UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
Form 20-F

☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934
or
☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2019.
or
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _______ to _______
or
☐ SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Date of event requiring this shell company report
For the transition period from _______ to _______

Commission file number: 000-51469

Baidu, Inc.
(Exact name of Registrant as specified in its charter)
N/A
(Translation of Registrant’s name into English)
Cayman Islands
(Jurisdiction of incorporation or organization)

Baidu Campus
No. 10 Shangdi 10th Street
Haidian District, Beijing 100085
The People’s Republic of China
(Address of principal executive offices)

Herman Yu, Chief Financial Officer
Telephone: +(86 10) 5992-8888
Email: ir@baidu.com
Facsimile: +(86 10) 5992-0000

Baidu Campus
No. 10 Shangdi 10th Street,
Haidian District, Beijing 100085
The People’s Republic of China
(Name, Telephone, Email and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:
American depositary shares (ten American depositary shares representing one Class A ordinary share, par value US$0.00005 per share)
Class A ordinary shares, par value US$0.00005 per share*)

Trading Symbol
BIDU

Name of Each Exchange on Which Registered
The NASDAQ Stock Market LLC
(The NASDAQ Global Select Market)
The NASDAQ Stock Market LLC
(The NASDAQ Global Select Market)

Securities registered or to be registered pursuant to Section 12(g) of the Act:
None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:
None

Title of Each Class
Trading Symbol
Name of Each Exchange on Which Registered

American depositary shares (ten American depositary shares representing one Class A ordinary share, par value US$0.00005 per share)
Class A ordinary shares, par value US$0.00005 per share*)
BIDU
The NASDAQ Stock Market LLC
(The NASDAQ Global Select Market)
The NASDAQ Stock Market LLC
(The NASDAQ Global Select Market)

* Not for trading, but only in connection with the listing on The NASDAQ Global Select Market of American depositary shares.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes ☐ No ☒

Indicate by check mark whether the registrant has filed all reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under this Act (Check one):
☒ Yes ☐ No ☐

If the registrant is an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐ Yes ☒ No ☐

☐ The term “emerging growth company” means an emerging growth company as defined in Section 2(a) of the Securities Act, which is an issuer with total annual gross revenue under $1.07 billion during the most recently completed calendar year (or for an issuer that completed an initial public offering (IPO) during the most recently completed calendar year, a fiscal year that ends after the issuer completes its IPO).

☐ If this is an annual report, indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of “large accelerated filer,” “accelerated filer,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.
Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☐ Emerging growth company ☒

If the registrant has filed all reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under this Act (Check one):
☒ Yes ☐ No ☐

☐ If this is an annual report, indicate by check mark whether the registrant is a large accelerated filer (as defined in Rule 12b-2 of the Exchange Act).
Large accelerated filer ☐ Accelerated filer ☒ Non-accelerated filer ☐ Emerging growth company ☐

☐ If this is an annual report, indicate by check mark whether the registrant is in bankruptcy proceedings (Check one):
Yes ☐ No ☒

☐ (APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

☐ Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

☐ Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes ☒ No ☐

☐ Indicate by check mark whether the registrant is a well-known呵呵 seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

☐ Indicate by check mark whether the registrant has submitted electronically, if any, every Interactive Data File required by Section 13(a) of the Exchange Act (as specified in Rules 12b-25(b) and 12b-25(c)). Yes ☒ No ☐

☐ Indicate by check mark if the registrant has submitted electronically, if any, every Interactive Data File required by Section 15(d) of the Exchange Act (as specified in Rules 12b-25(b) and 12b-25(c)). Yes ☒ No ☐

☐ Indicate by check mark whether the registrant has submitted electronically, if any, every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

☐ Indicate by check mark whether the registrant has submitted electronically, if any, every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐
<table>
<thead>
<tr>
<th>Item</th>
<th>Section Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>Identity of Directors, Senior Management and Advisers</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Offer Statistics and Expected Timetable</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Key Information</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Information on the Company</td>
<td>49</td>
</tr>
<tr>
<td>Item 4A.</td>
<td>Unresolved Staff Comments</td>
<td>87</td>
</tr>
<tr>
<td>Item 5.</td>
<td>Operating and Financial Review and Prospects</td>
<td>87</td>
</tr>
<tr>
<td>Item 6.</td>
<td>Directors, Senior Management and Employees</td>
<td>115</td>
</tr>
<tr>
<td>Item 7.</td>
<td>Major Shareholders and Related Party Transactions</td>
<td>125</td>
</tr>
<tr>
<td>Item 8.</td>
<td>Financial Information</td>
<td>126</td>
</tr>
<tr>
<td>Item 9.</td>
<td>The Offer and Listing</td>
<td>128</td>
</tr>
<tr>
<td>Item 10.</td>
<td>Additional Information</td>
<td>128</td>
</tr>
<tr>
<td>Item 11.</td>
<td>Quantitative and Qualitative Disclosures about Market Risk</td>
<td>136</td>
</tr>
<tr>
<td>Item 12.</td>
<td>Description of Securities Other than Equity Securities</td>
<td>137</td>
</tr>
<tr>
<td>PART I</td>
<td>Defaults, Dividend Arrearages and Delinquencies</td>
<td>139</td>
</tr>
<tr>
<td>Item 13.</td>
<td>Material Modifications to the Rights of Security Holders and Use of Proceeds</td>
<td>139</td>
</tr>
<tr>
<td>Item 15.</td>
<td>Controls and Procedures</td>
<td>139</td>
</tr>
<tr>
<td>Item 16A.</td>
<td>Audit Committee Financial Expert</td>
<td>140</td>
</tr>
<tr>
<td>Item 16B.</td>
<td>Code of Ethics</td>
<td>140</td>
</tr>
<tr>
<td>Item 16C.</td>
<td>Principal Accountant Fees and Services</td>
<td>140</td>
</tr>
<tr>
<td>Item 16D.</td>
<td>Exemptions from the Listing Standards for Audit Committees</td>
<td>141</td>
</tr>
<tr>
<td>Item 16E.</td>
<td>Purchases of Equity Securities by the Issuer and Affiliated Purchasers</td>
<td>141</td>
</tr>
<tr>
<td>Item 16F.</td>
<td>Change in Registrant’s Certifying Accountant</td>
<td>141</td>
</tr>
<tr>
<td>Item 16G.</td>
<td>Corporate Governance</td>
<td>141</td>
</tr>
<tr>
<td>Item 16H.</td>
<td>Mine Safety Disclosure</td>
<td>142</td>
</tr>
<tr>
<td>PART III</td>
<td>Financial Statements</td>
<td>142</td>
</tr>
<tr>
<td>Item 17.</td>
<td>Financial Statements</td>
<td>142</td>
</tr>
<tr>
<td>Item 18.</td>
<td>Exhibits</td>
<td>142</td>
</tr>
<tr>
<td>Item 19.</td>
<td></td>
<td>153</td>
</tr>
<tr>
<td>SIGNATURES</td>
<td></td>
<td>i</td>
</tr>
</tbody>
</table>
INTRODUCTION

In this annual report, except where the context otherwise requires and for purposes of this annual report only:

• “we,” “us,” “our company,” “our,” or “Baidu” refers to Baidu, Inc., its subsidiaries, and, in the context of describing our operations and consolidated financial information, our consolidated affiliated entities in China, including but not limited to Beijing Baidu Netcom Science Technology Co., Ltd., or Baidu Netcom;

• “user traffic” or “traffic” refers generally to page views of a website, with “page views” measuring the number of web pages viewed by internet users over a specified period of time except that multiple page views of the same page viewed by the same user on the same day are counted only once;

• “DAU” for Baidu App refers to the number of unique mobile devices that have accessed Baidu App at least once during a day; “mobile DAUs,” for our iQIYI platform, refers to the number of unique mobile devices that have accessed our platform through our iQIYI mobile app at least once during a day; “mobile MAUs,” for our iQIYI platform, refers to the number of unique mobile devices that have accessed our platform through our iQIYI mobile app at least once during a month;

• “China” or “PRC” refers to the People’s Republic of China, and solely for the purpose of this annual report, excluding Taiwan, Hong Kong and Macau;

• “shares” or “ordinary shares” refers to our ordinary shares, which include both Class A ordinary shares and Class B ordinary shares;

• “ADSs” refers to our American depositary shares, and we effected a change of the ADS to Class A ordinary share ratio from 1 ADS representing 1 Class A ordinary share to 10 ADSs representing 1 Class A ordinary share on May 12, 2010, which has the same effect as a 10-for-1 ADS split;

• “U.S. GAAP” refers to generally accepted accounting principles in the United States;

• “RMB” or “Renminbi” refers to the legal currency of China;

• “$,” “dollars,” “US$” or “U.S. dollars” refers to the legal currency of the United States; and

all discrepancies in any table between the amounts identified as total amounts and the sum of the amounts listed therein are due to rounding.

FORWARD-LOOKING INFORMATION

This annual report on Form 20-F contains forward-looking statements that reflect our current expectations and views of future events. These statements are made under the “safe harbor” provisions of the U.S. Private Securities Litigation Reform Act of 1995. You can identify these forward-looking statements by terminology such as “may,” “will,” “expect,” “anticipate,” “future,” “intend,” “plan,” “believe,” “estimate,” “is/are likely to” or other similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements include, but are not limited to:

• our growth strategies;

• our future business development, results of operations and financial condition;

• our ability to attract and retain users and customers and generate revenue and profit from our customers;

• our ability to retain key personnel and attract new talent;
• competition in the internet search and feed, online marketing and other businesses in which we engage;
• the outcome of ongoing or any future litigation, including those relating to intellectual property rights; and
• PRC governmental regulations and policies relating to the internet, internet search and feed, online marketing and the implementation of a corporate structure involving variable interest entities in China.

We would like to caution you not to place undue reliance on these forward-looking statements and you should read these statements in conjunction with the risk factors disclosed in “Item 3D. Key Information—Risk Factors.” Those risks are not exhaustive. We operate in a rapidly evolving environment. New risks emerge from time to time and it is impossible for our management to predict all risk factors, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ from those contained in any forward-looking statement. We do not undertake any obligation to update or revise the forward-looking statements except as required under applicable law.

Unless otherwise noted, all translations from Renminbi to U.S. dollars and from U.S. dollars to Renminbi in this annual report are made at a rate of RMB6.9618 to US$1.00, the exchange rate in effect as of December 31, 2019 as set forth in the H.10 statistical release of The Board of Governors of the Federal Reserve System. We make no representation that any Renminbi or U.S. dollar amounts could have been, or could be, converted into U.S. dollars or Renminbi, as the case may be, at any particular rate, or at all.

PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

A. Selected Financial Data

The following table presents the selected consolidated financial information for our company. The selected consolidated statements of comprehensive income data and cash flow data for the three years ended December 31, 2017, 2018 and 2019 and the consolidated balance sheets data as of December 31, 2018 and 2019 have been derived from our audited consolidated financial statements, which are included in this annual report beginning on page F-1. The selected consolidated statements of comprehensive income data and cash flow data for the years ended December 31, 2015 and 2016 and the selected consolidated balance sheets data as of December 31, 2015, 2016 and 2017 have been derived from our audited consolidated financial statements for the years ended December 31, 2015, 2016 and 2017, which are not included in this annual report. Our historical results do not necessarily indicate results expected for any future periods. The selected consolidated financial data should be read in conjunction with, and are qualified in their entirety by reference to, our audited consolidated financial statements and related notes and “Item 5. Operating and Financial Review and Prospects” below. Our audited consolidated financial statements are prepared and presented in accordance with U.S. GAAP.

Starting from January 1, 2018, we adopted ASC Topic 606, Revenue from contracts with Customers (“ASC 606”), which reclassifies value added taxes, or VAT, from cost of revenues to net against revenues, among other changes. The consolidated statement of comprehensive income data for the year ended December 31, 2018 and 2019 presented below have been prepared in accordance with ASC 606, while the
consolidated statements of comprehensive income data for the years ended December 31, 2015, 2016 and 2017 presented below have been prepared in accordance with ASC Topic 605, *Revenue Recognition* (“ASC 605”).

### Consolidated Statements of Comprehensive Income Data:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2015&lt;sup&gt;(1)&lt;/sup&gt;</th>
<th>2016&lt;sup&gt;(1)&lt;/sup&gt;</th>
<th>2017&lt;sup&gt;(1)&lt;/sup&gt;</th>
<th>2018&lt;sup&gt;(2)&lt;/sup&gt;</th>
<th>2019&lt;sup&gt;(2)&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RMB</strong></td>
<td><strong>RMB</strong></td>
<td><strong>RMB</strong></td>
<td><strong>RMB</strong></td>
<td><strong>RMB</strong></td>
<td><strong>RMB</strong></td>
</tr>
<tr>
<td>Cash and cash equivalents RMB</td>
<td>9,960</td>
<td>10,898</td>
<td>11,084</td>
<td>27,638</td>
<td>33,443</td>
</tr>
<tr>
<td>Restricted cash          RMB</td>
<td>96</td>
<td>318</td>
<td>252</td>
<td>2,189</td>
<td>996</td>
</tr>
<tr>
<td>Short-term investments   RMB</td>
<td>57,969</td>
<td>71,196</td>
<td>89,381</td>
<td>111,626</td>
<td>112,924</td>
</tr>
<tr>
<td>Total assets&lt;sup&gt;(3)&lt;/sup&gt; RMB</td>
<td>147,853</td>
<td>181,997</td>
<td>251,728</td>
<td>297,566</td>
<td>301,316</td>
</tr>
<tr>
<td>Short-term loans         RMB</td>
<td>100</td>
<td>1,115</td>
<td>1,244</td>
<td>3,046</td>
<td>2,618</td>
</tr>
<tr>
<td>Long-term loans, current portion RMB</td>
<td>975</td>
<td>3,468</td>
<td>10</td>
<td>84</td>
<td>737</td>
</tr>
<tr>
<td>Long-term loans          RMB</td>
<td>3,240</td>
<td>6,822</td>
<td>6,701</td>
<td>7,456</td>
<td>7,804</td>
</tr>
<tr>
<td>Notes payable, current portion RMB</td>
<td>—</td>
<td>5,203</td>
<td>6,500</td>
<td>6,871</td>
<td>5,219</td>
</tr>
<tr>
<td>Notes payable            RMB</td>
<td>30,702</td>
<td>27,648</td>
<td>29,111</td>
<td>42,735</td>
<td>38,090</td>
</tr>
<tr>
<td>Convertible senior notes RMB</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>4,712</td>
<td>12,297</td>
</tr>
<tr>
<td>Total liabilities        RMB</td>
<td>63,638</td>
<td>84,254</td>
<td>121,356</td>
<td>121,814</td>
<td>128,501</td>
</tr>
<tr>
<td>Baidu, Inc. shareholders’ equity RMB</td>
<td>80,256</td>
<td>92,274</td>
<td>115,346</td>
<td>162,897</td>
<td>163,599</td>
</tr>
</tbody>
</table>

(1) VAT is presented in cost of revenues rather than net against revenues in accordance with the legacy revenue accounting standard (ASC 605).

(2) VAT is presented as net against revenues rather than in cost of revenues in accordance with the new revenue accounting standard (ASC 606).

### Consolidated Balance Sheets Data:

<table>
<thead>
<tr>
<th>As of December 31,</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RMB</strong></td>
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<td>115,346</td>
<td>162,897</td>
<td>163,599</td>
</tr>
</tbody>
</table>

(3) We adopted Accounting Standards Update (“ASU”) No. 2016-02: Leases on January 1, 2019 using the modified retrospective transition method. Right-of-use assets (“ROU assets”) and lease liabilities (including current and non-current) for operating leases are presented on the face of the consolidated balance sheets as of December 31, 2019, while the consolidated balance sheet data for the years ended December 31, 2015, 2016, 2017 and 2018 have been prepared in accordance with ASC topic 840 (“ASC 840”), *Accounting for Leases*.  

3
<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>(In millions)</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
</tr>
<tr>
<td><strong>Consolidated Cash Flow Data:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net cash provided by operating activities</td>
<td>19,771</td>
<td>22,480</td>
<td>32,828</td>
<td>35,967</td>
<td>28,458</td>
</tr>
<tr>
<td>Net cash used in investing activities</td>
<td>(31,621)</td>
<td>(35,911)</td>
<td>(76,949)</td>
<td>(34,460)</td>
<td>(19,974)</td>
</tr>
<tr>
<td>Net cash provided by (used in) financing activities</td>
<td>7,778</td>
<td>14,447</td>
<td>44,557</td>
<td>15,082</td>
<td>(3,873)</td>
</tr>
<tr>
<td>Net increase (decrease) in cash and cash equivalents(4)</td>
<td>(3,893)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net increase in cash, cash equivalents and restricted cash(4)</td>
<td>—</td>
<td>1,160</td>
<td>120</td>
<td>18,491</td>
<td>4,612</td>
</tr>
</tbody>
</table>


B. **Capitalization and Indebtedness**

Not applicable.

C. **Reasons for the Offer and Use of Proceeds**

Not applicable.

D. **Risk Factors**

Risks Related to Our Business

*If we fail to retain existing customers or attract new customers for our online marketing services, our business, results of operations and growth prospects could be seriously harmed.*

We generate a substantial majority of our revenues from online marketing services, a substantial majority of which are derived from our pay-for-performance, or P4P, services. Our online marketing customers will not continue to do business with us if their investment does not generate sales leads and ultimately consumers, or if we do not deliver their web pages in an appropriate and effective manner. Our P4P customers may choose to discontinue their business with us, which are not subject to fixed-term contracts. In addition, third parties may develop and use certain technologies to block the display of our customers’ advertisements and other marketing products on our Baidu platform, which may in turn cause us to lose customers and adversely affect our results of operations. Furthermore, as our auction-based P4P services enable our customers to bid for priority placement of their paid sponsored links, we may lose customers if they find the bidding mechanism not cost effective or otherwise not attractive. Additionally, if our users do not increase their engagement on our platform, or our content ecosystem fails to offer rich and quality content that meets users’ tastes and preferences, or our users spend more time with or otherwise satisfy their content consumption demands on competing platforms, or we otherwise experience user traffic decline due to any reason, it would be difficult for us to attract new customers or retain existing customers. Failure to retain our existing customers or attract new customers for our online marketing services could seriously harm our business, results of operations and growth prospects.

We believe our large user base and traffic provide advertisers with a broad reach and optimal monetization results. However, we cannot assure you that we will be able to continue to attract new advertisers or retain our existing advertisers. If our advertisers determine that their expenditures on our platform do not generate expected returns, they may allocate a portion or all of their advertising budgets to other advertising channels, such as television, outdoor media and other online marketing platforms, and reduce or discontinue business with us.
Since most of our advertisers are not bound by long-term contracts, they may amend or terminate advertising arrangements with us easily without incurring liabilities. Failure to retain existing advertisers or attract new ones to advertise on our platform may materially and adversely affect our business, financial condition, results of operations and prospects.

We have in the past removed, and may in the future again remove, questionable paid search listings of certain customers to ensure the quality and reliability of our search results. Such removal, whether temporary or permanent, may cause affected customers to discontinue their business with us. We also examine the relevant business licenses and bank accounts of prospective customers prior to business engagement, as a quality control measure. In addition, we have taken steps to implement measures requested by PRC regulatory authorities, such as modifying paid search practices and limiting the amount of displays. We have also proactively implemented numerous additional measures to deliver a better user experience and build a safer and more trustworthy platform for users. Such measures have had a negative impact on the number of customers and our revenues, although we believe such impact is likely to be temporary. PRC regulations on online marketing services are evolving, and uncertainties remain with respect to the implementation of and compliance with new regulations that may emerge, which in turn may have a material adverse impact on our business, results of operations and growth prospects.

If online marketing through internet search or feed does not further grow in China, our business and results of operations could be materially and adversely affected.

While the internet has developed to a more advanced stage in China, customers have many channels to conduct online marketing and promotion. As users may not spend as much time on internet search and feed products as they used to, many current and potential customers may not use internet search and feed products as one of their main online marketing channels to promote their products and services, and thus may not allocate a significant portion of their marketing budgets to online marketing through internet search and feed products such as our P4P services, as compared to other methods of online marketing. Our ability to increase revenue and profitability from online marketing on PC, mobile internet and others may be adversely impacted by a number of factors, many of which are beyond our control, including but not limited to:

• difficulties associated with developing and maintaining a larger user base with demographic characteristics attractive to online marketing customers and maintaining and increasing user engagement;
• increased competition and potential re-allocation of marketing budgets and downward pressure on online marketing prices;
• higher customer acquisition costs due in part to the limited experience of small to medium-sized enterprises, or SMEs, with the internet as a marketing channel or due to competition;
• decreased use of our search and paid click because search queries are increasingly being undertaken via voice-activated smart devices, apps, social media or other platforms;
• growing reluctance of users to click on search results marked as advertisements;
• ineffectiveness of our online marketing delivery, tracking and reporting systems; and
• decreased use of internet or online marketing in China.

Our business depends on a strong brand, and if we are unable to maintain and enhance our brand, our business and results of operations may be harmed.

We believe that our brand “Baidu” has contributed significantly to the success of our business. We also believe that maintaining and enhancing the “Baidu” brand is critical to increasing the number of our users, customers, Baidu Union partners and content providers. We have conducted various marketing and brand promotion activities, but we cannot assure you that these activities will achieve the brand promotion effect expected by us. If we fail to maintain and further promote the “Baidu” brand, or if we incur excessive expenses in this effort, our business and results of operations may be materially and adversely affected.
In addition, any negative publicity about our company, our products and services, our employees, our business practices, our search results or the platform to which our search results link, regardless of its veracity, could harm our brand image and in turn adversely affect our business and results of operations. We cannot assure you that we will be able to defuse negative publicity to the satisfaction of our investors, users, customers and business partners. From time to time, there has been negative publicity about our company and our business practice, which has adversely affected our public image and reputation during certain periods of intense negative publicity. For example, in 2018, Chinese media reported incidents where users had been defrauded by health care and logistics service providers that they found through search listings on Baidu. Also in 2018, an editorial falsely alleged that, unlike Google, Baidu was biased in displaying its feed content in its search results. This editorial attracted the attention of the general public and Chinese media, including state-owned news agencies, and adversely affected our public image. In 2019, Shenzhen Consumer Council received complaints from users who encountered false travel information provided by false travel agencies through search listings on Baidu. The negative publicity surrounding these incidents have resulted in significant adverse impact on our public image and reputation. Intense negative publicity may divert our management’s attention and may adversely impact our business. We cannot assure you that our brand, public image and reputation will not be materially and adversely affected in the future.

We face significant competition and may suffer from loss of users and customers as a result.

We face significant competition in almost every aspect of our business, including competition from other companies that seek to provide internet search, feed or other content-rich services to users and provide online marketing services to customers. For Baidu Core business, our main competitors in the Chinese internet market include China-based internet companies, such as Alibaba, Tencent, ByteDance, Kuaishou, Sohu, Qihoo 360, Xiaomi and Huawei. We compete with these entities for both users and customers on the basis of user traffic, quality (relevance), user experience of the search and feed services, quality, quantity and relevancy of content, availability and ease of use of products and services, distribution channels and the number of associated third-party websites/wapsites. For iQIYI, our primary competitors include companies that operate online video platforms in China, such as Tencent Video and Youku. Some of our competitors have significant financial resources, long operating histories and are experienced in attracting and retaining their users, accommodating their users’ habits and preferences and managing customers. They may use their experience and resources to compete with us in a variety of ways, including competing for users and their time, customers, distributors, content, strategic partners and networks of third-party websites/wapsites, investing more heavily in research and development and making investments and acquisitions. If any of our competitors provides comparable or better Chinese language search experience or internet video services, our user traffic could decline significantly. Additionally, if the channels and properties that we use to distribute services or products to our users and customers are no longer available to us, we may experience a decline in user traffic. Any such decline in traffic could weaken our brand and result in loss of users and customers, which could have a material and adverse effect on our results of operations.

We also face competition from other types of advertising media, such as newspapers, magazines, yellow pages, billboards, other forms of outdoor media, television, radio, mobile apps, webcasting and online video. Large companies in China generally allocate, and may continue to allocate, a limited portion of their budgets to online marketing, as opposed to traditional advertising and other forms of advertising media. If these companies do not devote a larger portion of their marketing budgets to online marketing services provided by us, or if our existing customers reduce the amount they spend on online marketing, our results of operations and growth prospects could be adversely affected.

If our expansions into new businesses are not successful, our future results of operations and growth prospects may be materially and adversely affected.

As part of our growth strategy, we enter into new businesses from time to time by leveraging our large internet user base and advanced technology to generate additional revenue streams and through our development
of new business lines or strategic investments in or acquisitions of other businesses. Expansions into new businesses may present operating, marketing and compliance challenges that differ from those that we currently encounter.

In recent years, we have invested significant resources in the research and development of artificial intelligence (AI) technology and have made significant progress in the commercialization of AI technologies, such as AI-powered voice assistant platform DuerOS, autonomous driving platform Apollo, Baidu Cloud, Baidu Search and Baidu Feed. We plan to continue to contribute capital and other resources to our AI-enabled business operations. However, AI technology is rapidly evolving with significant uncertainties, and we cannot assure you that our investment and exploration in AI technology, including AI-powered voice assistant, smart devices, autonomous driving, smart transportation, cloud, search, feed, short videos and other new initiatives will be successful. Our operating results may also suffer if our innovation is not responsive to the needs of our users, customers and content providers, appropriately timed with market opportunities, or marketed ineffectively. For example, we have limited experience with our AI-enabled business operations, such as Xiaodu smart devices, Baidu Cloud, and commercialization of smart transportation, which could subject us to various challenges and risks, including managing relationships with business and governmental customers, who could have different needs and preferences from our existing customers and users, highly competitive procurement processes of business and governmental customers, longer accounts receivable payment cycles, and lower collection rates. We also may not alter our business practices in time to avoid or reduce adverse effects from any of the foregoing risks. In addition, our AI-enabled business requires very different products and services, sales and marketing channels and internal operational processes. These requirements could disrupt our current operations and harm our financial condition and operating results.

It is uncertain whether our strategies will attract users or generate revenue required to succeed. If we fail to generate sufficient usage of our new products and services, we may not grow revenue in line with the significant resources we invested in these new businesses. This may negatively impact gross margins and operating income. Commercial success of our expansions into new business depends on many factors, including innovativeness, competitiveness, and effective distribution and marketing. For example, the smart transportation industry is highly competitive and fragmented. Our current and potential competitors in this industry range from large and established technology companies to emerging start-ups. Some competitors have longer operating histories in the sector. They can use their experience and resources in ways that could affect our competitive position, including by making acquisitions, continuing to invest heavily in research and development and in talent, aggressively initiating intellectual property claims (whether or not meritorious), and continuing to compete aggressively for customers. Our competitors may be able to innovate and provide products and services faster than we can or may foresee the need for products and services before us. As a result, we may not achieve significant revenue, or may incur significant losses from our new businesses, such as our AI-enabled business operations, for several years, or at all.

In addition, we may encounter regulatory uncertainties related to new businesses that we enter into. The laws and regulations related to AI technology and products are at early stage of development and still evolving in China. The effects of such laws and regulations remain unclear and may add uncertainty to the operation of our AI-related business. For example, as PRC regulatory framework on autonomous driving evolves, we may be required to comply with approval and other compliance requirements for autonomous driving road test and related data collection and sharing promulgated by PRC authorities from time to time. See “Item 4.B. Information on the Company—Business Overview—Regulations—Regulations on Artificial Intelligence and Autonomous Driving Vehicles.” We may confront other challenges as we enter new business domains, including lack of adoption of new products and services, lack of management talent in the new business, cost management and other factors required for the expansion of new businesses.

*Our revenues could decline, we may sustain net loss from time to time, and we may experience downward pressure on our operating margin in the future.*

Our total revenues grew at a compound annual growth rate of 12.8% from 2015 to 2019. Our growth was driven in part by the growth in China’s internet and online marketing industries, which may not be indicative of
future growth or be sustainable. Our revenue growth slowed down in 2019, as our online marketing services experienced a year-over-year decline. Our revenue growth rate could decline over time and we could experience a decline in our revenues in the future, as a result of a number of factors, including changes in the mix of products and services, customer demographics, industry and channel, changes in policy or policy implementation, increase in market competition for marketing and/or new AI offerings, and decrease in pricing arising from an oversupply of ad inventory in the market, which was witnessed in 2019. We may also experience a decline in our revenue growth rate, if there is a decrease in the rate of adoption for our products, services and technologies, or deceleration or decline in demand for platforms used to access our services, among other factors.

We may experience downward pressure on our operating margin from increasing competition, resulting in revenue growing slower than expenses, and increased costs from many aspects of our business, including within online marketing where revenue growth does not keep up with traffic growth and related infrastructure costs to support our online properties, such as Baidu App, short videos and other products requiring huge data transmission and computing power. We may also pay increased fees to our distribution partners, as well as increased content acquisition costs to content providers. Additionally, the increase in personnel-related costs, increase in spending to promote new products and services or distribute certain products and services, or the outbreak of the coronavirus (COVID-19) may affect our operating margin. We may also experience downward pressure on our operating margin resulting from a variety of factors, such as the expansion of our business into new areas, including voice assistant/smart device, cloud and autonomous driving/smart transportation, all of which have margins much lower than online marketing.

In addition, we may also sustain net loss from time to time. We experienced significant losses from investment write downs in the third quarter of 2019, and experienced foreign currency fluctuation from time to time. We may experience further investment impairment and currency losses in the future. Declining operating margin and investment impairment have caused us to experience net loss in the first and third quarter of 2019, as well as in 2019, and there is no guarantee that we will be profitable in the future.

Due to these factors and the evolving nature of our business, our historical revenue growth rate, historical operating margin and historical profitability may not be indicative of our future performance.

If we fail to continue to innovate and provide products, services and high-quality internet experience that attract and retain users, we may not be able to generate sufficient user traffic to remain competitive.

Our success depends on providing products and services to attract users and enable users to have a high-quality internet experience. In order to attract and retain users and compete against our competitors, we must continue to invest significant resources in research and development to enhance our internet search marketing artificial intelligence (AI) technologies, improve our existing products and services, and introduce additional high-quality products and services, including feed, other mobile services and AI-based products and services. If we are unable to anticipate user preferences or industry changes, enhance the quality of our products and services on a timely basis or fail to provide sufficient content, or provide other consumer-facing services and products, including our maps and smart devices, to our users’ satisfaction, we may suffer a decline in the size of our user base. Our results of operations may also suffer if our innovations do not respond to the needs of our users, are not appropriately timed with market opportunities or are not effectively brought to market. As search, marketing and AI technologies and new forms of devices and apps continue to develop, we may expend significant resources in research and development and strategic investments and acquisitions in order to remain competitive.

If our content ecosystem fails to continually offer quality content in a cost effective manner, we may experience declines in user traffic and user engagement, our business and results of operations may be harmed.

Our content ecosystem consists of Baijiahao, Smart Mini Program, Managed Page, Baidu Post, Baidu Knows, Baidu Wiki, Baidu Wenku, Baidu Scholar, Haokan, Quanmin, iQIYI and various other products. The success of our content ecosystem depends on our ability to attract content owners to contribute quality content to
our platform by leveraging our user traffic and enhance user engagement through provision of attractive content, so as to create a virtuous cycle. We have relied, and will continue to rely, on third parties for the majority of the content offered in our content ecosystem and some of our products include third party intellectual property. As the competition for quality content becomes increasingly intense in China, we cannot assure you that we will be able to manage our content acquisition costs effectively and generate sufficient revenues to outpace future increase in content spending. We may also be unable to renew some of our content or intellectual property licensing agreements upon their expiration or termination and any renewal of the content or intellectual property licensing agreements may involve higher costs or less favorable terms. If we are not able to license popular premium content on commercially reasonable terms or renew our content or intellectual property licensing agreements, our financial condition and results of operations may be materially and adversely affected. In addition, we have users contribute their content to our various products, including Baidu Post, Baidu Knows, Baidu Wiki, Baijiahao, Haokan, Quanmin, and iQIYI’s user-generated content. If these parties fail to develop and maintain high-quality and engaging content, if our desired premium content becomes exclusive to our competitors, if we are unable to continue to grow our content offerings and stay competitive vis-à-vis other content platforms, or if a large number of our existing relationships are terminated, the attractiveness of our content offerings to users may be severely impaired. If we are unable to offer content that meets users’ tastes and preferences on a continuing basis, including continuously upgrading our content recommendation engines and in a cost effective manner, our user experience may deteriorate, we may suffer from reduced user traffic, our business and results of operations may be harmed.

Our now-divested financial services business may subject us to operational and reputational risks, which may have a material adverse effect on our business, results of operations and financial condition.

We have provided financial services in China in recent years. In August 2018, we completed the divestiture of a majority equity stake in our financial services business unit, which has been rebranded as Du Xiaoman Financial, or Du Xiaoman. After the divestiture, we hold a minority equity interest in Du Xiaoman and have since then deconsolidated the financial results of Du Xiaoman from our consolidated financial statements in accordance with U.S. GAAP. The financial services provided by the now-divested Du Xiaoman mainly include consumer credit, wealth management, financial technology services and payment support, through which Du Xiaoman mainly offers technology solutions to financial institution partners covering loan facilitation and risk management aspects and consumer financing to individual customers to meet their cash expenditure needs.

PRC laws and regulations concerning the internet finance industry, particularly those governing wealth management and credit lending, are evolving. Although Du Xiaoman has taken careful measures to comply with the laws and regulations that are applicable to its financial services, the PRC government authorities may promulgate new policies, rules and regulations regulating the internet finance industry. We cannot assure you that the practices of Du Xiaoman would not be deemed to violate any PRC laws or regulations, nor can we ensure that all business cooperators on Du Xiaoman’s platform meet all the regulatory compliance requirements. If Du Xiaoman were deemed to violate any PRC laws or regulations, we may be exposed to negative publicity as a result of the potential misconception that Du Xiaoman is still part of our consolidated group.

Furthermore, we are still the largest shareholder of Du Xiaoman and would be exposed to losses from Du Xiaoman. Under certain conditions, investors of Du Xiaoman can require Baidu or Du Xiaoman to redeem their shares. Occurrence of the such events could have a material adverse effect on our business, financial conditions and results of operations.

If we fail to keep up with rapid changes in technologies and user behavior, our future success may be adversely affected.

Our future success will depend on our ability to respond to rapidly changing technologies, adapt our products and services to evolving industry standards and improve the performance and reliability of our products and services. Our failure to adapt to such changes could harm our business. In addition, changes in user behavior resulting from technological developments may also adversely affect us. For example, the number of people accessing the internet through mobile devices and internet of things, or IoTs, such as smartphones, tablets and
smart (voice-activated internet) home devices, has increased in recent years, and we expect this trend to continue while 5G and more advanced mobile communications technologies are broadly implemented. If we fail to develop products and technologies that are compatible with all mobile devices, IoTs and operating systems, or if the products and services we develop are not widely accepted and used by users of various mobile devices and IoTs, our position in the mobile internet and AI sectors may be adversely affected. In addition, the widespread adoption of new internet, networking or telecommunications technologies or other technological changes could require substantial expenditures to modify or integrate our products, services or infrastructure. If we fail to keep up with rapid technological changes to remain competitive, or consequently fail to retain users with products and services of exceptional quality, our future success may be materially and adversely affected.

**Our increasing focus on cloud-based services presents execution, competitive and compliance risks.**

A growing part of our business involves cloud-based services available across a spectrum of computing devices. We are devoting significant resources to provide AI solutions, cloud infrastructure, and other services to enterprises and individuals. At the same time, our competitors are rapidly developing and deploying similar cloud-based services. Pricing and delivery models are evolving. Devices and form factors influence how users access services in the cloud and sometimes the user’s choice of which suite of cloud-based services to use. Our success in cloud-based services strategy will depend on the level of adoption of our products and services. We may not establish market share sufficient to achieve scale necessary to achieve our business objectives or recoup costs incurred to build and maintain infrastructure to support our cloud-based services. It is uncertain whether our strategies will attract the users or generate the revenue required to succeed. If we fail to generate sufficient usage of our new products and services, we may not grow revenue in line with the costs associated with infrastructure development and research and development investments. This may negatively impact our results of operations and financial performance.

The development of cloud-based services is accompanied by regulatory compliance risks. For example, regulatory authorities in China are increasing enforcement efforts against non-compliance relating to companies operating content delivery networks, internet data centers, and internet service providers. However, the interpretation and application of relevant laws in China and elsewhere are often uncertain and in flux, and any failure or perceived failure to comply with all applicable laws and regulations may result in legal proceedings or regulatory actions against us, and could have a material adverse effect on our business and results of operations.

In the past, our peers have experienced data security and infrastructure stability issues arising out of their cloud services. Our cloud services may also encounter similar issues, which could have a material and adverse impact on our operations and financial performance.

**Issues in the adoption and use of artificial intelligence in our product offerings may result in reputational harm or liability.**

We are building AI into many of our product offerings and we expect this element of our business to grow. We envision a future in which AI operates in our services and applications such as voice assistant platform DuerOS, autonomous driving platform Apollo, AI cloud services, Baidu Search and Baidu Feed, and the cloud helps our customers become more productive. As with many disruptive innovations, AI presents risks and challenges that could affect its adoption, and, therefore, our business. Our products and services based on AI may not be adopted by our users or customers. AI algorithms may be flawed. Datasets may be insufficient or contain biased information. Inappropriate or controversial data practices by us or others could impair the acceptance of our AI solutions. These deficiencies could undermine the decisions, predictions, or analysis AI applications produce, subjecting us to legal liability, and brand or reputational harm. Some AI scenarios present ethical issues. If we enable or offer AI solutions that are controversial because of their impact on human rights, privacy, employment, or other social issues, we may experience reputational harm or be exposed to liability.
Our Baidu Core’s revenue growth may be materially adversely affected if we are not able to develop, manufacture and market new Xiaodu smart products in response to changing customer requirements and new technologies.

The market for our Xiaodu smart products is characterized by rapidly changing technology, evolving industry standards, short product life cycles, frequent new product introductions, continual improvement in product price and performance characteristics, and price and feature sensitivity on the part of consumers and businesses. As a result, we must continually introduce new products and technologies and enhance existing products in order to remain competitive.

The success of our Xiaodu smart products depends on several factors, including our ability to:

- anticipate technology and market trends;
- develop innovative new products and enhancements on a timely basis;
- distinguish our products from those of our competitors;
- manufacture and deliver high-quality products in sufficient volumes at competitive cost structure;
- establish strong, efficient online and offline distribution channels;
- price our products competitively;
- develop a vibrant skills store and a large developer community to increase user stickiness and loyalty; and
- innovate post-hardware sales monetization models.

If we are unable to develop, manufacture, market and introduce enhanced or new Xiaodu smart products in a timely manner in response to changing market conditions or customer requirements, including changing fashion trends and styles, it will materially adversely affect our business, revenue growth, financial condition and results of operations. Furthermore, as we develop new generations of products more quickly, we expect that the pace of product obsolescence will increase concurrently. The disposition of inventories of excess or obsolete products may result in reductions to our operating margins and materially and adversely affect our earnings and results of operations.

The success of our Xiaodu smart products depends on the continued growth of the smart home device market, our ability to establish and maintain the brand, market share, and competition from other companies.

We have invested significant resources in the “Xiaodu” brand and the research and development of Xiaodu smart products. If the smart home device market does not continue to grow or grow in unpredictable ways, or we fail to maintain and further promote the “Xiaodu” brand, our revenue may fall short of expectations and our operating results may be harmed. Also, we offered sales discounts on Xiaodu smart products, and we cannot assure you that offering such discounts, which has resulted in a loss on smart device hardware sales, will eventually be a successful business model. Sales discount has negatively affected, and will continue to negatively affect, our financial performance. Additionally, even if the market for smart home devices does continue to grow, we may not be successful in developing and selling devices that appeal to consumers or gain sufficient market acceptance. To succeed in this market, we will need to design, produce and sell innovative and compelling products and partner with other businesses that enable us to capitalize on new technologies, some of which have developed or may develop and sell smart home devices of their own. Moreover, competition from other companies that seek to provide smart home devices will adversely affect our profitability.

We face a number of manufacturing, supply chain, distribution channel and inventory risks that, if not properly managed, could harm our financial condition, operating results, and prospects.

We rely on third parties to manufacture our Xiaodu smart products, to design certain of our components and parts, and to participate in the distribution of our products. Our business could be negatively affected if we are not able to engage these companies with the necessary capabilities or capacity on reasonable terms, or if those we engage fail to meet their obligations (whether due to financial difficulties or other reasons), or make adverse changes in the pricing or other material terms of our arrangements with them.
We may experience supply shortages and price increases driven by a variety of factors, such as raw material availability, manufacturing capacity, labor shortages, tariffs, trade disputes and barriers, natural disasters, and significant changes in the financial or business condition of our suppliers. We may experience shortages or other supply chain disruptions that could negatively affect our operations. In addition, some of the components we use in our Xiaodu smart products are available only from a single source or limited sources, and we may not be able to find replacement vendors on favorable terms in the event of a supply chain disruption.

Our Xiaodu smart products may have quality issues resulting from design, manufacturing, or operations. Sometimes, these issues may be caused by components we purchase from other manufacturers or suppliers. If the quality of our Xiaodu smart products does not meet expectations or are defective, it could harm our reputation, financial condition, and operating results.

We are exposed to significant inventory risks that may adversely affect our operating results as a result of seasonality, new product launches, rapid changes in product cycles and pricing, defective merchandise, changes in consumer demand and consumer spending patterns, and other factors. We endeavor to accurately predict these trends and avoid overstocking or understocking issues. Demand for our Xiaodu smart products, however, can change significantly between the time inventory or components are ordered and the date of sale. We may misjudge customer demand, resulting in inventory buildup and possible significant inventory write-down. It may also make it more difficult for us to inspect and control quality and ensure proper handling, storage and delivery. We may experience higher return rates on new products, receive more customer complaints about them and face costly product liability claims as a result of selling them, which would harm our brand and reputation as well as our financial performance.

Interruption or failure of our own information technology and communications systems or those of third-party service providers we rely upon could impair our ability to provide products and services, which could damage our reputation and harm our results of operations.

Our ability to provide products and services depends on the continuing operation of our information technology and communications systems. Any damage to or failure of our systems could interrupt our services. Service interruptions could reduce our revenue and profit and damage our brand if our systems are perceived to be unreliable. Our systems are vulnerable to damage or interruption as a result of terrorist attacks, wars, earthquakes, floods, fires, power loss, telecommunications failures, health epidemics, undetected errors or “bugs” in our software, computer viruses, interruptions in access to our platform through the use of “denial of service” or similar attacks, hacking or other attempts to harm our systems, and similar events. Some of our systems are not fully redundant, and our disaster recovery planning does not account for all possible scenarios. In February 2017, the service of Baidu App was inaccessible to users for forty-three minutes due to a system failure. In November 2018, multiple services including Baidu Search, Baidu Feed, Baidu Wiki, Baidu Post and Baidu Knows were inaccessible to users for seventy-three minutes due to a system failure. Such service disruptions adversely affected our user experience.

Our servers, which are hosted at third-party or our own internet data centers, are vulnerable to break-ins, sabotage and vandalism. The occurrence of natural disasters or closure of an internet data center by a third-party provider without adequate notice could result in lengthy service interruptions. In addition, our domain names are resolved into internet protocol (IP) addresses by systems of third-party domain name registrars and registries. Any interruptions or failures of those service providers’ systems, which are beyond our control, could significantly disrupt our own services. If we experience frequent or persistent system failures on our platform, whether due to interruptions and failures of our own information technology and communications systems or those of third-party service providers that we rely upon, our reputation and brand could be severely harmed. The steps we take to increase the reliability and redundancy of our systems may cause us to incur heavy costs and reduce our operating margin, and may not be successful in reducing the frequency or duration of service interruptions.

We may not be able to manage our expanding operations effectively.

We expect to continue to expand our operations as we grow our user and customer base and explore new opportunities. To manage the further expansion of our business and growth of our operations and personnel, we
need to continually improve our operational and financial systems, procedures and controls, and expand, train, manage and maintain good relations with our growing employee base. We have experienced labor disputes in the past. Although these disputes were resolved promptly, we cannot assure you that there will not be any new labor disputes in the future. In addition, we must maintain and expand our relationships with other websites, internet companies and other third parties. Our current and future personnel, systems, procedures and controls may not be adequate to support our expanding operations.

We may face intellectual property infringement claims and other related claims, which could be time-consuming and costly to defend and may result in an adverse impact over our operations.

Internet, technology and media companies are frequently involved in litigation based on allegations of infringement of intellectual property rights, unfair competition, invasion of privacy, defamation and other violations of other parties’ rights. The validity, enforceability and scope of protection of intellectual property in internet-related and AI-related industries, particularly in China, are uncertain and still evolving. As we face increasing competition and as litigation becomes more common in China in resolving commercial disputes, we face a higher risk of being the subject of intellectual property infringement claims. We may be subject to administrative actions brought by the PRC State Copyright Bureau and in the most severe scenario criminal prosecution for alleged copyright infringement, and as a result may be subject to fines and other penalties and be required to discontinue infringing activities. Furthermore, as we expand our operations outside of China, we may be subject to claims brought against us in jurisdictions outside of China.

Our search products and services link to materials in which third parties may claim ownership of trademarks, copyrights or other rights. As we adopt new technologies and roll out new products and services, we face the risk of being subject to intellectual property infringement claims that may arise from our use of new technologies and provision of new products and services. Our products and services including those based on content storage and sharing, such as Baidu Knows, Baidu Wiki, Baidu Wenku, Baidu Post, Baijiahao, Haokan, Quanmin, and iQIYI's user-generated content, allow our users to upload, store and share documents, images, audio and videos on our servers, or share, link to or otherwise provide access to contents from other websites, and we also operate distribution platforms whereby developers can upload, share and sell their apps or games to users. Although we have made commercially reasonable efforts to request users or developers to comply with applicable intellectual property laws, we cannot ensure that all of our users or developers have the rights to upload or share these contents or apps. In addition, we have been and may continue to be subject to copyright or trademark infringement and other related claims from time to time, in China and internationally.

We have been making continuous efforts to keep ourselves informed of and to comply with all applicable laws and regulations affecting our business. However, PRC laws and regulations are evolving, and uncertainties still exist with respect to the legal standards as well as the judicial interpretation of the standards for determining liabilities of internet search and other internet service providers for providing links to content on third-party websites that infringe upon others’ copyrights or hosting such content, or providing information storage space, file sharing technology or other internet services that are used by internet users to disseminate such content. The Supreme People’s Court of China promulgated a judicial interpretation on infringement of the right of dissemination through internet in December 2012. This judicial interpretation, like certain court rulings and certain other judicial interpretations, provide that the courts will place the burden on internet service providers to remove not only links or contents that have been specifically mentioned in the notices of infringement from right holders, but also links or content they “should have known” to contain infringing content. The interpretation further provides that where an internet service provider has directly obtained economic benefits from any content made available by an internet user, it has a higher duty of care with respect to internet users’ infringement of third-party copyrights. A guidance on the trial of audio/video sharing copyright disputes promulgated by the Higher People’s Court of Beijing in December 2012 provides that where an internet service provider has directly obtained economic benefits from any audio/video content made available by an internet user who has no authorization for sharing such content, the internet service provider shall be presumed to be at fault. These interpretations could subject us and other internet service providers to significant administrative burdens and litigation risks.
We conduct our business operations primarily in China. There might be claims that we are subject to U.S. copyright laws, including the legal standards for determining indirect liability for copyright infringement, although we believe such claims are without merit. We cannot assure you that we will not be subject to copyright infringement lawsuits or other proceedings in the U.S. or elsewhere in the future.

Intellectual property litigation is expensive, time-consuming and could divert resources and management attention from the operations of our business. We are currently named as defendant in certain copyright infringement suits in connection with Baidu Feed, P4P, Baidu Post, Baidu Search, iQIYI, Baidu Wenku, Baijiahao, Haokan and certain other products or services. See “Item 8.A. Financial Information—Consolidated Statements and Other Financial Information—Legal Proceedings.” There is no guarantee that the courts will accept our defenses and rule in our favor. If there is a successful claim of infringement, we may be required to discontinue the infringing activities, pay substantial fines and damages and/or enter into royalty or license agreements that may not be available on commercially acceptable terms, if at all. Our failure to obtain a license of the rights on a timely basis could harm our business. Any intellectual property litigation by third parties and/or negative publicity alleging our intellectual property infringement could have an adverse effect on our business, reputation, financial condition or results of operations. To address the risks relating to intellectual property infringement, we may have to substantially modify, limit or terminate some of our search services. Any such change could materially affect user experience and in turn have an adverse impact on our business.

We have been and may again be subject to claims and investigations in the ordinary course of business based on the content found on our platform, the results in our paid search listings or other products and services we offer, and could be impacted by unfavorable results of legal proceedings.

We are subject to various legal proceedings and claims that have arisen in the ordinary course of business and have not yet been fully resolved, and new claims may arise in the future. In addition, agreements entered into by us sometimes include indemnification provisions which may subject us to costs and damages in the event of a claim against an indemnified third party. Regardless of the merit of particular claims, litigation may be expensive, time consuming, disruptive to our operations and distracting to management. In recognition of these considerations, we may enter into arrangements to settle litigation and resolve such disputes. No assurance can be given that such agreements can be obtained on acceptable terms or that litigation will not occur. These settlements may also significantly increase our operating expenses.

The outcome of litigation is inherently uncertain. If one or more legal matters were resolved against us or an indemnified third party in a reporting period for amounts in excess of management’s expectations, our financial condition and operating results for that reporting period could be materially adversely affected. Further, such an outcome could result in significant compensatory, punitive or trebled monetary damages, disgorgement of revenue or profits, remedial corporate measures or injunctive relief against us that could materially adversely affect its financial condition and operating results.

In addition to the content developed and posted on our platform by ourselves, our users are free to post information on Baidu Post, Baidu Knows, Baidu Wiki, Baidu Wenku and other sections of our platform, our content providers may provide content through Baijiahao platform and our P4P customers may create text-based descriptions, image descriptions and other phrases to be used as text, images or keywords in our search listings, and users can also use our personal cloud computing service to upload, store and share documents, images, audio and videos on our cloud servers. We have been and may continue to be subject to claims and investigations for intellectual property ownership and infringement, defamation, negligence or other legal theories based on the content found on our platform, the results in our paid search listings or our other products and services, which, with or without merit, may result in diversion of management attention and financial resources and negative publicity for our brand and reputation. In November 2018, an individual, together with his related company, filed a complaint alleging acts of defamation and libel, commercial disparagement, tortious inference with prospective business relations, intentional infliction of emotional distress and civil conspiracy against, among others, us and Robin Yanhong Li in his capacity as our chairman and chief executive officer in the Supreme Court of New
York. The complaint alleged, among other things, that the defendants published articles containing false and defamatory statements concerning the plaintiffs, and sought damages in an aggregate amount of US$11 billion, including purported punitive damages of US$10 billion. Defendants moved the complaint to the U.S. District Court for the Eastern District of New York and filed motions to dismiss the complaint. The plaintiff voluntarily dismissed that complaint, and then added us and Mr. Li as defendants to an amended complaint in a separate lawsuit involving substantially similar claims against numerous other parties, that was then-pending in the Supreme Court of New York (the “Second State Court Lawsuit”). We filed motions to dismiss that complaint, which were not opposed. The plaintiff filed a notice of voluntary discontinuance of the complaint in the Second State Court Lawsuit, and subsequently filed a nearly identical complaint in the U.S. District Court for the Eastern District of New York. In January 2020, the U.S. District Court for the Eastern District of New York dismissed that complaint in its entirety with prejudice, and the time for plaintiff to appeal that dismissal has expired. In February 2020, the Supreme Court of New York granted defendants’ motions to discontinue the Second State Court Lawsuit with prejudice. No appeal of that order has been filed as of the date of this disclosure. We believe these claims to be without merit and intend to continue to defend ourselves vigorously. See “Item 8.A. Financial Information—Consolidated Statements and Other Financial Information—Legal Proceedings.” Furthermore, if the content posted on our platform or found, stored or shared through our other products and services contains information that government authorities find objectionable, our platform or relevant products or services may be shut down and we may be subject to other penalties. See “—Risks Related to Doing Business in China—Regulation and censorship of information disseminated over the internet in China may adversely affect our business, and subject us to liability for information displayed on or linked to our platform and negative publicity in international media.”

We have been, and may again in the future be, subject to claims, investigations or negative publicity based on the results in our paid search listings. Claims have been filed against us after we allowed certain customers to register keywords containing trademarks, trade names or brand names owned by others and displayed links to such customers’ websites in our paid search listings. While we maintain a database of certain well-known trademarks and continually update our system algorithms and functions to guard against customers keywords containing the well-known trademarks that are owned by others, it is not possible for us to completely prevent our customers from bidding on keywords that contain trademarks, trade names or brand names owned by others. There has been negative publicity about fraudulent information in our paid search listings. Although we have been continually enhancing our technology, control and oversight to prevent fraudulent websites, web pages and information from appearing in our paid search listings, there is no guarantee that the measures we have taken are effective at all times. Claims, investigations and negative publicity based on the results in our paid search listings, regardless of their merit, may divert management attention, severely disrupt our operations, adversely affect our results of operations and harm our reputation.

Liability claims against, or any unauthorized control or manipulation of our autonomous driving systems, could result in the loss of confidence in us, our brands and our products, and harm our business.

Our autonomous driving platform Apollo contains complex information technology systems. We have designed, implemented and tested security measures intended to prevent unauthorized access to our Apollo platform, but there can be no assurance that vulnerabilities will not be identified in the future, or that our remediation efforts are or will be successful. Hackers have reportedly attempted, and may attempt in the future, to gain unauthorized access to modify, alter and use our Apollo platform to gain control of, or to change, functionality, user interface and performance characteristics of vehicles utilizing our Apollo platform, or to gain access to data stored in or generated by the vehicles. Any unauthorized access to or control of autonomous driving vehicles or their systems or any loss of data could result in death and personal injury, and legal claims or proceedings against us.

Our Apollo platform may be involved in crashes resulting in property damage, death or personal injury in the future, and such crashes may be the subject of significant public attention. We may face claims related to any misuse or failure of new technologies that we are pioneering, including our autonomous driving platform Apollo
and related solutions, such as smart transportation. A successful product liability claim against us could require us to pay substantial monetary damages.

Moreover, product liability claims or reports of unauthorized access to our autonomous driving platform Apollo or data, regardless of their veracity, could generate substantial negative publicity about our products and business and could have material adverse impact on our brand, business, prospects and operating results.

**Our business may be adversely affected if we were found to have failed to fulfill the additional obligations under the online advertising rules.**

Although the PRC Advertising Law has not specified “paid search results” as a form of advertising, the Interim Administration Measures of Internet Advertising, or the Internet Advertising Measures, which was promulgated by the State Administration for Industry and Commerce (currently known as State Administration for Market Regulation, or the SAMR) and became effective on September 1, 2016, characterizes “paid search results” as a form of internet advertising from the perspective of regulating the online advertising business. Pursuant to the Internet Advertising Measures, we are subject to additional legal obligations to monitor our P4P customers’ listings on our website during the course of our provision of P4P services. For example, we must examine, verify and record identity information of our P4P customers, such as the customer’s name, address and contact information, and maintain an updated verification of such information on a regular basis. Moreover, we must examine supporting documentation provided by our P4P customers. Where a special government review is required for specific categories of advertisements before posting, we must confirm that the review has been performed and approval has been obtained. If the content of the advertisement is inconsistent with the supporting documentation, or the supporting documentation is incomplete, the advertisement cannot be published. The Chinese government may, from time to time, promulgate new advertising laws and regulations in the future to impose further requirements on online advertising services relating to medical, pharmaceutical, health care and other similar businesses. We cannot assure that we will be in compliance with the requirements under these new laws and regulations. Failure to comply with these obligations may subject us to fines and other administrative penalties. If advertisements shown on our platform are in violation of relevant PRC advertising laws and regulations, or if the supporting documentation and government approvals provided to us by our P4P customers in connection with the advertising content are not complete or accurate, we may be subject to legal liabilities and our reputation could be harmed. See “Item 4.B. Information on the Company—Business Overview—Regulations—Regulations on Advertisements and Online Advertising.”

**We may be subject to patent infringement claims with respect to our P4P platform.**

Our technologies and business methods, including those relating to our P4P platform, may be subject to third-party claims or rights that limit or prevent their use. In June 2005, we applied for a patent in China for our P4P platform, but our application was rejected on the ground that it is not patentable. Certain U.S.-based companies, including Overture Services Inc., have been granted patents in the United States relating to P4P platforms and similar business methods and related technologies. While we believe that we are not subject to U.S. patent laws since we conduct our business operations primarily in China, we cannot assure you that U.S. patent laws would not be applicable to our business operations, or that holders of patents relating to a P4P platform would not seek to enforce such patents against us in the United States or China.

Many parties are actively developing and seeking protection for internet-related technologies, including patent protection. They may hold patents issued or pending that relate to certain aspects of our technologies, products, business methods or services. Any patent infringement claims, regardless of their merits, could be time-consuming and costly to us. If we were sued for patent infringement claims with respect to our P4P platform and were found to infringe upon the patents and were not able to adopt non-infringing technologies, we may be severely limited in our ability to operate our P4P platform, which would have a material and adverse effect on our results of operations and prospects.
Our business may be adversely affected by third-party software apps or practices that interfere with our receipt of information from, or provision of information to, our users, which may impair our users’ experience.

Our business may be adversely affected by third-party malicious or unintentional software apps that make changes to our users’ computers and interfere with our products and services. These software apps may change our users’ internet experience by hijacking queries to our platform, altering or replacing our search results, or otherwise interfering with our ability to connect with our users. The interference often occurs without disclosure to or consent from users, resulting in a negative experience, which users may associate with our platform. These software apps may be difficult to remove or disable, may reinstall themselves and may circumvent other apps’ efforts to block or remove them.

In addition, our business may be adversely affected by the practices of third-party website owners, content providers and developers which interfere with our ability to crawl and index their web pages and contents including apps. The ability to provide a superior user experience is critical to our success. If we are unable to successfully combat malicious third-party software apps that interfere with our products and services, our reputation may be harmed. If a significant number of website owners, content providers and developers prevent us from indexing and including their high-quality web pages and content including apps in our search results, or if we cannot effectively combat web spam from low-quality and irrelevant content websites, the quality of our search results may be impaired, which may damage our reputation and deter our current and potential users from using our products and services.

We may not be able to prevent others from unauthorized use of our intellectual property, which could harm our business and competitive position.

We rely on a combination of copyright, trademark and trade secret laws, as well as nondisclosure agreements and other methods to protect our intellectual property rights. The protection of intellectual property rights in China may not be as effective as those in the United States or other countries. The steps we have taken may be inadequate to prevent the misappropriation of our technology. Reverse engineering, unauthorized copying or other misappropriation of our technologies could enable third parties to benefit from our technologies without paying us. Moreover, unauthorized use of our technology could enable our competitors to offer products and services that compete with ours, which could harm our business and competitive position. We have in the past resorted to litigation to enforce our intellectual property rights, and may have to do so from time to time in the future. There is no guarantee that the competent courts will accept our claims and rule in our favor. Such litigation may result in substantial costs and diversion of resources and management attention.

Our success depends on the continuing and collaborative efforts of our management team and other key personnel, and our business may be disrupted if we lose their services and are not able to find their successors in a timely manner.

Our success depends heavily upon the continuing services of our management team, in particular our chairman and chief executive officer, Robin Yanhong Li. If one or more of our executives or other key personnel are unable or unwilling to continue in their present positions and we are not able to find their successors in a timely manner, our business may be disrupted and our financial condition and results of operations may be adversely affected. Competition for management and key personnel is intense, the pool of qualified candidates is limited, and we may not be able to retain the services of our executives or key personnel, or attract and retain experienced executives or key personnel in the future.

If any of our executives or other key personnel joins a competitor or forms a competing company, we may not be able to successfully retain customers, distributors, know-how and key personnel. Each of our executive officers and key employees has entered into an employment agreement with us, containing confidentiality and non-competition provisions. If any disputes arise between any of our executives or key personnel and us, we cannot assure you the extent to which any of these agreements may be enforced.
We rely on highly skilled personnel. If we are unable to retain or motivate them or hire additional qualified personnel, we may not be able to grow effectively.

Our performance and future success depend on the talents and efforts of highly skilled individuals. We will need to continue to identify, hire, develop, motivate and retain highly skilled personnel for all areas of our organization and business operations. Competition in the internet industry for qualified employees is intense. Our continued ability to compete effectively depends on our ability to attract new employees and to retain and motivate our existing employees. As competition in the internet industry intensifies, it may be more difficult for us to hire, motivate and retain highly skilled personnel. If we do not succeed in attracting additional highly skilled personnel or retaining or motivating our existing personnel, we may be unable to grow effectively.

Our strategy of investments and acquiring complementary businesses and assets may fail.

As part of our business strategy, we have pursued, and intend to continue to pursue, selective strategic investments and acquisitions of businesses and assets that complement our existing business and help us execute our growth strategies. For example, we invested in Ctrip, which was renamed as Trip.com Group Limited (Trip.com) in October 2019, and China United Network Communications Limited. We intend to make other strategic investments and acquisitions in the future if suitable opportunities arise. Investments and acquisitions involve uncertainties and risks, including, but not limited to:

- potential ongoing financial obligations and unforeseen or hidden liabilities, including liability for infringement of third-party copyrights or other intellectual property;
- failure to achieve the intended objectives, benefits or revenue-enhancing opportunities;
- costs and difficulties of integrating acquired businesses and managing a larger business;
- in the case of investments where we do not obtain management and operational control, lack of influence over the controlling partner or shareholder, which may prevent us from achieving our strategic goals in the investments;
- possible loss of key employees of a target business;
- potential claims or litigation regarding our board’s exercise of its duty of care and other duties required under applicable law in connection with any of our significant acquisitions or investments approved by the board;
- diversion of resources and management attention;
- regulatory hurdles and compliance risks, including the anti-monopoly and competition laws, rules and regulations of China and other jurisdictions and the enhanced compliance requirement for outbound acquisitions and investment under the laws and regulations of China; and
- in the case of acquisitions of businesses or assets outside of China, the need to integrate operations across different business cultures and languages and to address the particular economic, currency, political, and regulatory risks associated with specific countries.

Any failure to address these risks successfully may have a material and adverse effect on our financial condition and results of operations. Investments and acquisitions may require a significant amount of capital, which would decrease the amount of cash available for working capital or capital expenditures. In addition, if we use our equity securities to pay for investments and acquisitions, we may dilute the value of our ADSs and the underlying ordinary shares. If we borrow funds to finance investments and acquisitions, such debt instruments may contain restrictive covenants that could, among other things, restrict us from distributing dividends. Moreover, acquisitions may also generate significant amortization expenses related to intangible assets. We may also incur impairment charges to earnings for investments and acquired businesses and assets.
We are exposed to significant downward adjustments or impairments in the market values of our investments, which will be material to financial statements.

As part of our business strategy, we have investments in both private and public companies. Fair values of these investments can be negatively impacted by fluctuations in the share prices of public companies we own, the fair value of private companies we own, liquidity, credit deterioration or losses, financial results, foreign exchange rates, changes in interest rates, or other factors. In addition, after adopting ASC Topic 321, Investments—Equity Securities (“ASC 321”), on January 1, 2018, for investments previously accounted for using the cost method, we elected to use the measurement alternative to measure these investments at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer, if any. Equity securities with readily determinable fair values are measured at fair value, and any changes in fair value are recognized in earnings, instead of through other comprehensive income if they were previously designated as available for sale equity securities under legacy GAAP. The change of these equity securities’ fair value could result in significant fluctuation of our financial condition and operating results.

For example, in 2019, the market value of Trip.com declined, and the continuing low market price of its ADSs caused us to recognize a non-cash impairment loss of RMB8.9 billion in the third quarter of 2019. We may still suffer significant impairment loss or downward adjustments of our investment in Trip.com or other companies in the future. As a result, the value or liquidity of our cash equivalents and marketable securities could decline and result in a material impairment, which could materially adversely affect our financial condition and operating results.

We are subject to risks and uncertainties faced by companies in a rapidly evolving industry.

We operate in the rapidly evolving internet industry, which makes it difficult to predict our future results of operations. Accordingly, you should consider our future prospects in light of the risks and uncertainties experienced by companies in evolving industries. Some of these risks and uncertainties relate to our ability to:

- maintain our leading position in the Chinese-language internet search market;
- offer attractive, useful and innovative products and services to attract and retain a larger user base;
- procure content from studios and other content providers, as well as distributors and other licensors of content;
- attract users’ continuing use of internet search services;
- retain existing customers and attract additional customers and increase spending per customer;
- retain members and attract new members of iQIYI’s membership services;
- upgrade our technology to support increased traffic and expanded product and service offerings;
- further enhance our brand;
- respond to competitive market conditions;
- respond to evolving user preferences or industry changes;
- respond to changes in the regulatory environment and manage legal risks, including those associated with intellectual property rights;
- maintain effective control of our costs and expenses;
- execute our strategic investments and acquisitions and post-acquisition integrations effectively;
- attract, retain and motivate qualified personnel and maintain good relations with a young and growing work force; and
- build profitable operations in new markets and other overseas internet markets we have entered into.
If we are unsuccessful in addressing any of these risks and uncertainties, our business may be materially and adversely affected.

**Our indebtedness could adversely affect our financial condition and our ability to obtain additional capital on reasonable terms when necessary.**

As of December 31, 2019, we had an aggregate of RMB66.8 billion (US$9.6 billion) of outstanding indebtedness, which will mature between 2020 and 2028, which include RMB16.5 billion (US$2.4 billion) of outstanding indebtedness of iQIYI. See “Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources.” We may incur additional indebtedness in the future. Our current and future debt requires us to dedicate a portion of our cash flow to service interest and principal payments and may limit our ability to engage in other transactions. Our ability to pay interest and repay the principal for our indebtedness is dependent upon our ability to manage our business operations, generate sufficient cash flows, raise additional capital and the other factors discussed in this section. There can be no assurance that we will be able to manage any of these risks successfully.

Certain of our outstanding indebtedness include financial and other covenants. For example, certain of these covenants require iQIYI to maintain minimum liquidity. If we fail to comply with these covenants and are unable to remedy or obtain a waiver or amendment, an event of default would result. If an event of default were to occur, the lenders could, among other things, declare outstanding amounts due and payable. In addition, because certain outstanding notes of Baidu, Inc. contain customary cross default and cross acceleration provisions, an event of default or declaration of acceleration under a subsidiary’s outstanding loan could also result in an event of default under these notes of Baidu, Inc., which would permit the notes holders to accelerate the repayment of the notes. If any of these notes is accelerated, we may be required to renegotiate, repay or refinance these obligations and may not have sufficient funds available to repay it, and our liquidity and financial position would be materially and adversely affected.

We may require additional capital to support our business growth or to respond to business opportunities, challenges or unforeseen circumstances. Our ability to obtain additional capital, if and when required, will depend on our business plans, investor demand, our operating performance, the condition of the capital markets, and other factors, and our indebtedness may limit our ability to borrow additional funds. We may have difficulty incurring new debt on terms that we would consider to be commercially reasonable. In addition, we may also need to refinance a portion of our outstanding debt as it matures. There is a risk that we may not be able to refinance existing debt or that the terms of any refinancing may not be as favorable as the terms of our existing debt.

**iQIYI has significant working capital requirements, and our controlling interest in iQIYI may be diluted if iQIYI raises additional capital by issuing and selling additional equity in the future.**

iQIYI, our controlled subsidiary listed on the NASDAQ Global Select Market, has historically experienced working capital deficits. iQIYI had achieved a working capital surplus as of December 31, 2018 and December 31, 2019. However, there is no assurance that iQIYI will continue to improve its working capital position or to maintain the surplus. Although iQIYI will take actions to manage its working capital, there can be no assurance, however, that iQIYI will be able to maintain working capital surplus, or raise additional equity or debt financing on terms that are acceptable to iQIYI. Any failure to do so as and when necessary could materially adversely affect iQIYI’s liquidity, results of operations, financial condition and ability to operate. In addition, in the future, if iQIYI obtains additional financing by issuing and selling additional equity or equity-linked securities, for example, convertible bonds, our interest in iQIYI will be diluted.
iQIYI operates in a capital intensive industry and requires a significant amount of cash to fund its operations, content acquisitions and technology investments. If iQIYI cannot obtain sufficient capital, its business, financial condition and prospects may be materially and adversely affected.

The operation of an internet video streaming platform requires significant and continuous investment in content and technology. Producing high-quality original content is costly and time-consuming and it will typically take a long period of time to realize returns on investment, if at all. To date, iQIYI has financed its operations primarily with net cash generated from operating activities, as well as financing activities such as placements of preferred shares, convertible notes and asset-based securities, and the proceeds from its initial public offering. In order to implement its growth strategies, iQIYI will incur additional capital in the future to cover, among others, costs to produce and license content. iQIYI may need to obtain additional financing, including equity offering or debt financing, to fund the operation and expansion of business. iQIYI’s ability to obtain additional financing in the future, however, is subject to a number of uncertainties, including those relating to:

- iQIYI’s business development, financial condition and results of operations;
- general market conditions for financing activities by companies in iQIYI’s industry; and
- macro-economic and other conditions in China and elsewhere.

As a public company with a growing business, iQIYI expects to increasingly rely on net cash provided by operating activities, financing through capital markets and commercial banks for its liquidity needs. However, iQIYI cannot assure you that it will be successful in its efforts to further diversify its sources of liquidity and obtain financing. If iQIYI cannot obtain sufficient capital to meet its capital needs, iQIYI may not be able to execute its growth strategies and its business, financial condition and prospects may be materially and adversely affected.

Our results of operations may fluctuate, which makes our results difficult to predict and could cause our results to fall short of expectations.

Our results of operations may fluctuate as a result of a number of factors, many of which are beyond our control. For these reasons, comparing our results of operations on a period-to-period basis may not be meaningful, and you should not rely on our past results as an indication of our future performance. Our quarterly and annual revenues and costs and expenses as a percentage of our revenues may be significantly different from our historical or projected figures. Our results of operations in future quarters may fall below expectations. Any of these events could cause the price of our ADSs to fall. Any of the risk factors listed in this “Risk Factors” section, and in particular the following factors, could cause our results of operations to fluctuate from quarter to quarter:

- general economic conditions in China and economic conditions specific to the internet, internet search and feed, and online marketing industries;
- our ability to continue to attract users to our platform despite the emergence of mobile apps and other services;
- our ability to attract additional customers and increase spending per customer;
- the announcement or introduction of new or enhanced products and services by us or our competitors;
- the amount and timing of operating costs and capital expenditures related to the maintenance and expansion of our businesses, operations and infrastructure;
- the results of our acquisitions of, or investments in, other businesses or assets;
- PRC regulations or government actions pertaining to activities on the internet, including various forms of entertainment, online payment and activities otherwise affecting our online marketing customers, and those relating to the products and services we provide;
Because of the rapid growth of our business, our historical results of operations may not be useful to you in predicting our future results of operations. Our user traffic tends to be seasonal. For example, we generally experience less user traffic during public holidays and other special event periods in China. In addition, advertising and other marketing spending in China has historically been cyclical, reflecting overall economic conditions as well as budgeting and buying patterns. As we continue to grow, we expect that the cyclical and seasonality in our business may cause our results of operations to fluctuate.

A severe and prolonged downturn in the Chinese or global economy could materially and adversely affect our business, results of operations and financial condition.

The global macroeconomic environment is facing challenges. The growth of the Chinese economy has gradually slowed down in recent years and the trend may continue. There is considerable uncertainty over the long-term effects of the monetary and fiscal policies adopted by the central banks and financial authorities of some of the world’s leading economies, including the United States and China. There have been concerns over unrest and terrorist threats in the Middle East, Europe and Africa. There have also been concerns on the relationship between China and other countries, including surrounding Asian countries, which may potentially lead to foreign investors closing down their businesses or withdrawing their investments in China and, thus, exiting the China market, and other economic effects. In particular, there is significant uncertainty about the future relationship between the United States and China with respect to trade policies, treaties, government regulations and tariffs. Economic conditions in China are sensitive to global economic conditions, as well as changes in domestic economic and political policies and the expected or perceived overall economic growth rate in China. Any severe or prolonged slowdown in the global or Chinese economy may have a negative impact on our business, results of operations and financial condition, and continued turbulence in the international markets may adversely affect our ability to access the capital markets to meet liquidity needs. Our customers may reduce or delay spending with us, while we may have difficulty expanding our customer base fast enough, or at all, to offset the impact of decreased spending by our existing customers. In addition, to the extent we offer credit to any customer and the customer experiences financial difficulties due to the economic slowdown, we could have difficulty collecting payment from the customer.

Changes in U.S. and international trade policies, particularly with regard to China, may adversely impact our business and operating results.

The U.S. government has made statements and taken certain actions that may lead to potential changes to U.S. and international trade policies towards China. In January 2020, the “Phase One” agreement was signed between the United States and China on trade matters. However, it remains unclear what additional actions, if any, will be taken by the U.S. or other governments with respect to international trade agreements, the imposition of tariffs on goods imported into the U.S., tax policy related to international commerce, or other trade matters. While cross-border business may not be an area of our focus, any unfavorable government policies on international trade, such as capital controls or tariffs, may affect the demand for our products and services, impact the competitive position of our products or prevent us from selling products in certain countries. If any new tariffs, legislation and/or regulations are implemented, or if existing trade agreements are renegotiated or, in particular, if the U.S. government takes retaliatory trade actions due to the recent U.S.-China trade tension, such changes could have an adverse effect on our business, financial condition and results of operations.

Additionally, the United States and various foreign governments have imposed controls, export license requirements and restrictions on the import or export of technologies and products (or voiced the intention to do so), especially related to semiconductor, AI and other high tech areas, which could have a material and adverse effect on our business, financial condition and results of operations.
Failure to retain key distributors or attract additional distributors, or termination of our relationship with distributors could materially and adversely affect our business. Moreover, there is no assurance that our direct sales model in some key geographic markets will continue to be successful.

We rely, to a large extent, on a nationwide distribution network of third-party distributors for our sales to, and collection of payment from, our customers. If our distributors do not provide quality services to our customers or otherwise breach their contracts with our customers, we may terminate our relationship with distributors, lose customers and our results of operations may be materially and adversely affected. Since most of our distributors are not bound by long-term contracts, we cannot assure you that we will continue to maintain favorable relationships with them. If we fail to retain our key distributors or attract additional distributors on terms that are commercially reasonable, our business and results of operations could be materially and adversely affected. We may decide to terminate existing distributors and transition to new distributors or to our direct sales force. If we decide and fail to smoothly transition our business to new distributors or to our direct sales force, our business and results of operations could be materially and adversely affected.

We have transitioned to using our direct sales force to serve customers in some key geographic markets, such as Beijing, Shanghai, Tianjin, Suzhou and major cities in Guangdong Province. There is no assurance that our direct sales model in those markets will continue to be successful. If we fail to maintain an adequate direct sales force, retain existing customers and continue to attract new customers in those markets, our business, results of operations and prospects could be materially and adversely affected.

We rely on Baidu Union partners for a significant portion of our revenues. If we fail to retain existing Baidu Union partners or attract additional members, our revenue growth and profitability may be adversely affected.

We pay Baidu Union partners a portion of our revenues as we leverage traffic of the Baidu Union partners’ internet properties. Some of Baidu Union partners, however, may compete with us in one or more areas of our business. Therefore, they may decide in the future to terminate their relationships with us. If Baidu Union partners decide to use a competitor’s or their own internet search services, or if our competitors offer more attractive prices to bid for union traffic, our user traffic may decline, which may adversely affect our revenues. If we fail to attract additional Baidu Union partners, our revenue growth may be adversely affected. In addition, if we have to share a larger portion of our revenues to retain existing Baidu Union partners or attract additional partners, our profitability may be adversely affected.

Our overseas operations may not be successful.

We have launched products and services in local languages to internet users in several countries. It is uncertain when the operation will become profitable, if at all. In particular, we rely on local telecommunication operators and service providers to provide us with network services and data center hosting services, and our systems for these international products and services are not redundant across different regions and data centers. Any interruption to the internet infrastructure or any data center may render our products and services in the region unavailable.

We face certain risks inherent in doing business internationally, including:

- difficulties in developing, staffing and simultaneously managing a foreign operation as a result of distance, language and cultural differences;
- challenges in formulating effective local sales and marketing strategies targeting users from various jurisdictions and cultures, who have a diverse range of preferences and demands;
- challenges in identifying appropriate local business partners and establishing and maintaining good working relationships with them;
- dependence on local platforms in marketing our international products and services overseas;
- challenges in selecting suitable geographical regions for international business;
If we are unable to adapt or expand our existing technology infrastructure to accommodate greater traffic, content or additional customer requirements, our business may be harmed.

Our Baidu platform regularly serves a large number of users and customers and delivers a large number of daily page views. Our technology infrastructure is highly complex and may not provide satisfactory service in the future, especially as the number of users and customers increases. We may be required to upgrade our technology infrastructure to keep up with the increasing traffic on our Baidu platform, such as increasing the capacity of our servers and the sophistication of our software. If we fail to adapt our technology infrastructure to accommodate greater traffic or customer requirements, our users and customers may become dissatisfied with our services and switch to our competitors’ websites, which could harm our business.

If we fail to detect fraudulent click-throughs, our customers’ confidence in us could be damaged and our revenues could decline.

We are exposed to the risk of click-through fraud on our paid search results. Click-through fraud occurs when a person clicks paid search results for a reason other than to view the underlying content of search results. Although our anti-spam algorithms and tools can identify and respond to spam web pages quickly and effectively and thus capture and prevent some fraudulent click-throughs, there is no assurance that our anti-spam technology is able to detect and stop all fraudulent click-throughs. If we fail to detect fraudulent clicks or otherwise are unable to prevent this fraudulent activity, the affected customers may experience a reduced return on investments, or ROI, in our online marketing services and lose confidence in the integrity of our systems, and we may have to issue refunds to our customers. If this happens, we may be unable to retain existing customers or attract new customers for our online marketing services, and our online marketing revenues could decline. In addition, affected customers may also file legal actions against us claiming that we have over-charged or failed to refund them. Any such claims or similar claims, regardless of their merits, could be time-consuming and costly for us to defend against and could also adversely affect our brand and our customers’ confidence in the integrity of our systems. We experienced a number of incidents involving fraudulent click-throughs in recent years. Although the amount of revenue involved in these incidents was immaterial, such cases of fraudulent click-throughs, if occurring on a large-scale and widespread manner, may damage the reputation of our search ecosystem.

The successful operation of our business depends upon the performance and reliability of the internet infrastructure and fixed telecommunications networks in China.

Our business depends on the performance and reliability of the internet infrastructure in China. Almost all access to the internet is maintained through state-owned telecommunication operators under the administrative control and regulatory supervision of the Ministry of Industry and Information Technology, or the MIIT.
addition, the national networks in China are connected to the internet through international gateways controlled by the PRC government. These international gateways are the only channels through which a domestic user can connect to the internet. It is unpredictable whether a more sophisticated internet infrastructure will be developed in China. We may not have access to alternative networks in the event of disruptions, failures or other problems with China’s internet infrastructure. In addition, the internet infrastructure in China may not support the demands associated with continued growth in internet usage.

We rely heavily on China Telecommunications Corporation, or China Telecom, China United Network Communications Group Company Limited, or China Unicom, and China Mobile Communications Corporation, or China Mobile, to provide us with network services and data center hosting services. We have entered into contracts with various local branches or subsidiaries of China Telecom, China Unicom and China Mobile to obtain data communications capacity. We have limited access to alternative services in the event of disruptions, failures or other problems with the fixed telecommunications networks of these companies, or if these companies otherwise fail to provide the services. Any unscheduled service interruption could damage our reputation and result in a decrease in our revenues. Furthermore, we have no control over the costs of the services provided by these telecommunication companies. If the prices that we pay for telecommunications and internet services rise significantly, our gross margins could be adversely affected. In addition, if internet access fees or other charges to internet users increase, our user traffic may decrease, which in turn may harm our revenues.

Our business is subject to complex and evolving Chinese and international laws and regulations regarding privacy and data protection. Many of these laws and regulations are subject to change and uncertain interpretation, and could result in claims, changes to our business practices, increased cost of operations, or declines in user growth or engagement, or otherwise harm our business.

We are required by privacy and data protection laws in China and other jurisdictions, including, without limitation, the PRC Cyber Security Law, to ensure the confidentiality, integrity and availability of the information of our users, customers, distributors, content providers and Baidu Union partners, which is also essential to maintaining their confidence in our online products and services. However, the interpretation and application of such laws in China and elsewhere are often uncertain and in flux.

In December 2012, the Standing Committee of the PRC National People’s Congress promulgated the Decision on Strengthening Network Information Protection, or the Network Information Protection Decision, to enhance the legal protection of information security and privacy on the internet. The Network Information Protection Decision also requires internet operators to take measures to ensure confidentiality of information of users. In July 2013, the MIIT promulgated the Provisions on Protection of Personal Information of Telecommunication and Internet Users to regulate the collection and use of users’ personal information in the provision of telecommunication service and internet information service in China. In November 2016, the Standing Committee of the National People’s Congress promulgated the PRC Cyber Security Law, which requires, among others, that network operators take security measures to protect the network from unauthorized interference, damage and unauthorized access and prevent data from being divulged, stolen or tampered with. Significant capital, managerial and human resources are required to comply with legal requirements, enhance information security and to address any issues caused by security failures.

The PRC Cyber Security Law is relatively new and subject to interpretation by the regulator. Although we only gain access to user information that is necessary for, and relevant to, the services provided, the data we obtain and use may include information that is deemed as “personal information” under the PRC Cyber Security Law and related data privacy and protection laws and regulations. As such, we have adopted a series of measures to ensure that we comply with relevant laws and regulations in the collection, use, disclosure, storage, and security of user information.

While we take all these measures to comply with all applicable data privacy and protection laws and regulations, we cannot guarantee the effectiveness of the measures undertaken by us and business partners. The
activities of third parties such as our customers and business partners are beyond our control. If our business partners violate the PRC Cyber Security Law and related laws and regulations relating to the protection of personal information, or fail to fully comply with the service agreements with us, or if any of our employees fail to comply with our internal control measures and misuse the information, we may be subject to penalties. Any failure or perceived failure to comply with all applicable data privacy and protection laws and regulations, or any failure or perceived failure of our business partners to do so, or any failure or perceived failure of our employees to comply with our internal control measures, may result in negative publicity and legal proceedings or regulatory actions against us, and could damage our reputation, discourage current and potential users and customers from using our products or services and subject us to fines and damages, which could have a material adverse effect on our business and results of operations.

There are a number of legislative proposals in the European Union and the United States, at both the federal and state level, as well as other jurisdictions that could impose new obligations in areas affecting our business. New laws or regulations concerning data protection, or the interpretation and application of existing consumer and data protection laws or regulations, which is often uncertain and in flux, may be inconsistent with our practices. The introduction of new products or other actions that we may take may subject us to additional laws, regulations, or other government scrutiny. Complying with new laws and regulations could cause us to incur substantial costs or require us to change our business practices in a manner materially adverse to our business. For example, if privacy concerns or regulatory restrictions prevent us from selling demographically targeted advertising, we may become less attractive to online advertising customers. In addition, some countries are considering or have passed legislation implementing data protection requirements or requiring local storage and processing of data or similar requirements that could increase the cost and complexity of delivering our services.

Security breaches and improper access to or disclosure of our data or user data, or any system failure or compromise of our security, could harm our reputation and adversely affect our business.

Our business is prone to cyber-attacks seeking unauthorized access to our data or user data or to disrupt our ability to provide services. Any failure to prevent or mitigate security breaches and improper access to or disclosure of our data or user data, such as personal information, names, accounts, user IDs and passwords, and payment or transaction related information, could result in the loss or misuse of such data, which could cause a loss or give rise to liabilities to the owners of confidential information, such as our users, customers, distributors, content providers and Baidu Union partners, subject us to penalties imposed by administrative authorities, and disrupt our operations. In addition, computer malware, viruses, social engineering (predominantly spear phishing attacks), and general hacking have become more prevalent in our industry, have occurred on our systems in the past, and may occur again on our systems in the future. We also regularly encounter attempts to create false or undesirable user accounts, purchase ads, or take other actions on our platform for purposes such as spamming, spreading misinformation, or other objectionable ends. As a result of our prominence, the size of our user base, and the types and volume of personal data on our systems, we believe that we are a particularly attractive target for such breaches and attacks. Such attacks may cause interruptions to the services we provide, degrade the user experience, cause users or customers to lose confidence and trust in our products and services, impair our internal systems, or result in financial harm to us.

We have adopted strict information security policies and deployed advanced measures to implement the policies, including, among others, advanced encryption technologies. However, we may not be able to implement adequate preventative measures or prevent compromises or breaches of our preventative measures due to the evolution of the sophistication of cyber-attacks, advances in technology, an increased level of sophistication and diversity of our products and services, an increased level of expertise of hackers, new discoveries in the field of cryptography or others, software bugs or other technical malfunctions, employee, contractor, or vendor error or malfeasance, government surveillance, or other evolving threats. As a result, we may incur significant costs in protecting against or remedying cyber-attacks.

In addition, some of our developers or other partners, such as those that help us measure the effectiveness of ads, may receive or store information provided by us or by our users through mobile or web applications

26
integrated with our products. We provide limited information to such third parties based on the scope of services provided to us. However, if these third parties fail to adopt or adhere to adequate data security practices, or in the event of a breach of their networks, our data or our users’ data may be improperly accessed, used, or disclosed.

Affected users or government authorities could initiate legal or regulatory actions against us in connection with any actual or perceived security breaches or improper disclosure of data, which could cause us to incur significant expense and liabilities or result in orders or consent decrees forcing us to modify our business practices. Such incidents or our efforts to remediate such incidents may also result in a decline in our user base or engagement levels. Any of these events could have a material and adverse effect on our business, reputation, or results of operations.

Concerns and unfavorable media coverage relating to our privacy practices could damage our reputation, deter current and potential users and customers from using our products and services and negatively impact our business.

The internet industry is facing significant challenges with respect to information security and privacy, including the storage, transmission and sharing of confidential information. The general public, our users, customers, distributors, content providers and Baidu Union partners are increasingly aware of the vulnerability of confidential and private information. We will continue to experience media or regulatory scrutiny of our actions or decisions regarding user privacy, content or advertising. Furthermore, concerns have been expressed from time to time about whether our products, services or processes could compromise the privacy of users and others.

We transmit and store confidential and private information of our users, customers, distributors, content providers and Baidu Union partners, such as personal information, including names, accounts, user IDs and passwords, and payment or transaction related information. Historically there has been negative publicity or media reports making allegations about our practice, and we cannot rule out similar possibilities of such in the future. Although we strive to comply with all privacy related requirements, we cannot guarantee that our products or services are at all times without defect due to the complexity and rapid evolvement of technology, etc. Concerns about our practices with regard to the collection, use, disclosure, or security of personal information or other privacy related matters, and any negative publicity on our information safety or privacy protection mechanism and policy, even if unfounded, has in the past, and could adversely affect our business and results of operations and financial condition. Such concerns and negative publicity could damage our reputation and brand, and have an adverse effect on the size, engagement and loyalty of our user base, which could adversely affect our business and results.

If we fail to maintain an effective system of internal control over financial reporting, we may lose investor confidence in the reliability of our financial statements.

We are subject to reporting obligations under the U.S. securities laws. The SEC, as required by Section 404 of the Sarbanes-Oxley Act of 2002, adopted rules requiring every public company to include a management report on the company’s internal control over financial reporting in its annual report, which contains management’s assessment of the effectiveness of its internal control over financial reporting. In addition, an independent registered public accounting firm must attest to and report on the effectiveness of the company’s internal control over financial reporting. We have been subject to these requirements since the fiscal year ended December 31, 2006.

Our management has concluded that our internal control over financial reporting was effective as of December 31, 2019. See “Item 15. Controls and Procedures.” Our independent registered public accounting firm has issued an attestation report, which has concluded that our internal control over financial reporting was effective in all material aspects as of December 31, 2019. However, if we fail to maintain an effective system of internal control over financial reporting in the future, our management and our independent registered public accounting firm may not be able to conclude that we have effective internal control over financial reporting at a
reasonable assurance level. This could in turn result in loss of investor confidence in the reliability of our financial statements and negatively impact the trading price of our ADSs. Furthermore, we have incurred and anticipate that we will continue to incur considerable costs, management time and other resources in an effort to comply with Section 404 of the Sarbanes-Oxley Act and other requirements.

We are subject to changing laws and regulations regarding regulatory matters, corporate governance and public disclosures that have increased both our costs and the risk of non-compliance.

We are subject to rules and regulations by various governing bodies, including, for example, the SEC, which is charged with the protection of investors and the oversight of companies whose securities are publicly traded, and the various regulatory authorities in China and the Cayman Islands, and to new and evolving regulatory measures under applicable law. Our efforts to comply with new and changing laws and regulations have resulted in and are likely to continue to result in, increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities.

Moreover, because these laws, regulations and standards are subject to varying interpretations, their application in practice may evolve over time as new guidance becomes available. This evolution may result in continuing uncertainty regarding compliance matters and additional costs necessitated by ongoing revisions to our disclosure and governance practices. If we fail to address and comply with these regulations and any subsequent changes, we may be subject to penalty and our business may be harmed.

We have limited business insurance coverage.

Insurance companies in China currently offer limited business insurance products. We do not have any business liability or disruption insurance coverage for our operations in China. Any business disruption may result in our incurring substantial costs and the diversion of our resources.

We face risks related to health epidemics, severe weather conditions and other outbreaks.

In recent years, there have been outbreaks of epidemics in various countries, including China. Recently, there was an outbreak of a novel strain of coronavirus (COVID-19) in China, which has spread rapidly to many parts of the world. The epidemic has resulted in quarantines, travel restrictions, and the temporary closure of stores and facilities in China for the past few months. In March 2020, the World Health Organization declared the COVID-19 a pandemic.

Substantially all of our revenues and our workforce are concentrated in China. Consequently, our results of operations will likely be adversely, and may be materially, affected, to the extent that the COVID-19 or any other epidemic harms the Chinese and global economy in general. Any potential impact to our results will depend on, to a large extent, future developments and new information that may emerge regarding the duration and severity of the COVID-19 and the actions taken by government authorities and other entities to contain the COVID-19 or treat its impact, almost all of which are beyond our control. Potential impacts include, but are not limited to, the following:

- temporary closure of offices, travel restrictions or suspension of services of our customers and suppliers have negatively affected, and could continue to negatively affect, the demand for our services;
- our customers in industries that are negatively impacted by the outbreak of COVID-19, including healthcare, travel, offline education, franchising, auto/transportation and real estate/home furnishing sectors, may reduce their budgets on online advertising and marketing, which may materially adversely impact our revenue from online marketing services;
- our customers may require additional time to pay us or fail to pay us at all, which could significantly increase the amount of accounts receivable and require us to record additional allowances for doubtful accounts. We have provided and may continue to provide significant sales incentives to our customers and distributors during the outbreak, which may in turn materially adversely affect our financial condition and operating results;
the business operations of our distributors have been and could continue to be negatively impacted by the outbreak, which may negatively impact our distribution channel, or result in loss of customers or disruption of our services, which may in turn materially adversely affect our financial condition and operating results;

- any disruption of our supply chain, logistics providers or customers could adversely impact our business and results of operations, including causing us or our suppliers to cease manufacturing Xiaodu smart devices for a period of time or materially delay delivery to customers, which may also lead to loss of customers, as well as reputational, competitive and business harm to us;

- many of our customers, distributors, suppliers and other partners are small and medium-sized enterprises (SMEs), which may not have strong cash flows or be well capitalized, and may be vulnerable to an epidemic outbreak and slowing macroeconomic conditions. If the SMEs that we work with cannot weather the COVID-19 and the resulting economic impact, or cannot resume business as usual after a prolonged outbreak, our revenues and business operations may be materially and adversely impacted;

- the global stock markets have experienced, and may continue to experience, significant decline from the COVID-19 outbreak and the private and public companies that we have invested in could be materially adversely affected, which may lead to significant impairment in the fair values of our investments and in turn materially adversely affect our financial condition and operating results; and

- corporate social responsibility initiatives we put forth in response to the outbreak, such as the RMB300 million charitable initiative with the goal of providing awareness education and improving public health in China, and many other efforts to leverage our technology, products and services to help contain the epidemic, may negatively affect our financial condition and operating results.

Because of the uncertainty surrounding the COVID-19 outbreak, the financial impact related to the outbreak of and response to the coronavirus cannot be reasonably estimated at this time, but our consolidated results for the first quarter of and full year 2020 may be adversely affected. We expect our total revenues in the first quarter of 2020 to decrease year over year, and there is no guarantee that our total revenues will grow or remain at the similar level year over year in the next three quarters of 2020. We may have to record downward adjustments or impairment in the fair value of investments in the first quarter of 2020, if conditions have not been significantly improved and global stock markets have not recovered from recent declines.

In general, our business could be adversely affected by the effects of epidemics, including, but not limited to, the COVID-19, avian influenza, severe acute respiratory syndrome (SARS), the influenza A virus, Ebola virus, severe weather conditions such as a snowstorm, flood or hazardous air pollution, or other outbreaks. In response to an epidemic, severe weather conditions, or other outbreaks, government and other organizations may adopt regulations and policies that could lead to severe disruption to our daily operations, including temporary closure of our offices and other facilities. These severe conditions may cause us and/or our partners to make internal adjustments, including but not limited to, temporarily closing down business, limiting business hours, and setting restrictions on travel and/or visits with clients and partners for a prolonged period of time. Various impact arising from a severe condition may cause business disruption, resulting in material, adverse impact to our financial condition and results of operations.

Risks Related to Our Corporate Structure

PRC laws and regulations governing our businesses and the validity of certain of our contractual arrangements are uncertain. If we are found to be in violation, we could be subject to sanctions. In addition, changes in PRC laws and regulations or changes in interpretations thereof may materially and adversely affect our business.

The PRC government restricts or imposes conditions on foreign investment in internet content, value-added telecommunication-based online marketing, audio and video services and mobile application distribution
businesses. We and our PRC subsidiaries are subject to PRC legal restrictions on or conditions for foreign ownership of internet content, value-added telecommunication-based online marketing, audio and video services and mobile application distribution businesses. Due to these restrictions and conditions, we operate our platform and conduct value-added telecommunication-based online marketing, audio and video services and mobile application distribution businesses in China through our consolidated affiliated entities. As all the nominee shareholders of our consolidated affiliated entities are either PRC citizens or PRC domestic enterprises, these entities are therefore considered as PRC domestic enterprises under PRC law. The “nominee shareholders” refer to those shareholders who have pledged their equity interest in our consolidated affiliated entities to us and entered into exclusive equity purchase and transfer option agreements with us as part of the contractual arrangements. Our contractual arrangements with our consolidated affiliated entities and the nominee shareholders allow us to have the power to direct the activities of these entities that most significantly impact their economic performance. These contractual arrangements demonstrate our ability and intention to continue to exercise the ability to absorb losses or receive economic benefits that could potentially be significant to the consolidated affiliated entities. In 2017, 2018 and 2019, we derived 29%, 25% and 33% of our external revenues from our consolidated affiliated entities, respectively.

There are substantial uncertainties regarding the interpretation and application of PRC laws and regulations, including, but not limited to, the laws and regulations governing our business, or the enforcement and performance of our contractual arrangements with our consolidated affiliated entities, including but not limited to Baidu Netcom and the nominee shareholders. These laws and regulations may be subject to change, and their official interpretation and enforcement may involve substantial uncertainty. New laws and regulations that affect existing and proposed future businesses may also be applied retroactively.

Although we believe we comply with current PRC laws and regulations, we cannot assure you that the PRC government would agree that our contractual arrangements comply with PRC licensing, registration or other regulatory requirements, with existing policies or with requirements or policies that may be adopted in the future. The PRC government has broad discretion in determining penalties for violations of laws and regulations. If the PRC government determines that we do not comply with applicable law, it could revoke our business and operating licenses, require us to discontinue or restrict our operations, restrict our right to collect revenues, block our websites, require us to restructure our operations, impose additional conditions or requirements with which we may not be able to comply, impose restrictions on our business operations or on our customers, or take other regulatory or enforcement actions against us that could be harmful to our business. Any of these or similar occurrences could significantly disrupt our business operations or restrict us from conducting a substantial portion of our business operations, which could materially and adversely affect our business, financial condition and results of operations. If any of these occurrences results in our inability to direct the activities of any of our consolidated affiliated entities that most significantly impact its economic performance, and/or our failure to receive the economic benefits from any of our consolidated affiliated entities, we may not be able to consolidate these entities in our consolidated financial statements in accordance with U.S. GAAP.

Our contractual arrangements with our consolidated affiliated entities in China and the individual nominee shareholders may not be as effective in providing control over these entities as direct ownership.

Since PRC law restricts or imposes conditions on foreign equity ownership in the internet sector, value-added telecommunication-based online marketing, online audio and video services and mobile application distribution companies in China, we operate our platform and conduct our value-added telecommunication-based online marketing, online audio and video services and mobile app distribution businesses through our consolidated affiliated entities in China. We have no equity interest in any of these entities and must rely on contractual arrangements to control and operate the businesses and assets held by our consolidated affiliated entities, including the domain names and trademarks that have been transferred from our subsidiaries to our consolidated affiliated entities in accordance with requirements of PRC law. These contractual arrangements may not be as effective in providing control over these entities as direct ownership. For example, our consolidated affiliated entities and the individual nominee shareholders could breach their contractual arrangements with us by, among other things, failing to operate our business, such as using the domain names and trademarks our
subsidiaries have transferred to them or maintaining our platform, in an acceptable manner or taking other actions that are detrimental to our interests. If our consolidated affiliated entities or the individual nominee shareholders fail to perform their obligations under these contractual arrangements, we may have to incur substantial costs to enforce such arrangements, and rely on legal remedies under PRC law, including contract remedies, which may not be sufficient or effective. If we are unable to enforce these contractual arrangements, or if we suffer significant delay or other obstacles in the process of enforcing these contractual arrangements, we may not be able to have the power to direct the activities that most significantly affect the economic performance of our consolidated affiliated entities, and we may lose control over the assets owned by our consolidated affiliated entities, including our Baidu.com domain name and website, and any other domain names and websites we have access to may not attract a large number of users and customers at the same level as Baidu.com. As a result, our ability to conduct our business may be materially and adversely affected, and we may not be able to consolidate the financial results of the relevant affiliated entities into our consolidated financial statements in accordance with U.S. GAAP, which may materially and adversely affect our results of operations and damage our reputation.

Our contractual arrangements with our consolidated affiliated entities in China may result in adverse tax consequences to us.

As a result of our corporate structure and the contractual arrangements between our subsidiaries and each of our consolidated affiliated entities in China, we are subject to VAT as a result of the VAT reform program on both service revenues generated by our consolidated affiliated entities’ operations in China and revenues derived from our subsidiaries’ contractual arrangements with these consolidated affiliated entities. Where our consolidated affiliated entity is qualified as a VAT general taxpayer, the VAT charged by our subsidiaries on the revenues obtained from such consolidated affiliated entity based on the contractual arrangement between our subsidiaries and such consolidated affiliated entity will constitute input VAT for the consolidated affiliated entity, and will be creditable against output VAT arising in connection with VAT taxable activities carried out by the consolidated affiliated entity. See “Item 5.A. Operating and Financial Review and Prospects—Operating Results—Taxation” for more information on the VAT reform program. Moreover, we would be subject to adverse tax consequences if the PRC tax authorities were to determine that the contracts between our subsidiaries and these consolidated affiliated entities were not on an arm’s-length basis and therefore constituted a favorable transfer pricing. Under the PRC Enterprise Income Tax Law, or the EIT Law, an enterprise must submit its annual tax return together with information on related-party transactions to the PRC tax authorities. The PRC tax authorities may impose reasonable adjustments on taxation if they have identified any related party transactions that are inconsistent with arm’s-length principles. For example, the PRC tax authorities could request that our consolidated affiliated entities adjust their taxable income upward for PRC tax purposes. Such adjustment could adversely affect us by increasing our consolidated affiliated entities’ tax expenses without reducing our subsidiaries’ tax expenses, which could subject our consolidated affiliated entities to interest due on late payments and other penalties for under-payment of taxes.

We may have exposure to greater than anticipated tax liabilities.

We are subject to enterprise income tax, or EIT, VAT, and other taxes in many provinces and cities in China and our tax structure is subject to review by various local tax authorities. The determination of our provision for income tax and other tax liabilities requires significant judgment. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. For example, if our P4P service is classified as a form of advertisement distribution service, we may be required to pay a 3% cultural business construction fee (a 50% reduction of cultural business construction fee from July 1, 2019 to December 31, 2024). In addition, if this classification of P4P services were to be retroactively applied, we might be subject to sanctions, including payment of delinquent fees and fines for the revenues generated from our P4P services prior to the classification. Moreover, under the EIT Law, the PRC tax authorities may impose reasonable adjustments on taxation if they have identified any related party transactions that are inconsistent with arm’s-length principles. Particularly, pursuant to the Administrative Measures for Special Tax Adjustment and Investigation and Mutual Consultation Procedures issued by the State Administration of Tax in March 2017, if a PRC enterprise makes an outbound payment to its overseas related party which undertakes no functions, bears no
risks or has no substantial operation or activities and such payment is inconsistent with arm’s-length principles, the tax authorities may carry out a special tax adjustment based on the full amount deducted prior to tax. Although we believe all our related party transactions, including all payments by our PRC subsidiaries and consolidated affiliated entities to our non-PRC entities, are made on an arm’s-length basis and our estimates are reasonable, the ultimate decisions by the relevant tax authorities may differ from the amounts recorded in our financial statements and may materially affect our financial results in the period or periods for which such determination is made.

The individual nominee shareholders of our consolidated affiliated entities may have potential conflicts of interest with us, which may adversely affect our business. We do not have any arrangements in place to address such potential conflicts.

We have designated individuals who are PRC nationals to be the nominee shareholders of our consolidated affiliated entities in China. For example, Robin Yanhong Li, our chairman, chief executive officer and co-founder, is also the principal nominee shareholder of Baidu Netcom, which is our principal consolidated affiliated entity.

Although the individual nominee shareholders are contractually obligated to act in good faith and in our best interest, they may still have potential conflicts of interest with us. For example, some individual nominee shareholders of our consolidated affiliated entities do not have a significant equity stake in our company other than the share options granted to them. We cannot assure you that when conflicts of interest arise, any or all of these individuals will act in the best interests of our company or such conflicts will be resolved in our favor. In addition, these individuals may breach, cause our consolidated affiliated entities to breach or refuse to renew, the existing contractual arrangements with us. Currently, we do not have any arrangements to address potential conflicts of interest between these individuals and our company, except that we could exercise our transfer option under the exclusive equity purchase and transfer option agreement with the relevant individual nominee shareholder to request him/her to transfer all of his/her equity ownership in the relevant consolidated affiliated entity to a PRC entity or individual designated by us. We rely on Mr. Robin Yanhong Li, who is also a director of our company, to abide by the Cayman Islands law, which provides that directors owe a fiduciary duty to the company, and those who are also directors or officers of our PRC subsidiaries to abide by PRC law, which provides that directors and officers owe a fiduciary duty to the company. Such fiduciary duty requires directors and/or officers to act in good faith and in the best interests of the company and not to use their positions for personal gains. There are, however, no specific provisions under the Cayman Islands or PRC law on how to address potential conflicts of interest. If we cannot resolve any conflict of interest or dispute between us and the individual nominee shareholders of our consolidated affiliated entities, we would have to rely on legal proceedings, which could disrupt our business, distract management and subject us to substantial uncertainty as to the outcome of any such legal proceedings.

We may be unable to collect long-term loans to the nominee shareholders of our consolidated affiliated entities in China.

As of the date of this annual report, we have made long-term loans in an aggregate principal amount of RMB18.5 billion (US$2.7 billion) to the nominee shareholders of our consolidated affiliated entities. We extended these loans to enable the nominee shareholders to fund the capitalization of these entities. We may in the future provide additional loans to the nominee shareholders of our consolidated affiliated entities in China in connection with any increase in their capitalization to the extent necessary and permissible under applicable law. Our ability to ultimately collect these loans will depend on the profitability of these consolidated affiliated entities and their operational needs, which are uncertain.
We are in the process of registering the pledges of equity interests by nominee shareholders of some of our consolidated affiliated entities, and we may not be able to enforce the equity pledges against any third parties who acquire the equity interests in good faith in the relevant consolidated affiliated entities before the pledges are registered.

The nominee shareholders of each of our consolidated affiliated entities have pledged all of their equity interests in the relevant consolidated affiliated entities to our subsidiaries pursuant to equity pledge agreements under the contractual arrangements. An equity pledge agreement becomes effective among the parties upon execution. However, according to the PRC Property Rights Law, an equity pledge is not perfected as a security property right unless it is registered with the relevant local administration for market regulation. We are still in the process of registering the pledge relating to certain consolidated affiliated entities, relating to recent equity interest transfers and capital increase. Prior to the completion of the registration, we may not be able to successfully enforce the equity pledge against any third parties who have acquired property right interests in good faith in the equity interests in the relevant consolidated affiliated entities.

Recently introduced economic substance legislation of the Cayman Islands may adversely impact us or our operations.

The Cayman Islands, together with several other non-European Union jurisdictions, have recently introduced legislation aimed at addressing concerns raised by the Council of the European Union as to offshore structures engaged in certain activities which attract profits without real economic activity. With effect from January 1, 2019, the International Tax Co-operation (Economic Substance) Law, 2018 (the “Substance Law”) came into force in the Cayman Islands introducing certain economic substance requirements for in-scope Cayman Islands entities which are engaged in certain “relevant activities,” which in the case of exempted companies incorporated before January 1, 2019, will apply in respect of financial years commencing July 1, 2019, onwards. However, it is anticipated that we may remain out of scope of the legislation or else be subject to more limited substance requirements. Although it is presently anticipated that the Substance Law will have little material impact on us or our operations, as the legislation is new and remains subject to further clarification and interpretation it is not currently possible to ascertain the precise impact of these legislative changes on us.

Risks Related to Doing Business in China

Changes in China's economic, political or social conditions or government policies could have a material and adverse effect on our business and operations.

Most of our business operations are conducted in China. Accordingly, our business, results of operations, financial condition and prospects are affected by economic, political and social conditions in China generally and by continued economic growth in China as a whole.

China’s economy differs from the economies of most developed countries in many respects, including the level of government involvement, level of development, growth rate, control of foreign exchange and allocation of resources. Although the Chinese government has implemented measures emphasizing the utilization of market forces for economic reform, the reduction of state ownership of productive assets, and the establishment of improved corporate governance in business enterprises, a substantial portion of productive assets in China is still owned by the government. In addition, the Chinese government continues to play a significant role in regulating industry development. The Chinese government also exercises significant control over China’s economic growth through allocating resources, controlling payment of foreign currency-denominated obligations, setting monetary policy, and providing preferential treatment to particular industries or companies.

Growth of China’s economy has been uneven, both geographically and among various sectors of the economy, and the growth of the Chinese economy has slowed down in recent years. Some of the government measures may benefit the overall Chinese economy, but may have a negative effect on us. For example, our financial condition and results of operations may be adversely affected by government control over capital investments or changes in tax regulations. Any stimulus measures designed to boost the Chinese economy may contribute to higher inflation, which could adversely affect our results of operations and financial condition. For example, certain operating costs and expenses, such as employee compensation and office operating expenses, may increase as a result of higher inflation. Additionally, because a substantial portion of our assets consists of
cash and cash equivalents and short-term investments, high inflation could significantly reduce the value and purchasing power of these assets.

Uncertainties with respect to the PRC legal system could adversely affect us.

We conduct our business primarily through our subsidiaries and consolidated affiliated entities in China. Our operations in China are governed by PRC laws and regulations. Our subsidiaries are generally subject to laws and regulations applicable to foreign investments in China. The PRC legal system is based on written statutes. Prior court decisions may be cited for reference but have limited precedential value.

PRC laws and regulations have significantly enhanced the protections afforded to various forms of foreign investments in China for the past decades. However, China has not developed a fully integrated legal system and recently enacted laws and regulations may not sufficiently cover all aspects of economic activities in China. In particular, because these laws and regulations are relatively new, and because of the limited volume of published decisions and their nonbinding nature, the interpretation and enforcement of these laws and regulations involve uncertainties.

Furthermore, the PRC legal system is based in part on government policies and internal rules, some of which are not published on a timely basis or at all. As a result, we may not be aware of our potential violation of these policies and rules. In addition, any litigation in China may be protracted and result in substantial costs and diversion of resources and management attention.

We may be adversely affected by the complexity, uncertainties and changes in PRC regulation of internet and related business and companies.

The PRC government regulates the internet and related industry extensively, including foreign ownership of, and the licensing and permit requirements pertaining to, companies in the internet industry. These internet-related laws and regulations are relatively new and evolving, and their interpretation and enforcement involve significant uncertainty. As a result, under certain circumstances it may be difficult to determine what actions or omissions may be deemed to be violations of applicable laws and regulations. Issues, risks and uncertainties relating to PRC government regulation of the internet industry include, but are not limited to, the following:

• We only have contractual control over our websites. We do not own the websites due to the restriction of foreign investment in businesses providing value-added telecommunications services in China, including online information services.

• The licensing requirements relating to the internet business in China are uncertain and evolving. This means that permits, licenses or operations at some of our PRC subsidiaries and consolidated affiliated entities may be subject to challenge, or we may not be able to obtain or renew certain permits or licenses, including without limitation, a Value-Added Telecommunication Business Operating License, which is issued by the MIIT, an Internet News License, which is issued by the Cyberspace Administration of China, or the CAC, a Short Messaging Service Access Code Certificate, which is issued by the MIIT, an Online Audio/Video Program Transmission License, which is issued by the State Administration of Press Publication, Radio, Film and Television, or the SAPPRFT (currently known as National Radio and Television Administration, or the NRTA), a Radio and Television Program Production License, which is issued by the NRTA, a Surveying and Mapping Qualification Certificate for internet map services, which is issued by the National Administration of Surveying, Mapping and Geo-information, an Internet Culture Business Permit with the permitted scope of business covering online game operation and online game virtual currency issuance or trading, which is issued by the Ministry of Culture, an Internet Publication Service License, which is issued by the National News and Publication Bureau, or the NNPB, a Publication Business Operating License, which is issued by NNPB, a Qualification Certificate for Internet Drug Information Services, which is issued by provincial branch of the State Food and Drug Administration, a Human Resource Services License, which is issued by the Ministry of Human Resources and Social Security, and a Commercial Performances License, which is issued by the municipal bureau of culture. Failure to obtain or renew these permits and licenses may significantly disrupt our business, or subject us to sanctions,
requirements to increase capital or other conditions or enforcement, or compromise enforceability of related contractual arrangements, or have other harmful effects on us.

- New laws and regulations may be promulgated to regulate internet activities, including online advertising. Other aspects of our online operations may be regulated in the future. If these new laws and regulations are promulgated, additional licenses may be required for our online operations. If our operations do not comply with these new regulations at the time they become effective, or if we fail to obtain any licenses required under these new laws and regulations, we could be subject to penalties.

We provide value-added telecommunications services through our consolidated affiliated entities, which hold the required licenses. In July 2006, the MIIT issued the Notice of the Ministry of Industry and Information Technology on Intensifying the Administration of Foreign Investment in Value-Added Telecommunications Services. This notice prohibits domestic telecommunication service providers from leasing, transferring or selling telecommunication business operating licenses to any foreign investor in any form, or providing any resources, sites or facilities to any foreign investor for their illegal operation of a telecommunication business in China. According to this notice, either the holder of a Value-Added Telecommunication Business Operating License or its shareholders must directly own the domain names and trademarks used by the license holder in its provision of value-added telecommunications services. The notice also requires each license holder to have the necessary facilities, including servers, for its approved business operations and to maintain these facilities in the regions covered by its license. Baidu Netcom, our consolidated affiliated entity, owns the necessary domain names and trademarks, including pending trademark applications and have the necessary personnel and facilities to operate our websites.

As we enter into new businesses, we may encounter additional regulatory uncertainties. For example, the current PRC legal framework on autonomous cars or autonomous driving is still new and evolving. Pursuant to the local rules and regulations in various cities including Beijing, Shanghai, Tianjin, Chongqing, and other cities, any entity intending to conduct a road testing of autonomous driving vehicles in these cities must file an application for road testing with a designated local agency supervising road testing of autonomous vehicles in these cities. It also remains uncertain what additional compliance requirements we need to meet in order to undertake a road testing of our autonomous driving cars in other locations in China. Baidu has obtained permits to conduct road testing in Beijing, Changsha, Chongqing, Cangzhou, Wuhan, Tianjin and other cities. There is no guarantee that the road testing of our autonomous driving cars in other locations fully complies with local laws and regulations. If our road testing is deemed by local enforcement authority as a violation of the applicable traffic and transportation laws, we may have to suspend the testing, and the progress of our research and development of autonomous cars may be adversely affected.

The interpretation and application of existing PRC laws, regulations and policies and possible new laws, regulations or policies relating to the internet industry have created substantial uncertainties regarding the legality of existing and future foreign investments in, and the businesses and activities of, internet businesses in China, including our business.

**Uncertainties exist with respect to the interpretation and implementation of the new PRC Foreign Investment Law and its Implementation Regulations and how it may impact the viability of our current corporate structure, corporate governance and business operations.**

On January 1, 2020, the Foreign Investment Law and the Regulations for Implementation of the Foreign Investment Law of the People’s Republic of China, or the Implementation Regulations, came into effect and replace the trio of prior laws regulating foreign investment in China, namely, the Sino-foreign Equity Joint Venture Enterprise Law, the Sino-foreign Cooperative Joint Venture Enterprise Law and the Wholly Foreign-invested Enterprise Law, together with their implementation rules and ancillary regulations. The Foreign Investment Law and the Implementation Regulations embody an expected PRC regulatory trend to rationalize its foreign investment regulatory regime in line with prevailing international practice and the legislative efforts to unify the corporate legal requirements for both foreign and domestic investments. However, since they are relatively new, uncertainties still exist in relation to their interpretation and implementation. For instance, under the Foreign Investment Law, “foreign investment” refers to the investment activities directly or indirectly
conducted by foreign individuals, enterprises or other entities in China. Though it does not explicitly classify contractual arrangements as a form of foreign investment, there is no assurance that foreign investment via contractual arrangement would not be interpreted as a type of indirect foreign investment activities under the definition in the future. In addition, the definition contains a catch-all provision which includes investments made by foreign investors through means stipulated in laws or administrative regulations or other methods prescribed by the State Council. Therefore, it still leaves leeway for future laws, administrative regulations or provisions promulgated by the State Council to provide for contractual arrangements as a form of foreign investment. In any of these cases, it will be uncertain whether our contractual arrangements will be deemed to be in violation of the market access requirements for foreign investment under the PRC laws and regulations. Furthermore, if future laws, administrative regulations or provisions prescribed by the State Council mandate further actions to be taken by companies with respect to existing contractual arrangements, we may face substantial uncertainties as to whether we can complete such actions in a timely manner, or at all. Failure to take timely and appropriate measures to cope with any of these or similar regulatory compliance challenges could materially and adversely affect our current corporate structure, corporate governance and business operations.

Regulation and censorship of information disseminated over the internet in China may adversely affect our business, and subject us to liability for information displayed on or linked to our websites, mobile apps, Smart Mini Program or Managed Page and negative publicity in international media.

The PRC government has adopted regulations governing internet access and distribution of news and other information over the internet. Under these regulations, internet content providers and internet publishers are prohibited from posting or displaying over the internet content that, among other things, violates PRC laws and regulations, impairs the national dignity of China, contains terrorism or extremism content, or is reactionary, obscene, superstitious, fraudulent or defamatory. Failure to comply with these requirements may result in the revocation of licenses to provide internet content and other licenses and the closure of the concerned websites. In the past, failure to comply with these requirements has resulted in the closure of certain websites. The website operator may also be held liable for the censored information displayed on or linked to the website or the mobile apps.

In particular, the MIIT has published regulations that subject website operators to potential liability for content displayed on their websites or mobile apps and the actions of users and others using their systems, including liability for violations of PRC laws and regulations prohibiting the dissemination of content deemed to be socially destabilizing. The Ministry of Public Security has the authority to order any local internet service provider to block any internet website at its sole discretion. From time to time, the Ministry of Public Security has stopped the dissemination over the internet of information which it believes to be socially destabilizing. The State Secrecy Bureau is also authorized to block any website it deems to be leaking state secrets or failing to meet the relevant regulations relating to the protection of state secrets in the dissemination of online information. Furthermore, we are required to report any suspicious content to relevant governmental authorities, and to undergo computer security inspections. If we fail to implement the relevant safeguards against security breaches, our websites may be shut down and our business and ICP licenses may be revoked. In addition, the CAC has, from time to time, also issued rules enhancing the internet service provider’s obligations to monitor information displayed on its information platform and prevent dissemination of illegal contents. See “Item 4.B. Information on the Company—Business Overview—Regulations—Regulations on Value-Added Telecommunications Services and Internet Content Services—Content Regulation.”

The Anti-Terrorism Law, which took effect on January 1, 2016 and was amended on April 27, 2018, further requires internet service providers to verify the identity of their users, and to not provide services to anyone whose identity is unclear or who declines verification. Although the identity verification requirements are already embodied in some internet related regulations, the Anti-Terrorism Law extends these requirements to all types of internet services. The internet service providers are also required to provide technical interfaces, decryption and other technical support and assistance for the competent departments to prevent and investigate terrorist activities. See “Item 4.B. Information on the Company—Business Overview—Regulations—Regulations on Information Security.” for more details.

36
Although we attempt to monitor the content in our search results, mobile apps, online communities such as Baidu Post, and Smart Mini Programs and Managed Page, we are not able to control or restrict the content of other internet content providers linked to or accessible through our websites, mobile apps, or content generated or placed on our Baidu Post message boards, mini programs, Managed Page, or our other online communities by our users. To the extent that PRC regulatory authorities find any content displayed on our websites or mobile apps illegal, they may require us to limit or eliminate the dissemination of such information on our websites or mobile apps. To the extent that PRC regulatory authorities find any content displayed on our websites or mobile apps objectionable, they may suggest that we limit or eliminate the dissemination of such information on our websites or mobile apps. If third-party websites linked to or accessible through our websites or mini programs accessible through our mobile apps conduct unlawful activities such as online gambling, PRC regulatory authorities may require us to report such unlawful activities to relevant authorities and to remove the links to such websites or mobile apps, or they may suspend or shut down the operation of these third-party websites. PRC regulatory authorities may also temporarily block access to certain websites or mobile apps for a period of time for reasons beyond our control. Any of these actions may reduce our user traffic and adversely affect our business. In addition, we have been and may be subject to penalties in the future for violations of those regulations arising from information displayed on or linked to our websites or mobile apps, including a suspension or shutdown of our online operations.

Moreover, our compliance with PRC regulations governing internet access and distribution of news and other information over the internet may subject us to negative publicity or even legal actions outside of China. In May 2011, eight New York residents filed a lawsuit against us before the U.S. District Court for the Southern District of New York accusing us of aiding Chinese censorship in violation of the U.S. Constitution. In March 2014, the U.S. District Court for the Southern District of New York granted our motion for judgment on the pleadings based upon the First Amendment to the U.S. Constitution and dismissed with prejudice the plaintiffs’ complaint in its entirety, barring the plaintiffs from bringing an appeal or action based on the same claim. Even though we have won the case, our reputation may continually be adversely affected among users and investors outside of China.

_Please note:_ The discontinuation of any of the preferential income tax treatments currently available to us in the PRC could have a material and adverse effect on our result of operations and financial condition.

Pursuant to the EIT Law, as further clarified by subsequent tax regulations implementing the EIT Law, foreign-invested enterprises and domestic enterprises are subject to EIT at a uniform rate of 25%. Certain enterprises may benefit from a preferential tax rate of 15% under the EIT Law if they qualify as “High and New Technology Enterprises strongly supported by the state,” subject to certain general factors described in the EIT Law and the related regulations.

A number of our PRC subsidiaries and consolidated affiliated entities, such as Baidu Online Network Technology (Beijing) Co., Ltd., or Baidu Online, and Baidu Netcom are entitled to enjoy a preferential tax rate of 15% due to their qualification as “High and New Technology Enterprise,” which has a term of three years. If any or some of these PRC subsidiaries and consolidated affiliated entities fail to maintain the “High and New Technology Enterprise” qualification, their applicable EIT rate will increase to 25%. Furthermore, Baidu Online was entitled to a preferential income tax rate of 10% from 2010 to 2018 due to its “Key Software Enterprise” status, so was Baidu China for 2015 to 2018, and Baidu International Technology (Shenzhen) Co., Ltd., or Baidu International, for 2016 to 2018. Baidu Online, Baidu China and Baidu International will file with the local tax authority for the preferential tax rate of 10% for a “Key Software Enterprise” for 2019 before the end of May 2020, and will be subject to relevant governmental authorities’ assessment. However, there is no assurance that any of these entities will continue to enjoy the preferential tax rate as a “Key Software Enterprise.” See “Item 5.A. Operating and Financial Review and Prospects—Operating Results—Taxation—PRC Enterprise Income Tax.”

The discontinuation of any of the above-mentioned preferential income tax treatments currently available to us in the PRC could have a material and adverse effect on our result of operations and financial condition. We cannot assure you that we will be able to maintain our current effective tax rate in the future.
If our PRC subsidiaries declare and distribute dividends to their respective offshore parent companies, we will be required to pay more taxes, which could have a material and adverse effect on our results of operations.

Under the EIT Law and related regulations, dividends, interests, rent or royalties payable by a foreign-invested enterprise, such as our PRC subsidiaries, to any of its foreign non-resident enterprise investors, and proceeds from any such foreign enterprise investor’s disposition of assets (after deducting the net value of such assets) are subject to a 10% withholding tax, unless the foreign enterprise investor’s jurisdiction of incorporation has a tax treaty with China that provides for a reduced rate of withholding tax. Undistributed profits earned by foreign-invested enterprises prior to January 1, 2008 are exempted from any withholding tax. The British Virgin Islands, where Baidu Holdings Limited, the direct parent company of our PRC subsidiaries Baidu Online and Baidu International, is incorporated, does not have such a tax treaty with China. Hong Kong has a tax arrangement with China that provides for a 5% withholding tax on dividends subject to certain conditions and requirements, such as the requirement that the Hong Kong resident enterprise own at least 25% of the PRC enterprise distributing the dividend at all times within the 12-month period immediately preceding the distribution of dividends and be a “beneficial owner” of the dividends. For example, Baidu (Hong Kong) Limited, which directly owns our PRC subsidiaries Baidu China and Baidu Times, is incorporated in Hong Kong. However, if Baidu (Hong Kong) Limited is not considered to be the beneficial owner of dividends paid to it by Baidu China and Baidu Times under the tax circulars promulgated in February 2009 and 2018, such dividends would be subject to withholding tax at a rate of 10%. See “Item 5.A. Operating and Financial Review and Prospects—Operating Results—Taxation—PRC Enterprise Income Tax.” If our PRC subsidiaries declare and distribute profits earned after January 1, 2008 to us in the future, such payments will be subject to withholding tax, which will increase our tax liability and reduce the amount of cash available to our company.

We may be deemed a PRC resident enterprise under the EIT Law, which could subject us to PRC taxation on our global income, and which may have a material and adverse effect on our results of operations.

Under the EIT Law and related regulations, an enterprise established outside of the PRC with “de facto management body” within the PRC is considered a PRC resident enterprise and is subject to the EIT at the rate of 25% on its worldwide income as well as PRC EIT reporting obligations. The related regulations define the term “de facto management body” as “the establishment that exercises substantial and overall management and control over the production, business, personnel, accounts and properties of an enterprise.” The State Administration of Taxation issued SAT Circular 82 in April 2009, which provides certain specific criteria for determining whether the “de facto management body” of a Chinese-controlled overseas-incorporated enterprise is located in China. The State Administration of Taxation issued additional rules to provide more guidance on the implementation of SAT Circular 82 in July 2011, and issued an amendment to SAT Circular 82 delegating the authority to its provincial branches to determine whether a Chinese-controlled overseas-incorporated enterprise should be considered a PRC resident enterprise, in January 2014. See “Item 5.A. Operating and Financial Review and Prospects—Operating Results—Taxation—PRC Enterprise Income Tax.” Although the SAT Circular 82, the additional guidance and amendment apply only to overseas registered enterprises controlled by PRC enterprises, not to those controlled by PRC individuals or foreigners, the criteria set forth in SAT Circular 82 may reflect the State Administration of Taxation’s general position on how the “de facto management body” test should be applied in determining the tax resident status of offshore enterprises, regardless of whether they are controlled by PRC enterprises or individuals. If we are deemed a PRC resident enterprise, we may be subject to the EIT at 25% on our global income, except that the dividends we receive from our PRC subsidiaries may be exempt from the EIT to the extent such dividends are deemed as “dividends among qualified PRC resident enterprises.” If we are deemed a PRC resident enterprise and earn income other than dividends from our PRC subsidiaries, a 25% EIT on our global income could significantly increase our tax burden and materially and adversely affect our cash flow and profitability.
Under PRC tax laws, dividends payable by us and gains on the disposition of our shares or ADSs may be subject to PRC taxation.

If we are considered a PRC resident enterprise under the EIT Law, our shareholders and ADS holders who are deemed non-resident enterprises may be subject to the EIT at the rate of 10% upon the dividends payable by us or upon any gains realized from the transfer of our shares or ADSs, if such income is deemed derived from China, provided that (i) such foreign enterprise investor has no establishment or premises in China, or (ii) it has establishment or premises in China but its income derived from China has no real connection with such establishment or premises. If we are required under the EIT Law to withhold PRC income tax on our dividends payable to our non-PRC resident enterprise shareholders and ADS holders, or if any gains realized from the transfer of our shares or ADSs by our non-PRC resident enterprise shareholders and ADS holders are subject to the EIT, your investment in our shares or ADSs could be materially and adversely affected.

Furthermore, if we are considered a PRC resident enterprise and relevant PRC tax authorities consider dividends we pay with respect to our shares or ADSs and the gains realized from the transfer of our shares or ADSs to be income derived from sources within the PRC, it is possible that such dividends and gains earned by non-resident individuals may be subject to PRC individual income tax at a rate of 20%. If we are required under PRC tax laws to withhold PRC income tax on dividends payable to our non-PRC investors that are non-resident individuals or if you are required to pay PRC income tax on the transfer of our shares or ADSs, the value of your investment in our shares or ADSs may be materially and adversely affected.

Our subsidiaries and consolidated affiliated entities in China are subject to restrictions on paying dividends and making other payments to our holding company.

Baidu, Inc. is our holding company incorporated in the Cayman Islands. As a result of the holding company structure, it currently relies on dividend payments from our subsidiaries in China. However, PRC regulations currently permit payment of dividends only out of accumulated profits, as determined in accordance with PRC accounting standards and regulations. Our subsidiaries and consolidated affiliated entities in China are also required to set aside a portion of their after-tax profits according to PRC accounting standards and regulations to fund certain reserve funds. The PRC government also imposes controls on the conversion of RMB into foreign currencies and the remittance of foreign currencies out of China. We may experience difficulties in completing the administrative procedures necessary to obtain and remit foreign currency. See “—Governmental control of currency conversion may affect the value of your investment.” Furthermore, if our subsidiaries or consolidated affiliated entities in China incur debt on their own in the future, the instruments governing the debt may restrict their ability to pay dividends or make other payments. If our subsidiaries and consolidated affiliated entities in China are unable to pay dividends or make other payments to us, we may be unable to pay dividends on our ordinary shares and ADSs.

Governmental control of currency conversion may affect the value of your investment.

The PRC government imposes controls on the convertibility of RMB into foreign currencies and, in certain cases, the remittance of foreign currency out of China. We receive most of our revenues in RMB. Under our current structure, our income at the Cayman Islands holding company level will primarily be derived from dividend payments from our PRC subsidiaries. Shortages in the availability of foreign currency may restrict the ability of our PRC subsidiaries and consolidated affiliated entities to remit sufficient foreign currency to pay dividends or other payments to us, or otherwise satisfy their foreign currency denominated obligations. Under existing PRC foreign exchange regulations, payments of current account items, including profit distributions, interest payments and expenditures from trade-related transactions, can be made in foreign currencies without prior approval from the State Administration of Foreign Exchange, or SAFE, by complying with certain procedural requirements. However, approval from appropriate government authorities is required where RMB is to be converted into foreign currency and remitted out of China to pay capital expenses such as the repayment of loans denominated in foreign currencies. The PRC government may also at its discretion restrict access in the
future to foreign currencies for current account transactions. If the foreign exchange control system prevents us from obtaining sufficient foreign currency to satisfy our currency demands, we may not be able to pay dividends in foreign currencies to our shareholders or ADS holders.

**PRC regulation of loans to and direct investment in PRC entities by offshore holding companies and governmental control of currency conversion may delay or prevent us from making loans to our PRC subsidiaries or consolidated affiliated entities, or making additional capital contributions to our PRC subsidiaries, which could adversely affect our ability to fund and expand our business.**

Baidu, Inc. is our offshore holding company conducting operations in China through our PRC subsidiaries and consolidated affiliated entities. We may make loans to our PRC subsidiaries and consolidated affiliated entities, or we may make additional capital contributions to our PRC subsidiaries. Loans by Baidu, Inc. or any of our offshore subsidiaries to our PRC subsidiaries, which are treated as foreign-invested enterprises under PRC law, or to our consolidated affiliated entities are subject to PRC regulations and foreign exchange loan registrations. Such loans to any of our PRC subsidiaries and consolidated affiliated entities to finance their activities cannot exceed a statutory upper limit and must be filed with SAFE through the online filing system of SAFE after the loan agreement is signed and at least three business days prior to the borrower withdraws any amount from the foreign loan. We may also decide to finance our PRC subsidiaries by means of capital contributions, in which case the PRC subsidiary is required to register the details of the capital contribution with the local branch of SAMR and submit a report on the capital contribution via the online enterprise registration system to the Ministry of Commerce. Meanwhile, we are not likely to finance the activities of our consolidated affiliated entities by means of capital contributions given the PRC legal restrictions on foreign ownership of internet, value-added telecommunication-based online marketing, online audio and video services and mobile app distribution businesses.

In June 2016, SAFE promulgated SAFE Circular No. 16, which removed certain restrictions previously provided under several SAFE circulars, including SAFE Circular No. 142, in respect of conversion by a foreign-invested enterprise of foreign currency registered capital into RMB and use of such RMB capital. However, SAFE Circular No. 16 continues to prohibit foreign-invested enterprises from, among other things, using RMB fund converted from its foreign exchange capitals for expenditure beyond its business scope, and providing loans to non-affiliated enterprises except as permitted in the business scope. On October 23, 2019, the SAFE issued the Circular on Further Promoting Cross-border Trade and Investment Facilitation, or SAFE Circular 28. Among others, SAFE Circular 28 relaxes prior restrictions and allows foreign-invested enterprises that do not have equity investments in their approved business scope to use their capital obtained from foreign exchange settlement to make domestic equity investments as long as the investments are real and in compliance with the foreign investment-related laws and regulations.

In light of the various requirements imposed by PRC regulations on loans to and direct investment in PRC entities by offshore holding companies, including SAFE Circulars referred to above, we cannot assure you that we will be able to complete the necessary government registrations or filings on a timely basis, if at all, with respect to future loans by us to our PRC subsidiaries or consolidated affiliated entities or additional capital contributions by us to our PRC subsidiaries, and conversion of such loans or capital contributions into RMB. If we fail to complete such registrations or filings, our ability to capitalize or otherwise fund our PRC operations may be negatively affected, which could adversely affect our ability to fund and expand our business.

**PRC regulations relating to the establishment of offshore special purpose companies by PRC residents may limit our ability to inject capital into our PRC subsidiaries, limit our subsidiaries’ ability to increase their registered capital or distribute profits to us, or may otherwise adversely affect us.**

The Notice on Issues Relating to the Administration of Foreign Exchange in Fund-Raising and Round-Trip Investment Activities of Domestic Residents Conducted via Offshore Special Purpose Companies, or SAFE Circular No. 75, and a series of implementation rules and guidance issued by SAFE, including the circular
relating to operating procedures that came into effect in July 2011, require PRC residents and PRC corporate entities to register with local branches of SAFE in connection with their direct or indirect offshore investment in an overseas special purpose vehicle, or SPV, for the purposes of overseas equity financing activities, and to update such registration in the event of any significant changes with respect to that offshore company. SAFE promulgated the Circular on Relevant Issues Concerning Foreign Exchange Control on Domestic Residents’ Offshore Investment and Financing and Roundtrip Investment through Special Purpose Vehicles, or SAFE Circular No. 37, on July 4, 2014, which replaced the SAFE Circular No. 75. SAFE Circular No. 37 requires PRC residents to register with local branches of SAFE in connection with their direct establishment or indirect control of an offshore entity, for the purpose of overseas investment and financing, with such PRC residents’ legally owned assets or equity interests in domestic enterprises or offshore assets or interests, referred to in SAFE Circular No. 37 as a “special purpose vehicle.” The term “control” under SAFE Circular No. 37 is broadly defined as the operation rights, beneficiary rights or decision-making rights acquired by the PRC residents in the offshore special purpose vehicles or PRC companies by such means as acquisition, trust, proxy, voting rights, repurchase, convertible bonds or other arrangements. SAFE Circular No. 37 further requires amendment to the registration in the event of any changes with respect to the basic information of the special purpose vehicle, such as changes in a PRC resident individual shareholder, name or operation period; or any significant changes with respect to the special purpose vehicle, such as increase or decrease of capital contributed by PRC individuals, share transfer or exchange, merger, division or other material event. If the shareholders of the offshore holding company who are PRC residents do not complete their registration with the local SAFE branches, the PRC subsidiaries may be prohibited from distributing their profits and proceeds from any reduction in capital, share transfer or liquidation to the offshore company, and the offshore company may be restricted in its ability to contribute additional capital to its PRC subsidiaries. Moreover, failure to comply with SAFE registration and amendment requirements described above could result in liability under PRC law for evasion of applicable foreign exchange restrictions. On February 28, 2015, SAFE promulgated a Notice on Further Simplifying and Improving Foreign Exchange Administration Policy on Direct Investment, or SAFE Notice 13, which became effective on June 1, 2015. In accordance with SAFE Notice 13, entities and individuals are required to apply for foreign exchange registration of foreign direct investment and overseas direct investment, including those required under the SAFE Circular No. 37, with qualified banks, instead of SAFE. The qualified banks, under the supervision of SAFE, directly examine the applications and conduct the registration.

We have notified holders of ordinary shares of our company whom we know are PRC residents to register with the local SAFE branch and update their registrations as required under the SAFE regulations described above. We are aware that Mr. Robin Yanhong Li, our chairman, chief executive officer and principal shareholder, who is a PRC resident, has registered, and updated registration when required, with the relevant local SAFE branch. We, however, cannot provide any assurances that all of our shareholders or ADS holders who are PRC residents will file all applicable registrations or update previously filed registrations as required by these SAFE regulations. The failure or inability of our PRC resident shareholders to comply with the registration procedures may subject the PRC resident shareholders to fines and legal sanctions, restrict our cross-border investment activities, or limit our PRC subsidiaries’ ability to distribute dividends to or obtain foreign exchange-dominated loans from our company.

As it is uncertain how the SAFE regulations described above will be interpreted or implemented, we cannot predict how these regulations will affect our business operations or future strategy. For example, we may be subject to more stringent review and approval process with respect to our foreign exchange activities, such as remittance of dividends and foreign currency-denominated borrowings, which may adversely affect our results of operations and financial condition. In addition, if we decide to acquire a PRC domestic company, we cannot assure you that we or the owners of such company will be able to obtain the necessary approvals or complete the necessary filings and registrations required by the SAFE regulations. This may restrict our ability to implement our acquisition strategy and could adversely affect our business and prospects.

41
Failure to comply with PRC regulations regarding the registration requirements for employee stock ownership plans or share option plans may subject the PRC plan participants or us to fines and other legal or administrative sanctions.

In February 2012, SAFE promulgated the Notices on Issues concerning the Foreign Exchange Administration for Domestic Individuals Participating in Stock Incentive Plan of Overseas Publicly-Listed Company, or the Stock Option Rule, replacing the earlier rules promulgated in March 2007. Under the Stock Option Rule, PRC residents who are granted stock options by an overseas publicly listed company are required, through a PRC agent or PRC subsidiary of such overseas publicly listed company, to register with SAFE and complete certain other procedures. We and our PRC resident employees who have been granted stock options are subject to these regulations. We have designated our PRC subsidiary Baidu Online to handle the registration and other procedures required by the Stock Option Rule. If we or our PRC optionees fail to comply with these regulations in the future, we or our PRC optionees and their local employers may be subject to fines and legal sanctions.

PRC regulations establish complex procedures for some acquisitions conducted by foreign investors, which could make it more difficult for us to pursue growth through acquisitions in China.

The Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, adopted by six PRC regulatory agencies in August 2006 and amended in June 2009, among other things, established additional procedures and requirements that could make merger and acquisition activities by foreign investors more time-consuming and complex. In addition, the Implementing Rules Concerning Security Review on the Mergers and Acquisitions by Foreign Investors of Domestic Enterprises, issued by the Ministry of Commerce in August 2011, specify that mergers and acquisitions by foreign investors involved in “an industry related to national security” are subject to strict review by the Ministry of Commerce, and prohibit any activities attempting to bypass such security review, including by structuring the transaction through a proxy or contractual control arrangement. We believe that our business is not in an industry related to national security, but we cannot preclude the possibility that the Ministry of Commerce or other government agencies may publish explanations contrary to our understanding or broaden the scope of such security reviews in the future, in which case our future acquisitions in the PRC, including those by way of entering into contractual control arrangements with target entities, may be closely scrutinized or prohibited. Moreover, the Anti-Monopoly Law requires that the Ministry of Commerce be notified in advance of any concentration of undertaking if certain filing thresholds are triggered. We may grow our business in part by directly acquiring complementary businesses in China. Complying with the requirements of the laws and regulations mentioned above and other PRC regulations to complete such transactions could be time-consuming, and any required approval processes, including obtaining approval from the Ministry of Commerce, may delay or inhibit our ability to complete such transactions, which could affect our ability to expand our business or maintain our market share. Our ability to expand our business or maintain or expand our market share through future acquisitions would as such be materially and adversely affected.

Our auditor is located in China, a jurisdiction where PCAOB is currently unable to conduct inspections without the approval of the PRC authorities, and as such, investors may be deprived of the benefits of such inspection.

Our independent registered public accounting firm that issues the audit reports included in our annual reports filed with the SEC, as an auditor of companies that are traded publicly in the United States and a firm registered with the Public Company Accounting Oversight Board (United States), or PCAOB, is required by the laws of the United States to undergo regular inspections by PCAOB to assess its compliance with the laws of the United States and professional standards. Our auditor is located in China, a jurisdiction where PCAOB is currently unable to conduct inspections without the approval of the PRC authorities. In May 2013, PCAOB announced that it had entered into a Memorandum of Understanding on Enforcement Cooperation with the China Securities Regulation Commission, or the CSRC, and the Ministry of Finance, which establishes a cooperative framework between the parties for the production and exchange of audit documents relevant to investigations.
undertaken by PCAOB, the CSRC or the Ministry of Finance in the United States and the PRC, respectively. PCAOB continues to be in discussions with the CSRC and the Ministry of Finance to permit joint inspections in the PRC of audit firms that are registered with PCAOB and audit Chinese companies that trade on U.S. exchanges. On December 7, 2018 and February 19, 2020, the SEC and the PCAOB issued two joint statements highlighting continued challenges faced by the U.S. regulators in their oversight of financial statement audits of U.S.-listed companies with significant operations in China. The joint statements reflect a heightened interest in an issue that has vexed U.S. regulators in recent years, and expect U.S. audit firms to bring appropriate increased attention and resources to their internal and cross-network quality control processes. However, it remains unclear what further actions the SEC and PCAOB will take to address the problem.

Inspections of other firms that PCAOB has conducted outside of China have identified deficiencies in those firms’ audit procedures and quality control procedures, which may be addressed as part of the inspection process to improve future audit quality. The inability of PCAOB to conduct inspections of independent registered public accounting firms operating in China makes it more difficult to evaluate the effectiveness of our auditor’s audit procedures or quality control procedures. As a result, investors may be deprived of the benefits of PCAOB inspections.

Proceedings instituted by the SEC against certain PRC-based accounting firms, including our independent registered public accounting firm, could result in financial statements being determined to not be in compliance with the requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act.

In December 2012, the SEC brought administrative proceedings against five accounting firms in China, including our independent registered public accounting firm, alleging that they had refused to produce audit work papers and other documents related to certain other China-based companies under investigation by the SEC. On January 22, 2014, an initial administrative law decision was issued, censuring these accounting firms and suspending four of these firms from practicing before the SEC for a period of six months. The decision is neither final nor legally effective unless and until reviewed and approved by the SEC. On February 12, 2014, four of these PRC-based accounting firms appealed to the SEC against this decision. In February 2015, each of the four PRC-based accounting firms agreed to a censure and to pay a fine to the SEC to settle the dispute and avoid suspension of their ability to practice before the SEC. The settlement requires the firms to follow detailed procedures to seek to provide the SEC with access to Chinese firms’ audit documents via the CSRC. If the firms fail to meet specified criteria, during a period of four years starting from the settlement date, the SEC retains authority to impose a variety of additional remedial measures on the firms depending on the nature of the failure. Additional remedies for any future noncompliance could include, as appropriate, an automatic six-month bar on a single firm’s performance of certain audit work, commencement of additional proceedings against a firm, or in extreme cases the resumption of the current proceeding against all four firms.

In the event that the SEC restarts the administrative proceedings, depending upon the final outcome, listed companies in the United States with major PRC operations may find it difficult or impossible to retain auditors in respect of their operations in the PRC, which could result in financial statements being determined not to be in compliance with the requirements of the Exchange Act, including possible delisting. Moreover, any negative news about the proceedings against these audit firms may cause investor uncertainty regarding China-based, United States-listed companies and the market price of our ADSs may be adversely affected.

If our independent registered public accounting firm were denied, even temporarily, the ability to practice before the SEC and we were unable to timely find another registered public accounting firm to audit and issue an opinion on our financial statements, our financial statements could be determined not to be in compliance with the requirements of the Exchange Act. Such a determination could ultimately lead to our delisting from the NASDAQ Global Select Market or deregistration from the SEC, or both, which would substantially reduce or effectively terminate the trading of our ADSs in the United States.
Fluctuation in exchange rates could have a material and adverse effect on our results of operations and the value of your investment.

The conversion of Renminbi into foreign currencies, including U.S. dollars, is based on rates set by the People's Bank of China. The value of Renminbi against the U.S. dollar and other currencies is affected by changes in China’s political and economic conditions and by China’s foreign exchange policies, among other things. We cannot assure that Renminbi will not appreciate or depreciate significantly in value against the U.S. dollar in the future. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between Renminbi and the U.S. dollar in the future.

Our revenues and costs are mostly denominated in RMB. Any significant revaluation of RMB may materially and adversely affect our cash flows, revenues, earnings and financial position, and the value of, and any dividends payable on, our ADSs in U.S. dollars. For example, to the extent that we need to convert U.S. dollars into RMB for our operations, appreciation of the RMB against the U.S. dollar would have an adverse effect on the RMB amount we would receive from the conversion. Conversely, if we decide to convert our RMB into U.S. dollars for the purpose of making payments for dividends on our ordinary shares or ADSs, repaying our U.S. dollar denominated notes or other payment obligations or for other business purposes, appreciation of the U.S. dollar against the RMB would have a negative effect on the U.S. dollar amount available to us. In addition, appreciation or depreciation in the value of the RMB relative to U.S. dollars would affect our financial results reported, regardless of any underlying change in our business or results of operations, as RMB is our reporting currency. For example, an appreciation of RMB against the U.S. dollar would result in foreign currency translation losses for financial reporting purposes when we translate our U.S. dollar denominated financial assets into RMB, our reporting currency, and foreign exchange losses reported in earnings for certain RMB denominated loans that overseas entities borrowed from our PRC entities. Conversely, a depreciation of RMB against the U.S. dollar would result in foreign currency translation losses for financial reporting purposes when we translate our U.S. dollar denominated notes and other indebtedness into RMB. Moreover, a significant depreciation of the RMB against the U.S. dollar may significantly reduce our earnings translated in the U.S. dollars, which in turn could adversely affect the price of our ADSs.

Very limited hedging options are available in China to reduce our exposure to exchange rate fluctuations. To date, we have not entered into any hedging transactions in an effort to reduce our exposure to foreign currency exchange risk. While we may decide to enter into hedging transactions in the future, the availability and effectiveness of these hedges may be limited and we may not be able to adequately hedge our exposure or at all. In addition, our currency exchange losses may be magnified by PRC exchange control regulations that restrict our ability to convert RMB into foreign currency. As a result, fluctuations in exchange rates may have a material adverse effect on your investment.

We face uncertainties with respect to indirect transfers of equity interests in PRC resident enterprises by their non-PRC holding companies. Enhanced scrutiny over acquisition transactions by the PRC tax authorities may have a negative impact on potential acquisitions we may pursue in the future.

In February 2015, the State Administration of Tax issued a Public Notice Regarding Certain Corporate Income Tax Matters on Indirect Transfer of Properties by Non-Tax Resident Enterprises, or Public Notice 7. Public Notice 7 extends its tax jurisdiction to not only indirect transfers but also transactions involving transfer of other taxable assets, through the offshore transfer of a foreign intermediate holding company. Public Notice 7 also brings challenges to both the foreign transferor and transferee (or other person who is obligated to pay for the transfer) of the taxable assets. Where a non-resident enterprise conducts an “indirect transfer” by transferring the taxable assets indirectly by disposing of the equity interests of an overseas holding company, the non-resident enterprise being the transferor, or the transferee, or the PRC entity which directly owned the taxable assets may report to the relevant tax authority such indirect transfer. Using a “substance over form” principle, the PRC tax authority may re-characterize such indirect transfer as a direct transfer of the equity interests in the PRC tax resident enterprise and other properties in China. As a result, gains derived from such indirect transfer may be
subject to PRC enterprise income tax, and the transferee or other person who is obligated to pay for the transfer is obligated to withhold the applicable taxes, currently at a rate of up to 10% for the transfer of equity interests in a PRC resident enterprise. However, Public Notice 7 provides safe harbors for internal group restructurings and the purchase and sale of equity through a public securities market. On October 17, 2017, the State Administration of Taxation, or the SAT issued the Announcement of the State Administration of Taxation on Issues Concerning the Withholding of Non-resident Enterprise Income Tax at Source, or SAT Bulletin 37, which came into effect on December 1, 2017. SAT Bulletin 37 further clarifies the practice and procedure of the withholding of non-resident enterprise income tax. Pursuant to Public Notice 7 and SAT Bulletin 37, both the transferor and the transferee may be subject to penalties under PRC tax laws if the transferee fails to withhold the taxes and the transferor fails to pay the taxes.

We face uncertainties with respect to the reporting and consequences of private equity financing transactions, share exchange or other transactions involving the transfer of shares in our company by investors that are non-PRC resident enterprises, or sale or purchase of shares in other non-PRC resident companies or other taxable assets by us. Our company and other non-resident enterprises in our group may be subject to filing obligations or being taxed if our company and other non-resident enterprises in our group are transferors in such transactions, and may be subject to withholding obligations if our company and other non-resident enterprises in our group are transferees in such transactions, under Public Notice 7 and SAT Bulletin 37. For the transfer of shares in our company by investors that are non-PRC resident enterprises, our PRC subsidiaries may be requested to assist in the filing under Public Notice 7 and SAT Bulletin 37. As a result, we may be required to expend valuable resources to comply with Public Notice 7 and SAT Bulletin 37 or to request the relevant transferors from whom we purchase taxable assets to comply with these circulars, or to establish that our company and other non-resident enterprises in our group should not be taxed under these circulars. The PRC tax authorities have the discretion under Public Notice 7 and SAT Bulletin 37 to make adjustments to the taxable capital gains based on the difference between the fair value of the taxable assets transferred and the cost of investment. If the PRC tax authorities make adjustments to the taxable income of the transactions under Public Notice 7 and SAT Bulletin 37, our income tax costs associated with such transactions will be increased, which may have an adverse effect on our financial condition and results of operations. We cannot assure you that the PRC tax authorities will not, at their discretion, adjust any capital gains and impose tax return filing obligations on us or require us to provide assistance to them for the investigation of any transactions we were involved in. Heightened scrutiny over acquisition transactions by the PRC tax authorities may have a negative impact on potential acquisitions we may pursue in the future.

Risks Related to Our ADSs

The trading price of our ADSs has been volatile and may continue to be volatile regardless of our operating performance.

The trading price of our ADSs has been and may continue to be subject to wide fluctuations. The market price for our ADSs may continue to be volatile and subject to wide fluctuations in response to factors including the following:

- actual or anticipated fluctuations in our quarterly results of operations;
- changes in financial estimates by securities research analysts;
- conditions in internet search and online marketing markets;
- changes in the operating performance or market valuations of other internet search or internet companies;
- announcements by us or our competitors or other internet companies of new products, acquisitions, strategic partnerships, joint ventures or capital commitments;
- addition or departure of key personnel;
public perception or negative news about our products or services;
our share repurchase program;
fluctuations of exchange rates between RMB and the U.S. dollar;
litigation, government investigation or other legal or regulatory proceeding; and
general economic or political conditions in China or elsewhere in the world.

In addition, the stock market in general, and the market prices for internet-related companies and companies with operations in China in particular, have experienced volatility that often has been unrelated to the operating performance of such companies. The securities of some China-based companies that have listed their securities in the United States have experienced significant volatility since their initial public offerings in recent years, including, in some cases, substantial declines in the trading prices of their securities. The trading performances of these companies’ securities after their offerings may affect the attitudes of investors towards Chinese companies listed in the United States in general, which consequently may impact the trading performance of our ADSs, regardless of our actual operating performance. In addition, any negative news or perceptions about inadequate corporate governance practices or fraudulent accounting, corporate structure or other matters of other Chinese companies may also negatively affect the attitudes of investors towards Chinese companies in general, including us, regardless of whether we have engaged in any inappropriate activities. In particular, the global financial crisis, the ensuing economic recessions and deterioration in the credit market in many countries have contributed and may continue to contribute to extreme volatility in the global stock markets. These broad market and industry fluctuations may adversely affect the market price of our ADSs. Volatility or a lack of positive performance in our ADS price may also adversely affect our ability to retain key employees, most of whom have been granted options or other equity incentives.

Sales of our ADSs in the public market, or the perception that these sales could occur, could cause the market price of our ADSs to decline. Such sales also might make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate. If any existing shareholder or shareholders sell a substantial amount of ADSs, the prevailing market price for our ADSs could be adversely affected. In addition, if we pay for our future acquisitions in whole or in part with additionally issued ordinary shares, your ownership interests in our company would be diluted and this, in turn, could have a material and adverse effect on the price of our ADSs.

On June 26, 2018, our board of directors authorized our company to repurchase up to US$1.0 billion of our ADSs or ordinary shares over 12 months from June 27, 2018 through June 26, 2019. On May 16, 2019, our board of directors has authorized a share repurchase program, under which we may repurchase up to US$1.0 billion of our ADSs or ordinary shares, effective until July 1, 2020. The share repurchase program, authorized by our board of directors, does not obligate us to repurchase any specific dollar amount or to acquire any specific number of ADSs. The share repurchase program could affect the price of our ADSs and increase volatility and may be suspended or terminated at any time, which may result in a decrease in the trading price of our ADSs.

Except as described in this annual report and in the deposit agreement, holders of our ADSs will not be able to exercise voting rights attached to the shares evidenced by our ADSs on an individual basis. Holders of our
ADSs will appoint the depositary or its nominee as their representative to exercise the voting rights attached to the shares represented by the ADSs. You may not receive voting materials in time to instruct the depositary to vote, and it is possible that you, or persons who hold their ADSs through brokers, dealers or other third parties, will not have the opportunity to exercise a right to vote. Upon our written request, the depositary will mail to you a shareholder meeting notice which contains, among other things, a statement as to the manner in which your voting instructions may be given, including an express indication that such instructions may be given or deemed given to the depositary to give a discretionary proxy to a person designated by us if no instructions are received by the depositary from you on or before the response date established by the depositary. However, no voting instruction will be deemed given and no such discretionary proxy will be given with respect to any matter as to which we inform the depositary that (i) we do not wish such proxy given, (ii) substantial opposition exists, or (iii) such matter materially and adversely affects the rights of shareholders.

You may not be able to participate in rights offerings and may experience dilution of your holdings as a result.

We may from time to time distribute rights to our shareholders, including rights to acquire our securities. Under the deposit agreement for the ADSs, the depositary will not offer those rights to ADS holders unless both the rights and the underlying securities to be distributed to ADS holders are either registered under the Securities Act of 1933, or exempt from registration under the Securities Act with respect to all holders of ADSs. We are under no obligation to file a registration statement with respect to any such rights or underlying securities or to endeavor to cause such a registration statement to be declared effective. In addition, we may not be able to take advantage of any exemptions from registration under the Securities Act. Accordingly, holders of our ADSs may be unable to participate in our rights offerings and may experience dilution in their holdings as a result.

You may be subject to limitations on transfer of your ADSs.

Your ADSs are transferable on the books of the depositary. However, the depositary may close its transfer books at any time or from time to time when it deems expedient in connection with the performance of its duties. In addition, the depositary may refuse to deliver, transfer or register transfers of ADSs generally when our books or the books of the depositary are closed, or at any time if we or the depositary deems it advisable to do so because of any requirement of law or of any government or governmental body, or under any provision of the deposit agreement, or for any other reason.

You may face difficulties in protecting your interests, and your ability to protect your rights through the U.S. federal courts may be limited, because we are incorporated under Cayman Islands law, conduct most of our operations in China and all of our executive officers reside outside of the United States.

We are incorporated in the Cayman Islands, and conduct most of our operations in China through our subsidiaries and consolidated affiliated entities in China. All of our executive officers and a majority of our directors reside outside of the United States and some or all of the assets of these persons are located outside of the United States. As a result, it may not be possible to effect service of process within the United States or elsewhere outside of China upon our executive officers, including with respect to matters arising under U.S. federal securities laws or applicable state securities laws.

It may also be difficult or impossible for you to bring an action against us or against our directors and executive officers in the Cayman Islands or in China in the event that you believe that your rights have been infringed under the securities laws or otherwise. Even if you are successful in bringing an action of this kind, the laws of the Cayman Islands and of China may render you unable to enforce a judgment against our assets or the assets of our directors and executive officers. There is no statutory recognition in the Cayman Islands of judgments obtained in the United States, although the courts of the Cayman Islands will generally recognize and enforce such judgments without retrial on the merits provided that the judgment (i) is given by a foreign court of competent jurisdiction, (ii) imposes on the judgment debtor a liability to pay a liquidated sum for which the judgment has been given, (iii) is not respect of taxes, a fine or a penalty, (iv) was not obtained in a manner and is
not of a kind the enforcement of which is contrary to natural justice or the public policy of the Cayman Islands, and (v) a final judgment. Moreover, our PRC counsel has advised us that the PRC does not have treaties with the United States or many other countries providing for the reciprocal recognition and enforcement of judgment of courts.

Our corporate affairs are governed by our memorandum and articles of association and by the Companies Law (2020 Revision) and common law of the Cayman Islands. The rights of shareholders to take legal action against our directors and us, actions by minority shareholders and the fiduciary responsibilities of our directors to us under Cayman Islands law are to a large extent governed by the common law of the Cayman Islands. The common law of the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as from English common law, which has persuasive, but not binding, authority on a court in the Cayman Islands. The rights of our shareholders and the fiduciary duties of our directors under Cayman Islands law are not as clearly established as they would be under statutes or judicial precedents in the United States. In particular, the Cayman Islands has a less developed body of securities laws as compared to the United States, and provides significantly less protection to investors. In addition, Cayman Islands companies may not have standing to initiate a shareholder derivative action before the federal courts of the United States.

As a result of all of the above, our public shareholders may have more difficulty in protecting their interests through actions against our management, directors or major shareholders than would shareholders of a corporation incorporated in a jurisdiction in the United States.

Our dual-class ordinary share structure with different voting rights could discourage others from pursuing any change of control transactions that holders of our Class A ordinary shares and ADSs may view as beneficial.

Our ordinary shares are divided into Class A ordinary shares and Class B ordinary shares. Holders of Class A ordinary shares are entitled to one vote per share, while holders of Class B ordinary shares are entitled to ten votes per share. We issued Class A ordinary shares represented by our ADSs in our initial public offering. Our co-founder, chairman and chief executive officer, Robin Yanhong Li, who acquired our shares prior to our initial public offering, holds our Class B ordinary shares. Each Class B ordinary share is convertible into one Class A ordinary share at any time by the holder thereof, while Class A ordinary shares are not convertible into Class B ordinary shares under any circumstances. Upon any transfer of Class B ordinary shares by a holder thereof to any person or entity which is not an affiliate (as defined in our memorandum and articles of association) of such holder, such Class B ordinary shares will be automatically and immediately converted into the equal number of Class A ordinary shares. In addition, if at any time Robin Yanhong Li and his affiliates collectively own less than 5% of the total number of the issued and outstanding Class B ordinary shares, each issued and outstanding Class B ordinary share will be automatically and immediately converted into one Class A ordinary share, and we shall not issue any Class B ordinary shares thereafter.

Due to the disparate voting powers attached to these two classes, certain shareholders have significant voting power over matters requiring shareholder approval, including election of directors and significant corporate transactions, such as a merger or sale of our company or our assets. This concentrated control could discourage or prevent others from pursuing any potential merger, takeover or other change of control transactions with our company, which could deprive our shareholders and ADS holders of an opportunity to receive a premium for their shares or ADSs as part of a sale of our company and might reduce the price of our ADSs.

Our articles of association contain anti-takeover provisions that could adversely affect the rights of holders of our ordinary shares and ADSs.

Our articles of association include certain provisions that could limit the ability of others to acquire control of our company, and therefore may deprive the holders of our ordinary shares and ADSs of the opportunity to sell their ordinary shares or ADSs at a premium over the prevailing market price by discouraging third parties.
from seeking to obtain control of our company in a tender offer or similar transactions. These provisions include the following:

- A dual-class ordinary share structure.
- Our board of directors has the authority, without approval by the shareholders, to issue up to a total of 10,000,000 preferred shares in one or more series. Our board of directors may establish the number of shares to be included in each such series and may fix the designations, preferences, powers and other rights of the shares of a series of preferred shares.
- Our board of directors has the right to elect directors to fill a vacancy created by the increase of the board of directors or the resignation, death or removal of a director, which prevents shareholders from having the sole right to fill vacancies on our board of directors.

We may be classified as a passive foreign investment company, or PFIC, which could result in adverse U.S. federal income tax consequence to U.S. Holders of our ADSs or ordinary shares.

A non-U.S. corporation, such as our own, will be considered a PFIC for any taxable year if either (i) at least 75% of its gross income is passive income or (ii) at least 50% of the value of its assets (based on an average of the quarterly values of the assets during a taxable year) is attributable to assets that produce or are held for the production of passive income. The value of our assets is generally determined by reference to the market price of the ADSs and ordinary shares, which may fluctuate considerably. In addition, because there are uncertainties in the application of the relevant rules and because PFIC status is a fact-intensive determination made on an annual basis, no assurance may be given with respect to our PFIC status for the current or any future taxable year.

Based on the market price of our ADSs and ordinary shares, the value of our assets, and the composition of our assets and income, we believe that we were not a PFIC for our taxable year ended December 31, 2019. However, given the lack of authority and the highly factual nature of the analyses, no assurance can be given. Our PFIC status for the current taxable year ending December 31, 2020 will not be determinable until the close of the taxable year, there can be no assurance that we will not be a PFIC for the current taxable year (or any future taxable year).

If we were treated as a PFIC for any taxable year during which a U.S. Holder (defined below) held an ADS or an ordinary share, certain adverse U.S. federal income tax consequences could apply to the U.S. Holder. See “Item 10.E. Additional Information—Taxation—U.S. Federal Income Tax Considerations—Passive Foreign Investment Company.”

Item 4. Information on the Company

A. History and Development of the Company

We were incorporated in the Cayman Islands in January 2000. Since our inception, we have conducted our operations in China principally through Baidu Online, our wholly owned subsidiary in Beijing, China. Since June 2001, we also have conducted part of our operations in China through Baidu Netcom, a consolidated affiliated entity in Beijing, China, which holds the licenses and approvals necessary to operate our platform and provide value-added telecommunication-based online marketing services. In subsequent years, we have established additional subsidiaries inside and outside of China and assisted in establishing additional PRC consolidated affiliated entities to conduct part of our operations.

On August 5, 2005, we listed our ADSs on The NASDAQ National Market (later renamed The NASDAQ Global Market) under the symbol “BIDU.” We and certain selling shareholders of our company completed the initial public offering of 4,604,224 ADSs, each then representing one Class A ordinary share, on August 10, 2005. On May 12, 2010, we effected a change of the ADS to Class A ordinary share ratio from 1 ADS representing 1 Class A ordinary share to 10 ADSs representing 1 Class A ordinary share. The ratio change has the same effect as a 10-for-1 ADS split. Our ADSs are currently traded on The NASDAQ Global Select Market.
In December 2008, our shareholders approved our name change from Baidu.com, Inc. to Baidu, Inc. In November 2009, we moved into our new corporate headquarters, which we name as Baidu Campus. Our principal executive offices are located at Baidu Campus, No. 10 Shangdi 10th Street, Haidian District, Beijing 100085, the People’s Republic of China. Our telephone number at this address is +86 (10) 5992-8888.

In November 2012, we obtained the controlling interest in iQIYI, Inc., or iQIYI, a prior equity method investee, and have since then consolidated its financial results into our consolidated financial statements. In May 2013, we acquired the online video business of PPStream Inc., or PPS, merged it with iQIYI and have since then consolidated its financial results into our consolidated financial statements. In March 2018, iQIYI raised US$2.4 billion of net proceeds through its initial public offering. iQIYI’s American Depositary Shares trade on the NASDAQ Global Select Market under the symbol “IQ”. We continue to control iQIYI and consolidate its financial results into our own in accordance with U.S. GAAP.

In August 2017, our subsidiary that operated Baidu Deliveries, Xiaodu Life Technology Ltd., or Xiaodu, completed its merger with Rajax Holding, or Rajax, which operates the food delivery business under the ele.me brand in China. As a result of the merger, Xiaodu became a subsidiary of Rajax. We and Rajax have agreed to business cooperation across a broad base of products and services post the merger transaction. In May 2018, we transferred all of our equity interests in Rajax, which operates the food delivery business under the ele.me brand in China, to Ali Panini Investment Limited.

In April 2018, we entered into definitive agreements with certain investors relating to our divestiture of a majority equity stake in our financial services business, which provides consumer credit, wealth management and other financial services and has been renamed as Du Xiaoman. The divestiture was completed in August 2018, following which we held a minority equity interest in Du Xiaoman, which was accounted for as an equity method investment, and have deconsolidated the financial results of Du Xiaoman from our consolidated financial statements in accordance with U.S. GAAP.

B. Business Overview

We aim to make the complicated world simpler through technology. We strive to achieve this mission through our two-pillar strategy: strengthen our mobile foundation and lead in artificial intelligence (AI).

Our business currently consists of two segments, Baidu Core and iQIYI. Baidu Core primarily comprises (1) search plus feed, including Baidu App, short video products, and knowledge & information products, such as Baidu Knows, Baidu Wiki and Baidu Post, as well as our online marketing services, which we describe as our “mobile ecosystem,” and (2) new AI businesses, such as DuerOS (voice assistant and smart devices), Baidu Cloud (AI solutions and cloud services) and Apollo (autonomous driving and smart transportation). iQIYI is an innovative market-leading online entertainment service provider in China. iQIYI’s platform features highly popular original content as well as a comprehensive library of other professionally-produced content, professional user generated content and user-generated content.

Our operations are primarily conducted in China, and revenues generated from China accounted for 98% of our total revenues from 2017 to 2019.

Baidu Core – Mobile Ecosystem

Products and Services for Users

We aspire to provide the best experience to our users. To enrich user experience, we provide a broad range of products and services accessible through mobile devices, PCs and other smart devices. We offer search and other services on the Baidu platform that connect users to relevant information online, including web pages, news, images, documents, multimedia files, and services, through links provided on our website, apps and skills store, as well as native-app like experiences via our Smart Mini Program.

50
Baidu App

Our flagship app enables users to access our search, feed and other services through mobile devices. Baidu App offers twin-engine search-plus-feed functions that leverage our AI-powered algorithms and deep user insight to offer users a compelling experience. It features improved feed display, short videos, Smart Mini Programs, enhanced voice input, text to speech and augmented reality search to better serve users of mobile devices. In December 2019, average DAUs of Baidu App reached 195 million, increasing 21% over the same period of 2018.

Baidu Search. Users can access our search and other services through Baidu’s properties and Baidu Union partners’ properties. In addition to text inputs, our users can conduct AI-powered voice search and visual search. Voice search integrates speech recognition and search technologies to enhance the user experience by providing a more natural and convenient input modality. Visual search enables the use of smart phone cameras to capture images and retrieve related content and services on the web. For example, users can take a photo of a plant or a pet to identify the species. We also endeavor to improve the search experience, through other AI-powered products such as Top 1, to satisfy user queries with the first displayed search result, which we believe will be an important capability with the adoption of smart devices with smaller screens. In addition, we offer vertical search to our users, such as video search and online literature search.

Baidu Feed. Baidu Feed is a product within Baidu App that provides users with personalized timeline based on their demographics and interests. Baidu Feed complements our core search product, leverages Baidu AI recommendation algorithms and monetization platform, and contributes to user engagement and retention, including content sharing, likes and comments. We also provide text-to-speech function for feeds to help users get hands free.

Short Video Apps

Haokan. Haokan is a short video app, offering a wide variety of user generated and professionally produced short videos, usually several minutes long, in coordination with multiple channel networks (MCNs). Haokan allows users to upload, view, search, rate, share, favorite, comment, and follow. Video content creators and curators can distribute their content to build a fan base and receive revenue share for their content contribution.

Quanmin. Quanmin is a flash video app for users to create and share short videos, usually less than one minute long, and live videos with entertainment orientation, such as musical, dance, comedy, acting and lip-sync. Users can shoot or upload flash videos and edit them with built-in special effects, filters and stickers. Contents are distributed in personalized timeline powered by Baidu AI recommendation algorithms.

Knowledge-and-Information Centric Products

Baidu Knows. Baidu Knows is a question-and-answer community where questions are asked, answered, and organized by our users. The answers posted on Baidu Knows are generated by our users, professionals, enterprises and governmental agencies. Baidu Knows also leverages Baidu’s search capabilities to help users find answers to their questions on the web fast and efficiently, and at the same time, various partners of Baidu Knows can reach their target users accurately.

Baidu Wiki (a.k.a. Baidu Encyclopedia). Baidu Wiki is a wiki, compiled by experts in specialized fields, featuring high-quality columns, such as Encyclopedia of Intangible Cultural Heritage, Digital Museum and Recorder of History, as well as a complete video-based knowledge source.

Baidu Healthcare Wiki. Baidu Healthcare Wiki offers healthcare knowledge and information from authoritative and professional sources in text, video, picture, and Q&A formats.
Table of Contents

Baidu Wenku. Baidu Wenku hosts a library of digital documents, covering a wide range of content, such as education, architecture, law, internet and finance, shared in forms such as academic papers and PowerPoint presentations by professionals, enterprises, institutions and other users. Combined with Baidu Search’s capabilities, Baidu Wenku serves as an abundant resource to help users obtain high-quality study content and knowledge & information in a variety of topics efficiently.

Baidu Scholar. Baidu Scholar is an academic search engine that provides literature retrieval functionality from massive Chinese and English academic resources including various academic journals and conference papers. Baidu Scholar also provides research tools such as plagiarism detection, journal search, and helps scholars efficiently find scholarly literature relevant to their academic topics.

Baidu Experience. Baidu Experience is an online platform where users share daily knowledge and experience. At the aim of providing practical and high efficiency solutions, Baidu Experience covers multiple fields such as software, lifestyle tips, games, etc.

Baidu Post (a.k.a. Baidu Post Bar). Baidu Post is a social media built on topical online communities. Users can post text, image, audio and video content and reply to original curation, forming valuable discussion groups. Baidu Post draws new users through close integration with search and user generated content, and has been a popular platform for celebrity fans, online game players and online novel readers to build communities for topical discussions, especially about current cultural trends.

Other User Products

Baidu Maps. Baidu Maps is a platform providing users with travel-related services including intelligent point-of-interest search, route planning, precise navigation, and real-time traffic condition information. Baidu Maps, as a new generation of AI map, supports voice interactions in a full spectrum of scenarios through its voice assistant, which allows users to customize the voice. Baidu Maps also provides professional and stable map services to business partners across different sectors.

Baidu Input Method Editor (Baidu IME). Baidu IME is a Chinese-language mobile keyboard which utilizes Baidu AI to improve input accuracy, remember corrections and offer a customized dictionary of new or uncommon words. Baidu IME supports advanced functions such as extended voice input, smart punctuation recommendation, voice message translation, voice modification and contextual speech detection. Baidu IME AI version was launched in 2019 with features including mixed voice input in Mandarin and other Chinese dialects with English, real-time translation and augmented reality Emoji.

Overseas Products. We offer a series of products and services in overseas markets, including popIn (ad recommendation platform), MediaGo (ad network platform), Simeji (leading mobile keyboard in Japan) and Facemoji (Simeji’s international edition).

Products and Services for Customers

Online Marketing Services

We deliver online marketing services to a diverse customer base consisting of SMEs, large domestic businesses and multinational companies across industries and geographical locations. The defined industries in which our customers operate include healthcare, education, retail/e-commerce, online game services, personal care, franchising, financial services, real estate and home furnishing sectors, and business services. Although our customers are located across China, we have a more active and larger customer base in the coastal regions, reflecting the current economic demographics in China.

52
Our online marketing services enable the delivery of comprehensive, rich and diversified marketing offerings to fulfill customer needs. We have made continuous improvements to the marketing services on our platform, including the following initiatives:

- **Video ads**: We promoted the monetization of our video traffic in 2019, using diversified monetization products such as live streaming and short videos, equipped with video creative production tools, to provide our customers with a richer and more effective brand communication medium.

- **oCPX**: oCPX provides our marketing customers with more options for lead generation. It enables our customers to bid for online marketing services based on pre-defined results other than on a cost-per-click basis, such as on a cost-per-impression, cost-per-action or cost-per-view basis.

- **Action ads**: Action ads come in a wide range of ad formats, including click-to-call, click-to-chat, click-to-download, and click-to-buy, to help marketing customers achieve better conversion.

- **Customer relationship management (CRM)**: By combining marketing automation and sales force automation functionalities, our CRM service allows customers to effectively qualify and nurture marketing-generated leads and further convert them into orders, so as to streamline the ad-to-order processes and to increase the return of the ad spending.

**Hosted marketing platform**: Our hosted marketing platform integrates our CRM with our “one-stop-shop” media purchase platform to allow our customers to purchase brand and performance-based marketing services, build audience and user engagement, generate leads and maintain relationships with users, leveraging tools and services powered by Baidu AI. Our hosted marketing platform helps us better understand our customers’ needs and enable our customers to leverage Baidu’s AI to simplify their marketing process and improve the effectiveness of their marketing efforts.

Online marketing services include P4P (pay for performance) services and others. Typically, a P4P customer pays us when users click on one of its website links on Baidu Search or Baidu Feed or Baidu Union partners’ properties, while a non-P4P customer pays us based on the duration of the placement on Baidu Search or Baidu Feed.

**P4P**: Our auction-based P4P services allow customers to bid for priority placement of paid sponsored links and reach users who search for information related to their products or services. Customers may choose to purchase search, feed and other online marketing services and have the option to set daily allowances target users by geography in China and specify the time period for their campaign. As our partners adopt Smart Mini Programs and Managed Pages, some of them have begun to use these properties as their landing pages, in lieu of their websites.

Search marketing services are mainly provided to customers through our proprietary online marketing system which drives monetization efficiency by improving relevance in paid search and optimizing value for our customers.

Feed marketing services usually comprise image-based or video-based advertising, appearing between the feed headlines or within the feed content. It is powered by Baidu AI in order to better match goods and services providers with their targeted audience while optimizing user experience.

**Others**: Our other marketing services comprise display-based marketing services and other online marketing services based on performance criteria other than cost per click (CPC). Customers can choose different mix of our service offerings to optimize their ROI. BrandZone allows customers to display integrated text, logo, image and video in a structured and uniform manner on a prominent position of the search result page or in vertical search products, such as Baidu Knows. Programmatic marketing platform supports the placement of advertisement using standard, intelligent or customized creativity, different purchasing methods (guaranteed delivery or real time bidding), and multiple payment methods.
We attract numerous business partners, which help create opportunities for us to work with them in research and development and other business cooperations and establish long term business relationships.

**Baidu Union.** Baidu Union consists of a large number of third-party websites and mobile apps. We match our customers’ promotional links to the properties of Baidu Union partners. Some Baidu Union partners also embed our products and services onto their properties. We allow Baidu Union partners to provide high-quality, relevant search results to their users without incurring the cost of development and maintenance for advanced search capabilities and monetize their traffic through revenue sharing arrangements with us. Baidu Union partners may use our content recommendation system to provide feed content and ads to their users.

**Baijiahao (BJH Accounts).** Our publisher network of 2.6 million BJH Accounts, aggregates news articles, photos, short videos, live videos and augmented reality clips from MCNs, media outlets, and other professional sources for distribution through our search, feed and short video products.

**Smart Mini Program.** Smart Mini Programs are applets developed by our partners to share their content and services in Baidu App with native-app like experience. The number of smart phones sold in China is on a decline and app installation costs have been rising, causing app developers to take interest in offering their content and services through Baidu App. Smart Mini Program has become increasingly popular, as users can now search for content and services that were historically only available in apps, and saves users from having to download and maintain so many apps on their phones. Smart Mini Program was launched in July 2018, and its monthly active users reached 316 million in December 2019.

**Managed Page.** Managed Page is an alternative for HTML site owners to use as the landing page for search results. Mobile site owners no longer need to purchase server, software and bandwidth to maintain a web presence. Instead, they can open an account on Baidu’s platform, use leverage our tools, services and AI to more efficiently reach and engage with users. Managed Page comes with industry-specific solutions and is designed to provide users with more reliable and secure information.

**Baidu Core – New AI Businesses**

Our new AI businesses comprise new business initiatives, including DuerOS (voice assistant and smart devices), Baidu Cloud (AI solutions and cloud services) and Apollo (autonomous driving and smart transportation). These businesses leverage Baidu AI on Baidu Brain, our internally developed AI platform.

**DuerOS.** DuerOS is a leading voice assistant for the Chinese language, which is installed on Xiaodu smart home devices, smart phones, children smart watches and story machines. Equipped with over 3,600 skills in wide-ranging genres, including education, cooking, online games and live streaming, the DuerOS skills store enables Xiaodu smart speakers and smart display to offer so much more beyond listening to music and watching videos. Xiaodu smart display with upgraded DuerOS enables hand gesture control and full-duplex continued conversation (multi-round conversation without wake words) through eye gesture detection.

**Baidu Cloud.** Baidu Cloud primarily provides AI solutions, cloud infrastructure and other services to enterprises and individuals. Our goal is to offer a comprehensive set of products, services and tools to enable enterprises and individuals to improve productivity and operational efficiency through the use of Baidu AI and cloud infrastructure. Baidu Cloud offers industry-specific AI solutions, serving sectors, including financial services, media, industrial goods, education, consumer goods and telecommunications, while supporting our internal needs. We also offer Baidu Drive, which allows users to store and retrieve photos, videos, and other files on Baidu Cloud, along with other capabilities, such as group share and data transfer.

**Apollo.** Apollo is a leader in autonomous driving in China, with over 177 OEMs, Tier 1 parts suppliers and other partners. Apollo supports third-party development through Apollo open platform, as well as the beginning.
of commercialization of autonomous driving and smart transportation. Apollo offers V2X solutions, the infrastructure backbone to smart transportation, to cities in China to help them improve municipal traffic condition, air pollution and road safety, using Baidu AI technology. In September 2019, Apollo’s first robotaxi pilot program, leveraging Apollo’s V2X solution, was made available to the public in Changsha, Hunan, with an initial fleet of 45 autonomous driving vehicles.

iQIYI

iQIYI is an innovative market-leading online entertainment service provider in China. For the year of 2019, iQIYI’s average mobile MAUs were 476 million, and its average mobile DAUs were 140 million. On average, users spent 9.6 billion hours per month watching video content on iQIYI platform through all devices, and spent 1.6 hours per day per user watching video content on its mobile apps during the year.

Products and Services

iQIYI produces, aggregates and distributes a wide variety of professionally produced content (PPC), as well as a broad spectrum of other video content in a variety of formats.

PPC. iQIYI’s PPC mainly includes original content and licensed content.

- Original content. iQIYI’s original content includes high quality content produced in-house and those produced in collaboration with third-parties. iQIYI obtains the intellectual property rights through production, adaptation or purchase from third parties, while the partners, typically established entertainment production companies, are responsible for content development and production. iQIYI maintains a high degree of control during the content development and production process.

- Licensed content. iQIYI provides users with a curated selection of high-quality PPC from third parties. iQIYI licenses video content typically at fixed rates for a specified term, and pay licensing fees generally in installments upon signing of the contacts and during the licenses period. iQIYI also exchanges rights to distribute licensed content with other internet video streaming services to enrich our content library. In certain cases, iQIYI has the right of first refusal to purchase new content produced by the licensor.

Other video content. iQIYI offers a broad base of other video content, such as internet movies and dramas, mini variety shows and animations, interactive videos, vertical or horizontal videos, as well as grassroots or influencer uploaded videos, edited video clips, and video blogs, or Vlogs, among others. iQIYI’s other video content expands its library and allows it to capture a broader user base, drive user engagement and enhance user stickiness.

Monetization

Membership Services. iQIYI’s membership services generally provide subscribing members with superior entertainment experience that is embodied in various membership privileges. Subscribing members have access to a large collection of VIP-only content comprising drama series, movies, animations, and cartoons, etc., and have earlier access to certain content aired on the iQIYI platform. Membership privileges generally include substantially ad-free streaming, 1080P/4K high-definition video, enhanced audio experience, accelerated downloads and others. Subscribing member privileges also include coupons and discounts on paid on-demand films, as well as special privilege in offline events, such as exclusive access to live concerts. The number of subscribing members increased 22.3% from 87.4 million as of December 31, 2018 to 106.9 million as of December 31, 2019. Excluding individuals with trial memberships, the number of subscribing members increased by 22.7% from 86.1 million as of December 31, 2018 to 105.7 million as of December 31, 2019.

Online Advertising. The prices of iQIYI’s advertising services depend upon various factors, including form and size of the advertising, level of sponsorship, popularity of the content or event in which the advertisements
will be placed, and specific targeting requirements. Prices for the brand advertising service purchased by each advertiser or advertising agency are fixed under sales contracts.

Sales and Distribution

We offer Baidu Core products and services directly and through our distribution network. We have direct sales presence in Beijing, Shanghai, Guangzhou, Shenzhen, and other cities, covering the major regional markets for our online marketing services and other services.

The business distributors of Baidu Core products and services provide numerous services, including identifying customers, collecting payments, assisting customers in setting up accounts with us, suggesting keywords to maximize ROI and engaging in other marketing and educational services aimed at acquiring customers. We offer discounts to distributors as consideration for their services. We have relied on distributors for several reasons. Firstly, the customer base of our P4P in China, consist of SMEs, is geographically diverse and fragmented. Moreover, SMEs are generally less experienced with online marketing, as compared to large companies, and, therefore, they can benefit from the extensive services provided by distributors. Finally, distributors serve as an important channel to reach SME customers throughout China and collect payments from them. We have also engaged third-party agencies to identify and reach potential customers outside of China. Xiaodu smart devices are distributed through our online e-commerce store, as well as through online and offline distributors.

iQIYI's brand advertising is sold through third-party advertising agencies, including members of American Association of Advertising Agencies, or 4As, and leading Chinese advertising agencies, as well as through a direct sales force. Feed advertising services is sold primarily through third-party advertising agencies, whose existing long-term relationships and network resources we strategically leverage, to increase our sales and expand our advertiser base. Depending on the type of advertiser and content, the duration of an advertising framework agreement is typically 12 months.

Marketing

We focus on continually improving the quality of our products and services, as we believe satisfied users and customers are more likely to recommend our products and services to others. Through these efforts and the increased use of internet in China, we have built our brand with modest marketing expenditures.

We have implemented a number of marketing initiatives designed to promote our brand awareness among potential users, customers and Baidu Union partners. In addition to our brand positioning in the market, we have also initiated a series of marketing activities to promote our products and technologies among existing and potential users and customers, including, but not limited to, Baidu Developer Conference and the CCTV Chinese New Year Eve Gala campaign.

Competition

For Baidu Core business, our primary competitors are mainly internet companies and online marketing platforms in China. We compete with these entities for both users and customers on the basis of user traffic, quality (relevance), safety and user experience of search (and other marketing and advertising) results, availability and ease of use of products and services, the number of customers, distribution channels and the number of associated third-party websites. We also face competition from U.S.-based internet search providers providing Chinese language services and online marketing platforms, as well as traditional advertising media.

Online Marketing Platforms, Internet, Cloud and Smart Device Companies in China. Chinese internet companies, such as Alibaba, Tencent, ByteDance, Kuaishou, Sohu, Qihoo 360, Xiaomi and Huawei, offer a broad range of online services, including search, feed, cloud services and smart devices. These companies have
widely recognized brand names in China and significant financial resources. Furthermore, some of these companies are private and are able to expend significant resources without consideration for near-term return on investment. We compete with these internet companies primarily for user traffic, user time, content, advertising budget and marketing resources. We leverage our user traffic, product design and various marketing to enhance users’ reliance on our platforms and services.

U.S.-based Internet Search Providers and Online Marketing Platforms. U.S.-based internet search providers and online marketing platforms, such as Microsoft, Google and Facebook, have a strong global presence, well established brand names, more users and customers and significantly greater financial resources than we do. We may also continue to face competition from other existing competitors and new entrants in the Chinese language search and online marketing market, cloud and smart devices.

Other Advertising Media. Other advertising media, such as newspapers, yellow pages, magazines, billboards, other forms of outdoor media, television, radio and mobile apps compete for a share of our customers’ marketing budgets. Large enterprises currently spend a relatively small percentage of their marketing budgets on online marketing as compared to other advertising media.

For iQIYI, our primary competitors include companies that operate online video sites in China, such as Tencent Video and Youku. We also compete with other internet media and entertainment services, such as internet and social platforms and short-form video platforms, as well as major TV stations. We compete with these market players for, both users, usage time and advertisers primarily on the basis of obtaining IP rights to popular content, conducting brand promotions and other marketing activities, and making investments in and acquisitions of our business partners.

Technology

We established several research labs in China and the U.S. to enhance our research and development capabilities, and to focus on efficient data analysis, robotics and other areas.

We have developed a proprietary technological infrastructure which consists of technologies for artificial intelligence, search, P4P and large-scale systems. Our established infrastructure serves as the backbone for our mobile, PC and AI platforms.

Artificial Intelligence (AI)

We have been investing in AI for a number of years, particularly in the areas of natural language processing, knowledge graph, user understanding, speech technology, computer vision, augmented reality, data science and deep learning technology. Baidu AI powers our core businesses, including search and feed, DuerOS, Baidu Cloud and Apollo. Through Baidu AI Open Platform, we have opened up Baidu AI capabilities to third-party developers and provided them with tool kits on Baidu Cloud. We are also exploring ways to apply AI technologies and accelerate the commercialization of AI products and services.

Chips. We are applying Baidu Kunlun, our high performance AI chip, which optimizes visual, speech, natural language processing and other AI capabilities, to power Baidu’s cloud servers. We also released an end-to-end far-field Automatic Speech Recognition (ASR) solution, based on in-house designed Baidu Honghu AI chip, for the use in DuerOS smart devices and in-vehicle infotainment.

Knowledge Graph. Baidu AI consists of heterogeneous knowledge graphs of entity-graph, attention graphs, events, POIs, and industry-knowledge, which transforms immense multi-element and multi-modal data into a holistic semantic network containing hundreds of millions of nodes and hundreds of billions of relationships.

Computer Vision. Based on knowledge graphs, visual semantics allow the machine to understand videos from the perspective of a viewer and extract structured semantic knowledge by recognizing people, movements,
items and associated time series. Visual understating has been applied widely in our video applications. With synthetic virtual image technology, including facial, limb and mouth shape generation, we have developed “virtual” customer representative, to be paired with our automated customer service cloud solutions, powered by Baidu Brain.

Speech. In 2019, Baidu launched the streaming multi-layer truncated attention model (SMLTA) to improve the accuracy of speech recognition, making it possible to recognize mixed Chinese and English or mixed Mandarin dialect speech. Meitron, a voice synthesis technology we developed, maps the tone color, style, emotion and other elements into different sub-spaces, which allows a user to switch the voice of an application to his/her voice by recording a voice input of 20 sentences. Meitron voice customization function has been added to Baidu Maps.

Natural Language Processing. We built a knowledge enhanced semantic understanding framework ERNIE, which is capable of continual learning various knowledge. ERNIE has achieved state-of-the-art results in both Chinese and English language understanding tasks. ERNIE has also been widely used in the fields of reading comprehension, emotional analysis, search intelligent Q&A, video recommendation, CTR prediction. As to machine translation, we developed the first speech-to-speech simultaneous interpretation system, providing users with high-quality, low latency simultaneous interpreting experiences.

Deep Learning (DL) Platform. We have developed an open-source, industry-level deep learning platform, PaddlePaddle. It has outstanding advantages including, 1) a DL framework based on programming logic enabling both development flexibility and stability; 2) the ultra-large-scale training capacity for real-time updates of trillion-level parameters of DL models; 3) end-to-end deployment of high-performance inference engines designed for diverse platforms and devices; and 4) open source industry-grade models covering a wide range of applications.

Search Technology
Our search is powered by a set of industry-leading technologies, including the following, among others:

Ranking. We compare search queries with the content on web pages to help determine relevance. We have significantly improved the relevancy, freshness and authority of ranking using our machine learning modules to analyze the rich internet and user interaction data and prioritize the search results. We have innovatively applied our machine learning technology to better understand the semantics beyond simple text of the keywords inputted by our users, allowing us to provide more relevant search results to users. Since 2013, we have applied deep learning in our search ranking system, and such technology is playing an increasingly important role in search.

Video Search. Video content is growing as an explosive trend in the ecosystem of Internet content. As a new general-purpose content format, video is more intuitive and easy to understand, and has a larger information capacity than graphic content. The next-generation general-purpose search (video search) is beginning to take shape. With deep learning algorithm being applied to video analytics, we are vigilant in providing the best video search experience to our users.

Multimodal search: We greatly improved accuracy of speech recognition in scenarios such as long sentences, mixed Chinese and English, as well as strong accent, and thus significantly improving user satisfaction of our speech search. We built the terminal visual interaction engine V1.0 for visual search. We facilitated the implementation of several latest convolutional neural network (CNN) models in industry and significantly reduced training costs through unsupervised or semi-supervised models, leading the industry in user experience in multiple key scenes.

Web Crawling. Our powerful computer clusters and intelligent scheduling algorithms allow us to crawl web pages efficiently. We can easily scale up our system to collect an ever-growing number of Chinese web pages.
Our spider technology enables us to refresh web indices at different intervals and the index refresh frequency is set based on our knowledge of internet search users’ needs and the nature of the information. We also mine multi-media and other format of content from web page repositories.

**Natural Language Processing.** For search, natural language processing helps to understand user needs and web contents, optimize search results, support first-line accurate results, and enable voice broadcasting of search results, all enhancing user experience. For feed products, natural language processing continues to improve content understanding, recommendation algorithms, content generation and other technologies to optimize the personalized recommendation results, continuously improving the user experience and promoting healthy development of our feed content ecosystem.

**Extraction and Analysis of Behavioral Information of Mobile Internet Users.** We extract behavioral information from users of mobile Internet using high performance algorithms and information extraction techniques. Our techniques enable us to understand complex user behaviors metrics such as like and dislike votes, shares, clicks and followers to effectively rank the quality and popularity of information, which in turn allows us to provide our users more accurate search results.

**Top-1 Search:** We have significantly enhanced the results of question parsing and analysis, answer matching, extraction, page content understanding and other aspects of our search engine. As a result, we greatly improved user satisfaction with Top 1 search result (satisfying user with the first search result) in 2019 and the efficiency and satisfaction of search interaction.

**P4P Technology**

Our P4P platform serves billions of relevant, targeted sponsored links each day based on search terms users enter or content they view on the web page. Our key P4P technology includes:

**P4P Auction System.** We use a web-based auction system to enable customers to bid for keywords and automatically deliver relevant, targeted promotional links on Baidu’s properties and Baidu Union partners’ properties. The system starts by screening the relevance between the sponsored links and a particular query. We have developed a new auction system based on deep reinforcement learning and automated machine learning technologies, which enables us to automatically update our auction mechanism for better optimization.

**Phoenix Nest.** Designed to generate more relevant results, Phoenix Nest helps customers to identify popular keywords and provides them with tools for budget management and marketing effectiveness measurement. In 2019, we introduced a DNN model based on series to learn users’ long-term behavior and improve its prediction capability. We upgraded the framework of our AIBOX deep learning algorithms and introduced GPUBOX, which led to significant improvement in computing efficiency and cost reduction.

**Attention Based Technology.** We have developed more precise matching methodology for phrase match mode, which greatly improved accuracy rate and expanded ads retrieval results. For the first time, we have introduced rule-based limited translation triggering technology into exact contained match triggering, and the rule-based technology not only improves the diversity of translations, but also greatly improves the retrieval of bidding keywords.

**Content Auto-Generation Technology.** Based on materials and website content provided by our customers and with considerations for our customer’s needs, we use our content auto-generation technology to automatically generate advertisements attractive to our users which in turn help our customers achieve better click and conversion rates. We use ERNIE technology to ensure the relevance between automatically generated advertisements and customer intent, and MASS language model to generate better textual content in advertisements.
AiAds System. We use machine learning techniques to build an automated and intelligent advertising system, which changes the allocation mechanism, and use end-to-end ad framework to target and optimize ad creation.

P4P Billing System. We record every click and charge customers a fee by multiplying the number of clicks by the CPC. Our system is designed to detect fraudulent clicks based on factors, such as click patterns and timestamps. This system also computes the amount a Baidu Union partner or distributor should be paid.

P4P Customer Service System. This system offers data and tools to analyze data for our customers to evaluate and optimize the performance of our online marketing services provided to them. Through this system, our customers can also manage information relating to online marketing services, such as their budgets and time periods for the services.

Large-Scale Systems and Technologies

Large Size Cluster Management. We have developed an automated management platform for large size clusters. The platform enables us to intelligently manage and allocate resources and automatically debug and relocate services, thereby allowing tens of thousands of requests on the Baidu search engine to function stably across multiple internet data centers and thousands of servers.

Storage. We have developed an efficient, distributed and structured storage system to support Baidu Core products and services. Our storage system supports PB-level holistic, sequential data storage, and ten thousand times of real-time processing per second per device.

Distributed Computing System. We have developed a comprehensive set of ultra-large scale distributed computer system which increases the utility rate of idle resources. The proxy computing system has realized various distributed computing software stacks, such as resource isolation, resource distribution, computing modeling and application framework, and supports commonly used computing modules such as MapReduce, Spark and Stream.

Indexing Technology. Our indexing technology supports billions of daily search requests on over tens of thousands of servers located across multiple internet data centers. According to our indexing technology, we have been able to update our index within seconds. We have incorporated deep learning technology like latent semantic indexing that built upon our existing semantic matching technology to significantly improve our retrieval rate.

Our Environmental, Social and Governance (ESG) Initiatives

We are committed to corporate social responsibility and meeting society’s changing needs despite the challenging economic environment in 2019. We have established an internal environmental, social and governance communications and management mechanism to comprehensively improve our corporate governance and benefit society.

In 2019, we continued to improve our corporate social responsibility initiatives under the guidance of our ESG framework. We appreciate the oversight, guidance and feedback from different parties and are committed to collaborating closely with domestic and international organizations to support broader industry-wide ESG practices, to explore multi-dimensional use cases for our technology, to empower traditional industries with our capabilities and to promote a healthier lifestyle and the long-term sustainability of our society.

Environmentally Sustainable Mindset

We are a strong supporter of the Ten Principles of the United Nations Global Compact and the UN’s 17 Sustainable Development Goals (SDGs). We have participated in the Climate Group’s EV100 campaign, a global
initiative bringing together forward-looking companies committed to accelerating the transition to electric transportation, and are committed to making Baidu a low-carbon, energy-efficient and eco-friendly company through concrete actions. For example, to improve energy efficiency, we implemented various power supply solutions including HVDC offline and BBU (Battery Back-up Unit) in our data centers. Furthermore, our data centers are equipped with large-scale water cooling systems with a free cooling module and OCU (Overhead Cooling Unit) supplemented by fine-tuning operation optimization. As a result of these measures, we improved power usage effectiveness (PUE) of our data centers and further reduced our carbon emissions. We have also adopted various water and energy conservation measures, such as recycling heat energy and introducing electric commuter shuttle buses on our campus to make our offices more environmentally friendly. These initiatives reduced our carbon emissions by over 180,000 tons, as calculated by deducting carbon emissions in project scenario from carbon emissions in baseline scenario, in 2019.

While we rigorously implement environmentally sustainable policies and initiatives, we also encourage our users and the general public to adopt similar measures. For example, by adding new features to the app, we encourage the users of Baidu Maps app to take eco-friendly transportation options including biking and walking to reduce carbon emissions. In 2019, the total number of eco-friendly trips reached 100 million, reducing carbon emissions by approximately 44,000 tons, as calculated by aggregating carbon emissions reduced through various eco-friendly transportation options: (i) for carbon free transportation options such as walking, running and cycling, the amount of carbon emission reduced equals the quotient of the total distance so travelled by the average carbon emission factor of a typical fuel-based vehicle, and (ii) for transportation options with a lower carbon footprint such as taking a bus, the amount of carbon emission reduced equals the quotient of the total distance so travelled by the average carbon emission factor differential between a typical fuel-based vehicle and a typical bus on a per capita basis. Additionally, we have actively participated in initiatives that aim to improve bio-diversity. These included working with the International Union for Conservation of Nature (IUCN) to tag and maintain search results related to over 400 endangered animals on Baidu Search, removing over 260,000 entries containing inappropriate information related to wildlife and blocking 1.4 million posts about the illegal wildlife trade. We also cooperate with non-profit organizations, such as the International Fund for Animal Welfare, to conduct a series of events that promote public awareness of conservation efforts and science.

Building Social Trust and Developing Talent

Data Privacy and Data Security. As a reputable hi-tech company serving a large community of users, we put data privacy protection and data security as our top priorities. Within the company, we have established the Baidu Security Committee and Baidu Data Privacy Committee, comprised of senior decision makers to oversee these two areas, ensure compliance with applicable laws and regulations and to ensure that we are meeting the expectations of our users. We communicate with our users in an easy-to-understand manner to help them understand their rights under applicable laws and regulations. Through our data privacy and data security policies, users can learn about and control how their data is used and provide consent for data collection when necessary. We have put in place a comprehensive auditing mechanism across our business, to keep track of the data privacy and data security actions taken throughout the lifecycle of our products and services. We utilize a complete set of data privacy and data security management systems that allow us to continuously review and improve our processes. We have designed the General Privacy Policies and have drawn up specific privacy policies for individual products and services. We have also built an independent one-stop privacy protection platform, from which users can learn about our data privacy policies and provide feedback. Additionally, we are promoting the development of ethical standards for artificial intelligence. At the annual National People’s Congress (NPC) and the National Committee of the Chinese People’s Political Consultative Conference (CPPCC) in 2019, our chief executive officer and CPPCC member Robin Yanhong Li proposed a set of AI ethical standards, to set the foundation for developing a smart society based off of AI technologies. Baidu believes that we can make a complex world simpler through AI, but such vision can only be realized if AI is used properly.

Outlook on Talent and Organizational Development. Our employees are our most important asset. We have formulated a number of internal policies and processes to protect the rights and interests of our employees.
Since 2015, we have independently developed an “intelligent” recruitment system to ensure fair recruitment, with a special focus on equal opportunities for women. We have invested significant resources in career development and training for our employees, and provided a total of approximately 568,000 hours of staff training programs in 2019. To promote work-life balance for our employees, we have adopted flexible working arrangements and a system of paid leave and compensatory leave, in addition to statutory annual leave. Since 2019, we have been working with an insurance company to introduce commercial healthcare coverage for both our employees and their parents. We are the early adopter among Chinese internet companies to offer such customized coverage. Moreover, we provide a multitude of benefits to our employees and their family members, including pregnant and nursing employees. To better understand employee satisfaction, help employees address work challenges and improve the company’s overall work environment, we conduct annual human capital assessment surveys with all of our employees. We also provide a variety of channels for employees to provide feedback and file complaints. We fully respect and value our employees’ suggestions and feedback.

**Innovation and Practice in Social Responsibility**

We care about the society that we live in, and we encourage our employees across different product lines to leverage Baidu AI technologies to make our community a better place for everyone. We have worked with government and non-profit organizations to successfully reunite more than 10,000 missing persons in China with their families by using our AI technologies. Baidu’s facial recognition technology allows a regulatory body to anticipate how a missing child would look like with age, improving the probability and precision of locating missing persons years later and greatly reducing the time it takes to identify missing people. We are actively exploring the application of voice-based Xiaodu Smart Display for the education sector and aiding the elderly and the disadvantaged. We have donated Xiaodu Smart Display to 50 primary schools in China where they serve as classroom voice assistants to provide students with an extensive selection of high-quality educational resources. We have worked with the Dashilan elderly community in Beijing to turn Xiaodu Smart Display into an “elderly care station,” allowing its senior citizens to access community services at any time through far-field voice activation. This service has benefited hundreds of elderly people in 2019. Xiaodu Smart Display has also been adopted to help visually impaired students in schools and masseurs in their workplaces in more than 40 cities across China. Xiaodu Smart Display allows visually impaired students to access a wealth of information on the Internet and visually impaired masseurs to control the lighting and room temperature of their work place through far-field voice commands.

As the leading search engine in China, we leverage our platform to reduce gender discrimination and provide charitable organizations with opportunities to be discovered and heard by the public. We have optimized search results for gender-related keywords and deploy technologies to help eliminate gender discrimination on the Internet. To help people build more confidence and cope with mental health issues, we worked with leading psychology institutions in China to launch a Smart Mini Program, an applet within Baidu App, that provided more than 1.2 million users/accounts with timely support and counseling in 2019. To empower charitable organizations and use technology to create a better Internet community, we launched the Common Benefit Project to promote and allow 200 charitable programs to be easily discovered.

Building on our close communication and collaboration with all stakeholders, we will continue to benefit our society. As part of our efforts to create value for our society, we attach great importance to communication and engagement with our users, partners, social organizations and third-party agencies.

**Intellectual Property**

We rely on a combination of patent, trademark, copyright and trade secret protection laws in China and other jurisdictions, as well as confidentiality procedures and contractual provisions, to protect our intellectual property and our brand. We have over 6,016 issued patents in China covering invention, utility model and design, and intend to apply for more patents to protect our core technologies and intellectual property. We also enter into confidentiality, non-compete and invention assignment agreements with our employees and consultants, and nondisclosure agreements with selected third parties. “.baidu,” our company’s name “Baidu” in Chinese, has been recognized as a well-known trademark in China by the Trademark Office of National Intellectual Property.
Administration under the State Administration for Market Regulation. In addition to owning “百度” and the related logos, we have applied for registration of various other trademarks. We also have registered certain trademarks in the United States, Australia, Brazil, Canada, Hong Kong, India, Indonesia, Japan, Malaysia, Mexico, New Zealand, Russia, Singapore, South Africa, South Korea, Thailand, the European Union and several other jurisdictions. In addition, we have registered our domain name Baidu.com and certain other websites with China National Network Information Center (CNNIC). We have also successfully registered Baidu top-level domain names with the Internet Corporation for Assigned Names and Numbers (ICANN).

Internet, technology and media companies are frequently involved in litigation based on allegations of infringement or other violations of intellectual property rights. Furthermore, the application of laws governing intellectual property rights in China and abroad is uncertain and evolving and could involve substantial risks to us. See “Item 3.D. Key Information—Risk Factors—Risks Related to Our Business—We may face intellectual property infringement claims and other related claims that could be time-consuming and costly to defend and may result in an adverse impact over our operations” and “—We may be subject to patent infringement claims with respect to our P4P platform.”

Regulations

The PRC government extensively regulates the telecommunications industry, including the internet sector. The State Council, the MIIT and other relevant government authorities have promulgated an extensive regulatory scheme governing internet-related services. This section summarizes the principal PRC laws and regulations relating to our business.

In the opinion of Han Kun Law Offices, our PRC legal counsel, (i) the ownership structure relating to our consolidated affiliated entities complies with current PRC laws and regulations; (ii) subject to the disclosure and risks disclosed under “Item 3.D. Key Information—Risk Factors—Risks Related to Our Corporate Structure,” “—Risks Related to Doing Business in China” and “—Regulations,” our contractual arrangements with our consolidated affiliated entities and the nominee shareholders are valid and binding on all parties to these arrangements and do not violate current PRC laws or regulations; and (iii) subject to the disclosure and risks disclosed under “Item 3.D. Key Information—Risk Factors—Risks Related to Our Corporate Structure,” “—Risks Related to Doing Business in China” and “—Regulations,” the business operations of our consolidated affiliated entities, as described herein, comply with current PRC laws and regulations in all material respects.

China’s internet industry, online marketing market and e-commerce market are evolving. There are substantial uncertainties regarding the interpretation and application of existing or proposed PRC laws and regulations. We cannot assure you that the PRC regulatory authorities would find that our corporate structure and our business operations comply with PRC laws and regulations. If the PRC government finds us to be in violation of PRC laws and regulations, we may be required to pay fines and penalties, obtain certain licenses or permits and change, suspend or discontinue our business operations until we comply with applicable PRC laws and regulations.

Regulations on Foreign Investment

On January 1, 2020, the Foreign Investment Law and the Regulations for Implementation of the Foreign Investment Law, or the Implementation Regulations, came into effect and became the principal laws and regulations governing foreign investment in the PRC, replacing the trio of prior laws regulating foreign investment in China, namely, the Sino-foreign Equity Joint Venture Enterprise Law, the Sino-foreign Cooperative Joint Venture Enterprise Law and the Wholly Foreign-invested Enterprise Law, together with their implementation rules and ancillary regulations.

According to the Foreign Investment Law, “foreign investment” refers to the investment activities conducted directly or indirectly by foreign individuals, enterprises or other entities in the PRC, including the
following circumstances: (i) the establishment of foreign-invested enterprises in the PRC by foreign investors solely or jointly with other investors, (ii) a foreign investors’ acquisition of shares, equity interests, property portions or other similar rights and interests of enterprises in the PRC, (iii) investment in new projects in the PRC by foreign investors solely or jointly with other investors, and (iv) investments made by foreign investors through means stipulated in laws or administrative regulations or other methods prescribed by the State Council. Pursuant to the Foreign Investment Law, China has adopted a reformed system with respect to foreign investment administration, under which the Chinese government applies national treatment to foreign investors in terms of investment entry and the foreign investor needs to comply with the requirements as provided in the negative list for foreign investment. The negative list will be issued by, amended or released upon approval by the State Council, from time to time. The negative list will consist of a list of industries in which foreign investments are prohibited and a list of industries in which foreign investments are restricted. Foreign investors will be prohibited from making investments in prohibited industries, while foreign investments must satisfy certain conditions stipulated in the negative list for investments in restricted industries. Foreign investments and domestic investments in industries outside the scope of the prohibited industries and restricted industries stipulated in the negative list will be treated equally. Any foreign-invested enterprise established prior to the effectiveness of the Foreign Investment Law may maintain its original corporate forms for a period of five years after January 1, 2020.

The Implementation Regulations restates certain principles of the Foreign Investment Law and further provides that, among others, (1) if a foreign-invested enterprise established prior to the effective date of the Foreign Investment Law fails to adjust its legal form or governance structure to comply with the provisions of the Companies Law of the PRC or the Partnership Enterprises Law of the PRC, as applicable, and complete amendment registration before January 1, 2025, the enterprise registration authority will not process other registration matters of the foreign-invested enterprise and may publicize such non-compliance thereafter; (2) the provisions regarding equity interest transfer and distribution of profits and remaining assets as stipulated in the contracts among the joint venture parties of a foreign-invested enterprise established before the effective date of the Foreign Investment Law may, after adjustment of the legal form and governing structure of such foreign-invested enterprise, remain binding upon the parties.

Regulations on Value-Added Telecommunications Services and Internet Content Services

Value-added telecommunications services and Internet content services. The Telecommunications Regulations promulgated by the PRC State Council in September 2000 categorize all telecommunication businesses in the PRC as either basic or value-added. Pursuant to the Telecommunications Regulations, commercial operators of value-added telecommunications services must first obtain a Value-Added Telecommunication Business Operating License from the MIIT or its provincial level counterparts. The Administrative Measures for Telecommunication Business Operating License, promulgated by the MIIT with latest amendments becoming effective in September 2017, set forth the types of licenses required for value-added telecommunications services and the qualifications and procedures for obtaining such licenses. For example, a value-added telecommunications service operator providing commercial value-added services in multiple provinces is required to obtain an inter-regional license, whereas a value-added telecommunications service operator providing the same services in one province is required to obtain a local license. Baidu Netcom and some of our other PRC consolidated affiliated entities hold such Value-Added Telecommunication Business Operating Licenses.

Internet content services, or ICP services, are classified as one of the value-added telecommunication businesses. The Administrative Measures on Internet Information Services, promulgated by the PRC State Council in September 2000, require companies engaged in the provision of commercial internet content services to obtain a Value-added Telecommunication Business Operation Permit for ICP services, or an ICP license from the relevant government authorities before providing any commercial internet content services within the PRC. “Commercial internet content services” generally refer to provision of information service through public telecommunication network or internet for a fee. The Catalog of Classification of Telecommunications Services
promulgated by the MIIT in December 2015 and taking effect from March 1, 2016 further divides ICP services into information publication platform and delivery services, information search and inquiry services, information communities platform services, instant message services, and information security and management services. We do not believe our P4P services conducted by our certain PRC subsidiaries are categorized as part of internet content services that require an ICP license under these regulations. Although Baidu Online conducts part of the P4P business by, among other things, examining and filtering P4P keywords, interacting with potential P4P customers, engaging in sales activities with our customers, P4P search results are displayed on the websites operated by Baidu Netcom, including Baidu.com. Baidu Netcom, as the owner of our domain name Baidu.com and holder of the necessary licenses and approvals, such as an ICP license, operates the website to list P4P search results and display other marketing and advertising content as an online marketing service provider.

**Content regulation.** National security considerations are an important factor in the regulation of internet content in China. The National People’s Congress, the PRC’s national legislature, has enacted laws with respect to maintaining the security of internet operation and internet content. Under these laws and applicable regulations, violators may be subject to penalties, including criminal sanctions, for internet content that:

- opposes the fundamental principles stated in the PRC constitution;
- compromises national security, divulges state secrets, subverts state power or damages national unity;
- harms the dignity or interests of the state;
- incites ethnic hatred or racial discrimination or damages inter-ethnic unity;
- undermines the PRC’s religious policy or propagates heretical teachings or feudal superstitions;
- disseminates rumors, disturbs social order or disrupts social stability;
- disseminates obscenity or pornography, encourages gambling, violence, murder or fear or incites the commission of a crime;
- insults or slanders a third party or infringes upon the lawful rights and interests of a third party; or
- is otherwise prohibited by law or administrative regulations.

ICP operators are required to monitor their websites, including electronic bulletin boards. They may not post or disseminate any content that falls within the prohibited categories and must remove any such content from their websites. The PRC government may shut down the websites of ICP license holders that violate any of the above-mentioned content restrictions and revoke their ICP licenses. For instance, in 2017, the CAC issued a series of regulatory documents providing that an ICP operator is obligated to monitor contents displayed and disseminated by users on its platform. These regulations apply to online services, including (i) online forum and community service, which allows users to publish information and interact with other users on an online forum, post bar or other form of online communities, (ii) online follow-up comment service, which allows users to post threads, reply to original content, leave messages and engage in live commenting with texts, symbols, expressions, pictures, audio/video on a website, mobile app or other forms of interactive platform; (iii) online group chat information service, which allows users to communicate and exchange information in a cyberspace created by the users on an online platform; (iv) online official account information service, which allows users to post texts, pictures, audio/video and other information in the form of an official account registered by the user on a website, mobile app or other network platform. Pursuant to these regulations, a service provider is required to, among others, (x) register and verify the identity information of each user, and (y) in the case of publication or dissemination of prohibited contents on the platform, take prompt rectification measures, including removing and terminating transmission of the illegal content, restricting the user right of the offender, banning the user account and shutting down the relevant forum or channel, and report to the regulatory authority.

In addition, in November 2018, the CAC issued a notice to require ICP operators to conduct security assessments on their Internet information services if their services include forums, blogs, microblogs, chat rooms,
communication groups, public accounts, short videos, online live-streaming, information sharing, mini programs or such other functions that provide channels for the public to express opinions or have the capability of mobilizing the public to engage in specific activities. ICP operators must conduct self-assessment on, among others, the legality of new technology involved in the services and the effectiveness of security risk prevention measures, and file the assessment report to local competent Internet information office and public security authority. At the end of 2019, the CAC issued the Provisions on the Management of Network Information Content Ecology, or the CAC Order No.5, which became effective on March 1, 2020, to further strengthen the regulation and management of network information content. Pursuant to the CAC Order No.5, each network information content service platform is required, among others, (i) not to disseminate any information prohibited by laws and regulations, such as information jeopardizing national security; (ii) to strengthen the examination of advertisements published on such network information content service platform; (iii) to promulgate management rules and platform convention and improve user agreement, such that such network information content service platform could clarify users’ rights and obligations and perform management responsibilities required by laws, regulations, rules and convention; (iv) to establish convenient means for complaints and reports; and (v) to prepare annual work report regarding its management of network information content ecology. In addition, a network information content service platform must not, among others, (i) utilize new technologies such as deep-learning and virtual reality to engage in activities prohibited by laws and regulations; (ii) engage in online traffic fraud, malicious traffic rerouting and other activities related to fraudulent account, illegal transaction account or maneuver of users’ account; or (iii) infringe a third party’s legitimate rights or seek illegal interests by way of interfering with information display.

Restrictions on Foreign Ownership in Value-Added Telecommunications Services. Pursuant to the Provisions on Administration of Foreign-Invested Telecommunications Enterprises, promulgated by the PRC State Council with the latest amendments becoming effective in February 2016, the ultimate foreign equity ownership in a value-added telecommunications service provider must not exceed 50%. However, the MIIT released an announcement in June 2015 to remove the restriction on foreign equity for “online data processing and transaction processing businesses (operational E-commerce)” as provided in the Catalog of Telecommunication Businesses promulgated by the MIIT. The Guidance Catalog of Industries for Foreign Investment, as amended in 2017, and Special Administrative Measures (Negative List) for Foreign Investment Access issued in 2019 allow a foreign investor to own more than 50% of the total equity interest in an e-commerce business, a domestic multi-party communication business, an information storage and re-transmission business and a call center business. In order to acquire any equity interest in a value-added telecommunication business in China, a foreign investor must satisfy a number of stringent performance and operational experience requirements, including demonstrating a good track record and experience in operating a value-added telecommunication business overseas. Foreign investors that meet these requirements must obtain approvals from the MIIT and the Ministry of Commerce (or the Ministry of Commerce’s authorized local counterparts), which retain considerable discretion in granting approvals. According to publicly available information, the PRC government has issued telecommunication business operating licenses to only a limited number of foreign-invested companies. We believe that it would be impracticable for us to acquire any equity interest in our consolidated affiliated entities without diverting management attention and resources. Moreover, we believe that our contractual arrangements with these entities and the individual nominee shareholders provide us with sufficient and effective control over these entities. Accordingly, we currently do not plan to acquire any equity interest in any of the consolidated affiliated entities.

A Notice on Intensifying the Administration of Foreign Investment in Value-Added Telecommunications Services, issued by the MIIT in July 2006, prohibits domestic telecommunication service providers from leasing, transferring or selling Telecommunication Business Operating Licenses to any foreign investor in any form, or providing any resources, sites or facilities to any foreign investor for their illegal operation of a telecommunication business in China. Pursuant to this notice, either the holder of a Value-Added Telecommunication Business Operating License or its shareholders must directly own the domain names and trademarks used by such license holder in its provision of value-added telecommunications services. The notice further requires each license holder to have the necessary facilities, including servers, for its approved business
operations and to maintain the facilities in the regions covered by its license. If a license holder fails to comply with the requirements in the notice or
cure any non-compliance, the MIIT or its local counterparts have the discretion to take measures against the license holder, including revoking its Value-
Added Telecommunication Business Operating License.

Due to the restrictions under these PRC regulations, we operate our websites mainly through our PRC consolidated affiliated entities, such as
Baidu Netcom. Baidu Netcom is our PRC consolidated affiliated entity, and is considered a domestic PRC entity under PRC law given that the nominee
shareholders are PRC citizens or PRC entities.

Baidu Netcom and some of our other PRC consolidated affiliated entities holds a Value-Added Telecommunication Business Operating License. In compliance with the Notice of the MIIT on Intensifying the Administration of Foreign Investment in Value-Added Telecommunications Services, Baidu Netcom owns the necessary domain names and trademarks, including pending trademark applications, and have the necessary personnel and
facilities to operate our websites.

**Regulations on Mobile Internet Applications**

In June 2016, the CAC promulgated the Administrative Provisions on Mobile Internet Application Information Services, or the Mobile
Application Administrative Provisions, which became effective on August 1, 2016. Pursuant to the Mobile Application Administrative Provisions, a
mobile internet app refers to an app software that runs on mobile smart devices providing information services after being pre-installed, downloaded or
embedded through other means. Mobile internet app providers refer to the owners or operators of mobile internet apps. Internet app stores refer to
platforms which provide services related to online browsing, searching and downloading of app software and releasing of development tools and
products through the internet.

Pursuant to the Mobile Application Administrative Provisions, an internet app program provider must verify a user’s mobile phone number and
other identity information under the principle of mandatory real name registration at the back-office end and voluntary real name display at the front-
office end. An internet app provider must not enable functions that can collect a user’s geographical location information, access user’s contact list,
activate the camera or recorder of the user’s mobile smart device or other functions irrelevant to its services, nor is it allowed to conduct bundle
installations of irrelevant app programs, unless it has clearly indicated to the user and obtained the user’s consent on such functions and app programs.
In respect of an internet app store service provider, the Mobile Application Administrative Provisions require that, among others, it must file a record
with the local authority within 30 days after it rolls out the internet app store service online. It must also examine the authenticity, security and legality
of internet app providers on its platform, establish a system to monitor app providers’ credit and file a record of such information with relevant
governmental authorities. If an app provider violates the regulations, the internet app store service provider must take measures to stop the violations,
including giving a warning, suspension of release, withdrawal of the app from the platform, keeping a record of the incident and reporting the incident to
the relevant governmental authorities.

In December 2016, the MIIT promulgated the Interim Measures on the Administration of Pre-Installation and Distribution of Applications for
Mobile Smart Terminals, which came into effect on July 1, 2017. The Interim Measures aim to enhance the administration of mobile apps, and require,
among others, that mobile phone manufacturers and internet information service providers must ensure that a mobile app, as well as its ancillary
resource files, configuration files and user data can be uninstalled by a user on a convenient basis, unless it is a basic function software, which refers to a
software that supports the normal functioning of the hardware and operating system of a mobile smart device.

**Regulations on Internet Information Search Service**

In June 2016, the CAC promulgated the Administrative Provisions on Internet Information Search Services, or the Search Services Administrative
Provisions, which took effect on August 1, 2016. Pursuant to the Search
Services Administrative Provisions, internet information search service refers to the service whereby users can search for information that is collected from the internet and processed by computer technology. The Search Services Administrative Provisions requires that an internet information search service provider must not publish any information or contents prohibited by law in the form of links, abstracts, snapshots, associative words, related search or recommendations or otherwise. If an internet information search service provider identifies any search results that contain any information, website or app that is prohibited by law, it must stop displaying the search results, record the infraction and report it to the relevant governmental authority. In addition, an internet information search service provider is prohibited from seeking illegitimate interest by means of unauthorized disconnection of links, or provision of search results containing false information. If an internet information search service provider engages in paid search services, it must examine and verify the qualifications of its customers of the paid search services, specify the maximum percentage of search results as paid search results on a webpage, clearly distinguish paid search results from natural search results, and notably identify the paid search information item by item.

Regulations on News Display

Displaying news on a website and disseminating news through the internet are highly regulated in the PRC. The Provisional Measures for Administrating Internet Websites Carrying on the News Displaying Business, jointly promulgated by the State Council News Office and the MIIT in November 2000, require an ICP operator (other than a government authorized news unit) to obtain an approval from the State Council News Office to post news on its website or disseminate news through the internet. Furthermore, the disseminated news must come from government-approved sources pursuant to contracts between the ICP operator and the sources, copies of which must be filed with the relevant government authorities.

In May 2017, the CAC issued the Provisions on the Administration of Internet News Information Services, or the Internet News Regulation, and its implementing rules, which became effective on June 1, 2017. Pursuant to the Internet News Regulation and its implementing rules, if an entity intends to provide internet news information service, it is required to obtain an approval from the State Council News Office and receive an Internet News Information Service License. Internet news information service refers to editing, publishing and reprinting and the dissemination platform service of internet news through internet websites, mobile apps, forums, blogs, micro-blogs, official accounts, instant message tools, live-streaming and other similar means. Pursuant to the Internet News Regulation, no internet news information service organizations may take the form of a foreign-invested enterprise, whether a joint venture or a wholly foreign-owned enterprise, and no cooperation between internet news information service organizations and foreign-invested enterprises is allowed prior to the security evaluation by the CAC.

Baidu Netcom obtained the Internet News Information Service License, which permits it to publish internet news pursuant to the relevant PRC laws and regulations, in December 2006, and had the license renewed in October 2018.

Regulations on Internet Drug Information Services

According to the Provisions on the Administration of Internet Drug Information Services, which was issued by the State Food and Drug Administration in November 2017, an enterprise publishing drug-related information must obtain a qualification certificate from the provincial-level food and drug administration before it applies for the ICP license or files with the MIIT or its local provincial-level counterpart.

Baidu Netcom obtained the Qualification Certificate for Internet Drug Information Services, which permits it to publish drug-related information on its website, in November 2007, and had the certificate renewed in August 2017. We have several other entities in our group that have obtained the Qualification Certificate for Internet Drug Information Services.
Regulations on Internet Culture Activities

The Internet Culture Administration Measures, promulgated by the Ministry of Culture and with the latest amendment becoming effective in December 2017, require ICP operators engaging in “internet culture activities” to obtain a permit from the Ministry of Culture. The “internet culture activities” include, among other things, online dissemination of internet cultural products and the production, reproduction, importation, distribution and broadcasting of internet cultural products. In May 2019, the Ministry of Culture and Tourism issued a circular to adjust the applicable scope of the Internet Culture Business Permit. Pursuant to the circular, the Ministry of Culture and Tourism will no longer be the authority supervising the online game industry and therefore the business scope of an Internet Culture Business Permit issued by it and its local counterparts will only cover internet cultural products including online music, online plays or programs, online performance, online works of art, online cartoon and exhibition and online matches, but exclude online games. Imported internet cultural products are subject to content review by the Ministry of Culture and Tourism before they are disseminated online, while domestic internet cultural products must be filed with the local branch of the Ministry of Culture within 30 days following the online dissemination. Service providers are also required to conduct self-review of the content of internet cultural products before they are put on the internet or submitted to the Ministry of Culture for approvals or filings. Baidu Netcom was granted an Internet Culture Business Permit in April 2007, which was renewed again in September 2018. Some other entities in our group have also obtained an Internet Culture Business Permit.

The Several Suggestions on the Development and Administration of Internet Music, issued by the Ministry of Culture and becoming effective in November 2006, reiterate the requirement for an internet service provider to obtain the Internet Culture Business Permit to carry on any business of internet music products. In addition, foreign investors are prohibited from engaging in the internet culture business operation.

In October 2015, the Ministry of Culture promulgated a notice, which took effect on January 1, 2016, to further strengthen its regulation over online music, including requiring online platforms that allow users to upload self-created or performed music to set up real-time monitoring systems and requiring online music service providers to make quarterly filings of information related to their content self-review with the local counterpart of the Ministry of Culture from April 1, 2016.

Regulations on Internet Publishing

In February 2016, the SAPPRFT (currently known as the NNPB), and the MIIT jointly issued the Administrative Provisions on Internet Publishing Services, or the Internet Publishing Regulation, which took effect on March 10, 2016, and replaced the Interim Provisions for the Administration of Internet Publishing promulgated in 2002. The Internet Publishing Regulation requires that any entity engaged in the provision of online publications to the public via information networks obtain an Internet Publication License from the NNPB. Online publications refer to digital works with editing, production, processing and other publishing features, provided to the public via information networks, which mainly include: (i) informative and thoughtful text, pictures, maps, games, animation, audio and video digitizing books and other original digital works in fields such as literature, art and science, (ii) digital works consistent with the content of published books, newspapers, periodicals, audio-visual products and electronic publications, (iii) the network literature database or other digital works formed through aforementioned works by selecting, organizing, compiling and other means, and (iv) other types of digital works determined by the NNPB. The servers and storage facilities used by internet publishers must be located within the territory of the PRC. The Internet Publishing Regulation also provides that when an internet service provider provides manual intervention search ranking, advertising, promotion and other services to customers that provide internet publishing services, it is required to check and examine the Internet Publication Licenses obtained by the customers and the business scope of such licenses. Certain entities in our group have obtained the Internet Publication Licenses.
Regulations on Broadcasting Audio/Video Programs through the Internet

In December 2007, the State Administration of Radio, Film and Television, or the SARFT (currently known as NRTA) and the MIIT jointly promulgated the Rules for the Administration of Internet Audio and Video Program Services, commonly known as “Document 56,” which took effect on January 31, 2008. Pursuant to Document 56, an online audio/video service provider must obtain an Online Audio/Video Program Transmission License, which has a term of three years, and operate in accordance with the scope of the business as stipulated in the license. Furthermore, Document 56 requires all online audio/video service providers to be either wholly state-owned or state-controlled. According to some official answers to press inquiries published on the SARFT’s website in February 2008, officials from the SARFT and the MIIT clarified that online audio/video service providers that already had been operating lawfully prior to the issuance of Document 56 may re-register and continue to operate without becoming state-owned or controlled, provided that the providers have not engaged in any unlawful activities. This exemption will not be granted to online audio/video service providers established after Document 56 was issued. In addition, foreign-invested enterprises are not allowed to engage in the above-mentioned businesses. On March 16, 2018, the NRTA issued the Notice on Further Regulating the Transmission Orders of Internet Audio and Video Program, pursuant to which, among others, (i) online streaming platforms shall not illegally capture, edit, or reprogram audio-video programs, (ii) the movie clips and prevue broadcasted on the platform shall come from the licensed broadcasting and television programs; and (iii) the platform shall verify qualifications of sponsors for programs on the platform and shall refrain from accepting sponsorship or advertising from or cooperating in any other form with any unlicensed online audio/video service providers.

The PRC government has also promulgated a series of special regulatory measures governing live-streaming services. In November 2016, the CAC promulgated the Administrative Provisions on Internet Live-streaming Service, which took effect on December 1, 2016. Pursuant to the Administrative Provisions, internet live-streaming service refers to continuous publishing of real-time information to the public on internet by means of video, audio, graphics, text or other forms, and an internet live-streaming service provider refers to an operator of the platform providing internet live-streaming service. In accordance with the administrative provisions, an internet live-streaming service provider must verify and register the identity information of publishers of live-streaming programs and users on its platform, and file the identity information of the publishers with the local governmental authority for record. Any internet live-streaming service provider engaging in news service must obtain internet news information service qualification and operate within the permitted scope of such qualification. In September 2016, the SAPPRFT (currently known as the NRTA) issued a Circular on Strengthening Administration of Live-streaming Service of Network Audio/Video Programs. Pursuant to the circular, any entity that intends to engage in live audio/video broadcasting of major political, military, economic, social, cultural or sport events or activities, or live audio/video broadcasting of general social or cultural group activities, general sporting events or other organizational events, must obtain an Online Audio/Video Program Transmission License with a permitted operation scope covering the above business activities. Any entity or individual without qualification is prohibited from broadcasting live audio/radio programs involving news, variety shows, sports, interviews, commentary or other forms of programs through any online live-streaming platform or online live broadcasting booth, nor are they permitted to start a live broadcasting channel for any audio or radio programs. In addition, no entity or individual other than licensed radio stations or television stations are allowed to use “radio station,” “television station,” “broadcasting station,” “TV” or other descriptive terms exclusive to television and radio broadcasting organizations to engage in any business on the internet without approval. Furthermore, the CAC issued a notice in July 2017 which requires operators of internet news and information reproduction and broadcasting services, including commercial website apps that contain live-streaming features, and other internet live-streaming services, to file with the local CAC starting from July 15, 2017. The Circular on Tightening the Administration of Internet Live-Streaming Services jointly issued jointly by the MIIT, the CAC and several other government agencies in August 2018 reiterates the license requirements for online-streaming service providers and requires the operator to file with the local public security authority within 30 days after it commences the service online.

On March 29, 2019, the Administrative Provisions on Minor-oriented Programs was issued by the NRTA and has become effective since April 30, 2019. According to these provisions, network audio-visual programs
with minors as their main participants or recipients shall not contain any contents which are harmful to the minors, such as violence, pornography, heresy, superstition, drug taking and other illegal contents. On November 18, 2019, the CAC, the Ministry of Culture and Tourism and the NRTA jointly issued the Administrative Provisions on Online Audio-visual Information Services, or Circular No.3, which took effective on January 1, 2020. According to the Circular No.3, Online Audio-visual Information Services refer to the services of producing, publishing and disseminating audio-visual information offered to the public via Internet platforms, such as websites and application programs. Circular No.3 requires that no individual or entity is allowed to (i) use the online audio-visual information services or related technologies to engage in any activities which may jeopardize national security, undermine social stability or infringe legitimate right of others; (ii) produce, publish or disseminate any audio-visual information prohibited by the laws and regulations, such as Internet rumors. A provider of audio-visual information services must establish, maintain and optimize a rumors refuting regime, under which once it identifies that any user of audio-visual information services produces, publishes or disseminates any rumor by virtue of the technology of producing forged pictures or audio-visual information based on deep-learning or virtual reality, such provider must take measures to refute such rumors in a timely manner and file such situations with the competent authorities governing Internet information, culture and tourism, and radio and television.

Baidu Netcom has renewed its Online Audio/Video Program Transmission License, which remains valid until July 2021. iQIYI has an Online Audio/Video Program Transmission License that is valid until October 2021. Another entity in our group has an Online Audio/Video Program Transmission License that is valid until March 2020.

Regulations on Internet Map Services

According to the Administrative Rules of Surveying Qualification Certificate, as amended by the National Administration of Surveying, Mapping and Geo-information (a.k.a. the State Bureau of Surveying and Mapping) in August 2014, the provision of internet map services by any non-surveying and mapping enterprise is subject to the approval of the National Administration of Surveying, Mapping and Geo-information and requires a Surveying and Mapping Qualification Certificate. Internet maps refer to maps called or transmitted through the internet. Pursuant to the Notice on Further Strengthening the Administration of Internet Map Services Qualification issued by the National Administration of Surveying, Mapping and Geo-information in December 2011, any entity without a Surveying and Mapping Qualification Certificate for internet map services is prohibited from providing any internet map services. According to the Provisions on the Administration of Examination of Maps amended on July 16, 2019, subject to limited exceptions, an enterprise must first apply for an approval by the relevant regulatory authority, if it intends to engage in any of the following activities: (i) publication, display, production, posting, import or export of a map or a product attached with a map, (ii) re-publication, re-display, re-production, re-posting, re-import or re-export of a map the content of which has been changed after it is approved, or other commercial products attached with such a map, and (iii) publication or display of a map or a product attached with a map overseas. The operator of an approved internet map is required to file the updated contents of the map with the relevant regulatory authority semi-annually, and re-apply for a new approval of the map when the two-year term of the existing approval expires.

Baidu Netcom provides online traffic information inquiry services as well as internet map services and has obtained a Surveying and Mapping Qualification Certificate for internet map services. Another entity in our group has also obtained the Surveying and Mapping Qualification Certificate. In accordance with the Provisions on the Administration of Examination of Maps, we have initiated the application for examination and approval of the maps that are used in our products.

Regulations on Online Games

Pursuant to the Administrative Provisions on Internet Publishing Services and the Circular on Mobile Game Publishing Service, the online games services provided on our websites by our online game operator partners
may be deemed as a type of “online publication service” provided by us, and we may be required to obtain an Internet Publication License from the NNPB. Beijing Perusal and another entity in our group have obtained the Internet Publication Licenses. The required approval by the NNPB of each online game provided on our websites is handled by our online game operator partners.

In September 2009, the GAPP (currently known as the NNPB) together with several other government agencies issued Circular 13, which explicitly prohibits foreign investors from participating in online game operating businesses through wholly-owned enterprises, equity joint ventures or cooperative joint ventures in China. Circular 13 expressly prohibits foreign investors from gaining control over or participating in PRC operating companies’ online game operations through indirect means, such as establishing joint venture companies, entering into contractual arrangements with or providing technical support to the operating companies, or through a disguised form, such as incorporating user registration, user account management or payment through game cards into online game platforms that are ultimately controlled or owned by foreign investors. We offer online games provided by our game operator partners on our websites owned and operated by our consolidated affiliated entities. We also operate two smartphone app distribution platforms in China as well as a mobile game platform through our consolidated affiliated entities. If our contractual arrangements were deemed to be “indirect means” or “disguised form” under Circular 13, our relevant contractual arrangements may be challenged by the NNPB or other governmental authorities. If we were found to be in violation of Circular 13 in the operation of our online game platform, the NNPB, in conjunction with relevant regulatory authorities, would have the power to investigate and deal with such violations, including in the most serious cases, suspending and revoking the relevant licenses and registrations.

In October 2019, the NNPB promulgated the Circular on Preventing Minors from Developing Online Game Addictions, which mandates that online game operators take, among others, the following measures to prevent minors from being addicted to online games: (i) the operator shall ensure that its online game users use valid and true identity information to register their game accounts; (ii) the operator shall strictly control the time slot and duration allowed for minors to log in and play online games to the extent that it shall not provide any game service for the minors in any form from 10:00 PM each day to 8:00 AM the next day, and the length of time a minor spends in playing its online games must not exceed three hours accumulatively on each statutory holiday and one and a half hours on each business day; and (iii) the online game operator shall not offer any paid services to minors that are not suitable for their civil capacity. According to such circular, these requirements are pre-conditions for an operator to publish and operate any online game.

Regulations on Online Game Virtual Currency

The Interim Administration Measures of Online Games require companies that (i) issue online game virtual currency (including prepaid cards and/or pre-payment or prepaid card points) or (ii) offer online game virtual currency transaction services to apply for the Internet Culture Business Permit from provincial branches of the Ministry of Culture. The regulations prohibit companies that issue online game virtual currency from providing services that would enable the trading of such virtual currency. Any company that fails to submit the requisite application will be subject to sanctions, including but not limited to termination of operation, confiscation of incomes and fines. The regulations also prohibit online game operators from allocating virtual items or virtual currency to players based on random selection through lucky draw, wager or lottery that involve cash or virtual currency directly paid by the players. In addition, companies that issue online game virtual currency must comply with certain specific requirements. For example, online games virtual currency can only be used for products and services related to the issuance company’s own online games. Pursuant to a Circular issued by the Ministry of Culture in December 2016, which took effect on May 1, 2017, an online game operator must not allow online game virtual currency to exchange for legal currency or items, except in the case of termination of online game operation where the online game operator may refund the balance of online game virtual currency to players in the form of legal currency or in other means acceptable to the players. Moreover, pursuant to the circular, regulations applicable to online game virtual currency also apply to such other virtual items where the virtual items are issued by the online game operator, can be exchangeable for other virtual items or value-added services.
related to the games, and can be purchased with legal currency or online game virtual currency or exchanged for online game virtual currency. Baidu Netcom and some other entities in our group have obtained the Internet Culture Business Permit for issuing online game virtual currency.

Regulations on Advertisements and Online Advertising

The PRC government regulates advertising, including online advertising, principally through the State Administration for Market Regulation. The PRC Advertising Law, as recently amended in October 2018, outlines the regulatory framework for the advertising industry, and allows foreign investors to own up to all equity interests in PRC advertising companies.

We conduct our value-added telecommunication-based online advertising business through Baidu Netcom, which is one of our consolidated affiliated entities in China and holds a business license that covers value-added telecommunication-based online advertising in its business scope. Our subsidiaries Baidu Times and Baidu China have also expanded their respective business license to cover advertising in their respective business scope.

Advertisers, advertising operators and advertising distributors are required by PRC advertising laws and regulations to ensure that the contents of the advertisements they prepare or distribute are true and in full compliance with applicable laws and regulations. For example, pursuant to the PRC Advertising Law, advertisements must not contain, among other prohibited contents, terms such as “the state-level,” “the highest grade,” “the best” or other similar words. In addition, where a special government review is required for certain categories of advertisements before publishing, the advertisers, advertising operators and advertising distributors are obligated to confirm that such review has been performed and the relevant approval has been obtained. Pursuant to the PRC Advertising Law, the use of the internet to distribute advertisements shall not affect the normal use of the internet by users. Particularly, advertisements distributed on internet pages such as pop-up advertisements shall be indicated with a conspicuous mark for “close” to ensure the close of such advertisements by one click. Where internet information service providers know or should know that illegal advertisements are being distributed using their services, they shall prevent such advertisements from being distributed.

In addition to the above regulations, the Internet Advertising Measures also set forth certain compliance requirements for online advertising businesses. For example, search engine service providers must indicate paid search results as an advertisement and distinguish paid search results from natural search results on their websites. Advertising operators and distributors of internet advertisements must examine, verify and record identity information, such as name, address and contact information, of advertisers, and maintain an updated verification record on a regular basis. Moreover, advertising operators and advertising distributors must examine supporting documentation provided by advertisers and verify the contents of the advertisements against supporting documents before publishing. If the contents of advertisements are inconsistent with the supporting documentation, or the supporting documentation is incomplete, advertising operators and distributors must refrain from providing design, production, agency or publishing services. The Internet Advertising Measures also prohibit the following activities: (i) providing or using apps and hardware to block, filter, skip over, tamper with, or cover up lawful advertisements; (ii) using network access, network equipment and apps to disrupt the normal transmission of lawful advertisements or adding or uploading advertisements without authorization; and (iii) harming the interests of a third party by using fake statistics or traffic data.

Violation of these regulations may result in penalties, including fines, confiscation of advertising income, orders to cease dissemination of the advertisements and orders to publish an advertisement correcting the misleading information. In the case of serious violations, the State Administration for Market Regulation or its local branches may force the violator to terminate its advertising operation or even revoke its business license. Furthermore, advertisers, advertising operators or advertising distributors may be subject to civil liability if they infringe on the legal rights and interests of third parties.
Regulations on Artificial Intelligence and Autonomous Driving Vehicles

We engage in the research and development of artificial intelligence (AI) technology and products, specifically autonomous driving vehicles. The Chinese government has issued a series of guidelines to encourage and support the research and development of AI technology, such as the Three-Year Implementing Plan for Internet Plus Artificial Intelligence issued in May 2016 and the Development Planning on the New Generation of Artificial Intelligence issued in July 2017. In particular, the MIIT, the Ministry of Public Security and the Ministry of Transport, issued the Circular on the Norms on Administration of Road Testing of Autonomous Driving Vehicles (Trial Implementation) in April 2018, which became effective from May 1, 2018 and is the primary regulation governing protocol of road testing of autonomous driving vehicles in China. Pursuant to this circular, any entity intending to conduct a road testing of autonomous driving vehicles must apply for and obtain a road-testing certificate and a temporary license plate for each tested car. To qualify for these required licenses, an applicant entity must satisfy, among others, the following requirements: (i) it must be an independent legal person registered under PRC law with the capacity to conduct manufacturing, technological research or testing of automobiles and automobile parts, which has established protocol to test and assess the performance of autonomous driving system and is capable of conducting real-time remote monitor of the tested cars; (ii) the vehicle under road testing must be equipped with a driving system that can switch between autonomous pilot model and human driving model in a safe, quick and simple manner and allows human driver to take control of the vehicle any time immediately when necessary; (iii) the tested vehicle must be equipped with the function of recording, storing and real-time monitoring the condition of the vehicle and is able to transmit real-time data of the vehicle, such as the driving model, location and speed; (iv) the applicant entity must sign an employment contract or a labor service contract with the driver of the tested vehicle, who must be a licensed driver with more than three years’ driving experience and a track record of safe driving and is familiar with the testing protocol for autonomous driving system and proficient in operating the system; (v) the applicant entity must insure each tested vehicle for at least RMB5 million against car accidents or provide a letter of guarantee covering the same. During testing, the testing entity should post a noticeable identification logo for autonomous driving test on each tested car and should not use autonomous driving model unless in the permitted testing areas specified in the road-testing certificate. If the testing entity intends to conduct road testing in the region beyond the administrative territory of the certificate issuing authority, it must apply for a separate road-testing certificate and a separate temporary license plate from the relevant authority supervising the road-testing of autonomous cars in that region. In addition, the testing entity is required to submit to the road-testing certificate issuing authority a periodical testing report every six months and a final testing report within one month after completion of the road testing. In the case of a car accident causing severe injury or death of personnel or vehicle damage, the testing entity must report the accident to the road-testing certificate issuing authority within 24 hours and submit a comprehensive analysis report in writing covering cause analysis, final liability allocation results, etc. within five working days after the traffic enforcement agency determines the liability for the accident. Some local governments, such as Beijing, Shanghai, Chongqing, Hunan and Tianjin, have issued local rules and regulations to regulate road testing of autonomous driving cars accordingly.

Regulation on Product Quality

Products made in mainland China shall be subject to the Product Quality Law of the PRC, or the Product Quality Law, which was promulgated on February 22, 1993 and amended on July 8, 2000, August 27, 2009 and December 29, 2019. According to the Product Quality Law, a seller of a product shall be responsible for repairing, replacing or returning the product with any of the following defects, and shall compensate for the damages incurred by consumers who bought such defective product: (i) the product does not have the usability which such product should have and there are no prior indications about such situation; (ii) the actual quality of such product fails to comply with the standards specified on such product or the package of such product; and (iii) the actual quality of such product fails to meet the quality status specified by way of product specifications and samples. After the seller performs its obligation of repairing, replacing and returning the defective product and/or compensating for the customers’ damages, such seller is entitled to seek reimbursement from the manufacturer of such product, if it could be proved that the defect is caused by the manufacturer. According to
the Product Quality Law, a manufacturer of a product shall be responsible to compensate for the damages to any person caused by the defect of such product, unless the manufacturer is able to prove that: (i) it did not circulate the product; (ii) the defect did not exist at the time when the product was circulated; or (iii) scientific or technologic knowledge at the time when such product was circulated was not such that it allowed the defect to be discovered.

**Tort Liability Law**

In accordance with the Tort Liability Law of the PRC, or the Tort Liability Law, which became effective in July 2010, internet users and internet service providers bear tortious liabilities in the event that they infringe upon other persons’ rights and interests through the internet. Where an internet user conducts tortious acts through internet services, the infringed person has the right to request the internet service provider take necessary actions such as deleting contents, screening and de-linking. Failing to take necessary actions after being informed, the internet service provider will be subject to joint and several liabilities with the internet user with regard to the additional damages incurred. Where an internet service provider knows that an internet user is infringing upon other persons’ rights and interests through its internet service but fails to take necessary actions, it is jointly and severally liable with the internet user. In addition, in accordance with the Tort Liability Law, in the event of any damage arising from a defective product, the infringed person may seek compensation from either the manufacturer or the seller of such product. If the manufacturer has compensated the infringed person but the defect is caused by the fault of the seller, the manufacturer is entitled to seek reimbursement from the seller. If the seller has compensated the infringed person but the defect is caused by the manufacturer, the seller is entitled to seek reimbursement from the manufacturer.

**Regulations on Intellectual Property Rights**

China has adopted legislation governing intellectual property rights, including patents, copyrights, trademarks, and domain names.

**Patent.** The PRC Patent Law provides for patentable inventions, utility models and designs, which must meet three conditions: novelty, inventiveness and practical applicability. The State Intellectual Property Office under the State Council is responsible for examining and approving patent applications. A patent is valid for a term of twenty years in the case of an invention and a term of ten years in the case of utility models and designs.

**Copyright.** The PRC Copyright Law and its implementation rules extend copyright protection to products disseminated over the internet and computer software. There is a voluntary registration system administered by the China Copyright Protection Center. Creators of protected works enjoy personal and property rights, including, among others, the right of disseminating the works through information networks.

Pursuant to the relevant PRC regulations, rules and interpretations, ICP operators will be jointly liable with the infringer if they (a) participate in, assist in or abet infringing activities committed by any other person through the internet, (b) are or should be aware of the infringing activities committed by their website users through the internet, or (c) fail to remove infringing content or take other action to eliminate infringing consequences after receiving a warning with evidence of such infringing activities from the copyright holder. The court will determine whether an internet service provider should have known of their internet users’ infringing activities based on how obvious the infringing activities are by taking into consideration a number of factors, including (i) the information management capabilities that the provider should have based on the possibility that the services provided by it may trigger infringing acts, (ii) the degree of obviousness of the infringing content, (iii) whether it has taken the initiative to select, edit, modify or recommend the contents involved, (iv) whether it has taken positive and reasonable measures against infringing acts, and (v) whether it has set up convenient programs to receive notices of infringement and made timely and reasonable responses to the notices. Where an internet service provider has directly obtained economic benefits from any contents made available by an internet user, it shall have a higher duty of care with respect to the internet user’s act of infringement of
others’ copyrights. Advertisements placed for or other benefits particularly connected with specific contents may be deemed as direct economic benefits from such contents, but general advertising fees or service fees charged by an internet service provider for its internet services will not be included. In addition, where an ICP operator is clearly aware of the infringement of certain content against another’s copyright through the internet, or fails to take measures to remove relevant contents upon receipt of the copyright holder’s notice, and as a result, it damages the public interest, the ICP operator could be ordered to stop the tortious act and be subject to other administrative penalties such as confiscation of illegal income and fines. An ICP operator is also required to retain all infringement notices for a minimum of six months and to record the content, display time and IP addresses or the domain names related to the infringement for a minimum of 60 days.

An internet service provider may be exempted from liabilities for providing links to infringing or illegal content or providing other internet services which are used by its users to infringe others’ copyright, if it does not know and does not have constructive knowledge that such content is infringing upon other parties’ rights or is illegal. However, if the legitimate owner of the content notifies the internet service provider and requests removal of the links to the infringing content, the internet service provider would be deemed to have constructive knowledge upon receipt of such notification, but would be exempted from liabilities if it removes or disconnects the links to the infringing content at the request of the legitimate owner. At the request of the alleged infringer, the internet service provider should immediately restore links to content previously disconnected upon receipt of initial non-infringing evidence.

We have adopted measures to mitigate copyright infringement risks. For example, our policy is to remove links to web pages and materials uploaded by the users if we know these web pages or materials contain materials that infringe upon third-party rights or if we are notified by the legitimate copyright holder of the infringement with proper evidence.

Software Products. The Computer Software Copyright Registration Measures promulgated by the China Copyright Office on February 20, 2002, regulates software copyright registration, exclusive licensing contracts of software copyright and transfer agreements. Although such registration is not mandatory under PRC law, software copyright owners are encouraged to go through the registration process and registered software may receive better protection.

Trademark. The PRC Trademark Law and its implementation rules protect registered trademarks. The Trademark Office of National Intellectual Property Administration under the State Administration for Market Regulation handles trademark registrations and grants a term of ten years to registered trademarks. Trademark license agreements must be filed with the Trademark Office of National Intellectual Property Administration for record. “[[商标]]” is recognized as a well-known trademark in China by the Trademark Office of National Intellectual Property Administration under the State Administration for Market Regulation. In addition to owning “[[商标]]” and the related logos, we have applied for registration of various other trademarks.

Domain name. Domain names are protected under the Administrative Measures on the Internet Domain Names promulgated by the MIIT in August 2017, which became effective in November 2017. The MIIT is the major regulatory body responsible for the administration of the PRC internet domain names, and under the supervision of the MIIT, the China Internet Network Information Center, or CNNIC, is responsible for the daily administration of .cn domain names and Chinese domain names. According to the Circular on Administration of the Use of Domain Names for Internet Information Services issued by the MIIT in November 2017, only the internet information service provider itself or the shareholder(s), principal or senior management officer(s) of the internet information service provider are eligible to register the domain names used for the internet information services. We have registered Baidu.cn, Baidu.com.cn, hao123.com and certain other domain names with CNNIC.

Regulations on Information Security

The National People’s Congress has enacted legislation that prohibits use of the internet that breaches the public security, disseminates socially destabilizing content or leaks state secrets. Breach of public security
includes breach of national security and infringement on legal rights and interests of the state, society or citizens. Socially destabilizing content includes any content that incites defiance or violations of PRC laws or regulations or subversion of the PRC government or its political system, spreads socially disruptive rumors or involves cult activities, superstition, obscenities, pornography, gambling or violence. State secrets are defined broadly to include information concerning PRC national defense, state affairs and other matters as determined by the PRC authorities.

Pursuant to applicable regulations, ICP operators must complete mandatory security filing procedures and regularly update information security and censorship systems for their websites with local public security authorities, and must also report any public dissemination of prohibited content.

In December 2015, the Standing Committee of the National People’s Congress promulgated the Anti-Terrorism Law, which took effect on January 1, 2016 and was amended on April 27, 2018. According to the Anti-Terrorism Law, telecommunication service operators or internet service providers shall (i) carry out pertinent anti-terrorism publicity and education to society; (ii) provide technical interfaces, decryption and other technical support and assistance for the competent departments to prevent and investigate terrorist activities; (iii) implement network security and information monitoring systems as well as safety and technical prevention measures to avoid the dissemination of terrorism information, delete the terrorism information, immediately halt its dissemination, keep relevant records and report to the competent departments once the terrorism information is discovered; and (iv) examine customer identities before providing services. Any violation of the Anti-Terrorism Law may result in severe penalties, including substantial fines.

In November 2016, the Standing Committee of the National People’s Congress promulgated the Cyber Security Law, which took effect on June 1, 2017. In accordance with the Cyber Security Law, network operators must comply with applicable laws and regulations and fulfill their obligations to safeguard network security in conducting business and providing services. Network service providers must take technical and other necessary measures as required by laws, regulations and mandatory requirements to safeguard the operation of networks, respond to network security effectively, prevent illegal and criminal activities, and maintain the integrity, confidentiality and usability of network data.

In addition, the State Secrecy Bureau has issued provisions authorizing the blocking of access to any website it deems to be leaking state secrets or failing to comply with the relevant legislation regarding the protection of state secrets during online information distribution. Specifically, internet companies in China with bulletin boards, chat rooms or similar services must apply for specific approval prior to operating such services.

Furthermore, the Provisions on Technological Measures for Internet Security Protection, promulgated by the Ministry of Public Security, require all ICP operators to keep records of certain information about its users (including user registration information, log-in and log-out time, IP address, content and time of posts by users) for at least 60 days and submit the above information as required by laws and regulations. The Network Information Protection Decision states that ICP operators must request identity information from users when ICP operators provide information publication services to the users. If ICP operators come across prohibited information, they must immediately cease the transmission of such information, delete the information, keep relevant records, and report to relevant government authorities.

On October 21, 2019, the Supreme People’s Court and the Supreme People’s Procuratorate of the PRC jointly issued the Interpretations on Certain Issues Regarding the Applicable of Law in the Handling of Criminal Case Involving Illegal Use of Information Networks and Assisting Committing Internet Crimes, which came into effect on November 1, 2019, and further clarifies the meaning of Internet service provider and the severe situations of the relevant crimes.

Baidu Netcom and some other entities in our group are ICP operators, and are therefore subject to the regulations relating to information security. They have taken measures to comply with these regulations. They
are registered with the relevant government authority in accordance with the mandatory registration requirement. Baidu Netcom’s policy is to remove links to web pages which to its knowledge contain information that would be in violation of PRC laws or regulations. In addition, we monitor our websites to ensure our compliance with the above-mentioned laws and regulations.

**Regulations on Internet Privacy**

The PRC Constitution states that PRC law protects the freedom and privacy of communications of citizens and prohibits infringement of these rights. In recent years, PRC government authorities have enacted legislation on internet use to protect personal information from any unauthorized disclosure. The Network Information Protection Decision provides that electronic information that identifies a citizen or involves privacy of any citizen is protected by law and must not be unlawfully collected or provided to others. ICP operators collecting or using personal electronic information of citizens must specify the purposes, manners and scopes of information collection and uses, obtain consent of the relevant citizens, and keep the collected personal information confidential. ICP operators are prohibited from disclosing, tampering with, damaging, selling or illegally providing others with, collected personal information. ICP operators are required to take technical and other measures to prevent the collected personal information from any unauthorized disclosure, damage or loss. The Administrative Measures on Internet Information Services prohibit an ICP operator from insulting or slandering a third party or infringing upon the lawful rights and interests of a third party. According to the Provisions on Protection of Personal Information of Telecommunication and Internet Users, telecommunication business operators and ICP operators are responsible for the security of the personal information of users they collect or use in the course of their provision of services. Without obtaining the consent from the users, telecommunication business operators and ICP operators may not collect or use the users’ personal information. The personal information collected or used in the course of provision of services by the telecommunication business operators or ICP operators must be kept in strict confidence, and may not be divulged, tampered with or damaged, and may not be sold or illegally provided to others. The ICP operators are required to take certain measures to prevent any divulgence of, damage to, tampering with or loss of users’ personal information. In accordance with the Cyber Security Law, network operators must not collect personal information irrelevant to their services. In the event of any unauthorized disclosure, damage or loss of collected personal information, network operators must take immediate remedial measures, notify the affected users and report the incidents to the relevant authorities in a timely manner. If any user knows that a network operator illegally collects and uses his or her personal information in violation of laws, regulations or any agreement with the user, or the collected and stored personal information is inaccurate or wrong, the user has the right to request the network operator to delete or correct the relevant collected personal information. We collect and use our users’ personal information only if our users give their informed consent, and we believe we have taken appropriate measures to protect the security of our users’ personal information.

The relevant telecommunications authorities are further authorized to order ICP operators to rectify unauthorized disclosure. ICP operators are subject to legal liability, including warnings, fines, confiscation of illegal gains, revocation of licenses or filings, closing of the relevant websites, administrative punishment, criminal liabilities, or civil liabilities, if they violate relevant provisions on internet privacy. Pursuant to the Ninth Amendment to the Criminal Law issued by the Standing Committee of the National People’s Congress in August 2015 and becoming effective in November 2015, any ICP provider that fails to fulfill the obligations related to internet information security administration as required by applicable laws and refuses to rectify upon orders, will be subject to criminal liability for (i) any dissemination of illegal information in large scale; (ii) any severe effect due to the leakage of the client’s information; (iii) any serious loss of evidence of criminal activities; or (iv) other severe situations, and any individual or entity that (x) sells or provides personal information to others unlawfully, or (y) steals or illegally obtains any personal information, will be subject to criminal liability in severe situations. In addition, the Interpretations of the Supreme People’s Court and the Supreme People’s Procuratorate of the PRC on Several Issues Concerning the Application of Law in Handling Criminal Cases of Infringing Personal Information, effective in June 2017, have clarified certain standards for the conviction and sentencing in relation to personal information infringement. The PRC government has the power and authority to
order ICP operators to turn over personal information if an internet user posts any prohibited content or engages in illegal activities on the internet.

With respect to the security of information collected and used by mobile apps, pursuant to the Announcement of Conducting Special Supervision against the Illegal Collection and Use of Personal Information by Apps, which was issued on January 23, 2019, app operators should collect and use personal information in compliance with the Cyber Security Law and should be responsible for the security of personal information obtained from users and take effective measures to strengthen the personal information protection. Furthermore, app operators should not force their users to make authorization by means of bundling, suspending installation or in other default forms and should not collect personal information in violation of laws, regulations or breach of user agreements. Such regulatory requirements were emphasized by the Notice on the Special Rectification of Apps Infringing upon User’s Personal Rights and Interests, which was issued by MIIT on October 31, 2019. On November 28, 2019, the CAC, the MIIT, the Ministry of Public Security and the SMAR jointly issued the Methods of Identifying Illegal Acts of Apps to Collect and Use Personal Information. This regulation further illustrates certain commonly-seen illegal practices of apps operators in terms of personal information protection, including “failure to publicize rules for collecting and using personal information”, “failure to expressly state the purpose, manner and scope of collecting and using personal information”, “collection and use of personal information without consent of users of such App”, “collecting personal information irrelevant to the services provided by such app in violation of the principle of necessity”, “provision of personal information to others without users’ consent”, “failure to provide the function of deleting or correcting personal information as required by laws” and “failure to publish information such as methods for complaints and reporting”. Among others, any of the following acts of an app operator will constitute “collection and use of personal information without consent of users”: (i) collecting an user’s personal information or activating the permission for collecting any user’s personal information without obtaining such user’s consent; (ii) collecting personal information or activating the permission for collecting the personal information of any user who explicitly refuses such collection, or repeatedly seeking for user’s consent such that the user’s normal use of such app is disturbed; (iii) any user’s personal information which has been actually collected by the app operator or the permission for collecting any user’s personal information activated by the app operator is beyond the scope of personal information which such user authorizes such app operator to collect; (iv) seeking for any user’s consent in a non-explicit manner; (v) modifying any user’s settings for activating the permission for collecting any personal information without such user’s consent; (vi) using users’ personal information and any algorithms to directionally push any information, without providing the option of non-directed pushing such information; (vii) misleading users to permit collecting their personal information or activating the permission for collecting such users’ personal information by improper methods such as fraud and deception; (viii) failing to provide users with the means and methods to withdraw their permission of collecting personal information; and (ix) collecting and using personal information in violation of the rules for collecting and using personal information promulgated by such app operator.

On August 22, 2019, the CAC promulgated the Children Information Protection Provisions, which took effect on October 1, 2019, requiring that before collecting, using, transferring or disclosing the personal information of a child, the Internet service operator should inform the child’s guardians in a noticeable and clear manner and obtain their consents. Meanwhile, Internet service operators should take measures like encryption when storing children’s personal information.

Regulations on Foreign Exchange

Foreign Currency Exchange

Pursuant to the Foreign Currency Administration Rules, as amended, and various regulations issued by SAFE and other relevant PRC government authorities, RMB is freely convertible to the extent of current account items, such as trade related receipts and payments, interest and dividends. Capital account items, such as direct equity investments, loans and repatriation of investment, unless expressly exempted by laws and regulations, still
require prior approval from SAFE or its provincial branch for conversion of RMB into a foreign currency, such as U.S. dollars, and remittance of the foreign currency outside of the PRC. After a Notice on Further Simplifying and Improving Foreign Exchange Administration Policy on Direct Investment, or SAFE Notice 13, became effective on June 1, 2015, instead of applying for approvals regarding foreign exchange registrations of foreign direct investment and overseas direct investment from SAFE, entities and individuals will be required to apply for such foreign exchange registrations from qualified banks. The qualified banks, under the supervision of SAFE, directly examine the applications and conduct the registration. On October 23, 2019, SAFE issued the Circular on Further Promoting Cross-border Trade and Investment Facilitation, or SAFE Circular 28. Among others, SAFE Circular 28 relaxes the prior restrictions and allows the foreign-invested enterprises without equity investment as in their approved business scope to use their capital obtained from foreign exchange settlement to make domestic equity investment as long as the investments are real and in compliance with the foreign investment-related laws and regulations. In addition, SAFE Circular 28 stipulates that qualified enterprises in certain pilot areas may use their capital income from registered capital, foreign debt and overseas listing, for the purpose of domestic payments without providing authenticity certifications to the relevant banks in advance for those domestic payments.

Payments for transactions that take place within the PRC must be made in RMB. Foreign currency revenues received by PRC companies may be repatriated into China or retained outside of China in accordance with requirements and terms specified by SAFE.

Dividend Distribution

Wholly foreign-owned enterprises and Sino-foreign equity joint ventures in the PRC may pay dividends only out of their accumulated profits, if any, as determined in accordance with PRC accounting standards and regulations. Additionally, these foreign-invested enterprises may not pay dividends unless they set aside at least 10% of their respective accumulated profits after tax each year, if any, to fund certain reserve funds, until such time as the accumulative amount of such fund reaches 50% of the enterprise's registered capital. In addition, these companies also may allocate a portion of their after-tax profits based on PRC accounting standards to employee welfare and bonus funds at their discretion. These reserves are not distributable as cash dividends.

Foreign Exchange Registration of Offshore Investment by PRC Residents

Pursuant to SAFE’s Notice on Relevant Issues Concerning Foreign Exchange Administration for PRC Residents to Engage in Financing and Inbound Investment via Overseas Special Purpose Vehicles, or SAFE Circular No. 75, issued in October 2005, and a series of implementation rules and guidance, including the circular relating to operating procedures that came into effect in July 2011, PRC residents, including PRC resident natural persons or PRC companies, must register with local branches of SAFE in connection with their direct or indirect offshore investment in an overseas special purpose vehicle, or SPV, for the purposes of overseas equity financing activities, and to update such registration in the event of any significant changes with respect to that offshore company. SAFE promulgated the Circular on Relevant Issues Concerning Foreign Exchange Control on Domestic Residents’ Offshore Investment and Financing and Roundtrip Investment through Special Purpose Vehicles, or SAFE Circular No. 37, on July 4, 2014, which replaced SAFE Circular No. 75. SAFE Circular No. 37 requires PRC residents to register with local branches of SAFE in connection with their direct establishment or indirect control of an offshore entity, for the purpose of overseas investment and financing, with such PRC residents’ legally owned assets or equity interests in domestic enterprises or offshore assets or interests, referred to in SAFE Circular No. 37 as a “special purpose vehicle.” The term “control” under SAFE Circular No. 37 is broadly defined as the operation rights, beneficiary rights or decision-making rights acquired by the PRC residents in the offshore special purpose vehicles or PRC companies by such means as acquisition, trust, proxy, voting rights, repurchase, convertible bonds or other arrangements. SAFE Circular No. 37 further requires amendment to the registration in the event of any changes with respect to the basic information of the special purpose vehicle, such as changes in a PRC resident individual shareholder, name or operation period; or any significant changes with respect to the special purpose vehicle, such as an increase or
decrease of capital contributed by PRC individuals, a share transfer or exchange, merger, division or other material event. If the shareholders of the offshore holding company who are PRC residents do not complete their registration with the local SAFE branches, the PRC subsidiaries may be prohibited from distributing their profits and proceeds from any reduction in capital, share transfer or liquidation to the offshore company, and the offshore company may be restricted in its ability to contribute additional capital to its PRC subsidiaries. Moreover, failure to comply with the SAFE registration and amendment requirements described above could result in liability under PRC law for evasion of applicable foreign exchange restrictions. We have notified holders of ordinary shares of our company whom we know are PRC residents to register with the local SAFE branch and update their registrations as required under the SAFE regulations described above. After SAFE Notice 13 became effective on June 1, 2015, entities and individuals are required to apply for foreign exchange registration of foreign direct investment and overseas direct investment, including those required under SAFE Circular No. 37, with qualified banks, instead of SAFE. The qualified banks, under the supervision of SAFE, directly examine the applications and conduct the registration. We are aware that Mr. Robin Yanhong Li, our chairman, chief executive officer and principal shareholder, who is a PRC resident, has registered with the relevant local SAFE branch. We, however, cannot provide any assurances that all of our shareholders who are PRC residents will file all applicable registrations or update previously filed registrations as required by these SAFE regulations. The failure or inability of our PRC resident shareholders to comply with the registration procedures may subject the PRC resident shareholders to fines and legal sanctions, restrict our cross-border investment activities, or limit our PRC subsidiaries’ ability to distribute dividends to or obtain foreign exchange-dominated loans from our company.

In February 2012, SAFE promulgated the Notices on Issues Concerning the Foreign Exchange Administration for Domestic Individuals Participating in Stock Incentive Plans of Overseas Publicly-Listed Companies, or the Stock Option Rule, replacing the earlier rules promulgated in March 2007. Under the Stock Option Rule, PRC residents who are granted stock options by an overseas publicly listed company are required, through a PRC agent or PRC subsidiary of such overseas publicly listed company, to register with SAFE and complete certain other procedures. We and our PRC resident employees who have been granted stock options are subject to these regulations. We have designated our PRC subsidiary Baidu Online to handle the registration and other procedures required by the Stock Option Rule. Failure of the option holders to complete their SAFE registrations may subject these PRC employees to fines and legal sanctions and may also limit the ability of the overseas publicly listed company to contribute additional capital into its PRC subsidiary and limit the PRC subsidiary’s ability to distribute dividends.

Regulations on Labor

The Labor Contract Law, which became effective in January 2008 and last amended in December 2018, and its implementation rules, impose more restrictions on employers and have been deemed to increase labor costs for employers, compared to the Labor Law, which became effective in January 1995. For example, pursuant to the Labor Contract Law, an employer is obliged to sign a labor contract with an unlimited term with an employee if the employer continues to hire the employee after the expiration of two consecutive fixed-term labor contracts. The employer has to compensate the employee upon the expiration of a fixed-term labor contract, unless the employee refuses to renew such contract on terms the same as or more favorable to the employee than those contained in the expired contract. The employer also has to indemnify an employee if the employer terminates a labor contract without a cause permitted by law. In addition, under the Regulations on Paid Annual Leave for Employees, which became effective in January 2008, employees who have served more than one year for an employer are entitled to a paid vacation ranging from 5 to 15 days per year, depending on their length of service. Employees who waive such vacation time at the request of employers must be compensated for three times their regular salaries for each waived vacation day.

Regulations on Taxation

For a discussion of applicable PRC tax regulations, see “Item 5.A. Operating and Financial Review and Prospects—Operating Results—Taxation.”
C. Organizational Structure

The following is a list of our principal subsidiaries and consolidated affiliated entities as of the date of this annual report on Form 20-F:

<table>
<thead>
<tr>
<th>Name</th>
<th>Place of Formation</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baidu Holdings Limited</td>
<td>British Virgin Islands</td>
<td>Wholly owned subsidiary</td>
</tr>
<tr>
<td>Baidu (Hong Kong) Limited</td>
<td>Hong Kong</td>
<td>Wholly owned subsidiary</td>
</tr>
<tr>
<td>Baidu Online Network Technology (Beijing) Co., Ltd.</td>
<td>China</td>
<td>Wholly owned subsidiary</td>
</tr>
<tr>
<td>Baidu (China) Co., Ltd.</td>
<td>China</td>
<td>Wholly owned subsidiary</td>
</tr>
<tr>
<td>Baidu.com Times Technology (Beijing) Co., Ltd.</td>
<td>China</td>
<td>Wholly owned subsidiary</td>
</tr>
<tr>
<td>Baidu International Technology (Shenzhen) Co., Ltd.</td>
<td>China</td>
<td>Wholly owned subsidiary</td>
</tr>
<tr>
<td>Beijing Baidu Netcom Science Technology Co., Ltd.</td>
<td>China</td>
<td>Consolidated affiliated entity</td>
</tr>
<tr>
<td>Beijing Perusal Technology Co., Ltd.</td>
<td>China</td>
<td>Consolidated affiliated entity</td>
</tr>
<tr>
<td>iQIYI, Inc.</td>
<td>Cayman Islands</td>
<td>Majority-owned subsidiary</td>
</tr>
</tbody>
</table>

The following diagram illustrates our corporate structure, including our principal subsidiaries and consolidated affiliated entities as of the date of this annual report on Form 20-F:

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* The diagram above omits the names of subsidiaries and consolidated affiliated entities that are insignificant individually and in the aggregate.

82
Beijing Baidu Netcom Science Technology Co., Ltd. is 99.5% owned by Mr. Robin Yanhong Li, our chairman and chief executive officer, and 0.5% owned by Ms. Shanshan Cui, an executive officer of ours. Please see “Item 6.E. Directors, Senior Management and Employees—Share Ownership” for Mr. Robin Yanhong Li’s beneficial ownership in our company. Ms. Shanshan Cui’s beneficial ownership of our company is less than 1% of our total outstanding shares.

Beijing Perusal Technology Co., Ltd. is 50% owned by Ms. Shanshan Cui and 50% owned by Mr. Zhixiang Liang. Both Ms. Shanshan Cui and Mr. Zhixiang Liang are our employees, and their respective beneficial ownership in our company is less than 1% of our total outstanding shares.

Contractual Arrangements with Our Consolidated Affiliated Entities and the Nominee Shareholders

PRC laws and regulations restrict and impose conditions on foreign investment in internet content, value-added telecommunication-based online marketing, audio and video services and mobile application distribution businesses. Accordingly, we operate these businesses in China through our consolidated affiliated entities. We have entered into a series of contractual arrangements with our consolidated affiliated entities and the nominee shareholders of our consolidated affiliated entities. These contractual arrangements enable us to:

• receive the economic benefits that could potentially be significant to our consolidated affiliated entities in consideration for the services provided by our subsidiaries;
• exercise effective control over our consolidated affiliated entities; and
• hold an exclusive option to purchase all or part of the equity interests in our consolidated affiliated entities when and to the extent permitted by PRC law.

We do not have any equity interests in our consolidated affiliated entities. However, as a result of contractual arrangements, we have effective control over and are considered the primary beneficiary of these companies, and we have consolidated the financial results of these companies in our consolidated financial statements. If our consolidated affiliated entities or the nominee shareholders fail to perform their respective obligations under the contractual arrangements, we could be limited in our ability to enforce the contractual arrangements that give us effective control over our consolidated affiliated entities. Furthermore, if we are unable to maintain effective control, we would not be able to continue to consolidate the financial results of our consolidated affiliated entities in our financial statements. In 2017, 2018 and 2019, we derived 29%, 25% and 33% of our external revenues from our consolidated affiliated entities, respectively. For a detailed description of the regulatory environment that necessitates the adoption of our corporate structure, see “Item 4.B. Information on the Company—Business Overview—Regulations.” For a detailed description of the risks associated with our corporate structure, see “Item 3.D. Key Information—Risk Factors—Risks Related to Our Corporate Structure.”

In August 2018, we completed the divestiture of a majority equity stake in our financial services business. The divested financial services business has been renamed as Du Xiaoman. After the divestiture, we hold a minority equity interest in Du Xiaoman which was accounted for as an equity method investment, and have deconsolidated the financial results of Du Xiaoman from our consolidated financial statements in accordance with U.S. GAAP.

Contractual Arrangements Relating to Our Consolidated Affiliated Entities

The following is a summary of the material provisions of the contractual arrangements relating to Baidu Netcom, Beijing Perusal and other consolidated affiliated entities.

Exclusive Technology Consulting and Services Agreement

Pursuant to the exclusive technology consulting and services agreement between Baidu Online and Baidu Netcom, Baidu Online has the exclusive right to provide to Baidu Netcom technology consulting and services related to, among other things, the maintenance of servers, software development, design of advertisements, and e-commerce technical services. Baidu Online owns the intellectual property rights resulting from the
The exclusive technology consulting and services agreement between Baidu Online and Beijing Perusal contains substantially the same terms as those between Baidu Online and Baidu Netcom described above. The agreement will be in effect for an unlimited term, until the term of business of one party expires and extension is denied by the relevant approval authorities.

In 2017, the amount of service fees Baidu Netcom paid to Baidu Online was 95% of its net income before income taxes. In 2018 and 2019 Baidu Netcom did not pay any service fees to Baidu Online due to Baidu Netcom’s accumulated loss position. Beijing Perusal did not pay any service fees to Baidu Online due to Beijing Perusal’s operating loss in 2017, 2018 and 2019.

Operating Agreement

Pursuant to the operating agreement amongst Baidu Online, Baidu Netcom and the nominee shareholders of Baidu Netcom, Baidu Online provides guidance and instructions on Baidu Netcom’s daily operations and financial affairs. Baidu Online has the right to appoint senior executives of Baidu Netcom. The nominee shareholders of Baidu Netcom must appoint candidates recommended by Baidu Online as their representatives on Baidu Netcom’s board of directors. In addition, Baidu Online agrees to guarantee Baidu Netcom’s performance under any agreements or arrangements relating to Baidu Netcom’s business arrangements with any third party. In return, Baidu Netcom agrees that without the prior consent of Baidu Online, Baidu Netcom will not engage in any transactions that could materially affect the assets, liabilities, rights or operations of Baidu Netcom, including, without limitation, incurrence or assumption of any indebtedness, sale or purchase of any assets or rights, incurrence of any encumbrance on any of its assets or intellectual property rights in favor of a third party or transfer of any agreements relating to its business operation to any third party. The agreement will be in effect for an unlimited term, until the term of business of one party expires and extension is denied by the relevant approval authorities.

The operating agreement by and among Baidu Online, Beijing Perusal and the nominee shareholders of Beijing Perusal contains substantially the same terms as those described above. The agreement will be in effect for an unlimited term, until the term of business of one party expires and extension is denied by the relevant approval authorities.

License Agreements

Baidu Online and Baidu Netcom have entered into a software license agreement and a web layout copyright license agreement. Pursuant to these license agreements, Baidu Online has granted to Baidu Netcom the right to use, including but not limited to, a software license and a web layout copyright license. Baidu Netcom may only use the licenses in its own business operations. Baidu Online has the right to adjust the service fees at its sole discretion. The software license agreement and web layout copyright license agreement have been renewed since their original expiration and are in effect for an unlimited term, until the term of business of one party expires and extension is denied by the relevant approval authorities.

The web layout copyright license agreements that Baidu Online has entered into with Beijing Perusal contain substantially the same terms as those between Baidu Online and Baidu Netcom described above. The agreement is in effect for an unlimited term, until the term of business of one party expires and extension is denied by the relevant approval authorities.
Exclusive Equity Purchase and Transfer Option Agreement

Pursuant to the exclusive equity purchase and transfer option agreement by and among Baidu, Inc., Baidu Online, Baidu Netcom and the nominee shareholders of Baidu Netcom, the nominee shareholders of Baidu Netcom have irrevocably granted Baidu, Inc. or its designated person(s) (including Baidu Online) an exclusive option to purchase, to the extent permitted under PRC law, all or part of the equity interests in Baidu Netcom for the cost of the initial contributions to the registered capital or the minimum amount of consideration permitted by applicable PRC law. The nominee shareholders must remit to Baidu Online any amount that is paid by Baidu Online in connection with the purchased equity interest as requested by Baidu, Inc. or its designated person(s) (including Baidu Online) to the extent permitted by the applicable laws. Baidu, Inc. or its designated person(s) have sole discretion to decide when to exercise the option, whether in part or in full amount. Any and all dividends and other capital distributions from Baidu Netcom to the nominee shareholders must be paid to Baidu, Inc. in full amount. Baidu, Inc. or its designated person(s) (including Baidu Online) also have the exclusive right to cause the nominee shareholders of Baidu Netcom to transfer their equity interest in Baidu Netcom to Baidu, Inc. or any designated third party. Baidu, Inc. will provide unlimited financial support to Baidu Netcom, if Baidu Netcom becomes in need of any form of reasonable financial support in the normal operation of business. If Baidu Netcom were to incur any loss and as a result cannot repay any loans from Baidu, Inc. (through Baidu Online), Baidu, Inc. will unconditionally forgive any such loans to Baidu Netcom upon provision by Baidu Netcom of sufficient proof for its loss and incapacity to repay. The agreement will terminate upon the transfer by the nominee shareholders of Baidu Netcom of all their equity interests in Baidu Netcom to Baidu, Inc. or its designated person(s) or upon expiration of the term of business of Baidu, Inc. or Baidu Netcom.

The exclusive equity purchase and transfer option agreement by and among Baidu, Inc., Baidu Online, Beijing Perusal and the nominee shareholders of Beijing Perusal contains substantially the same terms as those described above. The agreement will terminate upon the transfer by the nominee shareholders of Beijing Perusal of all their equity interests in Beijing Perusal, as the case may be, to Baidu, Inc. or its designated person(s) or upon expiration of the term of business of Baidu, Inc. or the relevant consolidated affiliated entity.

Loan Agreements

Pursuant to loan agreements amongst Baidu Online and the nominee shareholders of Baidu Netcom, Baidu Online provided the loans with an aggregate amount of RMB13.4 billion (US$1.9 billion) to the nominee shareholders of Baidu Netcom solely for the latter to fund the capitalization of Baidu Netcom. The loans can be repaid only with the proceeds from the sale of the nominee shareholders’ equity interest in Baidu Netcom to Baidu Online or its designated person(s). The term of the loan agreements will expire on July 9, 2029 and August 19, 2029, and can be extended with the written consent of both parties before its expiration.

The loan agreements amongst Baidu Online and the nominee shareholders of Beijing Perusal contain substantially the same terms as those described above, except that the amount of loans extended to the nominee shareholders is RMB3.2 billion (US$459 million). The loan agreements with the two nominee shareholders of Beijing Perusal will expire on March 30, 2028 and October 29, 2029, respectively, and can be extended with the written consent of both parties before expiration.

Proxy Agreement/Power of Attorney

Pursuant to the proxy agreement amongst Baidu, Inc. and the nominee shareholders of Baidu Netcom, the nominee shareholders of Baidu Netcom agree to entrust all the rights to exercise their voting power and any other rights as shareholders of Baidu Netcom to the person(s) designated by Baidu, Inc. Each of the nominee shareholders of Baidu Netcom has executed an irrevocable power of attorney to appoint the person(s) designated by Baidu, Inc. as their attorney-in-fact to vote on their behalf on all matters requiring shareholder approval. Any action taken by such attorney-in-fact in relation to the entrusted rights shall be directed and approved by Baidu, Inc. The proxy agreement will be in effect for as long as the relevant nominee shareholder of Baidu Netcom
holds any equity interests in Baidu Netcom unless terminated in writing by Baidu, Inc. Each of the powers of attorney will be in effect for as long as the relevant nominee shareholder of Baidu Netcom holds any equity interests in Baidu Netcom.

The proxy agreements and powers of attorney amongst Baidu, Inc. and the nominee shareholders of Beijing Perusal contain substantially the same terms as those described above. The proxy agreements will be in effect for an unlimited term unless terminated in writing by Baidu, Inc. The powers of attorney will be in effect for as long as the relevant nominee shareholder of Beijing Perusal holds any equity interests in Beijing Perusal.

Equity Pledge Agreement

Pursuant to the equity pledge agreement amongst Baidu Online and the nominee shareholders of Baidu Netcom, the nominee shareholders of Baidu Netcom have pledged all of their equity interests in Baidu Netcom to Baidu Online to guarantee their obligations under the loan agreements and Baidu Netcom’s performance of its obligations under the exclusive technology consulting and service agreement. If Baidu Netcom or the nominee shareholders breach their respective contractual obligations, Baidu Online, as the pledgee, will be entitled to certain rights, including the right to sell the pledged equity interests. The nominee shareholders of Baidu Netcom agree not to dispose of the pledged equity interests or take any actions that would prejudice Baidu Online’s interest. The equity pledge agreement will expire two years after expiration of the term of or the fulfillment by Baidu Netcom and the nominee shareholders of their respective obligations under the exclusive technology consulting and service agreement and the loan agreements.

The equity pledge agreements amongst Baidu Online and the nominee shareholders of Beijing Perusal contains substantially the same terms as those described above.

Through design of the aforementioned agreements, the nominee shareholders of these affiliated entities have effectively assigned their full voting rights to Baidu, Inc., which gives Baidu, Inc. the power to direct the activities that most significantly impact the affiliated entities’ economic performance. Baidu, Inc. obtains the ability to approve decisions made by the affiliated entities and the ability to acquire the equity interests in the affiliated entities when permitted by PRC law. Baidu, Inc. is obligated to absorb losses of the affiliated entities that could potentially be significant to the affiliated entities through providing unlimited financial support to the affiliated entities or is entitled to receive economic benefits from the affiliated entities that could potentially be significant to the affiliated entities through the exclusive technology consulting and service fees. As a result of these contractual arrangements, Baidu, Inc. is determined to be the primary beneficiary of these affiliated entities. Despite the lack of technical majority ownership, there exists a parent-subsidiary relationship between us and these affiliated entities through these contractual arrangements, and we consolidate these affiliated entities through Baidu, Inc.

We have also entered into contractual arrangements with several other affiliated entities and their respective nominee shareholders, including iQIYI’s affiliated entities and their respective nominee shareholders, through some of our subsidiaries other than Baidu Online, which result in these subsidiaries being the primary beneficiary of these affiliated entities. As a result of these contractual arrangements, there exists a parent-subsidiary relationship between us and the relevant affiliated entities, and we consolidate these affiliated entities through the subsidiaries.

D. Property, Plant and Equipment

Our corporate headquarters, Baidu Campus, is located in Shangdi, an area designated by Beijing as the city’s center for information technology. We own the office building on Baidu Campus and a nearby office building, Baidu Science Park, both located in Shangdi, Haidian district of Beijing. We are in the process of obtaining the land use permit with the local authority for Baidu Science Park and may be required to pay an unspecified amount of land transaction fee. Besides Beijing, we own and occupy office buildings in Shanghai and Shenzhen.
We also lease offices in Beijing, many other cities in mainland China and places outside of mainland China, including California (USA),
Washington (USA), Hong Kong and Japan.

We host our servers at the internet data centers of major telecom operators, including China Telecom, China Unicom and China Mobile, in over
ten selected cities across China. Our content delivery network covers most of the major cities in China.

In 2018, we completed the construction of our Shanxi cloud computing center, which serves as one of our internet data centers in China. In 2019,
we completed the construction of our office building in Shenzhen in Southern China.

**Item 4A. Unresolved Staff Comments**

None.

**Item 5. Operating and Financial Review and Prospects**

The following discussion of our financial condition and results of operations is based upon, and should be read in conjunction with, our audited
consolidated financial statements and the related notes included in this annual report on Form 20-F. This report contains forward-looking statements. See
“Forward-Looking Information.” In evaluating our business, you should carefully consider the information provided under the caption “Item 3.D. Key
Information—Risk Factors” in this annual report on Form 20-F. We caution you that our businesses and financial performance are subject to substantial
risks and uncertainties.

**A. Operating Results**

**Overview**

Our operations are primarily based in China, where we derive substantially all of our revenues. Total revenues in 2019 were RMB107.4 billion
(US$15.4 billion), growing by 5% from 2018. In 2017 and 2018, we divested certain non-core businesses, including Baidu Deliveries, Du Xiaoman, and
others. These divested businesses together generated RMB4.1 billion and RMB3.1 billion in revenues for the year ended December 31, 2017 and 2018,
respectively. Operating profit in 2019 was RMB6.3 billion (US$906 million), a 59% decrease from 2018. Net income attributable to Baidu, Inc. in 2019
was RMB2.1 billion (US$296 million), a 93% decrease from 2018. Net income in 2019 included a non-cash impairment loss of RMB8.9 billion
(US$1.3 billion) related to the write-down on our equity investment in Trip.com from an other-than-temporary decline. Please see “Investments” under
Note 4 to our audited consolidated financial statements for further information.

Our total assets as of December 31, 2019 were RMB301.3 billion (US$43.3 billion), of which cash, cash equivalents and restricted cash amounted
to RMB34.4 billion (US$4.9 billion). Our total liabilities as of December 31, 2019 were RMB128.5 billion (US$18.5 billion), accounting for 43% of
total liabilities, redeemable non-controlling interest and equity. As of December 31, 2019, our accumulated retained earnings were RMB126.3 billion
(US$18.1 billion).

**Reorganization of Operating Segments**

In the second quarter of 2017, we reorganized our operating segments from three operating segments into two operating segments, namely Baidu
Core and iQIYI. Starting from April 2017, search services and transaction services have been combined into one segment—Baidu Core. The change in
operating segments reflects our adjustments to business strategies and operations, as we de-emphasized our transaction services business and shifted
such resources to support our online marketing services. Our chief operating decision maker assesses the performance of our company and makes
decisions in respect of the allocation of company resources by analyzing the operating results of these two operating segments separately.
Table of Contents

Revenues

Revenue Generation

Baidu Core. Baidu Core revenues primarily comprise of (i) auction-based P4P online marketing services that include search and feed online marketing services; (ii) other online marketing services, including display advertisement, based on performance criteria other than CPC, and (iii) product and services from new AI business initiatives, such as DuerOS (voice assistant and smart devices), Apollo (autonomous driving and smart transportation), and Baidu Cloud (AI solutions and cloud services). We expect Baidu Core to continually earn a majority of our revenues.

A majority of Baidu Core’s revenues are derived from P4P services. Our P4P platform is an online marketplace that introduces internet search users to customers, who pay us a fee based on click-throughs for priority placement of their links in the search results. We recognize auction-based revenue from P4P services when a user clicks on a customer’s link in the search results, based on the amount that the customer has agreed to pay for each click-through. Besides the traditional auction-based P4P services, feed online marketing services has grown rapidly in recent years. Our feed platform helps customers target relevant feed users, and customers pay us based on a CPC basis or ad displays of their products.

We also provide our customers with other performance-based and display-based online marketing services. For other performance-based online marketing services, our customers pay us based on performance criteria other than CPC, such as the number of app downloads on mobile devices, the number of users registered with our customers or the transaction volume. For display-based online marketing services, our customers pay us based on the duration or the number of ad displays placed on our properties and Baidu Union partners’ properties.

Our online marketing services have historically been driven by the general increase in our customers’ online marketing budgets. Our online marketing customers are increasingly seeking marketing solutions with measurable results in order to maximize their ROI. To meet customers’ needs, we will continue to evaluate the effectiveness of our various products and services and adjust the mix of our service offerings to optimize our customers’ ROI. Any prolonged economic slowdown or health epidemic in China, however, may cause our customers to decrease or delay their online marketing spending, which could negatively affect our online marketing revenues. We will continue to make efforts to grow our customer base, improve customer experience and optimize their marketing budget allocation/spending effectiveness on our platform to drive growth.

Apart from the online marketing services, we derive revenue for Baidu Core by providing products and services from Baidu Cloud, DuerOS, Apollo and our financial services. In August 2018, we completed the divestiture of a majority equity stake in Du Xiaoman (financial services business), reducing our holding to a minority equity interest, and, thus have deconsolidated the financial results of Du Xiaoman from our consolidated financial statements in accordance with U.S. GAAP.

iQIYI. iQIYI is an innovative market-leading online entertainment service in China. iQIYI’s platform features highly popular original content, as well as a comprehensive selection of professionally produced content, partner-generated content, and user-generated content. iQIYI derives a majority of its revenues from membership services and online marketing services.

iQIYI offers membership packages to provide our members with (i) access to streaming of a library of premium content, (ii) certain commercial skipping and other viewing privilege, (iii) merchandise selection and privilege, (iv) higher community status in our iQIYI Paopao social platform. We generate a small portion of our membership services revenue from on-demand content purchase by our users and the sale of the right to services such as other companies’ memberships.

iQIYI’s online marketing revenues are recognized net of online marketing agency rebates. Most of iQIYI’s online marketing services are in the form of brand advertising.
Collection

For most of Baidu Core services, we collect payments from our customers directly and through our distributors. We require our P4P customers to pay a deposit before using our P4P services and they are sent automated reminders to replenish their accounts when the balance falls below a designated amount. The deposits received are recorded as customer deposits and deferred revenue on the consolidated balance sheets. We deduct the amount due to us from the deposit paid by a customer when a user clicks on the paid sponsored link in the search results or other performance criteria have been satisfied. In addition, we offer payment terms to some of our customers based on their historical marketing placements and credibility. We also offer longer payment terms to certain qualified distributors, consistent with industry practice.

Payment terms and conditions vary by customer and are based on the billing schedule established in our contracts or purchase orders with customers, but we generally provide credit terms to customers within one year; therefore, we have determined that our contracts do not include a significant financing component.

For most services provided by iQIYI, customers may enter into different payment terms based on their historical marketing placements and credibility. Users are also encouraged to upfront purchase membership services to get enhanced user experience, and such payments are collected from the users by iQIYI or through agents such as China Mobile.

As of December 31, 2019, we had accounts receivable of RMB7.4 billion (US$1.1 billion), net of allowance of RMB928 million (US$133 million) and contract assets of RMB1.9 billion (US$269 million), net of allowance for doubtful accounts of RMB7 million (US$1 million).

Operating Costs and Expenses

Our operating costs and expenses consist of cost of revenues, selling, general and administrative expenses, and research and development expenses. Share-based compensation expenses are allocated among these three categories, based on the nature of the work of the employees who have received share-based compensation.

Cost of Revenues

Our costs of revenues primarily consist of content costs, traffic acquisition costs, depreciation costs, hardware and cloud costs of goods sold, bandwidth costs and other cost of revenues.

Selling, General and Administrative Expenses

Our selling, general and administrative marketing expenses primarily consist of promotional and marketing expenses, salaries and benefits for our sales, marketing, general and administrative personnel, and legal, accounting and other professional services fees.

Research and Development Expenses

Research and development expenses primarily consist of salaries and benefits for research and development personnel. We expense research and development costs as they are incurred, except for capitalized software development costs that fulfill the capitalization criteria under Accounting Standards Codification (“ASC”).

Share-based Compensation Expenses

Baidu, Inc. grants options and restricted shares to our employees, directors and consultants as share-based compensation awards. As of December 31, 2019, there was RMB439 million (US$63 million) unrecognized.
Table of Contents

share-based compensation expenses related to options of Baidu, Inc., which are expected to be recognized over a weighted-average vesting period of 2.6 years. As of December 31, 2019, there was RMB7.2 billion (US$1.0 billion) unrecognized share-based compensation expenses related to restricted shares of Baidu, Inc., which are expected to be recognized over a weighted-average vesting period of 3.1 years. To the extent the actual forfeiture rate is different from our original estimate, actual share-based compensation cost related to these awards may be different from our expectation.

iQIYI grants options and restricted shares to its employees, directors, officers and consultants as share-based compensation awards. As of December 31, 2019, there were RMB2.2 billion (US$314 million) of unrecognized share-based compensation expenses related to iQIYI's equity awards that are expected to be recognized over a weighted-average vesting period of 2.8 years. Total unrecognized compensation costs may be adjusted for future changes in estimated forfeitures.

Other subsidiaries also have equity incentive plans granting share-based awards. Total share-based compensation expenses recognized and unrecognized were insignificant, both individually and in the aggregate.

Taxation

Cayman Islands and British Virgin Islands
We are not subject to income or capital gain tax under the current laws of the Cayman Islands and the British Virgin Islands. Additionally, upon payments of dividends by the Company, no Cayman Islands withholding tax will be imposed.

Hong Kong
Subsidiaries in Hong Kong are subject to the uniform tax rate of 16.5% and foreign-derived income is exempted from income tax. There are no withholding tax in Hong Kong on remittance of dividends.

Japan
As a result of the Japanese tax regulations amendments, the effective income tax rates are approximately 32%, 31% and 31% for the years ended December 31, 2017, 2018 and 2019, respectively.

PRC Enterprise Income Tax
Effective from January 1, 2008 and amended on December 29, 2018, the PRC’s statutory enterprise income tax, or EIT, rate is 25%. An enterprise may benefit from a preferential tax rate of 15% under the EIT Law if it qualifies as a “High and New Technology Enterprise” strongly supported by the state. Pursuant to the Administrative Measures on the Recognition of High and New Technology Enterprises, as amended in January 2016, the provincial counterparts of the Ministry of Science and Technology, the Ministry of Finance and the State Administration of Taxation make joint determination on whether an enterprise is qualified as a “High and New Technology Enterprise” under the EIT Law. In making such determination, these government agencies consider, among other factors, ownership of core technology, whether the key technology supporting the core products or services fall within the scope of high and new technology strongly supported by the state as specified in the measures, the ratios of research and development personnel to total personnel, the ratio of research and development expenditures to annual sales revenues, the ratio of revenues attributed to high and new technology products or services to total revenues, and other measures set forth in relevant guidance. A “High and New Technology Enterprise” certificate is effective for a period of three years. A number of our PRC subsidiaries and consolidated affiliated entities, such as Baidu Online and Baidu Netcom, obtained the “High and New Technology Enterprise” certificates. The related tax holiday under such “High and New Technology Enterprise” certificates of these entities will expire in 2020, 2021 and 2022.
If any entity fails to maintain the “High and New Technology Enterprise” qualification under the EIT Law, its tax rate will increase, which could have a material and adverse effect on our results of operations and financial position. Historically, all of the PRC subsidiaries and consolidated affiliated entities mentioned above successfully re-applied for the certificates when the prior ones expired.

An enterprise may benefit from a preferential tax rate of 10% under the EIT law if it qualifies as a “Key Software Enterprise.” Enterprises wishing to enjoy the “Key Software Enterprise” status will be subject to relevant governmental authorities’ assessment each year as to whether they are entitled to the preferential tax rate of 10%. Due to the “Key Software Enterprise” status, Baidu Online was entitled to a preferential income tax rate of 10% from 2010 to 2018, so was Baidu China from 2015 to 2018, and Baidu International from 2016 to 2018. Prior to May 2016, a “Key Software Enterprise” used to be designated jointly by the National Development and Reform Commission, the MIIT, the Ministry of Commerce, the Ministry of Finance and the State Administration of Taxation. In May 2016, the four PRC governmental authorities jointly issued a notice, pursuant to which an enterprise may be entitled to the preferential income tax rate of 10% by filing with the local tax authority with supporting documentation proving its qualifications to be a “Key Software Enterprise” during its annual income tax filing process. The “Key Software Enterprise” status of Baidu Online, Baidu China and Baidu International for 2019 will be filed with tax authorities before May 2020 and will be subject to relevant governmental authorities’ assessment.

If our PRC subsidiaries or consolidated affiliated entities that have enjoyed preferential tax treatment no longer qualify for the preferential treatment, we will consider available options under applicable law that would enable us to qualify for alternative preferential tax treatment. To the extent we are unable to offset the impact of the expiration of existing preferential tax treatment with new tax exemptions, tax incentives or other tax benefits, the expiration of existing preferential tax treatment may cause our effective tax rate to increase. The amount of income tax payable by our PRC subsidiaries and consolidated affiliated entities in the future will depend on various factors, including, among other things, the results of operations and taxable income of, and the statutory tax rate applicable to, each of the entities. Our effective tax rate depends partially on the extent of the relative contribution of each of our subsidiaries and consolidated affiliated entities to our consolidated taxable income.

**Withholding Tax**

Under the EIT Law and its implementation rules, dividends, interests, rent or royalties payable by a foreign-invested enterprise, such as our PRC subsidiaries, to any of its non-resident enterprise investors, and proceeds from any such non-resident enterprise investor’s disposition of assets (after deducting the net value of such assets) are subject to the EIT at the rate of 10%, namely withholding tax, unless the non-resident enterprise investor’s jurisdiction of incorporation has a tax treaty or arrangement with China that provides for a reduced withholding tax rate or an exemption from withholding tax. The Caishui (2008) No. 1 Notice clarifies that undistributed profits earned by foreign-invested enterprises prior to January 1, 2008 will be exempted from any withholding tax.

The British Virgin Islands, where Baidu Holdings Limited, the sole shareholder of certain of our PRC subsidiaries such as Baidu Online, was incorporated, does not have such a tax treaty with China.

Hong Kong, where Baidu (Hong Kong) Limited, our wholly owned subsidiary and the sole shareholder of certain of our PRC subsidiaries such as Baidu Times and Baidu China, was incorporated, has a tax arrangement with China that provides for a lower withholding tax rate of 5% on dividends subject to certain conditions and requirements, such as the requirement that the Hong Kong resident enterprise own at least 25% of the PRC enterprise distributing the dividend at all times within the 12-month period immediately preceding the distribution of dividends and be a “beneficial owner” of the dividends. However, pursuant to a SAT Circular 81 issued by the State Administration of Taxation in February 2009, if the relevant PRC tax authorities determine, in their discretion, that a company benefits from the reduced withholding tax rate on dividends due to a structure or arrangement designed for the primary purpose of obtaining favorable tax treatment, the PRC tax authorities may
adjust the preferential tax treatment. Moreover, pursuant to a SAT Circular 9 issued by the State Administration of Taxation in February 2018, which became effective from April 1, 2018 and superseded the SAT Circular 601 issued by the State Administration of Taxation in October 2009, a resident of a contracting state will not qualify for the benefits under the tax treaties or arrangements, if it is not the “beneficial owner” of the dividend, interest and royalty income. According to SAT Circular 9, a “beneficial owner” is required to have ownership and the right to dispose of the income or the rights and properties giving rise to the income, and generally engage in substantive business activities. An agent or conduit company will not be regarded as a “beneficial owner” and, therefore, will not qualify for treaty benefits. A conduit company normally refers to a company that is set up primarily for the purpose of evading or reducing taxes or transferring or accumulating profits. In addition, pursuant to a SAT Circular 60 issued by the State Administration of Taxation in August 2015, non-resident enterprises are not required to obtain pre-approval from the relevant tax authority in order to enjoy the reduced withholding tax rate. Instead, non-resident enterprises may, if they determine by self-assessment that the prescribed criteria to enjoy the tax treaty benefits are met, directly apply for the reduced withholding tax rate, and file necessary forms and supporting documents when performing tax filings, which will be subject to post-filing examinations by the relevant tax authorities.

If our PRC subsidiaries declare and distribute profits earned after January 1, 2008 to us in the future, the dividend payments will be subject to withholding tax, which will increase our tax liability and reduce the amount of cash available to our company. For the potential distributable profits to be distributed to our qualified Hong Kong incorporated subsidiary, the deferred tax liabilities are accrued at a 5% withholding tax rate.

**Tax Residence**

Under the EIT Law and its implementation rules, an enterprise established outside of the PRC with “de facto management body” within the PRC is considered a resident enterprise and will be subject to the EIT at the rate of 25% on its worldwide income. The term “de facto management body” refers to “the establishment that exercises substantial and overall management and control over the production, business, personnel, accounts and properties of an enterprise.”

Pursuant to SAT Circular 82 issued by the State Administration of Taxation in April 2009, an overseas registered enterprise controlled by a PRC company or a PRC company group will be classified as a “resident enterprise” with its “de facto management body” located within China if the following requirements are satisfied: (i) the senior management and core management departments in charge of its daily operations are mainly located in the PRC; (ii) its financial and human resources decisions are subject to determination or approval by persons or bodies located in the PRC; (iii) its major assets, accounting books, company seals, and minutes and files of its board and shareholders’ meetings are located or kept in the PRC; and (iv) no less than half of the enterprise’s directors or senior management with voting rights reside in the PRC. The State Administration of Taxation issued additional rules to provide more guidance on the implementation of SAT Circular 82 in July 2011, and issued an amendment to SAT Circular 82 delegating the authority to its provincial branches to determine whether a Chinese-controlled overseas-incorporated enterprise should be considered a PRC resident enterprise, in January 2014. Although the SAT Circular 82, the additional guidance and its amendment only apply to overseas registered enterprises controlled by PRC enterprises and not those controlled by PRC individuals or foreigners, the determining criteria set forth in the circular may reflect the State Administration of Taxation’s general position on how the “de facto management body” test should be applied in determining the tax resident status of offshore enterprises, regardless of whether they are controlled by PRC enterprises, individuals or foreigners.

If our offshore entities are deemed PRC resident enterprises, these entities may be subject to the EIT at the rate of 25% on their global incomes, except that the dividends distributed by our PRC subsidiaries may be exempt from the EIT to the extent such dividends are deemed “dividends among qualified resident enterprises.”

Should our offshore entities be deemed as PRC resident enterprises, such changes could significantly increase our tax burden and materially and adversely affect our cash flow and profitability.
PRC VAT in Lieu of Business Tax

In November 2011, the Ministry of Finance and the State Administration of Taxation jointly issued two circulars setting forth the details of the pilot VAT reform program, which change the charge of sales tax from business tax to VAT for certain pilot industries. The VAT reform program initially applied only to the pilot industries in Shanghai, and was expanded to eight additional regions, including, among others, Beijing and Guangdong province, in 2012. In August 2013, the program was further expanded nationwide. In May 2016, the pilot program was extended to cover additional industry sectors such as construction, real estate, finance and consumer services.

All of our PRC entities have been subject to VAT since August 1, 2013. These entities are required to pay VAT instead of business tax for services that are deemed by the relevant tax authorities to be within the pilot industries at a rate of 6%. In addition, cultural business construction fee is imposed at the rate of 3% on revenues derived from our advertisement distribution services, and we are entitled to a 50% reduction of cultural business construction fee from July 1, 2019 to December 31, 2024.

PRC Urban Maintenance and Construction Tax and Education Surcharge

Any entity, foreign-invested or purely domestic, or individual that is subject to consumption tax, VAT and business tax is also required to pay PRC urban maintenance and construction tax. The rates of urban maintenance and construction tax are 7%, 5% or 1% of the amount of consumption tax, VAT and business tax actually paid depending on where the taxpayer is located. All entities and individuals who pay consumption tax, VAT and business tax are also required to pay education surcharge at a rate of 3%, and local education surcharges at a rate of 2%, of the amount of VAT, business tax and consumption tax actually paid.
## Results of Operations

The following table sets forth a summary of our consolidated results of operations for the periods indicated. The period-to-period comparisons of results of operations should not be relied upon as indicative of future performance.

<table>
<thead>
<tr>
<th>Year ended December 31</th>
<th>2017 (2)</th>
<th>2018 (3)</th>
<th>2019 (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online marketing services</td>
<td>73,146</td>
<td>81,912</td>
<td>78,093</td>
</tr>
<tr>
<td>Others</td>
<td>11,663</td>
<td>20,365</td>
<td>29,320</td>
</tr>
<tr>
<td><strong>Total revenues</strong></td>
<td>84,809</td>
<td>102,277</td>
<td>107,413</td>
</tr>
<tr>
<td><strong>Operating costs and expenses:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of revenues</td>
<td>43,062</td>
<td>51,744</td>
<td>62,850</td>
</tr>
<tr>
<td>Selling, general and administrative</td>
<td>13,128</td>
<td>19,231</td>
<td>19,910</td>
</tr>
<tr>
<td>Research and development</td>
<td>12,928</td>
<td>15,772</td>
<td>18,346</td>
</tr>
<tr>
<td><strong>Total operating costs and expenses</strong></td>
<td>69,118</td>
<td>86,747</td>
<td>101,106</td>
</tr>
<tr>
<td><strong>Operating profit</strong></td>
<td>15,691</td>
<td>15,530</td>
<td>6,307</td>
</tr>
<tr>
<td>Total other income (loss)</td>
<td>5,592</td>
<td>11,795</td>
<td>(6,647)</td>
</tr>
<tr>
<td><strong>Income taxes</strong></td>
<td>2,995</td>
<td>4,743</td>
<td>1,948</td>
</tr>
<tr>
<td><strong>Net income (loss)</strong></td>
<td>18,288</td>
<td>22,582</td>
<td>(2,288)</td>
</tr>
<tr>
<td><strong>Less: Net loss attributable to non-controlling interests</strong></td>
<td>(13)</td>
<td>(4,991)</td>
<td>(4,345)</td>
</tr>
<tr>
<td><strong>Net income attributable to Baidu, Inc.</strong></td>
<td>18,301</td>
<td>27,573</td>
<td>2,057</td>
</tr>
</tbody>
</table>

(1) Share-based compensation expenses are allocated in operating costs and expenses as follows:

| Cost of revenues | 183 | 224 | 327 | 47 |
| Selling, general and administrative | 973 | 1,725 | 1,766 | 254 |
| Research and development | 2,088 | 2,727 | 3,531 | 507 |
| **Total** | 3,244 | 4,676 | 5,626 | 808 |

(2) VAT is presented in the cost of revenues rather than net against revenues in accordance with the legacy revenue accounting standard (ASC 605).

(3) VAT is presented as net against revenues rather than in the cost of revenues in accordance with the new revenue accounting standard (ASC 606).

Starting from January 1, 2018, we adopted a new revenue accounting standard (ASC 606), which reclassifies VAT from cost of revenues to net against revenues among other changes. The consolidated statement of comprehensive income data for the years ended December 31, 2018 and 2019 presented above have been prepared in accordance with ASC 606 and exclude the impact of VAT, while the consolidated statements of comprehensive income data for the year ended December 31, 2017 presented above have been prepared in accordance with the legacy revenue accounting standard (ASC 605) and, unlike the consolidated statement of comprehensive income data for the years ended December 31, 2018 and 2019, include the impact of VAT.
The following table presents the impact of VAT for the years ended December 31, 2017, 2018 and 2019:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2017</th>
<th>December 31, 2018</th>
<th>December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
</tr>
<tr>
<td>Online marketing services</td>
<td>4,036</td>
<td>4,834</td>
<td>4,625</td>
</tr>
<tr>
<td>Others</td>
<td>732</td>
<td>1,246</td>
<td>1,812</td>
</tr>
<tr>
<td>Total impact of VAT</td>
<td>4,768</td>
<td>6,080</td>
<td>6,437</td>
</tr>
</tbody>
</table>

**Year Ended December 31, 2019 Compared to Year Ended December 31, 2018**

**Consolidated revenues**. Our total revenues in 2019 were RMB107.4 billion (US$15.4 billion), growing by 5% from 2018 to 2019. Our online marketing revenues were RMB78.1 billion (US$11.2 billion) in 2019, decreasing by 5% year over year.

Online marketing revenues for Baidu Core in 2019 were RMB70.0 billion (US$10.1 billion) decreasing by 4% year over year, mainly due to weakness in healthcare, financial services and auto/logistics sectors, offset by strength in education, retail/e-commerce, travel and network services sectors. During 2019, we implemented an initiative in an attempt to require healthcare marketing customers to move their landing sites onto our Managed Page. Requiring healthcare customers to adopt our structured data solution allows us to better monitor the content they offer and increase consumer trust. In addition, certain sectors, such as financial services, were impacted by industry-specific policy changes and slowing macromacroeconomic environment. These changes dampened revenue growth, compared to the year before. The total number of paid clicks increased by 6% year over year.

Online marketing revenues for iQIYI in 2019 were RMB8.3 billion (US$1.2 billion), decreasing by 11% year over year, primarily due to the challenging macromacroeconomic environment, the delay of certain content launches and intensified competition in the advertising business. Average brand advertising revenue per brand advertiser decreased by 12% from RMB6.7 million in 2018 to RMB5.9 million (US$0.9 million) in 2019. We track the average brand advertising revenue per brand advertiser as a key indicator to evaluate iQIYI’s advertising services business and adapt its sales strategy, ad solutions and content scheduling accordingly.

Other revenues in 2019 were RMB29.3 billion (US$4.2 billion), increasing by 44% year over year, which was primarily due to the strong growth in iQIYI membership, cloud services and smart devices.

We expect our total revenues to decrease in absolute dollars for the first quarter of 2020 on a year-over-year basis, as our businesses are negatively impacted by the novel coronavirus (COVID-19). For a detailed description of the risks associated with the novel coronavirus, see “Item 3.D. Key Information—Risk Factors—Risks Related to Our Business—We face risks related to health epidemics, severe weather conditions and other outbreaks.”

**Consolidated operating costs and expenses**. Our consolidated operating costs and expenses in 2019 were RMB101.1 billion (US$14.5 billion), increasing by 17% year over year. This increase was primarily due to the expansion of our business.

**Cost of Revenues**. Our cost of revenues in 2019 were RMB62.9 billion (US$9.0 billion), increasing by 21% from 2018. This increase was primarily due to the increase in hardware and cloud costs of goods sold, content costs, depreciation expense, traffic acquisition costs and bandwidth costs. We expect our cost of revenues to rise in absolute dollars, as we plan to further increase our bandwidth costs, content offering, costs of goods sold related to our new AI initiatives and operating costs, to support the development of our businesses.
Selling, General and Administrative Expenses. Our selling, general and administrative expenses increased by 4% from RMB19.2 billion in 2018 to RMB19.9 billion (US$2.9 billion) in 2019, primarily due to an increase in promotional marketing and personnel related expenses, offset by a decrease in channel spending. In 2019, we primarily promoted Baidu App, Haokan, Quanmin and iQIYI in our promotional marketing. We expect marketing costs to rise in absolute dollars, as we plan to promote our brands and increase the scale of apps and other products and services, if we find such promotions to be effective.

Research and Development Expenses. Our research and development expenses increased by 16% from RMB15.8 billion in 2018 to RMB18.3 billion (US$2.6 billion) in 2019, primarily due to an increase in research and development personnel related expenses. We expect research and development expenses to rise in absolute dollars, as we plan to make new hires, adjust for salary increases and incur other personnel related expenses.

Operating profit. As a result of the foregoing, we generated an operating profit of RMB6.3 billion (US$906 million) in 2019, a 59% decrease from RMB15.5 billion in 2018.

Total other income (loss). Our total other loss was RMB6.6 billion (US$955 million) in 2019, compared to the total other income of RMB11.8 billion in 2018. Total other loss in 2019 mainly comprises non-cash impairment loss on equity investment arising from other-than-temporary decline. In the last quarter of 2015, following a transaction where we exchanged shares of our majority-owned subsidiary Qunar for a minority stake in Trip.com, we deconsolidated Qunar, recorded our investment in Trip.com at the closing-date market value and recognized a non-cash accounting gain of RMB24.4 billion. In 2019, the market value of the shares of Trip.com declined, and the continuing low market price caused us to recognize a non-cash impairment loss of RMB8.9 billion in the third quarter of 2019. In October 2019, we sold down our holding in Trip.com, reducing the interest of outstanding shares of Trip.com from 19% to 12%. Total other income in 2018 mainly comprises gains from the disposal of Du Xiaoman (financial services business) and fair value gains on private company equity investments in accordance with ASC 321, adopted on January 1, 2018.

Income taxes. Our income tax expense was RMB1.9 billion (US$279 million) in 2019, a 59% decrease from RMB4.7 billion in 2018. The decrease in income tax expense was mainly due to lower taxable income from Baidu Core.

Net loss attributable to non-controlling interests. Net loss attributable to non-controlling interests was RMB4.3 billion ($624 million), compared to RMB5.0 billion in 2018.

Net income attributable to Baidu, Inc. As a result of the foregoing, net income attributable to Baidu, Inc. decreased from RMB27.6 billion in 2018 to RMB2.1 billion (US$296 million) in 2019.

Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

Segment Revenues

The following table sets forth our revenues by segment and the year-over-year change, with segment revenues including inter-segment revenues:

<table>
<thead>
<tr>
<th>Segment</th>
<th>2017 RMB</th>
<th>2018 RMB</th>
<th>YoY%</th>
<th>2019 RMB</th>
<th>US$</th>
<th>YoY%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(In millions, except percentages)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baidu Core</td>
<td>67,681(1)</td>
<td>78,271</td>
<td>22(1)</td>
<td>79,711</td>
<td>11,450</td>
<td>2</td>
</tr>
<tr>
<td>iQIYI</td>
<td>17,378(2)</td>
<td>24,989</td>
<td>52(2)</td>
<td>28,994</td>
<td>4,165</td>
<td>16</td>
</tr>
</tbody>
</table>

(1) Baidu Core net revenue for 2017, excluding the impact of RMB3,778 million in VAT, was RMB63,903 million.
(2) iQIYI net revenue for 2017, excluding the impact of RMB982 million in VAT, was RMB16,396 million.

Baidu Core. Baidu Core revenue was RMB79.7 billion (US$11.5 billion) in 2019, increasing by 2% year over year. This increase was primarily due to the increase in cloud services and smart devices.

Baidu Core revenue was RMB78.3 billion in 2018, increasing by 16% from 2017 (or 22% year over year, if both years’ revenues were net of VAT). This increase was primarily due to the increase in online marketing revenues.

iQIYI. iQIYI revenue was RMB29.0 billion (US$4.2 billion) in 2019, increasing by 16% from 2018. This increase was mainly attributable to the growth of membership revenue, offset by a decline in online advertising revenue.

iQIYI revenue was RMB25.0 billion in 2018, increasing by 44% from 2017 (or 52%, if both years’ revenues were net of VAT). This increase was mainly attributable to an increase in membership services and online marketing revenues.

Segment Operating Costs and Expenses

The following table sets forth our operating costs and expenses by segment and the year-over-year change:

<table>
<thead>
<tr>
<th>Segment</th>
<th>2017 RMB</th>
<th>2018 RMB</th>
<th>YoY%</th>
<th>2019 RMB</th>
<th>US$</th>
<th>YoY%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(In millions, except percentages)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baidu Core</td>
<td>47,966(1)</td>
<td>54,463</td>
<td>23</td>
<td>64,450</td>
<td>9,258</td>
<td>18</td>
</tr>
<tr>
<td>iQIYI</td>
<td>21,331(2)</td>
<td>33,295</td>
<td>64</td>
<td>38,252</td>
<td>5,495</td>
<td>15</td>
</tr>
</tbody>
</table>

(1) The operating costs and expenses in 2017 was RMB44,188 million excluding the impact of RMB3,778 million of VAT.
(2) The operating costs and expenses in 2017 was RMB20,349 million excluding the impact of RMB982 million of VAT.

Baidu Core. Operating costs and expenses of Baidu Core mainly consist of personnel-related costs, traffic acquisition costs, marketing and promotion spending, bandwidth costs, depreciation and intangible amortization expenses, hardware and cloud cost of goods sold, content costs and sales tax and surcharges.

Cost of revenues. The cost of revenues of Baidu Core in 2019 were RMB34.0 billion (US$4.9 billion) increasing 34% year over year, primarily due to an increase in hardware and cloud costs of goods sold, content costs, depreciation expense, traffic acquisition costs and bandwidth costs.

Selling, general and administrative expenses. The selling, general and administrative expenses of Baidu Core decreased by 4% from RMB15.3 billion in 2018 to RMB14.7 billion (US$2.1 billion) in 2019, primarily
due to a decrease in channel spending and personnel-related expenses, offset by an increase in promotional spending.

Research and development expenses. The research and development expenses of Baidu Core increased by 14% from RMB13.8 billion in 2018 to RMB15.7 billion (US$2.3 billion) in 2019, primarily due to an increase in personnel-related expenses.

Operating costs and expenses of Baidu Core were RMB54.5 billion in 2018, compared to RMB48.0 billion in 2017. The increase was primarily due to an increase in content costs, our feed content network, increases in bandwidth costs and traffic acquisition costs, an increase in investment in channel and promotional marketing, as well as an increase in personnel-related expenses.

iQIYI. Operating costs and expenses of iQIYI mainly consist of content costs, personnel-related costs, bandwidth costs, marketing and promotion spending, and payment platform charges.

Cost of revenues. The cost of revenues of iQIYI in 2019 were RMB30.3 billion (US$4.4 billion), increasing by 12% year over year, primarily due to higher content costs and other cost items.

Selling, general and administrative expenses. The selling, general and administrative expenses of iQIYI increased by 26% from RMB4.2 billion in 2018 to RMB5.2 billion (US$753 million) in 2019, primarily due to increased sales and marketing expenses related to certain iQIYI apps and its game business, as well as higher personnel-related compensation expenses.

Research and development expenses. The research and development expenses of iQIYI increased by 34% from RMB2.0 billion in 2018 to RMB2.7 billion (US$383 million) in 2019, primarily due to an increase in personnel-related costs.

Operating costs and expenses of iQIYI increased from RMB21.3 billion in 2017 to RMB33.3 billion in 2018, primarily due to an increase in content costs, channel and content-related promotional marketing, and personnel-related costs.

Inflation

Inflation in China has not materially impacted our results of operations. According to the National Bureau of Statistics of China, the annual average percent changes in the consumer price index in China for 2017, 2018 and 2019 were 1.6%, 2.1% and 2.9%, respectively. The year-over-year percent change in the consumer price index for January 2018, 2019 and 2020 was increase of 1.5%, 1.7% and 5.4%, respectively. Although we have not been materially affected by inflation in the past, we can provide no assurance that we will not be affected in the future by higher rates of inflation in China. For example, certain operating costs and expenses, such as employee compensation and office operating expenses may increase as a result of higher inflation. Additionally, because a substantial portion of our assets consists of cash and cash equivalents and short-term investments, high inflation could significantly reduce the value and purchasing power of these assets. We are not able to hedge our exposure to higher inflation in China.

Foreign Currency

The exchange rate between the U.S. dollar and the RMB has declined from RMB8.1056 per USD in July 2005 to RMB6.9618 per USD in December 2019. As of December 31, 2019, we recorded RMB2.6 billion (US$372 million) of net foreign currency translation loss in accumulated other comprehensive income as a component of shareholders’ equity. We have not hedged exposures to exchange fluctuations using any hedging instruments. See also “Item 3.D. Key Information—Risk Factors—Risks Related to Doing Business in China—Fluctuation in the value of the RMB may have a material and adverse effect on your investment.” and “Item 11. Quantitative and Qualitative Disclosures about Market Risk—Foreign Exchange Risk.”
Critical Accounting Policies

We prepare financial statements in accordance with U.S. GAAP, which requires us to make judgments, estimates and assumptions that affect the reported amounts of our assets and liabilities and the disclosure of our contingent assets and liabilities at the end of each fiscal period and the reported amounts of revenues and expenses during each fiscal period. We continually evaluate these judgments and estimates based on our own historical experience, knowledge and assessment of current business and other conditions, our expectations regarding the future based on available information and assumptions that we believe to be reasonable, which together form our basis for making judgments about matters that are not readily apparent from other sources. Since the use of estimates is an integral component of the financial reporting process, our actual results could differ from those estimates. Some of our accounting policies require a higher degree of judgment than others in their application.

The selection of critical accounting policies, the judgments and other uncertainties affecting application of those policies and the sensitivity of reported results to changes in conditions and assumptions are factors that should be considered when reviewing our financial statements. For further information on our critical accounting policies, see Note 2 to our consolidated financial statements. We believe the following accounting policies involve the most significant judgments and estimates used in the preparation of our financial statements.

Consolidation of Affiliated Entities

In order to comply with PRC laws and regulations limiting foreign ownership of or imposing conditions on internet content, advertising, audio and video services, and mobile app distribution businesses, we operate our websites and conduct our internet content, advertising, audio and video services, and mobile app distribution businesses through our affiliated entities in China by means of contractual arrangements. We have entered into certain exclusive agreements with the affiliated entities directly or through our subsidiaries, which oblige us to absorb losses of the VIEs’ that could potentially be significant to the VIEs or entitle the Primary Beneficiaries to receive economic benefits from the VIEs that could potentially be significant to the VIEs. In addition, we have entered into certain agreements with the affiliated entities and the nominee shareholders of affiliated entities directly or through our subsidiaries, which enable us to direct the activities that most significantly affect the economic performance of the affiliated entities. Based on these contractual arrangements, we consolidate the affiliated entities as required by ASC Topic 810, Consolidation, because we hold all the variable interests of the affiliated entities directly or through the subsidiaries, which are the primary beneficiaries of the affiliated entities. We will reconsider the initial determination of whether a legal entity is a consolidated affiliated entity upon certain events listed in ASC 810-10-35-4 occurring. We will also continuously reconsider whether we are the primary beneficiaries of our affiliated entities as facts and circumstances change. See "Item 3.D. Key Information—Risk Factors—Risks Related to Our Corporate Structure.”

Segment Reporting

As of December 31, 2017, 2018 and 2019, we had two reportable segments, Baidu Core and iQIYI. Baidu Core mainly provides search-based, feed-based, and other online marketing services, as well as products and services from our new AI initiatives. Search Services and Transaction Services were combined into Baidu Core beginning April 2017, to reflect our strategic and operational change to de-emphasize our transaction services business and shift more resources to support our online marketing and other services. iQIYI is an online entertainment service provider that offers original, professionally produced and partner-generated content on its platform. In early April 2018, iQIYI completed its initial public offering (IPO) on the NASDAQ Global Market.

Our chief executive officer, who has been identified as the chief operating decision marker, (“CODM”), reviews the operating results of Baidu Core and iQIYI, to allocate resources and assess our performance. Accordingly, the financial statements include segment information which reflects the current composition of the reportable segments in accordance with ASC Topic 280, Segment Reporting.
Revenue Recognition

Following the adoption of ASC 606, revenue is recognized when control of promised goods or services is transferred to our customers in an amount of consideration to which an entity expects to be entitled to in exchange for those goods or services.

(1) Performance-based online marketing services
Cost-per-click (“CPC”)

Our auction-based P4P platform enables customers to bid for priority placement of paid sponsored links and reach users who search for information related to their products or services. P4P online marketing customers can choose from search-based and feed-based online marketing services, and select criteria for their inventory purchase, such as daily spending limit and user profile targeted, including, but not limited to, users from specific regions in China and users online during specific time period. Revenue is recognized when all of the revenue recognition criteria are met, which is generally when a user clicks on one of the customer-sponsored links or feed-based marketing.

Other performance-based online marketing services

To the extent the we provide online marketing services based on performance criteria other than cost-per-click, such as the number of downloads (and user registration) of mobile apps and the pre-determined ratios of completed transaction volumes, revenue is recognized when the specified performance criteria are met along with the satisfaction of other applicable revenue recognition criteria.

(2) Online display advertising services

We provide online display advertising services to its customers by integrating text description, image and/or video, and displaying the advertisement in the search result, in Baidu Feed or on other properties. We recognize revenue on a pro-rata basis over the contractual term for cost per time advertising arrangements, commencing on the start date of the display advertisement, or based on the number of times that the advertisement has been displayed for cost per thousand impressions advertising arrangements.

(3) Baidu Union online marketing services

Baidu Union is a program through which we expand distribution of its customers’ sponsored links or advertisements by leveraging the traffic of Baidu Union partners’ online properties. We acquire traffic from Baidu Union partners and is responsible for service fulfillment, pricing and bearing inventory risks. As principal, we recognize revenue on a gross basis, based on customer billing. Payments made to Baidu Union partners are recorded as traffic acquisition costs, which are included in “cost of revenues” in the consolidated statements of comprehensive income.

Online marketing services customers are required to pay a deposit before using our services. Once their account balance falls below a designated amount, they will receive an automated notice from us to replenish their accounts. Customer deposit is deducted when a user clicks on the customer’s link in the search result or when other performance criteria other than CPC have been satisfied. We offer payment terms to certain customers based on their credit history with us and other credit factors. We may also offer payment terms to certain agencies, as is common in the industry.

(4) Collection

Certain customers of online marketing services are required to pay a deposit before using our services and are sent automated reminders to replenish their accounts when the balance falls below a designated amount. The
deposits received are recorded as customer deposits and deferred revenue on the consolidated balance sheets. The amounts due to us are deducted from the deposited amounts when users click on the paid sponsored links in the search results or other performance criteria have been satisfied. In addition, we offer payment terms to some of our customers based on their historical marketing placements and credibility. We also offer longer payment terms to certain online payment agencies, consistent with industry practice.

Payment terms and conditions vary by customer and are based on the billing schedule established in our contracts or purchase orders with customers, but we generally provide credit terms to customers within one year; therefore, we have determined that our contracts do not include a significant financing component.

(5) Sales incentives

We provide sales incentives to agents that enable them to receive price reductions on the online marketing services by meeting certain cumulative consumption requirements. We account for these incentives granted to customers as a variable consideration and net them against revenue. The amount of variable consideration is measured based on the most likely amount of incentives to be provided to customers.

(6) Membership services

We offer membership services that allow subscribers access to a library of premium content or personal cloud services, in exchange for non-refundable upfront membership fees. When the receipt of membership fees is for services to be delivered over a period of time, the receipt is initially recorded as deferred revenue, and revenue is recognized ratably over the membership period as services are rendered. Membership services revenue also includes fees earned from on-demand content purchases and the sale of rights to other services, such as other memberships, which we acquire and control before they are transferred to customers.

(7) Content distribution

We generate revenues from sub-licensing content licensed from vendors for cash or through nonmonetary exchanges mainly with other online video broadcasting companies. The exclusive licensing agreements we enter into with the vendors have a specified license period and provide us rights to sub-license these contents to other third parties. We enter into a non-exclusive sub-license agreement with a sub-licensee for a period that falls within the original exclusive license period. For cash sub-licensing transactions, we are entitled to receive the sub-license fee under the sub-licensing arrangements and do not have any future obligation once we have provided the underlying content to the sub-licensee (which is provided at or before the beginning of the sub-license period). The sub-licensing of content represents a license of functional intellectual property that grants a right to use our licensed copyrights, and is recognized at the point in time when the licensed copyright is made available for the customer’s use and benefit.

We also enter into nonmonetary transactions to exchange online broadcasting rights of licensed copyrights with other online video broadcasting companies from time to time. The exchanged licensed copyrights provide rights for each party to broadcast the licensed copyrights received on its own website only. Each transferring party retains the right to continue broadcasting the exclusive content on its own website and/or sublicense the rights to the content it surrendered in the exchange. We account for these nonmonetary exchanges based on the fair value of the asset received starting from January 1, 2018, when ASC 606 was adopted. Barter sublicensing revenue are recognized in accordance with the same revenue recognition criteria above. The attributable cost of sublicensing transactions, whether for cash or through nonmonetary exchanges, is recognized as cost of revenues through the amortization of the sublicensing right component of the exclusive licensed copyright calculated based on its estimated usage pattern.
(8) **Financial services**

Before the divestiture of Du Xiaoman, we offer financial services which include provision of installment payment services to consumers and wealth management services to third-party investors. Interest income earned from provision of financial services is reported as “Other revenues” and reported on a net basis after deduction of related interest costs incurred.

The financial services business was disposed of in August 2018.

(9) **Cloud services**

We provide cloud services, which include computing database, storage and other services and allow customers to use hosted software over the contract period without taking possession of the software, generally on either a subscription or consumption basis. Revenue related to cloud services provided on a subscription basis is recognized ratably over the contract period. Revenue related to cloud services provided on a consumption basis, such as the amount of storage used in a period, is recognized based on the customer utilization of such resources.

(10) **Sales of hardware**

We sell hardware products via distributors or directly to end customers. Revenue from the sales of hardware is recognized when control of the goods is transferred to customers, which generally occurs when the products are delivered and accepted by the customers. Revenue is recorded net of sales incentives and return allowance.

(11) **Other revenue recognition related policies**

For arrangements that include multiple performance obligations, primarily for advertisements to be displayed in different spots, placed under different forms and displayed at different times, we would evaluate all of the performance obligations in the arrangement to determine whether each performance obligation is distinct. Consideration is allocated to each performance obligation based on its standalone selling price. We generally determine standalone selling prices based on the prices charged to customers on a standalone basis or estimate it using an expected cost plus margin approach. If a promised good or service does not meet the criteria to be considered distinct, it is combined with other promised goods or services until a distinct bundle of goods or services exists.

Timing of revenue recognition may differ from the timing of invoicing to customers. For certain services customers are required to pay before the services are delivered to the customer. When either party to a revenue contract has performed, we recognize a contract asset or a contract liability on the consolidated balance sheet, depending on the relationship between the entity’s performance and the customer’s payment. Contract liabilities were mainly related to fees for membership services to be provided over the membership period, which were presented as deferred revenue on the consolidated balance sheets. The year over year increase in deferred revenue as compared to the year ended December 31, 2018 is a result of the increase in consideration received from our customers. Contract assets represent unbilled amounts related to our rights to consideration for advertising services delivered and were included in “Other current assets, net” on the consolidated balance sheets. The year over year increase in the balance of contract assets was primarily due to more outstanding advertising contracts as of December 31, 2019 compared to the prior year for which we had commenced to provide advertisement placements but had not completed all specified advertising services in the contract, which corresponds to when we have the right to bill our customers. Contract assets represent unbilled amounts related to our rights to consideration for advertising services delivered and are included in “Other current assets, net” on the consolidated balance sheets.

We do not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which we recognize revenue at the amount to which it has the right to invoice for services performed.
Share-based Compensation

We account for share-based compensation in accordance with ASC Topic 718, Compensation-Stock Compensation, (“ASC 718”). We have elected to recognize share-based compensation using the straight-line method for all share-based awards issued with no performance conditions. For awards with performance conditions, compensation cost is recognized on an accelerated basis if it is probable that the performance condition will be achieved.

Forfeitures are estimated based on historical experience and are periodically reviewed. Cancellation of an award accompanied by the concurrent grant of a replacement award is accounted for as a modification of the terms of the cancelled award, or the modified awards. The compensation costs associated with the modified awards are recognized if either the original vesting condition or the new vesting condition is achieved. Total recognized compensation cost for the awards is at least equal to the fair value of the awards at the grant date unless at the date of the modification the performance or service conditions of the original awards are not expected to be satisfied. The incremental compensation cost is measured as the excess of the fair value of the replacement award over the fair value of the cancelled award at the cancellation date. Therefore, in relation to the modified award, we recognize share-based compensation over the vesting periods of the replacement award, which comprises (i) the amortization of the incremental portion of share-based compensation over the remaining vesting term, and (ii) any unrecognized compensation cost of the original awards, using either the original term or the new term, whichever results in higher expenses for each reporting period.

We account for share awards issued to non-employees in accordance with the provisions of ASC Subtopic 505-50, Equity: Equity-based Payments to Non-Employees, prior to adopting ASU 2018-07, Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting. We use the Black-Scholes-Merton option pricing model method to measure the value of options granted to non-employees (“ASU 2018-07”) on January 1, 2019. We apply the modified retrospective method. Subsequent to the adoption, we measure equity-classified nonemployee awards using their fair value on grant date. The impact of adopting the new standard was insignificant.

Income Taxes

We account for income taxes under the liability method. Deferred income taxes are recognized for differences between the financial reporting and tax bases of assets and liabilities at enacted tax rates in effect for the years in which the differences are expected to reverse. We record valuation allowance against the amount of deferred tax assets that we determine is not more-likely-than-not to be realized. The effect on deferred taxes of a change in tax rates is recognized in earnings in the period that includes the enactment date. For reconciliation of tax computed by applying the respective statutory income tax rate to pre-tax income, please see “Income taxes” under Note 14 to our audited consolidated financial statements.

We apply the provisions of ASC Topic 740, Income Taxes, (“ASC 740”), in accounting for uncertainty in income taxes. ASC 740 clarifies the accounting for uncertainty in income taxes by prescribing the recognition threshold a tax position is required to meet before being recognized in the financial statements. We have elected to classify interest and penalties related to an uncertain tax position (if and when required) as part of income tax expense in the consolidated statements of comprehensive income.

Accounts Receivable, net of allowance

Accounts receivable are recognized and carried at the original invoiced amount less an allowance for any potential uncollectible amounts. An estimate for doubtful debts is made when collection of the full amount is no longer probable. Receivable balances are written off when they are deemed uncollectible. We generally do not require collateral from our customers.

We maintain allowances for doubtful accounts for estimated losses resulting from the failure of customers to make payments on time. We review the accounts receivable on a periodic basis and make general and specific
allowances when there is doubt as to the collectability of individual balances. In evaluating the collectability of individual receivable balances, we
consider many factors, including the age of the balance, the customer’s payment history, the customer’s current credit-worthiness and current economic
trends.

**Long-term investments**

Our long-term investments consist of equity investments with readily determinable fair value, equity method investments, held-to-maturity debt
investments, available-for-sale debt investments, equity investments without readily determinable fair value, and other investments accounted for at fair
value.

We adopted ASC Topic 321, *Investments – Equity Securities* (“ASC 321”), from January 1, 2018 and the cumulative effect of RMB1.9 billion
representing the unrealized gains of available-for-sale equity securities before the adoption was recorded as an adjustment to the opening retained
earnings. Pursuant to ASC 321, equity investments, except for those accounted for under the equity method, those that result in consolidation of the
investee and certain other investments, are measured at fair value, and any changes in fair value are recognized in earnings. For equity securities without
readily determinable fair value and do not qualify for the existing practical expedient in ASC Topic 820, *Fair Value Measurements and Disclosures*
(“ASC 820”) to estimate fair value using the net asset value per share (or its equivalent) of the investment, we elected to use the measurement alternative
to measure those investments at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for
identical or similar investments of the same issuer, if any. Significant judgments are required to determine whether (i) observable price changes in
orderly transaction are for instruments that are considered similar, and (ii) appropriate valuation methodologies and underlying assumptions, including
expected volatility and the probability of exit events as it relates to liquidation and redemption features used to measure the price adjustments for the
difference in rights and obligations between instruments. Equity securities with readily determinable fair values are measured at fair value, and any
changes in fair value are recognized in earnings.

For equity investments measured at fair value with changes in fair value recorded in earnings, we do not assess whether those securities are
impaired. For equity investments that we elect to use the measurement alternative, we make a qualitative assessment of whether the investment is
impaired at each reporting date. If a qualitative assessment indicates that the investment is impaired, the entity has to estimate the investment’s fair value
in accordance with the principles of ASC 820. If the fair value is less than the investment’s carrying value, we recognize an impairment loss in net
income equal to the difference between the carrying value and fair value.

Investments that we have positive intent and ability to hold to maturity are classified as held-to-maturity investments and stated at amortized cost.
For individual securities classified as held-to-maturity investments, we evaluate whether a decline in fair value below the amortized cost basis is other-
than-temporary, in accordance with ASC 320. Other-than-temporary impairment loss is recognized in earnings equal to the entire excess of the debt
investment’s amortized cost basis over its fair value at the balance sheet date of the reporting period for which the assessment is made.

Available-for-sale debt investments are convertible debt instruments issued by private companies and investment in preferred shares that is
redeemable at our option, which are measured at fair value. Interest income is recognized in earnings. All other changes in the carrying amount of these
debt investments are recognized in other comprehensive income. An impairment loss on the available-for-sale debt investments, if any, is recognized in
earnings when the decline in value is determined to be other-than-temporary.

Investments in entities in which we can exercise significant influence but does not own a majority equity interest or control are accounted for
using the equity method of accounting in accordance with ASC Topic 323, *Investments-Equity Method and Joint Ventures* (“ASC 323”). Under the
equity method, we initially record its investment at cost and the difference between the cost of the equity investee and the amount of the underlying
equity in the net assets of the equity investee is accounted for as if the investee were a consolidated subsidiary. We subsequently adjust the carrying
amount of its investment to recognize our proportionate share of each equity
investee’s net income or loss into earnings. We will discontinue applying the equity method if an investment (plus additional financial support provided to the investee, if any) has been reduced to zero. When we have other investments in its equity-method investee and is not required to advance additional funds to that investee, we would continue to report its share of equity method losses in its statement of comprehensive income after its equity-method investment in ordinary shares has been reduced to zero, to the extent of and as an adjustment to the adjusted basis of our other investments in the investee. Such losses are first applied to those investments of a lower liquidation preference before being further applied to the investments of a higher liquidation preference. We adopted a one-quarter lag in reporting for its share of equity income/(loss) in all of its equity method investees.

We evaluate the equity method investments for impairment whenever events or changes in circumstances indicate that the carrying amount of the investment might not be recoverable. Factors considered by us when determining whether an investment has been other-than-temporarily-impaired, includes, but not limited to, the length of the time and the extent to which the market value has been less than cost, the financial performance and near-term prospect of the investee, and our intent and ability to retain the investment until the recovery of its cost. An impairment loss on the equity method investments is recognized in earnings when the decline in value is determined to be other-than-temporary and is allocated to the individual net assets underlying equity method investments in the following order: 1) reduce any equity method goodwill to zero; 2) reduce the individual basis differences related to the investee’s long-lived assets pro rata based on their amounts relative to the overall basis difference at the impairment date and 3) reduce the individual basis difference of the investee’s remaining assets in a systematic and rational manner.

In accordance with ASC 946-320 Financial Services—Investment Companies, Investments—Debt and Equity Securities, we account for long-term equity investments in unlisted companies held by consolidated investment companies at fair value. These investments were initially recorded at their transaction price net of transaction costs, if any. Fair value of these investments are re-measured periodically in accordance with ASC 820.

**Licensed Copyrights, net**

Licensed copyrights consist of professionally-produced content such as films, television series, variety shows and other video content acquired from external parties. The license fees are capitalized and, unless prepaid, a corresponding liability is recorded when the cost of the content is known, the content is accepted by us in accordance with the conditions of the license agreement and the content is available for its first showing on our websites. Licensed copyrights are carried at the lower of unamortized cost or net realizable value. Licensed copyrights are presented on the balance sheet as current and non-current, based on estimated time of usage. We have two types of licensed copyrights, (i) non-exclusive licensed copyrights and (ii) exclusive licensed copyrights. For non-exclusive licensed copyrights, we have the right to broadcast the contents on our own websites. For exclusive licensed copyrights, in addition to the broadcasting right, we also have the right to sublicense the underlying contents to external parties.

Non-exclusive licensed copyrights are amortized using an accelerated or a straight-line method based on historical and estimated viewership consumption patterns over its economic useful lives. Estimates of future viewership consumption patterns and economic useful lives for licensed copyrights are reviewed periodically, at least on an annual basis and revised, if necessary. Revisions to the amortization pattern are accounted for as a change in accounting estimate prospectively in accordance with ASC topic 250 (“ASC 250”), Accounting Changes and Error Corrections.

The purchase cost of exclusive licensed copyrights includes a broadcasting right and a right to sublicense the content to external parties, and we allocate the content cost to these two rights when the exclusive licensed copyrights are initially recognized based on the relative proportion of our estimate of the total revenues that will be generated by each right over its economic useful lives. For the broadcasting right, which is the portion of an
exclusive licensed copyright that generates direct and indirect online advertising and membership services revenues, the content costs are amortized in
accordance with ASC subtopic 920-350 ("ASC 920-350"), Entertainment-Broadcasters: Intangibles—Goodwill and Other, using the same method as
non-exclusive licensed copyrights as described above. For the right to sublicense the content to external parties, which is the portion of an exclusive
licensed copyright that generates direct content distribution revenues, the content costs are amortized based on its estimated usage pattern. We review
the forecasted total direct content distribution revenues on a periodic basis and any changes in estimates will result in us applying a revised fraction to
the net carrying amount of the right to sublicense as of the beginning of the fiscal year.

On a periodic basis, we evaluate the program usefulness of the broadcasting rights of its licensed copyrights and records these rights at the lower
of unamortized cost or estimated net realizable value pursuant to the guidance in ASC 920-350. When there is a change in the expected usage of
licensed copyrights, we estimate net realizable value of licensed copyrights to determine if any impairment exists.

Net realizable value is determined by estimating the expected cash flows generated from provision of online advertising and membership services,
less any direct costs, over the remaining useful lives of the licensed copyrights. We estimate online advertising and membership services cash flows for
each category of content separately. Estimates that impact advertising and membership services cash flows include anticipated levels of demand for our
advertising and membership services and the expected selling prices of such services. For the right to sublicense to external parties, recoverability is
assessed in accordance with ASC Subtopic 926-20, Entertainment—Films: Other Assets—Film Costs ("ASC 926-20").

Produced Content, net

We produce original content in-house and collaborate with external parties. The cost incurred in the physical production of original content
includes direct production costs, production overhead and acquisition costs and is reported separately as "Produced content" on the consolidated balance
sheet. Produced content also includes cash expenditures made to acquire a proportionate share of certain rights to films including profit sharing,
distribution and/or other rights. Production costs exceeding the estimated total revenues to be earned ("ultimate revenue") are expensed as cost of
revenues.

Ultimate revenue estimates include contracted revenue, if any, and revenue expected to be earned not exceeding ten years from the date of initial
release from all sources, including exhibition, licensing, or exploitation of produced content if we have demonstrated a history of earning such revenue.
We estimate ultimate revenue to be earned during the economic useful lives of produced content based on anticipated release patterns and historical
results of similar produced content, which are identified based on various factors, including cast and crew, target audience and popularity.

We amortize produced content using an accelerated method based on historical and estimated usage patterns of its produced contents. Significant
management judgement is required to estimate the growth rates for the Company’s membership services and online advertising revenue, which could
significantly impact estimated ultimate revenue and usage patterns of produced content. These estimates are periodically reviewed and adjusted, if
appropriate. The difference between expenses determined using the new estimates and any amounts previously expensed during the fiscal year is
recognized in the period of revision.

We review unamortized produced content costs for impairment whenever events or circumstances indicate that the fair value of the produced
content may be less than its unamortized cost. Produced content was presented as "Other non-current assets" on the consolidated balance sheets.

Impairment of Long-Lived Assets Other Than Goodwill

We evaluate long-lived assets, such as fixed assets and purchased or internally developed intangible assets with finite lives other than licensed
copyrights and produced contents, for impairment whenever events or
changes in circumstances indicate the carrying value of an asset may not be recoverable in accordance with ASC Topic 360, Property, Plant and Equipment.

When such events occur, we assess the recoverability of the asset group based on the undiscounted future cash flow the asset group is expected to generate and recognize an impairment loss when estimated undiscounted future cash flow expected to result from the use of the asset group plus net proceeds expected from disposition of the asset group, if any, is less than the carrying value of the asset group. If we identify an impairment, we reduce the carrying amount of the asset group to its estimated fair value based on a discounted cash flow approach or, when available and appropriate, to comparable market values. We use estimates and judgments in our impairment tests and if different estimates or judgments had been utilized, the timing or the amount of any impairment charges could be different. Asset groups to be disposed of would be reported at the lower of the carrying amount or fair value less costs to sell, and no longer depreciated. The assets and liabilities of a disposal group classified as held for sale would be presented separately in the appropriate asset and liability sections of the consolidated balance sheet.

Impairment of Goodwill

We assess goodwill for impairment in accordance with ASC Subtopic 350-20, Intangibles—Goodwill and Other: Goodwill, (“ASC 350-20”), which requires that goodwill be tested for impairment at the reporting unit level at least annually and more frequently upon the occurrence of certain events, as defined by ASC 350-20. As of December 31, 2017, 2018 and 2019, we had two reporting units, consisting of Baidu Core and iQIYI.

We have the option to assess qualitative factors first to determine whether it is necessary to perform the two-step test in accordance with ASC 350-20. If we believe, as a result of the qualitative assessment, that it is more-likely-than-not that the fair value of the reporting unit is less than its carrying amount, the two-step quantitative impairment test described above is required. Otherwise, no further testing is required. In the qualitative assessment, we consider primary factors such as industry and market considerations, overall financial performance of the reporting unit, and other specific information related to the operations. In performing the two-step quantitative impairment test, the first step compares the carrying amount of the reporting unit to the fair value of the reporting unit based on either quoted market prices of the ordinary shares or estimated fair value using a combination of the income approach and the market approach. If the fair value of the reporting unit exceeds the carrying value of the reporting unit, goodwill is not impaired and we are not required to perform further testing. If the carrying value of the reporting unit exceeds the fair value of the reporting unit, then we must perform the second step of the impairment test in order to determine the implied fair value of the reporting unit’s goodwill. The fair value of the reporting unit is allocated to its assets and liabilities in a manner similar to a purchase price allocation in order to determine the implied fair value of the reporting unit goodwill. If the carrying amount of the goodwill is greater than its implied fair value, the excess is recognized as an impairment loss.

We performed qualitative assessments for the reporting unit of Baidu Core in 2017, 2018 and 2019. Based on the requirements of ASC350-20, we evaluated all relevant factors, including but not limited to macroeconomic conditions, industry and market conditions, financial performance, and our share price. We weighed all factors in their entirety and concluded that it was not more-likely-than-not the fair value was less than the carrying amount of Baidu Core, and further impairment testing on goodwill was unnecessary as of December 31, 2017, 2018 and 2019.

We elected to assess goodwill for impairment using the two-step process for the reporting unit of iQIYI. Subsequent to iQIYI’s IPO, we primarily considered the quoted market price of iQIYI’s share to determine the fair value of the reporting unit. As of December 31, 2017, 2018 and 2019, the fair value of iQIYI exceeded its carrying amount, and therefore goodwill related to the iQIYI reporting unit was not impaired and we were not required to perform further testing.
Business Combinations

We account for our business combinations using the purchase method of accounting in accordance with ASC Topic 805, Business Combinations. The purchase method of accounting requires that the consideration transferred be allocated to the assets, including separately identifiable assets and liabilities we acquired, based on their estimated fair values. The consideration transferred in an acquisition is measured as the aggregate of the fair values at the date of exchange of the assets given, liabilities incurred, and equity instruments issued as well as the contingent considerations as of the acquisition date. The costs directly attributable to the acquisition are expensed as incurred. Identifiable assets, liabilities and contingent liabilities acquired or assumed are measured separately at their fair value as of the acquisition date, irrespective of the extent of any non-controlling interests. The excess of (i) the total of cost of acquisition, fair value of the non-controlling interests and acquisition date fair value of any previously held equity interest in the acquiree over (ii) the fair value of the identifiable net assets of the acquiree, is recorded as goodwill. If the cost of acquisition is less than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in earnings.

In a business combination achieved in stages, we re-measured our previously held equity interest in the acquiree immediately before obtaining control at its acquisition-date fair value and the re-measurement gain or loss, if any, is recognized in earnings.

The determination and allocation of fair values to the identifiable assets acquired, liabilities assumed and non-controlling interests is based on various assumptions and valuation methodologies requiring considerable judgment from management. The most significant variables in these valuations are discount rates, terminal values, the number of years on which to base the cash flow projections, as well as the assumptions and estimates used to determine the cash inflows and outflows. We determine discount rates to be used based on the risk inherent in the related activity’s current business model and industry comparisons. Terminal values are based on the expected life of asset, and forecasted cash flows over that period.

B. Liquidity and Capital Resources

As of December 31, 2019, we had RMB147.4 billion (US$21.2 billion) of cash, cash equivalents, restricted cash and short-term investments. Our cash and cash equivalents consist of cash on hand and investments in interest bearing demand deposit accounts, time deposits, money market funds and other liquid investments which have original maturities of three months or less. The short-term investments primarily consist of fixed-rate and adjustable-rate debt investments with original maturity of less than one year. We believe that our current cash, cash equivalents, restricted cash and short-term investments and anticipated cash flow from operations will be sufficient to meet our anticipated cash needs, including our cash needs for working capital, capital expenditures and debt repayment, for at least the next 12 months. We may, however, require additional cash due to changing business conditions or other future developments, including any investments or acquisitions we may decide to pursue. If our or iQIYI’s existing cash is insufficient to meet our requirements, we may seek to sell additional equity securities, debt securities or borrow from banks.

Furthermore, cash transfers from our PRC subsidiaries to their parent companies outside of China are subject to PRC government control of currency conversion. Shortages in the availability of foreign currency may restrict the ability of our PRC subsidiaries and consolidated affiliated entities to remit sufficient foreign currency to pay dividends or other payments to their parent companies outside of China or our company, or otherwise satisfy their foreign currency denominated obligations. See “Item 3.D. Key Information—Risk Factors—Risks Related to Doing Business in China—Governmental control of currency conversion may affect the value of your investment.” As of December 31, 2019, our PRC subsidiaries and consolidated affiliated entities held RMB128.4 billion (US$18.4 billion) of cash, cash equivalents, restricted cash, and short-term investments, RMB2.0 billion (US$282 million) of which were in the form of foreign currencies.

The total outstanding balance of our short-term loans as of December 31, 2019 amounted to RMB2.6 billion (US$376 million), which consisted of borrowings from financial institutions and were repayable within one year.
The repayment of all short-term loans is guaranteed by the subsidiaries and VIEs of iQIYI and either collateralized by an office building of one of iQIYI’s VIEs or collateralized by restricted cash. As of December 31, 2019, the weighted average interest rates for the outstanding borrowings were 4.05%, and the aggregate amounts of unused lines of credit for short-term loans were RMB1.6 billion (US$233 million).

We have entered into the following long-term loan transactions with commercial banks:

- In June 2016, we entered into a five-year term and revolving facility agreement with a group of 21 syndicated bankers, pursuant to which we are entitled to borrow an unsecured USD denominated floating rate loan of US$1.0 billion with a term of five years and to borrow an unsecured USD denominated revolving loan of US$1.0 billion for five years. The facility was priced at 110 basis points over LIBOR and is intended for our general working capital purposes. In June 2016, we drew down two tranches of US$250 million each under the facility commitment. In November 2016, we drew down another two tranches of US$250 million each under the facility commitment. In connection with the facility agreements, we entered into four interest rate swap agreements, pursuant to which the loans would be settled with a fixed annual interest rate of 2.11%, 2.10%, 2.78% and 2.78% respectively, during the respective term of the loans.

- iQIYI has other bank borrowings of RMB1.6 billion (US$232 million), primarily used for working capital purposes, see note 10 to our audited consolidated financial statements included elsewhere in this annual report for further information.

We have conducted the following rounds of debt securities issuances:

- In November 2012, we issued US$750 million senior unsecured notes due in 2017, with stated annual interest rates of 2.25%, and US$750 million senior unsecured notes due in 2022 (“2022 Ten-year Notes”), with stated annual interest rates of 3.50%. The net proceeds from the sale of the notes were used for general corporate purposes. In November 2017, notes with carrying value of US$750 million were fully repaid when they became due. As of December 31, 2019, the total carrying value and estimated fair value of these notes were US$750 million and US$769 million. The estimated fair value was based on quoted prices for our publicly-traded debt securities as of December 31, 2019. We are not subject to any financial covenants or other significant restrictions under the notes. In 2019, we paid an aggregate of US$26 million in interest payments related to these notes.

- In August 2013, we issued an aggregate of US$1.0 billion senior unsecured notes due in 2018 (“2018 Notes”), with stated annual interest rate of 3.25%. The net proceeds from the sale of the notes were used for general corporate purposes, including merger and acquisition activities. In August 2018, the notes with carrying value of US$1.0 billion were fully repaid when they became due.

- In June 2014, we issued an aggregate of US$1.0 billion senior unsecured notes due in 2019 (“2019 Notes”), with stated annual interest rate of 2.75%. The net proceeds from the sale of the notes were used for general corporate purposes. In June 2019, notes with carrying value of US$1.0 billion were fully repaid when they became due. We are not subject to any financial covenants or other significant restrictions under the notes. In 2019, we paid an aggregate of US$14 million in interest payments related to these notes.

- In June 2015, we issued an aggregate of US$750 million senior unsecured notes due in 2020 (“2020 Notes”), with stated annual interest rate of 3.00%, and an aggregate of US$500 million senior unsecured notes due in 2025 (“2025 Notes”), with stated annual interest rate of 4.13%. The net proceeds from the sale of the notes were used for general corporate purposes. As of December 31, 2019, the total carrying value and estimated fair value were US$750 million and US$753 million, respectively, with respect to the 2020 Notes, and US$500 million and US$531 million, respectively, with respect to the 2025 Notes. The estimated fair values were based on quoted prices for our publicly-traded debt securities as of December 31, 2019. We are not subject to any financial covenants or other significant restrictions under the notes. During 2019, we paid an aggregate of US$43 million in interest payments related to these notes.
In July 2017, we issued an aggregate of US$900 million senior unsecured notes due in 2022 (“2022 Five-year Notes”), with stated annual interest rate of 2.88%, and an aggregate of US$600 million senior unsecured notes due in 2027 (“2027 Notes”), with stated annual interest rate of 3.63%. The net proceeds from the sale of the notes were used to repay existing indebtedness and for general corporate purposes. As of December 31, 2019, the total carrying value and estimated fair value were US$900 million and US$907 million, respectively, with respect to the 2022 Five-year Notes, and US$600 million and US$616 million, respectively, with respect to the 2027 Notes. The estimated fair values were based on quoted prices for our publicly-traded debt securities as of December 31, 2019. We are not subject to any financial covenants or other significant restrictions under the notes. In 2019, the interest payments related to these notes were US$48 million.

In March 2018, we issued an aggregate of US$1.0 billion senior unsecured notes due in 2023 (“2023 Notes”), with stated annual interest rate of 3.88%, and an aggregate of US$500 million senior unsecured notes due in 2028 (“2028 March Notes”), with stated annual interest rate of 4.38%. The net proceeds from the sale of the notes were used to repay existing indebtedness and for general corporate purposes. As of December 31, 2019, the total carrying value and estimated fair value were US$1.0 billion and US$1.0 billion, respectively, with respect to the 2023 Notes, and US$500 million and US$539 million, respectively, with respect to the 2028 March Notes. The estimated fair values were based on quoted prices for our publicly-traded debt securities as of December 31, 2019. We are not subject to any financial covenants or other significant restrictions under the notes. In 2019, the interest payments related to these notes were US$61 million.

In November 2018, we issued an aggregate of US$600 million senior unsecured notes due in 2024 (“2024 November Notes”), with stated annual interest rate of 4.38%, and an aggregate of US$400 million senior unsecured notes due in 2028 (“2028 November Notes”), with stated annual interest rate of 4.88%. In December 2018, we issued an aggregate of US$250 million senior unsecured notes due in 2024 (“2024 December Notes”), with stated annual interest rate of 4.38%, which constitute a further issuance of, and be fungible with and be consolidated and form a single series with the 2024 November Notes. The net proceeds from the sale of the notes were used to repay existing indebtedness and for general corporate purposes. As of December 31, 2019, the total carrying value and estimated fair value were US$600 million and US$637 million, respectively, with respect to the 2024 November Notes, US$400 million and US$448 million, respectively, with respect to the 2028 November Notes, US$400 million and US$448 million, respectively, with respect to the 2024 December Notes, and US$250 million and US$265 million, respectively, with respect to the 2024 December Notes. The estimated fair values were based on quoted prices for our publicly-traded debt securities as of December 31, 2019. We are not subject to any financial covenants or other significant restrictions under the notes. In 2019, the interest payments related to these notes were US$57 million.

iQIYI has conducted the following issuances of convertible notes, which remain outstanding as of the date of this annual report:

In December 2018, iQIYI issued US$750 million convertible senior notes due 2023 (“iQIYI 2023 Convertible Notes”). The iQIYI 2023 Convertible Notes are senior, unsecured obligations of iQIYI, and interest is payable semi-annually in cash at a rate of 3.75% per annum with a maturity date of December 1, 2023, unless previously repurchased, redeemed or converted prior to such date. The initial conversion rate of the iQIYI 2023 Convertible Notes is 37.1830 of iQIYI’s ADSs per US$1,000 principal amount of the iQIYI 2023 Convertible Notes. Upon conversion, iQIYI will pay or deliver to such converting holders, as the case may be, cash, ADSs, or a combination of cash and ADSs, at its election.

Concurrently with the issuance of the iQIYI 2023 Convertible Notes, iQIYI purchased capped call options on iQIYI’s ADS with certain counterparties at a price of US$68 million. The capped call exercise price is equal to the initial conversion price of the iQIYI 2023 Convertible Notes and the cap price is US$38.42 per ADS, subject to certain adjustments under the terms of the capped call transaction. The cost of the capped call was recorded as a reduction of the Company’s additional paid-
As the conversion option may be settled entirely or partially in cash at iQIYI’s option, the Company separated the iQIYI 2023 Convertible Notes into liability and equity components in accordance with ASC 470-20, Debt with Conversion and Other Options. The carrying amount of the liability component was calculated by measuring the fair value of a similar liability that does not have an associated conversion feature. The carrying amount of the equity component representing the conversion option was determined by deducting the fair value of the liability component from the initial proceeds and recorded as additional paid-in capital. Debt issuance costs were allocated to the liability and equity components based on the same proportion as the recognized amounts bifurcated based on gross proceeds from the iQIYI 2023 Convertible Notes. The difference between the principal amount of the iQIYI 2023 Convertible Notes and the liability component is considered debt discount and is amortized at an effective interest rate of 7.04% to accrete the discounted carrying value of the iQIYI 2023 Convertible Notes to its face value on December 1, 2021, the put date of the iQIYI 2023 Convertible Notes. The holders may require iQIYI to repurchase all or portion of the iQIYI 2023 Convertible Notes for cash on December 1, 2021, or upon a fundamental change, at a repurchase price equal to 100% of the principal amount, plus accrued and unpaid interest.

In March 2019, iQIYI issued US$1.2 billion convertible senior notes due 2025 ("iQIYI 2025 Convertible Notes"). The iQIYI 2025 Convertible Notes are senior, unsecured obligations of iQIYI, and interest is payable semi-annually in cash at a rate of 2.00% per annum with a maturity date of April 1, 2025, unless previously repurchased, redeemed or converted prior to such date. The initial conversion rate of the iQIYI 2025 Convertible Notes is 33.0003 of iQIYI’s ADSs per US$1,000 principal amount of the iQIYI 2025 Convertible Notes. Upon conversion, iQIYI will pay or deliver to such converting holders, as the case may be, cash, ADSs, or a combination of cash and ADSs, at its election.

Concurrently with the issuance of the iQIYI 2025 Convertible Notes, iQIYI purchased call options on iQIYI’s ADS with certain counterparties at a price of US$85 million. The capped call exercise price is equal to the initial conversion price of the iQIYI 2025 Convertible Notes and the cap price is US$40.02 per ADS, subject to certain adjustments under the terms of the capped call transaction. The cost of the capped call was recorded as a reduction of the Company’s additional paid-in capital and non-controlling interests on the consolidated balance sheets with no subsequent changes in fair value be recorded.

The accounting of iQIYI 2025 Convertible Notes is similar to that of iQIYI 2023 Convertible Notes. The difference between the principal amount of the iQIYI 2025 Convertible Notes and the liability component is considered debt discount and is amortized at an effective interest rate of 6.01% to accrete the discounted carrying value of the iQIYI 2025 Convertible Notes to its face value on April 1, 2023, the put date of the Notes. The holders may require iQIYI to repurchase all or portion of the iQIYI 2025 Convertible Notes for cash on April 1, 2023, or upon a fundamental change, at a repurchase price equal to 100% of the principal amount, plus accrued and unpaid interest.

The iQIYI 2023 Convertible Notes and the iQIYI 2025 Convertible Notes are collectively referred to the Convertible Notes. As of December 31, 2018 and 2019, the principal amount of the liability component of the Convertible Notes were RMB5.2 billion and RMB13.6 billion (US$2.0 billion), unamortized debt discounts were RMB446 million and RMB13.6 billion (US$184 million), and the net carrying amount of the liability component were RMB4.7 billion and RMB12.3 billion (US$1.8 billion), respectively. The carrying amount of the equity component of the Notes were RMB362 million and RMB1.3 billion (US$194 million), respectively. For the years ended December 31, 2018 and 2019, the amount of interest cost recognized relating to both the contractual interest coupon and amortization of the discount on the liability component were RMB24 million and RMB670 million (US$96 million), respectively. As of December 31, 2019, the liability component of the iQIYI 2023 Convertible Notes and the iQIYI 2025 Convertible Notes will be accreted up to the principal amount of US$750 million and US$1.2 billion over a remaining period of 1.92 years and 3.25 years, respectively.
We may use the net proceeds from our issuance and sale of the notes to fund the operations of our PRC subsidiaries by making additional capital contributions to our existing PRC subsidiaries, injecting capital to establish new PRC subsidiaries and/or providing loans to our PRC subsidiaries. Such transfer of funds from Baidu, Inc. or any of our offshore subsidiaries to our PRC subsidiaries is subject to the PRC regulatory restrictions and procedures: (i) capital increase of the existing PRC subsidiaries and establishment of new PRC subsidiaries must be registered with the local branch of SAMR and reported to the Ministry of Commerce via the online enterprise registration system, and registered with local banks authorized by SAFE; and (ii) loans to any of our PRC subsidiaries must not exceed the statutory limit and must be filed with SAFE. See “Item 3.D. Key Information—Risk Factors—Risks Related to Doing Business in China—PRC regulation of loans to and direct investment in PRC entities by offshore holding companies and governmental control of currency conversion may delay or prevent us from making loans to our PRC subsidiaries or consolidated affiliated entities, or making additional capital contributions to our PRC subsidiaries, which could adversely affect our ability to fund and expand our business.”

As of December 31, 2019, we had RMB51.9 billion (US$7.4 billion) in long-term loans and notes payables (including current portion of RMB6.0 billion (US$856 million)), RMB12.3 billion (US$1.8 billion) in long-term convertible notes and had RMB2.6 billion (US$376 million) in short-term loans. Our loans and notes payable, long-term convertible notes and short-term loans include those of iQIYI hereinafter. As of December 31, 2019, iQIYI had RMB1.6 billion (US$232 million) in long-term loans payables (including current portion of RMB737 million (US$106 million)), RMB12.3 billion (US$1.8 billion) in long-term convertible notes and had RMB2.6 billion (US$376 million) in short-term loans.

Cash Flows and Working Capital

As of December 31, 2017, 2018 and 2019, we had RMB100.7 billion, RMB141.5 billion and RMB147.4 billion (US$21.2 billion) in cash, cash equivalents, restricted cash and short-term investments.

The following table sets forth a summary of our cash flows for the years indicated:

<table>
<thead>
<tr>
<th>Year ended December 31,</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td>US$</td>
</tr>
<tr>
<td>Net cash provided by operating activities</td>
<td>32,828</td>
<td>35,967</td>
<td>4,088</td>
</tr>
<tr>
<td>Net cash used in investing activities</td>
<td>(76,949)</td>
<td>(34,460)</td>
<td>(2,869)</td>
</tr>
<tr>
<td>Net cash provided by (used in) financing activities</td>
<td>44,557</td>
<td>15,082</td>
<td>(556)</td>
</tr>
<tr>
<td>Effect of exchange rate changes on cash, cash equivalents and restricted cash</td>
<td>(316)</td>
<td>1,902</td>
<td>—</td>
</tr>
<tr>
<td>Net increase in cash, cash equivalents and restricted cash</td>
<td>120</td>
<td>18,491</td>
<td>4,612</td>
</tr>
<tr>
<td>Cash, cash equivalents and restricted cash at beginning of the year</td>
<td>11,216</td>
<td>11,336</td>
<td>4,284</td>
</tr>
<tr>
<td>Cash, cash equivalents and restricted cash at end of the year</td>
<td>11,336</td>
<td>29,827</td>
<td>4,947</td>
</tr>
</tbody>
</table>

Operating Activities

Net cash generated from operating activities decreased to RMB28.5 billion (US$4.1 billion) in 2019 from RMB36.0 billion in 2018. This decrease was primarily due to a decrease of RMB24.9 billion (US$3.6 billion) in net income, partially offset by an increase of RMB9.3 billion (US$1.3 billion) in impairment of long-term investments and other assets and an increase of RMB6.1 billion (US$877 million) in loss on disposal of subsidiaries.
Investing Activities

Net cash used in investing activities decreased to RMB20.0 billion (US$2.9 billion) in 2019 from RMB34.5 billion in 2018. This decrease was primarily due to a decrease of RMB22.3 billion (US$3.2 billion) in net cash outflow relating to purchasing short-term investments, an increase of RMB5.0 billion (US$717 million) in net cash inflow relating to proceeds from disposal of long-term investments, a decrease of RMB3.6 billion (US$513 million) in purchases of long-term investments, a decrease of RMB2.3 billion (US$337 million) in acquisition of property, plant and equipment, partially offset by a decrease of RMB10.8 billion (US$1.6 billion) in our net cash inflow relating to the financial services business we divested in 2018, a decrease of RMB6.1 billion (US$870 million) in our net cash inflow relating to the disposal of certain subsidiaries, and a decrease of RMB3.6 billion (US$519 million) in our net cash inflow relating to loans provided to related parties.

We have adopted ASU 2019-02 on January 1, 2020 which the FASB issued in March 2019, and report cash flows for the decrease or increase of acquisition of licensed copyrights as “operating activities” in the statement of cash flows, beginning with the period of adoption.

Financing Activities

Net cash used in financing activities was RMB3.9 billion (US$556 million) in 2019, compared to net cash generated from financing activities of RMB15.1 billion in 2018. The change was primarily due to a decrease of RMB18.1 billion (US$2.6 billion) in net proceeds from issuance of long-term notes, a decrease of RMB15.3 billion (US$2.2 billion) in the proceeds from non-controlling shareholders of our subsidiaries, which was primarily due to the initial public offering of iQIYI’s ADSs in 2018, a decrease of RMB3.7 billion (US$536 million) in the loans borrowed from related parties, a decrease in our net cash inflow of RMB3.5 billion (US$496 million) relating to the proceeds and repayments of loans borrowed by our subsidiary iQIYI, partially offset by a decrease in our net cash outflow of RMB21.3 billion (US$3.1 billion) relating to the financial services business we divested in 2018.

Capital Expenditures

We made capital expenditures of RMB4.8 billion, RMB8.8 billion and RMB6.4 billion (US$923 million) in 2017, 2018 and 2019, representing 6%, 9% and 6% of our total revenues (excluding the impact of VAT in 2017), respectively. In 2019, our capital expenditures were primarily attributable to the purchase of servers, network equipment and other computer hardware to increase our network infrastructure capacity. We funded our capital expenditures primarily with net cash flows generated from operating activities.

Our capital expenditures may increase in the future as our business continues to grow, in connection with the expansion and improvement of our network infrastructure and the construction of additional office buildings and cloud-computing based data centers. We currently plan to fund these expenditures with our current cash, cash equivalents, restricted cash, short-term investments and anticipated cash flow generated from our operating activities.

Holding Company Structure

Baidu, Inc. is a holding company with no operations of its own. We conduct our operations in China primarily through our subsidiaries and consolidated affiliated entities in China. As a result, although other means are available for us to obtain financing at the holding company level, Baidu, Inc.’s ability to pay dividends to the shareholders and to service any debt it may incur may depend upon dividends paid by our PRC subsidiaries and license and service fees paid by our PRC consolidated affiliated entities. If any of our subsidiaries incurs debt on its own behalf in the future, the instruments governing such debt may restrict its ability to pay dividends to Baidu, Inc. In addition, our PRC subsidiaries and consolidated affiliated entities are required to make appropriations to certain statutory reserve funds, which are not distributable as cash dividends except in the event of a solvent liquidation of the companies.
Our PRC subsidiaries, being foreign-invested enterprises established in China, are required to make appropriations to certain statutory reserves, namely, a general reserve fund, an enterprise expansion fund, a staff welfare fund and a bonus fund, all of which are appropriated from net profit as reported in their PRC statutory accounts. Each of our PRC subsidiaries is required to allocate at least 10% of its after-tax profits to a general reserve fund until such fund has reached 50% of its respective registered capital. Appropriations to the enterprise expansion fund and staff welfare and bonus funds are at the discretion of the board of directors of the PRC subsidiaries.

Our consolidated affiliated entities must make appropriations from their after-tax profits as reported in their PRC statutory accounts to non-distributable reserve funds, namely a statutory surplus fund, a statutory public welfare fund and a discretionary surplus fund. Each of our consolidated affiliated entities is required to allocate at least 10% of its after-tax profits to the statutory surplus fund until such fund has reached 50% of its respective registered capital. Appropriations to the statutory public welfare fund and the discretionary surplus fund are at the discretion of our consolidated affiliated entities.

Under PRC laws and regulations, our PRC subsidiaries and consolidated affiliated entities are subject to certain restrictions with respect to paying dividends or otherwise transferring any of their net assets to us. The amounts restricted include the paid-up capital and the statutory reserve funds of our PRC subsidiaries and the net assets of our consolidated affiliated entities in which we have no legal ownership, totaling RMB18.6 billion, RMB25.7 billion and RMB40.8 billion (US$5.9 billion) as of December 31, 2017, 2018 and 2019, respectively.

C. Research and Development

We have a team of experienced engineers who are mostly based in Beijing, Shanghai, Shenzhen and Sunnyvale, California. We recruit most of our engineers locally and have established various recruiting and training programs with leading universities in China. We have also recruited experienced engineers globally. We compete aggressively for engineering talent to help us address challenges such as Chinese language processing, artificial intelligence, deep learning and autonomous driving.

In the three years ended December 31, 2017, 2018 and 2019, our research and development expenditures, including share-based compensation expenses for research and development staff, were RMB12.9 billion, RMB15.8 billion and RMB18.3 billion (US$2.6 billion), representing 15%, 15% and 17% of our total revenues for the years ended December 31, 2017, 2018 and 2019, respectively. Our research and development expenses consist primarily of personnel-related costs. We have expensed substantially all of the development costs for the research and development of products and new functionality as incurred, except for certain internal-use software.

D. Trend Information

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events for the year ended December 31, 2019 that are reasonably likely to have a material and adverse effect on our net revenues, income, profitability, liquidity or capital resources, or that would cause the disclosed financial information to be not necessarily indicative of future results of operations or financial conditions.

E. Off-Balance Sheet Arrangements

We have not entered into any financial guarantees or other commitments to guarantee the payment obligations of any third parties. We have not entered into any off-balance sheet derivative instruments. Furthermore, we do not have any retained or contingent interest in assets transferred to an unconsolidated entity that serves as credit, liquidity or market risk support to such entity. We do not have any variable interest in any unconsolidated entity that provides financing, liquidity, market risk or credit support to us or engages in leasing, hedging or research and development services with us.
F. Contractual Obligations

The following table sets forth our contractual obligations by specified categories as of December 31, 2019:

<table>
<thead>
<tr>
<th>Payment Due by Period</th>
<th>Total</th>
<th>Less Than 1 Year</th>
<th>1-3 Years</th>
<th>3-5 Years</th>
<th>More Than 5 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(In RMB millions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term debt obligations (1)</td>
<td>75,655</td>
<td>8,085</td>
<td>23,149</td>
<td>20,456</td>
<td>23,965</td>
</tr>
<tr>
<td>Operating lease obligations (2)</td>
<td>7,465</td>
<td>2,350</td>
<td>3,012</td>
<td>1,708</td>
<td>395</td>
</tr>
<tr>
<td>Purchase obligations for fixed assets</td>
<td>560</td>
<td>559</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase obligations for bandwidth and property management fees</td>
<td>1,029</td>
<td>652</td>
<td>186</td>
<td>128</td>
<td>63</td>
</tr>
<tr>
<td>Purchase obligations for video content (3)</td>
<td>22,300</td>
<td>8,935</td>
<td>10,742</td>
<td>2,308</td>
<td>315</td>
</tr>
<tr>
<td>Investment commitment obligations (4)</td>
<td>1,277</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Total</td>
<td>108,286</td>
<td>20,581</td>
<td>37,090</td>
<td>24,600</td>
<td>24,738</td>
</tr>
</tbody>
</table>

(1) Including estimated interest payments of RMB10.0 billion in total (RMB2.2 billion, RMB3.8 billion, RMB2.3 billion and RMB1.7 billion over the periods of less than one year, one to three years, three to five years and more than five years from December 31, 2019, respectively). Please see “Loans Payable” under Note 10, “Notes Payable” under Note 11 and “Convertible Notes” under Note 12 to our audited consolidated financial statements.

(2) Operating lease obligations represent our obligations for leasing internet data center facilities and office premises, which include all future cash outflows under ASC Topic 842, Leases. Please see “Leases” under Note 13 to our audited consolidated financial statements.

(3) Purchase obligations for video content consist primarily of expenditures for video content under non-cancelable agreements for licensed copyrights and produced content.

(4) Our investment commitments primarily relate to capital contributions obligation under certain arrangements which do not have contractual maturity date.

Subsequent to December 31, 2019, we started the process of acquiring the equity interest of one of our investees that we do not currently own for approximately US$300 million.

Other than the contractual obligations set forth above, we do not have any contractual obligations that are long-term debt obligations, operating lease obligations, purchase obligations, investment commitment obligations or other long-term liabilities reflected on our consolidated balance sheet.

Item 6. Directors, Senior Management and Employees

A. Directors and Senior Management

The following table sets forth information regarding our executive officers and directors as of the date of this annual report.

<table>
<thead>
<tr>
<th>Directors and Executive Officers</th>
<th>Age</th>
<th>Position/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robin Yanhong Li</td>
<td>51</td>
<td>Chairman of the Board of Directors and Chief Executive Officer</td>
</tr>
<tr>
<td>Herman Yu</td>
<td>49</td>
<td>Chief Financial Officer</td>
</tr>
<tr>
<td>Haifeng Wang</td>
<td>48</td>
<td>Chief Technology Officer</td>
</tr>
<tr>
<td>Dou Shen</td>
<td>40</td>
<td>Executive Vice President</td>
</tr>
<tr>
<td>Shanshan Cui</td>
<td>44</td>
<td>Senior Vice President</td>
</tr>
<tr>
<td>James Ding</td>
<td>54</td>
<td>Independent Director</td>
</tr>
<tr>
<td>Brent Callinicos</td>
<td>54</td>
<td>Independent Director</td>
</tr>
<tr>
<td>Yuanqing Yang</td>
<td>55</td>
<td>Independent Director</td>
</tr>
<tr>
<td>Jixun Foo</td>
<td>51</td>
<td>Independent Director</td>
</tr>
</tbody>
</table>

Robin Yanhong Li is our co-founder, chief executive officer and chairman of our Board of Directors, overseeing our overall strategy and business operations. Mr. Li has been serving as the chairman since our inception in January 2000 and as our chief executive officer since February 2004. Mr. Li served as our president from February 2000 to December 2003. Prior to founding our company, Mr. Li worked as an engineer for Infoseek, a pioneer in the search industry, and as a senior consultant for IDD Information Services. Mr. Li currently serves on the board of New Oriental Education & Technology Group Inc., a private educational services provider in China (NYSE: EDU), and Trip.com, an online travel agency in China (NASDAQ: TCOM).
Mr. Li received a bachelor’s degree in information science from Peking University and a master’s degree in computer science from the State University of New York at Buffalo.

Herman Yu has served as our chief financial officer since September 2017, overseeing our finance and purchasing functions. Prior to joining Baidu, Mr. Yu served as the chief financial officer of Weibo Corporation, a social media company (NASDAQ: WB) from 2015 to 2017. Prior to Weibo, Mr. Yu worked at SINA Corporation, a portal (NASDAQ: SINA) from 2004 to 2015, with the last eight years as chief financial officer. Mr. Yu began his career at Arthur Andersen and held various finance and accounting management positions at Adobe Systems Inc., Cadence Design Systems, Inc. and VeriFone Systems, Inc. Mr. Yu currently serves on the board of directors of 58.com Inc., an online classifieds listing company (NYSE: WUBA), and ZTO Express Inc., an express delivery company (NYSE: ZTO). Mr. Yu, a California Certified Public Accountant, received his bachelor’s degree in economics from the University of California, Santa Cruz, and master’s degree in accountancy from the University of Southern California.

Haifeng Wang has served as our chief technology officer since May 2019, overseeing our AI lab, systems & technology and cloud group. Dr. Wang joined Baidu in 2010 and was promoted to vice president in 2013. Dr. Wang oversaw our core search products from 2014 to 2017. He was promoted to senior vice president in 2018. Prior to Baidu, Dr. Wang served as the chief research scientist at Toshiba’s R&D Center from 2002 to 2010. Dr. Wang is the president of National Engineering Laboratory for Deep Learning Technology and Applications. Dr. Wang was a fellow (and former president) of the Association for Computational Linguistics (ACL) and the founding chair of ACL’s Asia-Pacific chapter. Dr. Wang obtained his bachelor’s, master’s, and Ph.D. degrees in computer science from the Harbin Institute of Technology.

Dou Shen has served as executive vice president since May 2019. Previously, Dr. Shen served as senior vice president of Baidu’s mobile products, overseeing the development of Baidu App, Haokan short video app and Smart Mini Program. Dr. Shen joined Baidu in 2012 and has served in various management roles, including web search, display advertising and the financial services group. Prior to Baidu, Dr. Shen worked in the adCenter group at Microsoft and sold Buzzlabs, a social media monitoring and analysis platform company that he co-founded, to IAC-owned CityGrid Media. Dr. Shen currently serves on the board of directors of Trip.com, an online travel agency in China (NASDAQ: TCOM). Dr. Shen received a bachelor’s degree in engineering from North China Electric Power University, a master’s degree in engineering from Tsinghua University, and a Ph.D. in computer science from the Hong Kong University of Science and Technology.

Shanshan Cui currently serves as our senior vice president in charge of human resources and administrative functions since May 2019. Ms. Cui joined us in January 2000 overseeing the search technology group, and is a founding member of the company. Ms. Cui left Baidu in July 2010 to pursue personal interests and rejoined Baidu in December 2017, initially serving as executive assistant to our Organizational Culture Committee. In this capacity, Ms. Cui oversaw employee culture and organization effectiveness, implementing initiatives, such as OKR (objectives & key results) management, throughout the company. Ms. Cui received a bachelor’s degree in computer science from Beijing Institute of Technology and a master’s degree in computer science from the University of Chinese Academy of Sciences.

James Ding has served as our independent director since our initial public offering in August 2005. Mr. Ding is currently a managing director of GSR Ventures, which focuses on early stage companies in the artificial intelligence, big data, information technology related healthcare, virtual reality/augmented reality and new media sectors. Prior to that, Mr. Ding served as a co-chairman of the board of directors of AsiaInfo-Linkage Inc., a former NASDAQ-listed company, from July 2010 to January 2014. Mr. Ding also served as the chairman of the board of AsiaInfo from April 2003 to July 2010, and has served as a member of the board since AsiaInfo’s inception in 1993. Mr. Ding served as the chief executive officer and president of AsiaInfo from 1999 to 2003 and as senior vice president and chief technology officer of AsiaInfo from 1993 to 1999. Mr. Ding currently serves as director of the board of AsiaInfo. Mr. Ding received a master’s degree in information science from the University of California, Los Angeles and a bachelor’s degree in chemistry from Peking University in China.
Brent Callinicos has served as our independent director since October 2015, and as the chairman of our audit committee since April 2016. Mr. Callinicos served as the chief operating officer and the chief financial officer of Virgin Hyperloop One from January 2017 to February 2018. Prior to that, Mr. Callinicos served as the chief financial officer of Uber Technologies Inc. from September 2013 to March 2015, and then as an advisor for 18 additional months. Prior to joining Uber, he worked at Google from January 2007 to September 2013, where he last served as vice president, treasurer and chief accountant. He also led green energy investments and financial services at Google Inc. From 1992 to 2007, he served in a variety of increasingly senior roles at Microsoft Corporation, where he last served as corporate vice-president and divisional chief financial officer of the Platforms and Services Division, and oversaw Microsoft’s Worldwide Licensing and Pricing and Microsoft Financing. He currently serves on the board of directors of PVH Corp. (NYSE: PVH), and Rubicon Global, a private company. Mr. Callinicos is a certified public accountant. Mr. Callinicos received a bachelor’s degree from the University of North Carolina at Chapel Hill and an M.B.A. degree from the Kenan-Flagler School of Business at Chapel Hill.

Yuanqing Yang has served as our independent director since October 2015. Mr. Yang is currently the chairman and chief executive officer of Lenovo Group Limited, a Hong Kong-listed company, a director of Sureinvest Holdings Limited and Taikang Insurance Group. Mr. Yang joined Lenovo in 1989 and has led the company from the initial China-based PC maker to a diversified global technology leader. In 2011, FinanceAsia named Mr. Yang the Best CEO in China. In 2004 and 2012, Mr. Yang was named one of the “CCTV China Annual Economic Figures.” He was on Barron’s list of Best CEOs in 2013, 2014 and 2015. In 2014, Mr. Yang won an Edison Achievement Award for Innovation. Mr. Yang currently serves as a deputy to the 13th National People’s Congress of China. Mr. Yang holds a master’s degree in computer science from the University of Science and Technology of China.

Jixun Foo has served as our independent director since July 2019. Mr. Foo has served as managing partner at GGV Capital since 2006, working with entrepreneurs in the travel, transportation, social media, e-commerce and enterprise services sectors in China. Prior to joining GGV Capital, Mr. Foo was a director at Draper Fisher Jurvetson ePlanet Ventures, where he led investments in Asia. Mr. Foo also previously led investments under the finance and investment division of the National Science and Technology Board of Singapore and served as an R&D project group leader at Hewlett Packard. Mr. Foo currently serves on the boards of a number of private companies, including XPeng Motors, Hello, Boss Zhipin and Zuiyou. Mr. Foo received a First-Class Honors bachelor’s degree in engineering and a master’s degree in the management of technology from the National University of Singapore.

B. Compensation

In 2019, we paid an aggregate of RMB22 million (US$3 million) in cash compensation and granted options to purchase an aggregate of 27,466 Class A ordinary shares and 36,785 restricted Class A ordinary shares to our executive officers that are in office as of the date of this annual report as a group. We also paid an aggregate of RMB487,000 (US$70,000) in cash compensation and granted options to purchase an aggregate of 151 restricted Class A ordinary shares to our non-executive directors as a group. Our PRC subsidiaries and consolidated affiliated entities are required by law to make contributions equal to certain percentages of each employee’s salary for his or her pension insurance, medical insurance, housing fund, unemployment insurance and other statutory benefits. Other than the above-mentioned statutory contributions mandated by applicable PRC law, we have not set aside or accrued any amount to provide pension, retirement or other similar benefits to our executive officers and directors. No executive officer is entitled to any severance benefits upon termination of his or her employment with our company except as required under applicable PRC law.

Our board of directors and shareholders approved the issuance of up to 5,040,000 ordinary shares upon exercise of awards granted under our 2000 option plan. Our 2000 option plan terminated in January 2010 upon the expiration of its ten-year term. At the annual general meeting held on December 16, 2008, our shareholders approved a 2008 share incentive plan, which has reserved an additional 5,428,777 Class A ordinary shares for awards to be granted pursuant to its terms. Our 2008 share incentive plan terminated in December 2018 upon the
expiration of its ten-year term. On July 20, 2018, our board of directors approved a 2018 share incentive plan, which has reserved an additional 3,443,950 Class A ordinary shares for awards to be granted pursuant to its terms. As of December 31, 2019, options to purchase an aggregate of 649,514 Class A ordinary shares and an aggregate of 2,434,651 restricted Class A ordinary shares had been granted under the 2008 and 2018 share incentive plans.

The following table summarizes, as of December 31, 2019, the outstanding options and restricted Class A ordinary shares that we had granted to our current directors and executive officers and to other individuals as a group. Each Class A ordinary share is represented by 10 ADSs.

<table>
<thead>
<tr>
<th>Name</th>
<th>Ordinary Shares Underlying Outstanding Options</th>
<th>Exercise Price (US$/Share)</th>
<th>Grant Date</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robin Yanhong Li</td>
<td>4,247</td>
<td>1,058.90</td>
<td>January 25, 2011</td>
<td>January 25, 2021</td>
</tr>
<tr>
<td></td>
<td>4,279</td>
<td>1,418.30</td>
<td>February 16, 2012</td>
<td>2022</td>
</tr>
<tr>
<td></td>
<td>10,598</td>
<td>1,083.00</td>
<td>January 31, 2013</td>
<td>January 31, 2023</td>
</tr>
<tr>
<td></td>
<td>2,415</td>
<td>1,725.30</td>
<td>February 24, 2014</td>
<td>2024</td>
</tr>
<tr>
<td></td>
<td>11,977</td>
<td>2,146.70</td>
<td>February 11, 2015</td>
<td>February 11, 2025</td>
</tr>
<tr>
<td></td>
<td>43,904</td>
<td>2,069.00</td>
<td>April 16, 2015</td>
<td>April 16, 2025</td>
</tr>
<tr>
<td></td>
<td>14,634(1)</td>
<td>—</td>
<td>April 16, 2015</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>2,638</td>
<td>1,582.20</td>
<td>February 25, 2016</td>
<td>2026</td>
</tr>
<tr>
<td></td>
<td>9,060</td>
<td>1,751.00</td>
<td>October 27, 2016</td>
<td>October 27, 2026</td>
</tr>
<tr>
<td></td>
<td>883(1)</td>
<td>—</td>
<td>October 27, 2016</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>5,864</td>
<td>1,860.10</td>
<td>February 22, 2017</td>
<td>2027</td>
</tr>
<tr>
<td></td>
<td>2,760(1)</td>
<td>—</td>
<td>February 22, 2017</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>7,449(1)</td>
<td>—</td>
<td>February 9, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>13,105(1)</td>
<td>—</td>
<td>February 18, 2019</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>3,757(1)</td>
<td>—</td>
<td>May 23, 2019</td>
<td>N/A</td>
</tr>
<tr>
<td>Herman Yu</td>
<td>*</td>
<td>0.1</td>
<td>February 9, 2018</td>
<td>February 9, 2028</td>
</tr>
<tr>
<td></td>
<td>*</td>
<td>0.1</td>
<td>February 18, 2019</td>
<td>2029</td>
</tr>
<tr>
<td></td>
<td>*</td>
<td>0.1</td>
<td>May 23, 2019</td>
<td>May 23, 2029</td>
</tr>
<tr>
<td>Dou Shen</td>
<td>w(1)</td>
<td>—</td>
<td>February 25, 2016</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>February 22, 2017</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>July 26, 2017</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>February 9, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>February 18, 2019</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>May 23, 2019</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>*</td>
<td>998.90</td>
<td>August 8, 2019</td>
<td>August 8, 2029</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>August 8, 2019</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>October 28, 2019</td>
<td>N/A</td>
</tr>
<tr>
<td>Hai Feng Wang</td>
<td>w(1)</td>
<td>—</td>
<td>February 25, 2016</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>February 22, 2017</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>*</td>
<td>1,878.60</td>
<td>April 27, 2017</td>
<td>April 27, 2027</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>April 27, 2017</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>February 9, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>July 21, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>February 18, 2019</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>May 23, 2019</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>*</td>
<td>998.90</td>
<td>August 8, 2019</td>
<td>August 8, 2029</td>
</tr>
<tr>
<td>Shanshan Cui</td>
<td>w(1)</td>
<td>—</td>
<td>February 9, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>February 18, 2019</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>w(1)</td>
<td>—</td>
<td>May 23, 2019</td>
<td>N/A</td>
</tr>
<tr>
<td>Jixun Foo</td>
<td>w(1)</td>
<td>—</td>
<td>August 8, 2019</td>
<td>N/A</td>
</tr>
<tr>
<td>James Ding</td>
<td>w(1)</td>
<td>—</td>
<td>February 9, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>Brent Callinicos</td>
<td>w(1)</td>
<td>—</td>
<td>February 9, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>Yuanqing Yang</td>
<td>w(1)</td>
<td>—</td>
<td>February 9, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>Other individuals as a group</td>
<td>1,595,131</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

* The options and restricted shares in aggregate held by each of these directors and officers represent less than 1% of our total outstanding shares.

(1) Restricted shares.
The following paragraphs summarize the key terms of our 2008 share incentive plan adopted on December 16, 2008 and our 2018 share incentive plan adopted on July 20, 2018:

2008 Share Incentive Plan

Types of Awards. We may grant the following types of awards under our 2008 share incentive plan:

- options;
- restricted shares;
- restricted share units; and
- any other form of awards granted to a participant pursuant to the 2008 plan.

Plan Administration. The compensation committee of our board of directors administers our 2008 share incentive plan, but may delegate to a committee of one or more members of our board of directors the authority to grant or amend awards to participants other than independent directors and executive officers. The compensation committee will determine the provisions and terms and conditions of each award grant, including, but not limited to, the exercise price, the grant price or purchase price, any restrictions or limitations on the award, any schedule for lapse of forfeiture restrictions or restrictions on the exercisability of an award, and accelerations or waivers thereof, any provisions related to non-competition and recapture of gain on an award, based in each case on such considerations as the committee in its sole discretion determines. The compensation committee has the sole power and discretion to cancel, forfeit or surrender an outstanding award (whether or not in exchange for another award or combination or awards).

Award Agreement. Awards granted under our 2008 share incentive plan are evidenced by an award agreement that sets forth the terms, conditions and limitations for each award which may include the term of an award, the provisions applicable in the event the participant’s employment or service ends, and our authority to unilaterally or bilaterally amend, modify, suspend, cancel or rescind an award.

Eligibility. We may grant awards to employees, directors and consultants of our company or any of our related entities, which include our subsidiaries or any entities in which we hold a substantial ownership interest. However, we may grant ISOs only to our employees and employees of our majority-owned subsidiaries.

Acceleration of Awards upon Corporate Transactions. The outstanding awards will accelerate (i) upon occurrence of a change-of-control corporate transaction where any person acquires at least 50% of the total combined voting power of our outstanding securities or the incumbent board members no longer constitute at least 50% of our board, or (ii) upon occurrence of any other change-of-control corporate transaction in which the successor entity does not assume our outstanding awards under our 2008 share incentive plan, provided that the plan participant remains an employee, consultant or member of our board of directors on the effective date of the corporate transaction. In such event, each outstanding award will become fully exercisable and all forfeiture restrictions on such award will lapse immediately prior to the specified effective date of the corporate transaction.

If the successor entity assumes our outstanding awards and later terminates the grantee’s employment or service without cause within 12 months of the corporate transaction, or if the grantee resigns voluntarily with good reason, the outstanding awards automatically will become fully vested and exercisable. The compensation committee may also, in its sole discretion, upon or in anticipation of a corporate transaction, accelerate awards, purchase the awards from the plan participants, replace the awards, or provide for the payment of the awards in cash.
Table of Contents

Exercise Price and Term of Awards. The exercise price per share subject to an option may be amended or adjusted in the absolute discretion of the compensation committee, the determination of which shall be final, binding and conclusive. To the extent not prohibited by applicable laws or exchange rules, a downward adjustment of the exercise prices of options mentioned in the preceding sentence shall be effective without the approval of our shareholders or the approval of the affected grantees. If we grant an ISO to an employee, who, at the time of that grant, owns shares representing more than 10% of the voting power of all classes of our share capital, the exercise price cannot be less than 110% of the fair market value of our ordinary shares on the date of that grant. The compensation committee will determine the time or times at which an option may be exercised in whole or in part, including exercise prior to vesting. The term may not exceed ten years from the date of the grant, except that five years is the maximum term of an ISO granted to an employee who holds more than 10% of the voting power of our share capital.

Restricted Shares and Restricted Share Units. The compensation committee is also authorized to make awards of restricted shares and restricted share units. Except as otherwise determined by the compensation committee at the time of the grant of an award or thereafter, upon termination of employment or service during the applicable restriction period, restricted shares that are at the time subject to restrictions shall be forfeited or repurchased in accordance with the respective award agreements.

Vesting Schedule. The compensation committee determines, and the award agreement specifies, the vesting schedule of options and other awards granted. The compensation committee determines the time or times at which an option may be exercised in whole or in part, including exercise prior to vesting, and also determines any conditions that must be satisfied before all or part of an option may be exercised. At the time of grant for restricted share units, the compensation committee specifies the date on which the restricted share units become fully vested and non-forfeitable, and may specify such conditions to vesting as it deems appropriate.

Amendment and Termination. With the approval of our board of directors, the compensation committee may at any time amend, suspend or terminate our 2008 share incentive plan. Amendments to our 2008 share incentive plan are subject to shareholder approval, to the extent required by law, or by stock exchange rules or regulations. Any amendment, suspension or termination of our 2008 share incentive plan must not adversely affect in any material way awards already granted without written consent of the recipient of such awards. Unless terminated earlier, our 2008 share incentive plan shall continue in effect for a term of ten years from the date of adoption.

2018 Share Incentive Plan

Types of Awards. We may grant the following types of awards under our 2018 share incentive plan:

• options;
• restricted shares;
• restricted share units; and
• any other form of awards granted to a participant pursuant to the 2018 plan.

Plan Administration. The compensation committee of our board of directors administers our 2018 share incentive plan, but may delegate to a committee of one or more members of our board of directors the authority to grant or amend awards to participants other than independent directors and executive officers. The compensation committee will determine the provisions and terms and conditions of each award grant, including, but not limited to, the exercise price, the grant price or purchase price, any restrictions or limitations on the award, any schedule for lapse of forfeiture restrictions or restrictions on the exercisability of an award, and accelerations or waivers thereof, any provisions related to non-competition and recapture of gain on an award, based in each case on such considerations as the committee in its sole discretion determines. The compensation committee has the sole power and discretion to cancel, forfeit or surrender an outstanding award (whether or not in exchange for another award or combination or awards).
Award Agreement. Awards granted under our 2018 share incentive plan are evidenced by an award agreement that sets forth the terms, conditions and limitations for each award which may include the term of an award, the provisions applicable in the event the participant’s employment or service ends, and our authority to unilaterally or bilaterally amend, modify, suspend, cancel or rescind an award.

Eligibility. We may grant awards to employees, directors and consultants of our company or any of our related entities, which include our subsidiaries or any entities in which we hold a substantial ownership interest. However, we may grant ISOs only to our employees and employees of our majority-owned subsidiaries.

Acceleration of Awards upon Corporate Transactions. The outstanding awards will accelerate (i) upon occurrence of a change-of-control corporate transaction where any person acquires at least 50% of the total combined voting power of our outstanding securities or the incumbent board members no longer constitute at least 50% of our board, or (ii) upon occurrence of any other change-of-control corporate transaction in which the successor entity does not assume our outstanding awards under our 2018 share incentive plan, provided that the plan participant remains an employee, consultant or member of our board of directors on the effective date of the corporate transaction. In such event, each outstanding award will become fully exercisable and all forfeiture restrictions on such award will lapse immediately prior to the specified effective date of the corporate transaction.

If the successor entity assumes our outstanding awards and later terminates the grantee’s employment or service without cause within 12 months of the corporate transaction, or if the grantee resigns voluntarily with good reason, the outstanding awards automatically will become fully vested and exercisable. The compensation committee may also, in its sole discretion, upon or in anticipation of a corporate transaction, accelerate awards, purchase the awards from the plan participants, replace the awards, or provide for the payment of the awards in cash.

Exercise Price and Term of Awards. The exercise price per share subject to an option may be amended or adjusted in the absolute discretion of the compensation committee, the determination of which shall be final, binding and conclusive. To the extent not prohibited by applicable laws or exchange rules, a downward adjustment of the exercise prices of options mentioned in the preceding sentence shall be effective without the approval of our shareholders or the approval of the affected grantees. If we grant an ISO to an employee, who, at the time of that grant, owns shares representing more than 10% of the voting power of all classes of our share capital, the exercise price cannot be less than 110% of the fair market value of our ordinary shares on the date of that grant. The compensation committee will determine the time or times at which an option may be exercised in whole or in part, including exercise prior to vesting. The term may not exceed ten years from the date of the grant, except that five years is the maximum term of an ISO granted to an employee who holds more than 10% of the voting power of our share capital.

Restricted Shares and Restricted Share Units. The compensation committee is also authorized to make awards of restricted shares and restricted share units. Except as otherwise determined by the compensation committee at the time of the grant of an award or thereafter, upon termination of employment or service during the applicable restriction period, restricted shares that are at the time subject to restrictions shall be forfeited or repurchased in accordance with the respective award agreements.

Vesting Schedule. The compensation committee determines, and the award agreement specifies, the vesting schedule of options and other awards granted. The compensation committee determines the time or times at which an option may be exercised in whole or in part, including exercise prior to vesting, and also determines any conditions that must be satisfied before all or part of an option may be exercised. At the time of grant for restricted share units, the compensation committee specifies the date on which the restricted share units become fully vested and non-forfeitable, and may specify such conditions to vesting as it deems appropriate.

Amendment and Termination. With the approval of our board of directors, the compensation committee may at any time amend, suspend or terminate our 2018 share incentive plan. To the extent the Company decides to not
to follow home country practice, Amendments to our 2018 share incentive plan are subject to shareholder approval, to the extent required by law, or by stock exchange rules or regulations. Any amendment, suspension or termination of our 2018 share incentive plan must not adversely affect in any material way awards already granted without written consent of the recipient of such awards. Unless terminated earlier, our 2018 share incentive plan shall continue in effect for a term of ten years from the date of adoption.

C. Board Practices

Board of Directors

Our board of directors has five directors. A director is not required to hold any shares in the company by way of qualification. A director may vote with respect to any contract, proposed contract or arrangement in which he is materially interested. A director may exercise all the powers of the company to borrow money, mortgage its undertakings, property and uncalled capital, and issue debentures or other securities whenever money is borrowed or as security for any obligation of the company or of any third party. The remuneration to be paid to the directors is determined by the board of directors. There is no age limit requirement for directors.

Committees of the Board of Directors

We have three committees under the board of directors: an audit committee, a compensation committee and a corporate governance and nominating committee. We have adopted a charter for each of the three committees.

Audit Committee

Our audit committee consists of Brent Callinicos, James Ding and Yuanqing Yang, all of whom satisfy the “independence” requirements of Rule 5605(a)(2) of the NASDAQ Stock Market Rules and Rule 10A-3 under the Exchange Act. Our board of directors has determined that Mr. Callinicos is an audit committee financial expert as defined in the instructions to Item 16A of the Form 20-F. The audit committee oversees our accounting and financial reporting processes and the audits of the financial statements of our company. The audit committee is responsible for, among other things:

- appointing, retaining and overseeing the work of the independent auditors, including resolving disagreements between the management and the independent auditors relating to financial reporting;
- pre-approving all auditing and non-auditing services permitted to be performed by the independent auditors;
- reviewing annually the independence and quality control procedures of the independent auditors;
- reviewing and approving all proposed related party transactions;
- discussing the annual audited financial statements with the management;
- meeting separately with the independent auditors to discuss critical accounting policies, management letters, recommendations on internal controls, the auditor’s engagement letter and independence letter and other material written communications between the independent auditors and the management; and
- attending to such other matters that are specifically delegated to our audit committee by our board of directors from time to time.

In 2019, our audit committee held meetings or passed resolutions by unanimous written consent six times.

Compensation Committee

Our compensation committee consists of James Ding, Yuanqing Yang and Jixun Foo, all of whom satisfy the “independence” requirements of Rule 5605(a)(2) of the NASDAQ Stock Market Rules. The compensation committee...
committee assists the board in reviewing and approving our compensation structure, including all forms of compensation relating to our directors and executive officers. Our chief executive officer may not be present at any committee meeting while his compensation is deliberated. The compensation committee is responsible for, among other things:

- reviewing and approving, or recommending to the board for its approval, the compensation for our chief executive officer and other executive officers;
- reviewing and recommending to the board for determination with respect to the compensation of our non-employee directors;
- reviewing periodically and approving any incentive compensation or equity plans, programs or similar arrangements; and
- selecting compensation consultant, legal counsel or other adviser only after taking into consideration all factors relevant to that person’s independence from management.

In 2019, our compensation committee held meetings or passed resolutions by unanimous written consent five times.

Corporate Governance and Nominating Committee

Our corporate governance and nominating committee consists of James Ding and Yuanqing Yang, both of whom satisfy the “independence” requirements of Rule 5605(a) (2) of the NASDAQ Stock Market Rules. The corporate governance and nominating committee assists the board of directors in selecting individuals qualified to become our directors and in determining the composition of the board and its committees. The corporate governance and nominating committee is responsible for, among other things:

- recommending to the board nominees for election or re-election to the board or for appointments to fill any vacancies;
- reviewing annually the performance of each incumbent director in determining whether to recommend such director for an additional term;
- overseeing the board in the board’s annual review of its own performance and the performance of the management; and
- considering, preparing and recommending to the board such policies and procedures with respect to corporate governance matters as may be required or required to be disclosed under the applicable laws or otherwise considered to be material.

In 2019, our corporate governance and nominating committee passed resolutions by unanimous written consent twice.

Terms of Directors and Executive Officers

All directors hold office until their successors have been duly elected and qualified. None of our directors is subject to a fixed term of office. In addition, the service agreements between us and the directors do not provide benefits upon termination of their services. Director nomination is subject to the approval of our corporate governance and nominating committee. Our shareholders may remove any director by ordinary resolution and may in like manner appoint another person in his stead. A valid ordinary resolution requires a majority of the votes cast at a shareholder meeting that is duly constituted and meets the quorum requirement. Officers are elected by and serve at the discretion of the board of directors.

D. Employees

We had 36,628, 40,127 and 37,779 full time employees as of December 31, 2017, 2018 and 2019, respectively. As of December 31, 2019, we had 21,626 employees in research and development, 9,727 employees
in sales and marketing, 4,056 employees in operation and service, and 2,370 employees in management and administration. As of December 31, 2019, we had 24,091 employees in Beijing, 13,390 employees outside of Beijing but within China, and 298 employees outside of China.

We also hire temporary employees and contractors from time to time. Our employees are not covered by any collective bargaining agreement. We consider our relations with our employees to be generally good. However, as our operations and employee base further expand, we cannot assure you that we will always be able to maintain good relations with all of our employees. See “Item 3.D. Key Information—Risk Factors—Risks Related to Our Business—We may not be able to manage our expanding operations effectively.”

E. Share Ownership

The following table sets forth information with respect to the beneficial ownership of our shares as of January 31, 2020 by:

- each of our current directors and executive officers; and
- each person known to us to own beneficially more than 5% of our shares.

See “—B. Compensation” for more details on options and restricted shares granted to our directors and executive officers.

| Directors and Executive Officers: | Shares Beneficially Owned | %
|----------------------------------|---------------------------|
| Robin Yanhong Li (1)             | 5,692,798                 | 16.4%
| Herman Yu                       | *                         | *%
| Dou Shen                        | *                         | *%
| Haifeng Wang                    | *                         | *%
| Shanshan Cui                    | *                         | *%
| James Ding (4)                  | *                         | *%
| Brent Callinicos (5)            | *                         | *%
| Yuanqing Yang (6)               | *                         | *%
| Jixun Foo (7)                   | *                         | *%
| All Directors and Executive Officers as a Group (8) | 5,713,741 | 16.5%

Principal Shareholders:

Handsome Reward Limited (9) 5,490,000 15.8%

* Less than 1% of our total outstanding Class A ordinary shares and Class B ordinary shares.
** Except for James Ding, Yuanqing Yang, Brent Callinicos and Jixun Foo, the business address of our directors and executive officers is c/o Baidu, Inc., Baidu Campus, No. 10 Shangdi 10th Street, Haidian District, Beijing 100085, PRC.
(1) The number of shares beneficially owned by each named director and executive officer includes the shares beneficially owned by such person, the shares underlying all options held by such person that have vested or will vest within 60 days after January 31, 2020, and restricted shares held by such person that will vest within 60 days after January 31, 2020. The options and restricted shares were granted under our 2008 share incentive plan and 2018 share incentive plan.
(2) Percentage of beneficial ownership of each named director and executive officer is based on 34,584,829 ordinary shares (consisting of 27,383,575 Class A ordinary shares and 7,201,254 Class B ordinary shares) of our company outstanding as of January 31, 2020, the number of ordinary shares underlying options that have vested or will vest within 60 days after January 31, 2020, and the number of restricted shares that will vest within 60 days after January 31, 2020, each as held by such person as of that date.
(3) Includes (i) 37,660 Class A Ordinary Shares directly held by Mr. Li on record, (ii) 21,897 Class A ordinary shares in the form of ADSs held in the brokerage account of the administrator of our employee stock option program, (iii) 44,688 restricted Class A Ordinary Shares that had vested as of January 31, 2020, (iv) 98,568 Class A Ordinary Shares issuable upon exercise of options and vesting of restricted shares within 60 days after the date of January 31, 2020, (v) 5,490,000 Class B Ordinary Shares held by Handsome Reward Limited, a British Virgin Islands company wholly owned and controlled by Mr. Li, and (vi) excludes 1,510,000 Class B Ordinary Shares owned by Melissa Ma, Mr. Li’s wife, who also had 8,722 ADSs in the brokerage account of the administrator of our employee stock option program and the right to acquire 1,523 Class A Ordinary Shares upon the vesting of restricted share units granted under the Company’s share incentive plan within 60 days after January 31, 2020, of which Mr. Li disclaims beneficial ownership. The voting power of the shares beneficially owned by Mr. Li represented 55.4% of the total outstanding voting power of our company as of January 31, 2020.
(4) The business address of Mr. Ding is 56/F, China World Tower 3, No. 1 Jianguomenwai Street, Chaoyang District, Beijing 100004, PRC.
The residential address of Mr. Callinicos is 4110 Woodleigh Lane, La Canada Flintridge, CA 91011, USA.

The business address of Mr. Yang is Lenovo Headquarter East, Building 1, No. 10 Courtyard Xibeiwang East Road, Haidian District, Beijing 100094, PRC.

The business address of Mr. Foo is 35/F, Shanghai International Finance Center 2, No. 8 Century Avenue, Pudong, Shanghai 200120, PRC.

Includes ordinary shares, ordinary shares issuable upon exercise of options and restricted shares, held by all of our directors and executive officers as a group.

Represents 5,490,000 Class B ordinary shares held by Handsome Reward Limited, a British Virgin Island company wholly owned and controlled by Mr. Robin Yanhong Li. The business address of Handsome Reward Limited is c/o Robin Yanhong Li, Baidu, Inc., Baidu Campus, No. 10 Shangdi 10th Street, Haidian District, Beijing 100085, PRC.

Our ordinary shares are divided into Class A ordinary shares and Class B ordinary shares. Holders of Class A ordinary shares are entitled to one vote per share, while holders of Class B ordinary shares are entitled to ten votes per share. We issued Class A ordinary shares represented by our ADSs in our initial public offering in 2005. Holders of our Class B ordinary shares may choose to convert their Class B ordinary shares into the same number of Class A ordinary shares at any time. We are not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

As of January 31, 2020, 34,584,829 of our ordinary shares were issued and outstanding. To our knowledge, approximately 80% of our total outstanding ordinary shares were held by four record shareholders in the United States, including approximately 79% held by The Bank of New York Mellon, the depositary of our ADS program. The number of beneficial owners of our ADSs in the United States is likely to be much larger than the number of record holders of our ordinary shares in the United States.

Item 7. Major Shareholders and Related Party Transactions

A. Major Shareholders

Please refer to “Item 6.E. Directors, Senior Management and Employees—Share Ownership.”

B. Related Party Transactions

See “Item 4.C. Information on the Company—Organizational Structure—Contractual Arrangements with Our Consolidated Affiliated Entities and the Nominee Shareholders.”

Our subsidiaries, consolidated affiliated entities, and the subsidiaries of the consolidated affiliated entities have engaged, during the ordinary course of business, in a number of customary transactions with each other. All of these inter-company balances have been eliminated in consolidation.

As of December 31, 2017, 2018 and 2019, we had RMB177 million, RMB5.1 billion and RMB5.2 billion (US$741 million), respectively, due from related parties. The increase of the balance from December 31, 2017 to December 31, 2018 was primarily due to the provision of loans to certain related parties, including Du Xiaoman. The amount outstanding as of February 29, 2020 was RMB5.4 billion (US$776 million).

As of December 31, 2017, 2018 and 2019, we had RMB153 million, RMB6.1 billion and RMB6.1 billion (US$872 million), respectively, due from related parties. The increase of the balance from December 31, 2017 to December 31, 2018 was primarily due to the borrowing of loans from certain related parties, including Du Xiaoman. The amount outstanding as of February 29, 2020 was RMB6.2 billion (US$891 million).

In 2017, 2018 and 2019, related party transactions with Trip.com mainly comprised the online marketing services that we provided to Trip.com, which were in the total amount of RMB750 million, RMB774 million and RMB627 million (US$90 million), respectively.

In August 2018, we completed the divestiture of Du Xiaoman, following which we recognized our minority equity interest in Du Xiaoman as an equity method investment and Du Xiaoman became a related party. For the
years ended December 31, 2018, and 2019, related party transactions with Du Xiaoman comprised the online marketing services, cloud service and other services that we provided to Du Xiaoman, which were in the total amount of RMB256 million and RMB731 million (US$105 million), respectively. In 2018, we provided multiple short-term loans to Du Xiaoman in the amount of RMB12.0 billion with interest rates ranging from 5.00% to 7.00%. As of December 31, 2018, all short-term loans extended to Du Xiaoman had been repaid in full. In 2018, we provided three term loans to Du Xiaoman in the amount of RMB3.8 billion with terms ranging from two to five years, which are intended for working capital purposes. These loans bear interest rates ranging from 4.28% to 5.00% in 2018, and 0% to 5.00% in 2019, based on the re-entered agreements. The amount outstanding as of February 20, 2020 was RMB3.8 billion (US$552 million). In 2018, Du Xiaoman provided us with two term loans in the amount of RMB3.4 billion with terms of three and five years, which are intended for general corporate purposes. These loans bear interest rates ranging from 3.78% to 4.28% in 2018, and were revised to 0% in 2019, based on the re-entered agreements. The amount outstanding as of February 20, 2020 was RMB3.4 billion (US$487 million).

In 2018 and 2019, related party transactions with an investee over which we have significant influence, mainly related to hardware products purchased from and sold to the investee, which amounted to RMB1.9 billion (US$276 million) and RMB249 million (US$36 million), respectively, in 2019, and RMB102 million and RMB77 million, respectively, in 2018.

In 2017, 2018 and 2019, with the approval from our board of directors, we reimbursed Mr. Robin Yanhong Li the fees and expenses incurred in connection with his use of an aircraft beneficially owned by his family member for our business purposes. The hourly rate for use of the aircraft was determined based on an analysis of market rates for the charter of comparable aircrafts. The service charges for the use of the aircraft for 2017, 2018 and 2019 were insignificant.

Share Options and Restricted Shares Grants

Please refer to “Item 6.B. Directors, Senior Management and Employees—Compensation.”

C. Interests of Experts and Counsel

Not applicable.

Item 8. Financial Information

A. Consolidated Statements and Other Financial Information

We have appended consolidated financial statements filed as part of this annual report.

Legal Proceedings

From time to time, we have been involved in litigation or other disputes regarding, among other things, copyright and trademark infringement, defamation, unfair competition and labor disputes. Our search results provide links to materials, and our P4P, Baidu Wenku, Baidu Post, Baidu Wiki, Baidu Knows, Baidu Feed, iQIYI and certain other products or services may contain materials, in which others may allege to own copyrights, trademarks or image rights or which others may claim to be defamatory or objectionable.

In 2019, 4,114 complaints were filed against us before various courts in China, and the aggregate amount of the damages sought in these complaints totals approximately RMB887 million (US$127 million). As of December 31, 2019, 3,347 cases against us were pending before various courts in China. The aggregate amount of damages sought under these pending cases is approximately RMB1.0 billion (US$146 million). In 2019, there were no complaints filed against us before courts outside China. As of December 31, 2019, six cases against us
were pending before various courts outside China. The aggregate amount of damages sought under these pending cases is approximately RMB76.6 billion (US$11.0 billion). In November 2018, an individual, together with his related company, filed a complaint alleging acts of defamation and libel, commercial disparagement, tortious inference with prospective business relations, intentional infliction of emotional distress and civil conspiracy against, among others, us and Robin Yanhong Li in his capacity as our chairman and chief executive officer, in the Supreme Court of New York. The complaint alleged, among other things, that the defendants published articles containing false and defamatory statements concerning the plaintiffs, and sought damages in an aggregate amount of US$11 billion, including purported punitive damages of US$10 billion. The defendants moved the complaint to the U.S. District Court for the Eastern District of New York and filed motions to dismiss the complaint. The plaintiff voluntarily dismissed that complaint, and then added us and Mr. Li as defendants to the Second State Court Lawsuit. We filed motions to dismiss that complaint, which were not opposed. The Plaintiff filed a notice of voluntary discontinuance of the complaint in the Second State Court Lawsuit, and subsequently filed a nearly identical complaint in the U.S. District Court for the Eastern District of New York. In January 2020, the U.S. District Court for the Eastern District of New York dismissed that complaint in its entirety with prejudice, and the time for plaintiff to appeal that dismissal has expired. In February 2020, the Supreme Court of New York granted defendants’ motions to discontinue the Second State Court Lawsuit with prejudice. No appeal of that order has been filed as of the date of this disclosure. We believe these claims to be without merit and intend to continue to defend ourselves vigorously.

For many of these legal proceedings, we are currently unable to estimate the reasonably possible loss or a range of reasonably possible loss as the proceedings are in the early stages, or there is a lack of clear or consistent interpretation of laws specific to the industry-specific complaints among different jurisdictions. As a result, there is considerable uncertainty regarding the timing or ultimate resolution of such proceedings, which includes eventual loss, fine, penalty or business impact, if any, and therefore, an estimate for the reasonably possible loss or a range of reasonably possible loss cannot be made. With respect to the limited number of proceedings for which we are able to estimate the reasonably possible loss or the range of reasonably possible loss, such estimates are immaterial. However, we believe that such proceedings, individually and in the aggregate, when finally resolved, are not reasonably likely to have a material and adverse effect on our results of operations, financial position and cash flows.

**Dividend Policy**

Baidu, Inc., our holding company in the Cayman Islands, has never declared or paid any dividends on our ordinary shares, nor do we have any present plan to pay any cash dividends on our ordinary shares in the foreseeable future. We currently intend to retain most, if not all, of our available funds and any future earnings to operate and expand our business.

Our board of directors has complete discretion as to whether to distribute dividends, subject to Cayman Islands law. Even if our board of directors decides to pay dividends, the form, frequency and amount of our dividends will depend upon our future operations and earnings, capital requirements and surplus, financial condition, contractual restrictions and other factors that our board of directors may deem relevant. If we pay any dividends, our depositary will distribute such dividends to our ADS holders to the same extent as holders of our ordinary shares, subject to the terms of the deposit agreement, including the fees and expenses payable thereunder. Cash dividends on our ordinary shares, if any, will be paid in U.S. dollars.

**B. Significant Changes**

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.
Item 9. The Offer and Listing

A. Offering and Listing Details

Our ADSs have been listed on The NASDAQ Global Market since August 5, 2005. Our ADSs currently trade on The NASDAQ Global Select Market under the symbol “BIDU.” Prior to May 12, 2010, one ADS represented one Class A ordinary share. On May 12, 2010, we effected a change of the ADS to Class A ordinary share ratio from 1 ADS representing 1 Class A ordinary share to 10 ADSs representing 1 Class A ordinary share. The ratio change has the same effect as a 10-for-1 ADS split.

B. Plan of Distribution

Not applicable.

C. Markets

Our ADSs have been listed on NASDAQ since August 5, 2005 under the symbol “BIDU”.

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

Item 10. Additional Information

A. Share Capital

Not applicable.

B. Memorandum and Articles of Association

The following are summaries of material provisions of our third amended and restated memorandum and articles of association, as well as the Companies Law (2020 Revision) insofar as they relate to the material terms of our ordinary shares.

Registered Office and Objects

The Registered Office of our company is at the offices of Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands or at such other place as our board of directors may from time to time decide. The objects for which our company is established are unrestricted and we have full power and authority to carry out any object not prohibited by the Companies Law (2020 Revision), as amended from time to time, or any other law of the Cayman Islands.

Board of Directors

See “Item 6.C. Directors, Senior Management and Employees—Board Practices—Board of Directors.”
Ordinary Shares

**General.** Our ordinary shares are divided into Class A ordinary shares and Class B ordinary shares. Holders of Class A ordinary shares and Class B ordinary shares have the same rights except for voting and conversion rights. All of our outstanding ordinary shares are fully paid and non-assessable. Certificates representing the ordinary shares are issued in registered form. Our shareholders who are nonresidents of the Cayman Islands may freely hold and vote their shares.

**Dividends.** The holders of our ordinary shares are entitled to such dividends as may be declared by our board of directors subject to the Companies Law.

**Conversion.** Each Class B ordinary share is convertible into one Class A ordinary share at any time by the holder thereof. Class A ordinary shares are not convertible into Class B ordinary shares under any circumstances. Upon any transfer of Class B ordinary shares by a holder thereof to any person or entity which is not an affiliate of such holder (as defined in our articles of association), such Class B ordinary shares shall be automatically and immediately converted into the equal number of Class A ordinary shares. In addition, if at any time our chairman and chief executive officer, Robin Yanhong Li, and his affiliates collectively own less than 5% of the total number of the issued and outstanding Class B ordinary shares, each issued and outstanding Class B ordinary share shall be automatically and immediately converted into one share of Class A ordinary share, and we shall not issue any Class B ordinary shares thereafter.

**Voting Rights.** All of our shareholders have the right to receive notice of shareholders’ meetings and to attend, speak and vote at such meetings. In respect of matters requiring shareholders’ vote, each Class A ordinary share is entitled to one vote, and each Class B ordinary share is entitled to 10 votes. A shareholder may participate at a shareholders’ meeting in person, by proxy or by telephone conference or other communications equipment by means of which all the shareholders participating in the meeting can communicate with each other. At any shareholders’ meeting, a resolution put to the vote of the meeting shall be decided on a poll conducted by the chairman of the meeting.

A quorum for a shareholders’ meeting consists of one or more shareholders holding at least one third of the paid up voting share capital present in person or by proxy or, if a corporation or other non-natural person, by its duly authorized representative. We shall, if required by the Companies Law, hold a general meeting of shareholders as our annual general meeting and shall specify the meeting as such in the notices calling it. Our board of directors may call extraordinary general meetings, and they must on shareholders’ requisition convene an extraordinary general meeting. A shareholder requisition is a requisition of shareholders holding at the date of deposit of the requisition not less than a majority of the voting power represented by the issued shares of our company which as at that date carries the right of voting at general meetings of our company. Advance notice of at least five days is required for the convening of our annual general meeting and other shareholders’ meetings.

An ordinary resolution to be passed by the shareholders requires the affirmative vote of a simple majority of the votes attaching to the ordinary shares cast in a general meeting, while a special resolution requires the affirmative vote of no less than two-thirds of the votes attaching to the ordinary shares cast in a general meeting. A special resolution is required for matters such as a change of name. Holders of the ordinary shares may effect certain changes by ordinary resolution, including consolidating and dividing all or any of our share capital into shares of larger amount than our existing share capital and canceling any shares.

**Transfer of Shares.** Subject to the restrictions of our memorandum and articles of association, as applicable, any of our shareholders may transfer any or all of his or her ordinary shares by an instrument of transfer in the usual or common form or any other form approved by our board of directors.

Our board of directors may, in their absolute discretion (except with respect to a transfer from a shareholder to its affiliate(s)), decline to register any transfer of shares without assigning any reason thereof. If our board of
directors refuses to register a transfer they shall notify the transferee within two months of such refusal. Notwithstanding the foregoing, if a transfer complies with the holder’s transfer obligations and restrictions set forth under applicable law (including but not limited to U.S. securities law provisions related to insider trading) and our articles of association, our board of directors shall promptly register such transfer. Further, any director is authorized to confirm in writing addressed to the registered office to authorize a share transfer and to instruct that the register of members be updated accordingly, provided that the transfer complies with the holder’s transfer obligations and restrictions set forth under applicable law and our articles of association and such holder is not the director who authorizes the transfer or an entity affiliated with such director. Any director is authorized to execute a share certificate in respect of such shares for and on behalf of our company.

The registration of transfers may be suspended at such time and for such periods as our board of directors may from time to time determine, provided, however, that the registration of transfers shall not be suspended for more than 45 days in any year.

**Liquidation.** On a return of capital on winding up or otherwise (other than on conversion, redemption or purchase of shares), assets available for distribution among the holders of ordinary shares may be distributed among the holders of the ordinary shares as determined by the liquidator, subject to sanction of a special resolution of our company. If our assets available for distribution are insufficient to repay all of the paid-up capital, the assets will be distributed so that the losses are borne by our shareholders proportionately to the capital paid up, or which ought to have been paid up, at the commencement of the winding up on the shares held by such shareholders respectively.

**Calls on Shares and Forfeiture of Shares.** Our board of directors may from time to time make calls upon shareholders for any amounts unpaid on their shares in a notice served to such shareholders at least 14 days prior to the specified time and place of payment. The shares that have been called upon and remain unpaid on the specified time are subject to forfeiture.

**Redemption of Shares.** Subject to the provisions of the Companies Law and our articles of association, we may issue shares on terms that are subject to redemption, at our option or at the option of the holders, on such terms and in such manner as our board of directors may determine.

**Repurchase of Shares.** Subject to the provisions of the Companies Law and our articles of association, our board of directors may authorize repurchase of our shares in accordance with the manner of purchase specified in our articles of association without seeking shareholder approval.

**Variations of Rights of Shares.** All or any of the special rights attached to any class of shares may, subject to the provisions of the Companies Law, be varied either with the written consent of the holders of a majority of the issued shares of that class or with the sanction of a special resolution passed at a general meeting of the holders of the shares of that class.

**Inspection of Books and Records.** No holders of our ordinary shares who is not a director shall have any right of inspecting any of our accounts, books or documents except as conferred by the Companies Law or authorized by the directors or by us in general meeting. However, we will make this annual report, which contains our audited financial statements, available to shareholders and ADS holders. See “Item 10.H. Additional Information—Documents on Display.”

**Preferred Shares**

Our board of directors has the authority, without shareholder approval, to issue up to a total of 10,000,000 preferred shares in one or more series. Our board of directors may establish the number of shares to be included in each such series and may set the designations, preferences, powers and other rights of the shares of a series of preferred shares. While the issuance of preferred shares provides us with flexibility in connection with possible
acquisitions or other corporate purposes, it could, among other things, have the effect of delaying, deferring or preventing a change of control transaction and could adversely affect the market price of our ADSs. We have no current plan to issue any preferred shares.

C. Material Contracts

We have not entered into any material contracts other than in the ordinary course of business and other than those described in “Item 4. Information on the Company” or elsewhere in this annual report on Form 20-F.

D. Exchange Controls


E. Taxation

The following summary of the material Cayman Islands, People’s Republic of China and U.S. federal income tax consequences of an investment in our ADSs or ordinary shares is based upon laws and relevant interpretations thereof in effect as of the date of this annual report, all of which are subject to change. This summary does not deal with all possible tax consequences relating to an investment in our ADSs or ordinary shares, such as the tax consequences under state, local and other tax laws.

Cayman Islands Tax Considerations

According to Maples and Calder (Hong Kong) LLP, our Cayman Islands counsel, the Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciation and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to us levied by the Government of the Cayman Islands except for stamp duties which may be applicable on instruments executed in, or brought within, the jurisdiction of the Cayman Islands. The Cayman Islands is not party to any double tax treaties that are applicable to any payments made to or by our company. There are no exchange control regulations or currency restrictions in the Cayman Islands.

People’s Republic of China Tax Considerations

According to Maples and Calder (Hong Kong) LLP, our Cayman Islands counsel, the Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciation and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to us levied by the Government of the Cayman Islands except for stamp duties which may be applicable on instruments executed in, or brought within, the jurisdiction of the Cayman Islands. The Cayman Islands is not party to any double tax treaties that are applicable to any payments made to or by our company. There are no exchange control regulations or currency restrictions in the Cayman Islands.

If we are considered a PRC resident enterprise under the EIT Law, our shareholders and ADS holders who are deemed non-resident enterprises may be subject to the 10% EIT on the dividends payable by us or any gains realized from the transfer of our shares or ADSs, if such income is deemed derived from China, provided that (i) such foreign enterprise investor has no establishment or premises in China, or (ii) it has establishment or premises in China but its income derived from China has no real connection with such establishment or premises. Furthermore, if we are considered a PRC resident enterprise and relevant PRC tax authorities consider the dividends we pay with respect to our shares or ADSs and the gains realized from the transfer of our shares or ADSs to be income derived from sources within the PRC, it is also possible that such dividends and gains earned by non-resident individuals may be subject to the 20% PRC individual income tax. It is uncertain whether, if we are considered a PRC resident enterprise, holders of our shares or ADSs would be able to claim the benefit of tax treaties or arrangements entered into between China and other jurisdictions.

If we are required under the PRC tax law to withhold PRC income tax on our dividends payable to our non-PRC resident shareholders and ADS holders, or if any gains realized from the transfer of our shares or ADSs by our non-PRC resident shareholders and ADS holders are subject to the EIT or the individual income tax, your investment in our shares or ADSs could be materially and adversely affected.
U.S. Federal Income Tax Considerations

The following discussion is a summary of U.S. federal income tax considerations under present law of the ownership and disposition of the ADSs or ordinary shares. This summary applies only to investors that are U.S. Holders (as defined below) and that hold the ADSs or ordinary shares as capital assets. This discussion is based on the tax laws of the United States as in effect on the date of this annual report on Form 20-F and on U.S. Treasury regulations in effect or, in some cases, proposed, as of the date of this annual report on Form 20-F, as well as judicial and administrative interpretations thereof available on or before such date. All of the foregoing authorities are subject to change, which change could apply retroactively and could affect the tax considerations described below.

The following discussion does not deal with the tax consequences to any particular investor or to persons in special tax situations such as:

- banks;
- financial institutions;
- insurance companies;
- broker dealers;
- persons that elect to mark their securities to market;
- tax-exempt entities;
- persons liable for the alternative minimum tax;
- regulated investment companies;
- certain expatriates or former long-term residents of the United States;
- governments or agencies or instrumentalities thereof;
- persons holding an ADS or ordinary share as part of a straddle, hedging, conversion or integrated transaction;
- persons that actually or constructively own ADSs or ordinary shares representing 10% or more of our voting power or value;
- persons who are required to recognize income for U.S. federal income tax purposes no later than when such income is taken into account in applicable financial statements;
- persons whose functional currency is other than the U.S. dollar; or
- persons who acquired our ADSs or ordinary shares pursuant to the exercise of any employee share option or otherwise as compensation.

U.S. Holders are urged to consult their tax advisors about the application of the U.S. federal tax rules to their particular circumstances as well as the state, local and foreign tax consequences to them of ownership and disposition of our ADSs or ordinary shares.

The discussion below of the U.S. federal income tax consequences will apply if you are a “U.S. Holder.” You are a “U.S. Holder” if you are the beneficial owner of our ADSs or ordinary shares and you are, for U.S. federal income tax purposes,

- a citizen or individual resident of the United States;
- a corporation (or other entity subject to tax as a corporation for U.S. federal income tax purposes) that is created or organized in or under the laws of the United States, any State or the District of Columbia;
• an estate whose income is subject to U.S. federal income taxation regardless of its source; or
• a trust that (i) is subject to the supervision of a court within the United States and the control of one or more U.S. persons or (ii) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

This discussion does not consider the tax treatment of partnerships or other pass-through entities that hold the ADSs or ordinary shares, or of persons who hold the ADSs or ordinary shares through such entities. If a partnership (or other entity classified as a partnership for U.S. federal income tax purposes) is the beneficial owner of the ADSs or ordinary shares, the U.S. federal income tax treatment of a partner in the partnership will generally depend on the status of the partner and the activities of the partnership.

The discussion below assumes that the representations contained in the deposit agreement are true and that the obligations in the deposit agreement and any related agreement will be complied with in accordance with their terms. If you hold our ADSs, you will be treated as the holder of the underlying ordinary shares represented by those ADSs for U.S. federal income tax purposes.

This discussion does not address any aspect of U.S. federal non-income tax laws, such as gift or estate tax laws, or state, local or foreign tax laws or the Medicare tax on certain net investment income. We have not sought, and will not seek, a ruling from the Internal Revenue Service (the “IRS”), or an opinion as to any U.S. federal income tax consequence described herein. The IRS may disagree with the discussion herein, and its determination may be upheld by a court.

**Taxation of Dividends and Other Distributions on the ADSs or Ordinary Shares**

Subject to the passive foreign investment company rules discussed below, the gross amount of all our distributions to you with respect to the ADSs or ordinary shares will be included in your gross income as dividend income on the date of receipt by the depositary, in the case of our ADSs, or by you, in the case of ordinary shares, but only to the extent that the distribution is paid out of our current or accumulated earnings and profits (computed under U.S. federal income tax principles). Because we do not intend to determine our earnings and profits on the basis of U.S. federal income tax principles, any distribution paid will generally be treated as a “dividend” for U.S. federal income tax purposes. Dividends paid by us will not be eligible for the dividends-received deduction allowed to corporations in respect of dividends received from U.S. corporations.

With respect to non-corporate U.S. Holders (including individual U.S. Holders), dividends may be taxed at the lower applicable capital gains rate provided that (i) the ADSs or ordinary shares are readily tradable on an established securities market in the United States or we are eligible for the benefit of the income tax treaty between the United States and the PRC, or the Treaty, (ii) we are not a passive foreign investment company (as discussed below) for either our taxable year in which the dividend was paid or for the preceding taxable year, (iii) certain holding period requirements are met and (iv) such non-corporate U.S. Holders are not under an obligation to make related payments with respect to positions in substantially similar or related property. For this purpose, ADSs listed on the NASDAQ Global Select Market will generally be considered to be readily tradable on an established securities market in the United States. You should consult your tax advisor regarding the availability of the lower rate for dividends paid with respect to our ADSs or ordinary shares.

For U.S. foreign tax credit purposes, dividends paid on the ADSs or ordinary shares will generally be treated as income from foreign sources and will generally constitute passive category income. If PRC withholding taxes apply to dividends paid to you with respect to the ADSs or ordinary shares, you may be able to obtain a reduced rate of PRC withholding taxes under the Treaty. In addition, subject to certain conditions and limitations, PRC withholding taxes on dividends that are non-refundable under the Treaty may be treated as foreign taxes eligible for credit against your U.S. federal income tax liability. If you do not elect to claim a foreign tax credit, you may instead claim a deduction for U.S. federal income tax purposes in respect of such withholding, but only for a year in which you elect to do so for all creditable foreign income taxes. You should consult your tax advisor regarding the creditability of any PRC tax.
Sale, Exchange or Other Disposition of the ADSs or Ordinary Shares

Subject to the passive foreign investment company rules discussed below, you will recognize gain or loss on any sale, exchange or other taxable disposition of an ADS or ordinary share equal to the difference between the amount realized for the ADS or ordinary share and your tax basis in the ADS or ordinary share. The gain or loss will generally be capital gain or loss. If you are a non-corporate U.S. Holder, including an individual U.S. Holder, who has held the ADS or ordinary share for more than one year, you will generally be eligible for reduced tax rates. The deductibility of capital losses is subject to limitations. Any such gain or loss that you recognize will generally be treated as U.S. source income or loss for foreign tax credit limitation purposes, which will generally limit the availability of foreign tax credits. However, in the event we are deemed to be a PRC “resident enterprise” under PRC tax law, we may be eligible for the benefits of the Treaty. In such event, if PRC tax were to be imposed on any gain from the disposition of the ADSs or ordinary shares, a U.S. Holder that is eligible for the benefits of the Treaty may elect to treat such gain as PRC source income. U.S. Holders should consult their tax advisors regarding the creditability of any PRC tax.

Passive Foreign Investment Company

A non-U.S. corporation, such as our own, is considered a PFIC for any taxable year if either (i) at least 75% of its gross income is passive income, or (ii) at least 50% of the value of its assets (based on an average of the quarterly values of the assets during a taxable year) is attributable to assets that produce or are held for the production of passive income (the “asset test”). We will be treated as owning our proportionate share of the assets and earning our proportionate share of the income of any other corporation in which we own, directly or indirectly, more than 25% (by value) of the shares. Although the law in this regard is not entirely clear, we treat our variable interest entities as being owned by us for U.S. federal income tax purposes because we control their management decisions and we are entitled to receive economic benefits that could potentially be significant to them and, as a result, we consolidate their results of operations in our consolidated U.S. GAAP financial statements. If it were determined, however, that we are not the owner of our variable interest entities for U.S. federal income tax purposes, we would likely be treated as a PFIC for our taxable year ended December 31, 2020 and for subsequent taxable years.

Based on the market price of our ADSs and ordinary shares, the value of our assets, and the composition of our assets and income, we believe that we were not a PFIC for our taxable year ended December 31, 2019. However, given the lack of authority and the highly factual nature of the analyses, no assurance can be given. Our PFIC status for the current taxable year ending December 31, 2020 will not be determinable until the close of the taxable year, there can be no assurance that we will not be a PFIC for the current taxable year (or any future taxable year).

We must make a separate determination each year as to whether we are a PFIC. As a result, our PFIC status may change. In particular, because the total value of our assets for purposes of the asset test will generally be calculated using the market price of the ADSs and ordinary shares, our PFIC status will depend in large part on the market price of the ADSs and ordinary shares, which may fluctuate considerably. Accordingly, fluctuations in the market price of the ADSs and ordinary shares may result in our being a PFIC for any year. If we are a PFIC for any year during which you hold the ADSs or ordinary shares, we will generally continue to be treated as a PFIC for all succeeding years during which you hold such ADSs or ordinary shares. However, if we cease to be a PFIC, provided that you have not made a mark-to-market election, as described below, you may avoid some of the adverse effects of the PFIC regime by making a deemed sale election with respect to the ADSs or ordinary shares, as applicable.

If we are a PFIC for any taxable year during which you hold our ADSs or ordinary shares, you will be subject to special tax rules with respect to any "excess distribution" that you receive and any gain you realize from a sale or other disposition (including a pledge) of the ADSs or ordinary shares, unless you make a mark-to-market election as discussed below. Distributions you receive in a taxable year that are greater than
125% of the average annual distributions you received during the shorter of the three preceding taxable years or your holding period for the ADSs or ordinary shares will be treated as an excess distribution. Under these special tax rules:

- the excess distribution or gain will be allocated ratably over your holding period for the ADSs or ordinary shares,
- the amount allocated to the current taxable year, and any taxable year prior to the first taxable year in which we became a PFIC, will be treated as ordinary income, and
- the amount allocated to each of the other taxable years would be subject to tax at the highest rate of tax in effect for you for such year and would be increased by an additional tax equal to interest on the resulting tax deemed deferred with respect to each such other taxable year.

The tax liability for amounts allocated to years prior to the year of disposition or “excess distribution” cannot be offset by any net operating losses for such years, and gains (but not losses) realized on the sale of the ADSs or ordinary shares cannot be treated as capital, even if you hold the ADSs or ordinary shares as capital assets.

Alternatively, a U.S. Holder of “marketable stock” (as defined below) in a PFIC may make a mark-to-market election for such stock of a PFIC to elect out of the tax treatment discussed in the two preceding paragraphs. The mark-to-market election is available only for “marketable stock,” which is stock that is traded in other than de minimis quantities on at least 15 days during each calendar quarter, or “regularly traded,” on a qualified exchange or other market, as defined in applicable Treasury regulations. We expect that the ADSs will continue to be listed on the NASDAQ Global Select Market, which is a qualified exchange for these purposes, and, consequently, assuming that the ADSs are regularly traded, if you are a holder of our ADSs, it is expected that the mark-to-market election would be available to you were we to become a PFIC. However, a mark-to-market election may not be made with respect to our ordinary shares as they are not marketable stock. If you make a valid mark-to-market election for the ADSs, you will include in income each year an amount equal to the excess, if any, of the fair market value of the ADSs as of the close of your taxable year over your adjusted basis in such ADSs. You are allowed a deduction for the excess, if any, of the adjusted basis of the ADSs over their fair market value as of the close of the taxable year. Such deductions, however, are allowable only to the extent of any net mark-to-market gains on the ADSs included in your income for prior taxable years. Amounts included in your income under a mark-to-market election, as well as gain on the actual sale or other disposition of the ADSs, are treated as ordinary income. Ordinary loss treatment also applies to the deductible portion of any mark-to-market loss on the ADSs, as well as to any loss realized on the actual sale or disposition of the ADSs, to the extent that the amount of such loss does not exceed the net mark-to-market gains previously included for such ADSs. Your basis in the ADSs will be adjusted to reflect any such income or loss amounts. If you make such a mark-to-market election, tax rules that apply to distributions by corporations which are not PFICs would apply to distributions by us (except that the lower applicable capital gains rate would not apply).

Because, as a technical matter, a mark-to-market election cannot be made for any lower-tier PFICs that we may own, a U.S. Holder may continue to be subject to the general PFIC rules described above with respect to such U.S. Holder’s indirect interest in any investments held by us that are treated as an equity interest in a PFIC for U.S. federal income tax purposes.

Alternatively, a U.S. Holder may avoid the PFIC tax consequences described above in respect to its ADSs and ordinary shares by making a timely “qualified electing fund,” or QEF, election. To comply with the requirements of a QEF election, a U.S. Holder must receive certain information from us. Because we do not intend to provide such information, however, such election will not be available to you with respect to the ADSs or ordinary shares.

If you hold our ADSs or ordinary shares in any year in which we are a PFIC, you will be required to file an annual information report containing such information as the U.S. Treasury may require.
You are urged to consult your tax advisor regarding the application of the PFIC rules to your investment in our ADSs or ordinary shares.

F. Dividends and Paying Agents
Not applicable.

G. Statement by Experts
Not applicable.

H. Documents on Display
We are subject to the periodic reporting and other informational requirements of the Exchange Act, and are required to file reports and other information with the SEC. Specifically, we are required to file annually a Form 20-F within four months after the end of each fiscal year, which is December 31. All information filed with the SEC can be obtained over the internet at the SEC’s website at www.sec.gov. As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

We will furnish The Bank of New York Mellon, the depositary of our ADSs, with our annual reports, which will include a review of operations and annual audited consolidated financial statements prepared in conformity with U.S. GAAP, and all notices of shareholders’ meetings and other reports and communications that are made generally available to our shareholders. The depositary will make such notices, reports and communications available to holders of ADSs, and, upon our request, will mail to all record holders of ADSs the information contained in any notice of a shareholders’ meeting received by the depositary from us.

In accordance with NASDAQ Stock Market Rule 5250(d), we will post this annual report on Form 20-F on our website at http://ir.baidu.com. In addition, we will provide hardcopies of our annual report free of charge to shareholders and ADS holders upon request.

I. Subsidiary Information
Not applicable.

Item 11. Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Risk

Our exposure to interest rate risk primarily relates to excess cash invested in short-term instruments with original maturities of less than a year and bank borrowings that have a floating rate of interest.

Investments in both fixed rate and floating rate interest earning instruments carry a degree of interest rate risk. Fixed rate securities may have their fair market value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall. Investments in both these factors, our future investment income may fall short of expectations due to changes in interest rates, or we may suffer losses in principal if we have to sell securities which have declined in market value due to changes in interest rates. For example, as of December 31, 2019 we had RMB112.9 billion (US$16.2 billion) short-term investments, with a weighted average duration of approximately 0.5 year. A hypothetical one percentage point (100 basis-point) increase in interest rates would have resulted in a decrease of approximately RMB540 million (US$77 million) in the fair value of our short-term investments as of December 31, 2019. We have not been, and do not expect to be, exposed to material interest rate risks relating to our investment in short-term instruments, and therefore have not used any derivative financial instruments to manage such interest risk exposure.
Our exposure to interest rate risk also arises from our bank borrowings that have a floating rate of interest. The costs of floating rate borrowings may be affected by the fluctuations in the interest rates. We manage this risk by maintaining an appropriate mix between fixed and floating rate borrowings and through the use of interest rate swap contracts. In connection with the loan facilities entered into in June 2016, we entered into four interest rate swap agreements, which effectively convert the term loans from a variable interest rate to a fixed rate, thereby managing our exposure to changes in market interest rates under the term loans. See “Item 5.B. Operating and Financial Review and Prospects—Liquidity and Capital Resources.”

Foreign Exchange Risk

Most of our revenues and costs are denominated in RMB, while a portion of our cash and cash equivalents, restricted cash, short-term financial assets, long-term investments, long-term loans payable, notes payable and convertible senior notes are denominated in U.S. dollars. Any significant revaluation of RMB against the U.S. dollar may materially affect our cash flows, revenues, earnings and financial position, and the value of, and any dividends payable on, our ADS in U.S. dollars. See “Item 3.D. Key Information—Risk Factors—Risks Related to Doing Business in China—Fluctuation in the value of the RMB may have a material and adverse effect on our results of operations and the value of your investment.” In addition, we commenced operation in Japan in late 2007. To the extent we need to make capital injections into our Japan operation by converting U.S. dollars into Japanese Yen, we will be exposed to the fluctuations in the exchange rate between the U.S. dollar and the Japanese Yen. We have not used any derivative financial instruments to hedge exposure to foreign exchange risk. The value of your investment in our ADSs will be affected by the exchange rate between U.S. dollar and Renminbi because the value of our business is effectively denominated in RMB, while our ADSs will be traded in U.S. dollars.

The conversion of Renminbi into foreign currencies, including U.S. dollars, is based on rates set by the People’s Bank of China. The Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between Renminbi and the U.S. dollar in the future.

To the extent that we need to convert U.S. dollars into Renminbi for our operations, appreciation of the Renminbi against the U.S. dollar would have an adverse effect on the RMB amount we receive from the conversion. Conversely, if we decide to convert Renminbi into U.S. dollars for the purpose of making payments for dividends on our ordinary shares or ADSs, repay indebtedness denominated in U.S. dollars, or for other business purposes, appreciation of the U.S. dollar against the Renminbi would have a negative effect on the U.S. dollar amounts available to us.

The RMB depreciated by 1.24% against the U.S. dollar in 2019. As of December 31, 2019, we had RMB-denominated cash and cash equivalents, restricted cash and short-term investments of RMB122.0 billion, and U.S. dollar-denominated cash and cash equivalents, restricted cash and short-term investments of US$2.8 billion. Assuming we had converted RMB122.0 billion into U.S. dollars at the exchange rate of RMB6.9618 for US$1.00 as of the end of 2019, our U.S. dollar cash balance would have been US$20.3 billion. If the RMB had depreciated by 10% against the U.S. dollar, our U.S. dollar cash balance would have been US$18.7 billion instead. In addition, we had U.S. dollar-denominated long-term loans payable, notes payable and convertible senior notes of US$9.2 billion as of December 31, 2019. A hypothetical 10% increase in the exchange rate of the U.S. dollar against the RMB would have resulted in an increase of RMB6.4 billion (US$920 million) in the value of our U.S. dollar-denominated long-term loans payable and notes payable as of December 31, 2019.

Item 12. Description of Securities Other than Equity Securities

A. Debt Securities

Not applicable.
B. Warrants and Rights

Not applicable.

C. Other Securities

Not applicable.

D. American Depositary Shares

Fees and Charges Our ADS holders May Have to Pay

The Bank of New York Mellon is the depositary of our ADS program. A holder of ADSs may have to pay certain fees of The Bank of New York Mellon, as depositary, and certain taxes, registration and transfer charges and fees and governmental charges and fees. The depositary collects fees for delivery and surrender of ADSs directly from holders depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to holders by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deductions from cash distributions or by directly billing holders or by changing the book-entry system accounts of participants acting for them. The depositary may generally refuse to deliver ADSs or deposited shares or to forward any distributions until its fees for those services are paid. The Depositary’s Office is located at 240 Greenwich Street, New York, New York 10286.

Persons depositing or withdrawing shares must pay:

<table>
<thead>
<tr>
<th>For:</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property</td>
<td>US$5.00 or less per 100 ADSs (or portion thereof)</td>
</tr>
<tr>
<td>• Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates</td>
<td>US$0.02 or less per ADS (or portion thereof)</td>
</tr>
<tr>
<td>• Any cash distribution to ADS holders</td>
<td>A fee equivalent to the fee that would be payable if securities distributed had been shares and the shares had been deposited for issuance of ADSs</td>
</tr>
<tr>
<td>• Distribution of securities distributed to holders of deposited securities which are distributed by the depositary to ADS holders</td>
<td>US$0.02 or less per ADS (or portion thereof) per calendar year (if the depositary has not collected any cash distribution fee during that year)</td>
</tr>
<tr>
<td>• Depositary services</td>
<td>Expenses of the depositary</td>
</tr>
<tr>
<td>• Cable, telex and facsimile transmissions (when expressly provided in the deposit agreement)</td>
<td>Registration or transfer fees</td>
</tr>
<tr>
<td>• Converting foreign currency to U.S. dollars</td>
<td>Taxes and other governmental charges the depositary or the custodian have to pay on any ADS or share underlying an ADS, for example, stock transfer taxes, stamp duty or withholding taxes</td>
</tr>
<tr>
<td>• Transfer and registration of shares on our share register to or from the name of the depositary or its agent when you deposit or withdraw shares</td>
<td>Any charges incurred by the depositary or its agents for servicing the deposited securities</td>
</tr>
<tr>
<td>• As necessary</td>
<td>As necessary</td>
</tr>
</tbody>
</table>

138
Fees and Other Payments Made by the Depositary to Us

The depositary has agreed to reimburse us annually for our expenses incurred in connection with investor relationship programs and any other program related to our ADS facility and the travel expense of our key personnel in connection with such programs. The depositary has also agreed to provide additional payments to us based on the applicable performance indicators relating to our ADS facility. There are limits on the amount of expenses for which the depositary will reimburse us, but the amount of reimbursement available to us is not necessarily tied to the amount of fees the depositary collects from investors. In 2020, we are expecting to receive certain insignificant amount of reimbursement from the depositary for our expenses incurred in connection with investor relationship programs related to the ADS facility and the travel expense of our key personnel in connection with such programs.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

None.

Item 15. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, has performed an evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of the end of the period covered by this report, as required by Rule 13a-15(b) under the Exchange Act. Based upon that evaluation, our management has concluded that, as of December 31, 2019, our disclosure controls and procedures were effective in ensuring that the information required to be disclosed by us in the reports that we file and furnish under the Exchange Act was recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms, and that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our chief executive officer and chief financial officer, to allow timely decisions regarding required disclosure.

Management’s Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) under the Exchange Act. Our management evaluated the effectiveness of our internal control over financial reporting, as required by Rule 13a-15(c) of the Exchange Act, based on criteria established in the framework in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2019.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. In addition, projections of any evaluation of effectiveness of our internal control over financial reporting to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies and procedures may deteriorate.
Our independent registered public accounting firm, Ernst & Young Hua Ming LLP, has audited the effectiveness of our internal control over financial reporting as of December 31, 2019, as stated in its report, which appears on page F-2 of this annual report on Form 20-F.

Changes in Internal Control over Financial Reporting

There were no changes in our internal controls over financial reporting that occurred during the period covered by this annual report on Form 20-F that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 16A. Audit Committee Financial Expert

Our board of directors has determined that Mr. Brent Callinicos, an independent director (under the standards set forth in NASDAQ Stock Market Rule 5605(a)(2) and Rule 10A-3 under the Exchange Act) and chairman of our audit committee, is an audit committee financial expert.

Item 16B. Code of Ethics

In July 2005, our board of directors adopted a code of business conduct and ethics that applies to our directors, officers, employees and advisors. We have posted a copy of our code of business conduct and ethics on our website at http://ir.baidu.com.

Item 16C. Principal Accountant Fees and Services

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by Ernst & Young Hua Ming LLP, our principal external auditors, for the periods indicated.

<table>
<thead>
<tr>
<th>Description</th>
<th>2018 (RMB in thousands)</th>
<th>2019 (RMB in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit fees(1)</td>
<td>29,074</td>
<td>30,503</td>
</tr>
<tr>
<td>Audit-related fees(2)</td>
<td>4,697</td>
<td>1,068</td>
</tr>
<tr>
<td>Tax fees(3)</td>
<td>208</td>
<td>—</td>
</tr>
</tbody>
</table>

(1) “Audit fees” means the aggregate fees billed in each of the fiscal years listed for professional services rendered by our principal auditors for the audit of our annual financial statements and assistance with and review of documents filed with the SEC. In 2018 and 2019, the audit refers to financial audit and audit pursuant to Section 404 of the Sarbanes-Oxley Act of 2002.

(2) “Audit-related fees” means fees billed in 2018 and 2019 for professional services rendered by our principal auditors associated with certain due diligence projects.

(3) “Tax fees” means the aggregate fees billed in each of the fiscal years listed for professional services rendered by our principal auditors for tax compliance, tax advice, and tax planning. In 2018, the tax fees refer to fees paid to our principal auditors for reviewing the compliance of our tax documentation and providing tax advice.

All audit and non-audit services provided by our independent auditors must be pre-approved by our audit committee. Our audit committee has adopted a combination of two approaches in pre-approving proposed services: general pre-approval and specific pre-approval. With general approval, proposed services are pre-approved without consideration of specific case-by-case services; with specific approval, proposed services require the specific pre-approval of the audit committee. Unless a type of service has received general pre-approval, it will require specific pre-approval by our audit committee. Any proposed services exceeding pre-approved cost levels or budgeted amounts will also require specific pre-approval by our audit committee.

140
All requests or applications for services to be provided by our independent auditors that do not require specific approval by our audit committee will be submitted to our chief financial officer and must include a detailed description of the services to be rendered. The chief financial officer will determine whether such services are included within the list of services that have received the general pre-approval of the audit committee. The audit committee will be informed on a timely basis of any such services. Requests or applications to provide services that require specific approval by our audit committee will be submitted to the audit committee by both our independent auditors and our chief financial officer and must include a joint statement as to whether, in their view, the request or application is consistent with the SEC’s rules on auditor independence.

Item 16D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

On June 26, 2018, our board of directors authorized a share repurchase program, under which we may repurchase up to US$1.0 billion of our ADSs or ordinary shares over 12 months from June 27, 2018 through June 26, 2019. The share repurchase program was publicly announced on June 27, 2018.

On May 16, 2019, our board of directors authorized a new share repurchase program, under which we may repurchase up to US$1.0 billion of our ADSs or ordinary shares, effective until July 1, 2020. The share repurchase program was publicly announced on May 16, 2019. The table below is a summary of the shares repurchased by us in 2019. All shares were repurchased in the open market pursuant to these share repurchase programs.

<table>
<thead>
<tr>
<th>Period</th>
<th>Total Number of ADSs Purchased</th>
<th>Average Price Paid Per ADS</th>
<th>Total Number of ADSs Purchased as Part of the Publicly Announced Plan</th>
<th>Approximate Dollar Value of ADSs that May Yet Be Purchased Under the Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 1 – May 31, 2019</td>
<td>2,591,417</td>
<td>US$ 112.15</td>
<td>2,591,417</td>
<td>US$ 709,379,925</td>
</tr>
<tr>
<td>August 1 – August 31, 2019</td>
<td>2,582,880</td>
<td>US$ 104.28</td>
<td>2,582,880</td>
<td>US$ 440,045,461</td>
</tr>
<tr>
<td>October 1 – October 31, 2019</td>
<td>1,277,274</td>
<td>US$ 99.61</td>
<td>1,277,274</td>
<td>US$ 312,814,075</td>
</tr>
<tr>
<td>December 1 – December 31, 2019</td>
<td>193,767</td>
<td>US$ 114.92</td>
<td>193,767</td>
<td>US$ 290,546,496</td>
</tr>
<tr>
<td>Total</td>
<td>6,645,338</td>
<td>US$ 106.76</td>
<td>6,645,338</td>
<td>US$ 290,546,496</td>
</tr>
</tbody>
</table>

Item 16F. Change in Registrant’s Certifying Accountant

Not applicable.

Item 16G. Corporate Governance

NASDAQ Stock Market Rule 5620 requires each issuer to hold an annual meeting of shareholders no later than one year after the end of the issuer’s fiscal year-end. However, NASDAQ Stock Market Rule 5615(a)(3) permits foreign private issuers like us to follow “home country practice” in certain corporate governance matters. Maples and Calder (Hong Kong) LLP, our Cayman Islands counsel, has provided a letter to the NASDAQ Stock Market certifying that under Cayman Islands law, we are not required to hold annual shareholder meetings every year. We follow home country practice with respect to annual meetings and did not hold an annual meeting of shareholders in 2019. We may, however, hold annual shareholder meetings in the future if there are significant issues that require shareholders’ approvals. In the third quarter of 2018, our board of directors approved a 2018 share incentive plan. We relied on home country practice exemption and did not convene a shareholder meeting.
to approve the 2018 share incentive plan. Maples and Calder (Hong Kong) LLP, our Cayman Islands counsel, has provided a letter to the NASDAQ Stock Market certifying that under Cayman Islands law, we are not required to obtain shareholder approval in respect of the adoption of a stock option or other equity compensation arrangement, or an amendment to the stock option or other equity compensation plan.

Other than the practice described above, there are no significant differences between our corporate governance practices and those followed by U.S. domestic companies under NASDAQ Stock Market Rules.

**Item 16H. Mine Safety Disclosure**

Not applicable.

**PART III**

**Item 17. Financial Statements**

We have elected to provide financial statements pursuant to Item 18.

**Item 18. Financial Statements**

The consolidated financial statements of Baidu, Inc., its subsidiaries and its consolidated affiliated entities are included at the end of this annual report.

**Item 19. Exhibits**

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Third Amended and Restated Memorandum and Articles of Association of the Registrant (incorporated by reference to Exhibit 99.2 of Form 6-K furnished with the Securities and Exchange Commission on December 17, 2008)</td>
</tr>
<tr>
<td>2.1</td>
<td>Registrant’s Specimen American Depositary Receipt (incorporated by reference to Exhibit 1 of the prospectus filed with the Securities and Exchange Commission on January 5, 2009 pursuant to Rule 424(b)(3) under the Securities Act)</td>
</tr>
<tr>
<td>2.2</td>
<td>Registrant’s Specimen Certificate for Class A Ordinary Shares (incorporated by reference to Exhibit 4.2 of Amendment No. 5 to our Registration Statement on Form F-1 (file no. 333-126534) filed with the Securities and Exchange Commission on August 2, 2005)</td>
</tr>
<tr>
<td>2.3</td>
<td>Form of Deposit Agreement among the Registrant, the depositary and holder of the American Depositary Receipts (incorporated by reference to Exhibit 4.3 to our Registration Statement on Form F-1 (file no. 333-126534) filed with the Securities and Exchange Commission on July 12, 2005)</td>
</tr>
<tr>
<td>2.4</td>
<td>Indenture dated November 28, 2012 between the Registrant and The Bank of New York Mellon, as trustee (incorporated by reference to Exhibit 4.1 to Form 6-K furnished with the Securities and Exchange Commission on November 28, 2012)</td>
</tr>
<tr>
<td>2.5</td>
<td>First Supplemental Indenture dated November 28, 2012 between the Registrant and The Bank of New York Mellon, as trustee (incorporated by reference to Exhibit 4.2 to Form 6-K furnished with the Securities and Exchange Commission on November 28, 2012)</td>
</tr>
<tr>
<td>2.6</td>
<td>Form of 3.500% Notes due 2022 (incorporated by reference to Exhibit 4.2 to Form 6-K furnished with the Securities and Exchange Commission on November 28, 2012)</td>
</tr>
<tr>
<td>2.7</td>
<td>Second Supplemental Indenture dated August 6, 2013 between the Registrant and The Bank of New York Mellon, as trustee (incorporated by reference to Exhibit 4.5 to Form 6-K furnished with the Securities and Exchange Commission on August 6, 2013)</td>
</tr>
<tr>
<td>Exhibit Number</td>
<td>Description of Document</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>2.8</td>
<td>Third Supplemental Indenture dated June 9, 2014 between the Registrant and The Bank of New York Mellon, as trustee (incorporated by reference to Exhibit 4.5 to Form 6-K furnished with the Securities and Exchange Commission on June 9, 2014)</td>
</tr>
<tr>
<td>2.9</td>
<td>Fourth Supplemental Indenture dated June 30, 2015 between the Registrant and The Bank of New York Mellon, as trustee (incorporated by reference to Exhibit 4.1 to Form 6-K furnished with the Securities and Exchange Commission on July 2, 2015)</td>
</tr>
<tr>
<td>2.10</td>
<td>Form of 3.00% Notes due 2020 (incorporated by reference to Exhibit 4.1 to Form 6-K furnished with the Securities and Exchange Commission on July 2, 2015)</td>
</tr>
<tr>
<td>2.11</td>
<td>Form of 4.125% Notes due 2025 (incorporated by reference to Exhibit 4.1 to Form 6-K furnished with the Securities and Exchange Commission on July 2, 2015)</td>
</tr>
<tr>
<td>2.12</td>
<td>Fifth Supplemental Indenture dated July 6, 2017 between the Registrant and The Bank of New York Mellon, as trustee (incorporated by reference to Exhibit 4.1 to Form 6-K furnished with the Securities and Exchange Commission on July 7, 2017)</td>
</tr>
<tr>
<td>2.13</td>
<td>Form of 2.875% Notes due 2022 (incorporated by reference to Exhibit 4.1 to Form 6-K furnished with the Securities and Exchange Commission on July 7, 2017)</td>
</tr>
<tr>
<td>2.14</td>
<td>Form of 3.625% Notes due 2027 (incorporated by reference to Exhibit 4.1 to Form 6-K furnished with the Securities and Exchange Commission on July 7, 2017)</td>
</tr>
<tr>
<td>2.15</td>
<td>Sixth Supplemental Indenture dated March 29, 2018 between the Registrant and The Bank of New York Mellon, as trustee (incorporated by reference to Exhibit 4.5 to Form 6-K furnished with the Securities and Exchange Commission on November 15, 2018)</td>
</tr>
<tr>
<td>2.16</td>
<td>Form of 3.875% Notes due 2023 (incorporated by reference to Exhibit 4.5 to Form 6-K furnished with the Securities and Exchange Commission on November 15, 2018)</td>
</tr>
<tr>
<td>2.17</td>
<td>Form of 4.375% Notes due 2028 (incorporated by reference to Exhibit 4.5 to Form 6-K furnished with the Securities and Exchange Commission on November 15, 2018)</td>
</tr>
<tr>
<td>2.18</td>
<td>Seventh Supplemental Indenture dated November 14, 2018 between the Registrant and The Bank of New York Mellon, as trustee (incorporated by reference to Exhibit 4.5 to Form 6-K furnished with the Securities and Exchange Commission on November 15, 2018)</td>
</tr>
<tr>
<td>2.19</td>
<td>Form of 4.375% Notes due 2024 (incorporated by reference to Exhibit 4.8 to Form 6-K furnished with the Securities and Exchange Commission on November 15, 2018)</td>
</tr>
<tr>
<td>2.20</td>
<td>Form of 4.875% Notes due 2028 (incorporated by reference to Exhibit 4.8 to Form 6-K furnished with the Securities and Exchange Commission on November 15, 2018)</td>
</tr>
<tr>
<td>2.21</td>
<td>Indenture dated December 4, 2018 between iQIYI, Inc. and Citicorp International Limited, as trustee, and form of 3.75% Notes due 2023 (incorporated herein by reference to Exhibit 4.67 to iQIYI, Inc.’s annual report on Form 20-F (File No. 001-38431) filed with the SEC on March 15, 2019)</td>
</tr>
<tr>
<td>2.22</td>
<td>Indenture dated March 29, 2019 between iQIYI, Inc. and Citicorp International Limited, as trustee, and form of 2.00% Notes due 2025 (incorporated herein by reference to Exhibit 4.61 to iQIYI, Inc.’s annual report on Form 20-F (File No. 001-38431) filed with the SEC on March 12, 2020)</td>
</tr>
<tr>
<td>Exhibit Number</td>
<td>Description of Document</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>2.23</td>
<td>Description of American Depositary Shares of the Registrant (incorporated herein by reference to the section titled “Description of American Depositary Shares” in the Registrant’s registration statement on Form F-1 (File No. 333-126534), originally filed with the Securities and Exchange Commission on July 12, 2005, as amended, including any form of prospectus contained therein pursuant to Rule 424(b) under the Securities Act of 1933 and (ii) the Registrant’s registration statement on Form S-A (File No. 000-51469), filed with the Securities and Exchange Commission on August 1, 2005)</td>
</tr>
<tr>
<td>2.24</td>
<td>Description of the Registrant’s US$750,000,000 3.50% Notes Due 2022 (incorporated herein by reference to (i) the section titled “Description of Debt Securities” in the Registrants’ registration statement on Form F-3 (File No. 333-184757) filed with the Securities and Exchange Commission on November 5, 2012 and (ii) the section titled “Description of the Notes” in the prospectus supplement, in the form filed by the Registrant with the Securities and Exchange Commission on November 20, 2012 pursuant to Rule 424(b) under the Securities Act of 1933, as amended)</td>
</tr>
<tr>
<td>2.25</td>
<td>Description of the Registrant’s US$750,000,000 3.00% Notes Due 2020 and US$500,000,000 4.13% Notes Due 2025 (incorporated herein by reference to (i) the section titled “Description of Debt Securities” in the Registrants’ registration statement on Form F-3 (File No. 333-184757) filed with the Securities and Exchange Commission on November 5, 2012 and (ii) the section titled “Description of the Notes” in the prospectus supplement, in the form filed by the Registrant with the Securities and Exchange Commission on June 23, 2015 pursuant to Rule 424(b) under the Securities Act of 1933, as amended)</td>
</tr>
<tr>
<td>2.26</td>
<td>Description of the Registrant’s US$900,000,000 2.88% Notes Due 2022 and US$600,000,000 3.63% Notes Due 2027 (incorporated herein by reference to (i) the section titled “Description of Debt Securities” in the Registrants’ registration statement on Form F-3 (File No. 333-184757) filed with the Securities and Exchange Commission on June 26, 2017 and (ii) the section titled “Description of the Notes” in the prospectus supplement, in the form filed by the Registrant with the Securities and Exchange Commission on June 28, 2017 pursuant to Rule 424(b) under the Securities Act of 1933, as amended)</td>
</tr>
<tr>
<td>2.27</td>
<td>Description of the Registrant’s US$1,000,000,000 3.88% Notes Due 2023 and US$500,000,000 4.38% Notes Due 2028 (incorporated herein by reference to (i) the section titled “Description of Debt Securities” in the Registrants’ registration statement on Form F-3 (File No. 333-218972) filed with the Securities and Exchange Commission on June 26, 2017 and (ii) the section titled “Description of the Notes” in the prospectus supplement, in the form filed by the Registrant with the Securities and Exchange Commission on March 22, 2018 pursuant to Rule 424(b) under the Securities Act of 1933, as amended)</td>
</tr>
<tr>
<td>2.28</td>
<td>Description of the Registrant’s US$600,000,000 4.38% Notes Due 2024 and US$400,000,000 4.88% Notes Due 2028 (incorporated herein by reference to (i) the section titled “Description of Debt Securities” in the Registrants’ registration statement on Form F-3 (File No. 333-218972) filed with the Securities and Exchange Commission on June 26, 2017 and (ii) the section titled “Description of the Notes” in the prospectus supplement, in the form filed by the Registrant with the Securities and Exchange Commission on November 8, 2018 pursuant to Rule 424(b) under the Securities Act of 1933, as amended)</td>
</tr>
<tr>
<td>4.1</td>
<td>2000 Option Plan (amended and restated effective December 16, 2008) (incorporated by reference to Exhibit 99.3 of Form 6-K furnished with the Securities and Exchange Commission on December 17, 2008)</td>
</tr>
<tr>
<td>4.2</td>
<td>2008 Share Incentive Plan (incorporated by reference to Exhibit 99.4 of Form 6-K furnished with the Securities and Exchange Commission on December 17, 2008)</td>
</tr>
</tbody>
</table>
## Table of Contents

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3</td>
<td>Form of Indemnification Agreement between the Registrant and the Registrant’s directors (incorporated by reference to Exhibit 10.3 of our Registration Statement on Form F-1 (file no. 333-126534) filed with the Securities and Exchange Commission on July 12, 2005)</td>
</tr>
<tr>
<td>4.4</td>
<td>Form of Employment Agreement between the Registrant and an Executive Officer of the Registrant (incorporated by reference to Exhibit 10.4 of our Registration Statement on Form F-1 (file no. 333-126534) filed with the Securities and Exchange Commission on July 12, 2005)</td>
</tr>
<tr>
<td>4.5</td>
<td>Translation of Exclusive Technology Consulting and Services Agreement dated March 22, 2005 between Baidu Online and Baidu Netcom and the supplementary agreement dated April 22, 2010 (incorporated by reference to Exhibit 4.6 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2012)</td>
</tr>
<tr>
<td>4.6</td>
<td>Translation of Operating Agreement dated March 22, 2005 between Baidu Online and Baidu Netcom (incorporated by reference to Exhibit 4.7 of our Registration Statement on Form F-1 (file no. 333-126534) filed with the Securities and Exchange Commission on July 12, 2005)</td>
</tr>
<tr>
<td>4.7</td>
<td>Translation of Software License Agreement dated March 22, 2005 between Baidu Online and Baidu Netcom (incorporated by reference to Exhibit 4.8 of our Registration Statement on Form F-1 (file no. 333-126534) filed with the Securities and Exchange Commission on July 12, 2005)</td>
</tr>
<tr>
<td>4.8</td>
<td>Translation of Web Layout Copyright License Agreement dated March 1, 2004 between Baidu Online and Baidu Netcom and the supplementary agreement dated August 9, 2004 (incorporated by reference to Exhibit 4.9 of our Registration Statement on Form F-1 (file no. 333-126534) filed with the Securities and Exchange Commission on July 12, 2005)</td>
</tr>
<tr>
<td>4.9</td>
<td>Translation of Proxy Agreement dated August 9, 2004 among Baidu Online, Baidu Netcom, Robin Yanhong Li and Eric Yong Xu (incorporated by reference to Exhibit 4.10 of our Registration Statement on Form F-1 (file no. 333-126534) filed with the Securities and Exchange Commission on July 12, 2005)</td>
</tr>
<tr>
<td>4.10</td>
<td>English summary of the form of Exclusive Technology Consulting and Services Agreement/Exclusive Business Cooperation Agreement between a subsidiary of the Registrant and a consolidated affiliated PRC entity (incorporated by reference to Exhibit 4.10 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.11</td>
<td>English summary of the form of Operating Agreement among a subsidiary of the Registrant, a consolidated affiliated PRC entity and the shareholders of consolidated PRC entity (incorporated by reference to Exhibit 4.11 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.12</td>
<td>English summary of the form of Web Layout Copyright License Agreement, Software License Agreement and Trademark License Agreement between a subsidiary of the Registrant and a consolidated affiliated PRC entity (incorporated by reference to Exhibit 4.12 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.13</td>
<td>English summary of the form of Proxy Agreement/Power of Attorney among a subsidiary of the Registrant, a consolidated affiliated PRC entity and the shareholders of the consolidated affiliated PRC entity (incorporated by reference to Exhibit 4.13 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.14</td>
<td>English summary of the form of Equity Pledge Agreement between a subsidiary of the Registrant and the shareholder of a consolidated affiliated PRC entity (incorporated by reference to Exhibit 4.14 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
</tbody>
</table>

145
<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.15</td>
<td>English summary of the form of Exclusive Equity Purchase Option Agreement among a subsidiary of the Registrant, a consolidated affiliated PRC entity, the shareholders of a consolidated affiliated PRC entity and an offshore Holding company (if applicable) (incorporated by reference to Exhibit 4.15 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.16</td>
<td>English summary of the form of Loan Agreement between a subsidiary of the Registrant and the shareholder of a consolidated affiliated PRC entity (incorporated by reference to Exhibit 4.16 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.17</td>
<td>Translation of the Supplementary Agreement to Exclusive Technology Consulting and Services Agreement dated June 23, 2006 between Baidu Online and Beijing Perusal, dated as of April 22, 2010 (incorporated by reference to Exhibit 4.25 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2012)</td>
</tr>
<tr>
<td>4.18</td>
<td>Translation of the Web Layout Copyright License Agreement dated June 23, 2006 between Baidu Online and Beijing Perusal (incorporated by reference to Exhibit 4.27 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2011)</td>
</tr>
<tr>
<td>4.20</td>
<td>Translation of the supplementary agreement dated March 1, 2010 to the Web Layout Copyright License Agreement dated March 1, 2004 between Baidu Online and Baidu Netcom and the supplementary agreement dated August 9, 2004 (incorporated by reference to Exhibit 4.50 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2011)</td>
</tr>
<tr>
<td>4.21</td>
<td>Translation of the supplementary agreement dated April 22, 2010 to the Operating Agreement dated March 22, 2005 between Baidu Online and Baidu Netcom (incorporated by reference to Exhibit 4.51 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2011)</td>
</tr>
<tr>
<td>4.22</td>
<td>Translation of the supplementary agreement to the Loan Agreement among Robin Yanhong Li, Baidu Netcom and Baidu Online dated September 6, 2011 (incorporated by reference to Exhibit 4.65 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2012)</td>
</tr>
<tr>
<td>4.23</td>
<td>Translation of the supplementary agreement to the Software License Agreement between Baidu Online and Baidu Netcom dated January 30, 2011 (incorporated by reference to Exhibit 4.68 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2012)</td>
</tr>
<tr>
<td>4.24</td>
<td>Translation of the supplementary agreement to the Web Layout Copyright License Agreement between Baidu Online and Baidu Netcom dated January 30, 2011 (incorporated by reference to Exhibit 4.69 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 29, 2012)</td>
</tr>
<tr>
<td>4.25</td>
<td>Translation of the supplementary agreement to the Web Layout Copyright License Agreement between Baidu Online and Baidu Netcom dated August 15, 2013 (incorporated by reference to Exhibit 4.64 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 28, 2014)</td>
</tr>
</tbody>
</table>
**Exhibit Number** | **Description of Document**
--- | ---
4.26 | Translation of the supplementary agreement to the Software License Agreement between Baidu Online and Baidu Netcom dated August 15, 2013 (incorporated by reference to Exhibit 4.65 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 28, 2014)
4.27 | Translation of the supplementary agreement to the Web Layout Copyright License Agreement between Baidu Online and Beijing Perusal dated August 15, 2013 (incorporated by reference to Exhibit 4.66 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 28, 2014)
4.28 | Translation of the Termination Agreements among Baidu Online, Beijing Perusal, Jiping Liu and Yazhu Zhang, former individual shareholders of Beijing Perusal, dated March 15, 2016 and May 3, 2016, respectively (incorporated by reference to Exhibit 4.34 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)
4.29 | Translation of the Amended and Restated Loan Agreements between Baidu Online and Zhixiang Liang, and between Baidu Online and Xiaodong Wang, both dated June 20, 2016 (incorporated by reference to Exhibit 4.35 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)
4.31 | Translation of Proxy Agreement among Zhixiang Liang and Baidu Online and of Proxy Agreement among Xiaodong Wang and Baidu Online, both dated May 3, 2016 (incorporated by reference to Exhibit 4.37 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)
4.33 | Translation of the Amended and Restated Equity Pledge Agreements between Baidu Online and Zhixiang Liang, and between Baidu Online and Xiaodong Wang, both dated June 20, 2016 (incorporated by reference to Exhibit 4.39 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)
4.34 | Translation of the Amended and Restated Exclusive Equity Purchase and Transfer Option Agreements among Baidu Online, Zhixiang Liang and Beijing Perusal, and among Baidu Online, Xiaodong Wang and Beijing Perusal, both dated June 20, 2016 (incorporated by reference to Exhibit 4.40 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)
4.35 | Translation of Irrevocable Power of Attorney issued by Zhixiang Liang, the individual shareholder of Beijing Perusal, dated May 3, 2016 (incorporated by reference to Exhibit 4.41 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)
4.36 | Translation of Irrevocable Power of Attorney issued by Xiaodong Wang, the individual shareholder of Beijing Perusal, dated May 3, 2016 (incorporated by reference to Exhibit 4.42 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)

147
<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description of Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.38</td>
<td><strong>Translation of the Amended and Restated Loan Agreement between Baidu Online and Hailong Xiang dated January 18, 2017</strong> (incorporated by reference to Exhibit 4.44 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)</td>
</tr>
<tr>
<td>4.39</td>
<td><strong>Translation of the Amended and Restated Loan Agreement between Baidu Online and Robin Yanhong Li dated January 18, 2017</strong> (incorporated by reference to Exhibit 4.45 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)</td>
</tr>
<tr>
<td>4.41</td>
<td><strong>Translation of the Proxy Agreement among Robin Yanhong Li, Hailong Xiang and Baidu Online dated June 13, 2016</strong> (incorporated by reference to Exhibit 4.47 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)</td>
</tr>
<tr>
<td>4.42</td>
<td><strong>Translation of the Operating Agreement among Baidu Online, Baidu Netcom, Robin Yanhong Li, Hailong Xiang dated June 13, 2016</strong> (incorporated by reference to Exhibit 4.48 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)</td>
</tr>
<tr>
<td>4.43</td>
<td><strong>Translation of the Amended and Restated Equity Pledge Agreement between Baidu Online and Hailong Xiang dated January 18, 2017</strong> (incorporated by reference to Exhibit 4.49 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)</td>
</tr>
<tr>
<td>4.44</td>
<td><strong>Translation of the Amended and Restated Equity Pledge Agreement between Baidu Online and Robin Yanhong Li dated January 18, 2017</strong> (incorporated by reference to Exhibit 4.50 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)</td>
</tr>
<tr>
<td>4.45</td>
<td><strong>Translation of the Amended and Restated Exclusive Equity Purchase and Transfer Option Agreement among Baidu Online, Hailong Xiang and Baidu Netcom dated January 18, 2017</strong> (incorporated by reference to Exhibit 4.51 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)</td>
</tr>
<tr>
<td>4.46</td>
<td><strong>Translation of the Amended and Restated Exclusive Equity Purchase and Transfer Option Agreement among Baidu Online, Robin Yanhong Li and Baidu Netcom dated January 18, 2017</strong> (incorporated by reference to Exhibit 4.52 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)</td>
</tr>
<tr>
<td>4.48</td>
<td><strong>Translation of Irrevocable Power of Attorney issued by Hailong Xiang, an individual shareholder of Baidu Netcom, dated June 13, 2016</strong> (incorporated by reference to Exhibit 4.54 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)</td>
</tr>
<tr>
<td>Exhibit Number</td>
<td>Description of Document</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>4.51</td>
<td>US$2,000,000,000 Facilities Agreement between the Registrant and other parties thereto dated June 8, 2016 (incorporated by reference to Exhibit 4.68 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 31, 2017)</td>
</tr>
<tr>
<td>4.54</td>
<td>Share Purchase Agreement among Baidu Holdings Limited, Baidu (Hong Kong) Limited, 91 Wireless Websoft Limited and certain investors party thereto, dated April 28, 2018 and as amended on August 21, 2018 (incorporated by reference to Exhibit 4.54 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.55</td>
<td>Amended and Restated Shareholders Agreement among Baidu Holdings Limited, Baidu (Hong Kong) Limited, Duxiaoman (Cayman) Limited and certain investors party thereto, dated November 17, 2018 (incorporated by reference to Exhibit 4.55 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.56</td>
<td>2018 Share Incentive Plan (incorporated by reference to Exhibit 4.56 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.58</td>
<td>Translation of the Amended and Restated Loan Agreement between Baidu Online and Hailong Xiang dated May 7, 2018 (incorporated by reference to Exhibit 4.58 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.59</td>
<td>Translation of the Amended and Restated Loan Agreement between Baidu Online and Robin Yanhong Li dated May 7, 2018 (incorporated by reference to Exhibit 4.59 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.60</td>
<td>Translation of the Proxy Agreement between Robin Yanhong Li and Baidu, Inc. dated March 31, 2018 (incorporated by reference to Exhibit 4.60 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.61</td>
<td>Translation of the Proxy Agreement between Hailong Xiang and Baidu, Inc. dated March 31, 2018 (incorporated by reference to Exhibit 4.61 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.63</td>
<td>Translation of the Amended and Restated Exclusive Equity Purchase and Transfer Option Agreement among Baidu, Inc., Baidu Netcom, Baidu Online and Robin Yanhong Li dated May 7, 2018 (incorporated by reference to Exhibit 4.63 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.64</td>
<td>Translation of Irrevocable Power of Attorney issued by Robin Yanhong Li, an individual shareholder of Baidu Netcom, March 31, 2018 (incorporated by reference to Exhibit 4.64 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.65</td>
<td>Translation of Irrevocable Power of Attorney issued by Hailong Xiang, an individual shareholder of Baidu Netcom, dated March 31, 2018 (incorporated by reference to Exhibit 4.65 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>Exhibit Number</td>
<td>Description of Document</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>4.66</td>
<td>Translation of the Amended and Restated Equity Pledge Agreement between Baidu Online and Hailong Xiang dated May 7, 2018 (incorporated by reference to Exhibit 4.66 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.67</td>
<td>Translation of the Amended and Restated Equity Pledge Agreement between Baidu Online and Robin Yanhong Li dated May 7, 2018 (incorporated by reference to Exhibit 4.67 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.69</td>
<td>Translation of the Loan Agreements between Baidu Online and Zhixiang Liang, and between Baidu Online and Xiaodong Wang, both dated March 31, 2018 (incorporated by reference to Exhibit 4.69 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.70</td>
<td>Translation of Proxy Agreements between Zhixiang Liang and Baidu, Inc., and between Xiaodong Wang and Baidu, Inc., dated March 31, 2018 (incorporated by reference to Exhibit 4.70 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.71</td>
<td>Translation of Irrevocable Power of Attorney issued by Zhixiang Liang, an individual shareholder of Beijing Perusal, March 31, 2018 (incorporated by reference to Exhibit 4.71 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.72</td>
<td>Translation of Irrevocable Power of Attorney issued by Xiaodong Wang, an individual shareholder of Beijing Perusal, March 31, 2018 (incorporated by reference to Exhibit 4.72 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.73</td>
<td>Translation of the Exclusive Equity Purchase and Transfer Option Agreement among Baidu, Inc., Baidu Online, Zhixiang Liang and Beijing Perusal, dated March 31, 2018 (incorporated by reference to Exhibit 4.73 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.74</td>
<td>Translation of the Exclusive Equity Purchase and Transfer Option Agreement among Baidu, Inc., Baidu Online, Xiaodong Wang and Beijing Perusal, dated March 31, 2018 (incorporated by reference to Exhibit 4.74 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.75</td>
<td>Translation of the Termination Agreement of Current Control Contracts among Baidu Online, Beijing Perusal, Zhixiang Liang, Xiaodong Wang, and Baidu, Inc. dated June 28, 2018 (incorporated by reference to Exhibit 4.75 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.76</td>
<td>Translation of the Equity Transfer Agreements between Xiaodong Wang and Lu Wang, dated June 28, 2018 (incorporated by reference to Exhibit 4.76 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.77</td>
<td>Translation of the Operating Agreement among Baidu Online, Beijing Perusal, Zhixiang Liang, and Lu Wang, dated June 28, 2018 (incorporated by reference to Exhibit 4.77 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.78</td>
<td>Translation of the Loan Agreement between Baidu Online and Lu Wang, dated June 28, 2018 (incorporated by reference to Exhibit 4.78 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>Exhibit Number</td>
<td>Description of Document</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>4.80</td>
<td>Translation of Irrevocable Power of Attorney issued by Lu Wang, an individual shareholder of Beijing Perusal, dated June 28, 2018 (incorporated by reference to Exhibit 4.80 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.82</td>
<td>Translation of the Pledge Agreement between Baidu Online and Lu Wang, dated June 28, 2018 (incorporated by reference to Exhibit 4.82 of our Annual Report on Form 20-F filed with the Securities and Exchange Commission on March 15, 2019)</td>
</tr>
<tr>
<td>4.83*</td>
<td>Translation of the Amended and Restated Loan Agreement between Baidu Online and Robin Yanhong Li dated July 10, 2019</td>
</tr>
<tr>
<td>4.84*</td>
<td>Translation of the Amended and Restated Exclusive Equity Purchase and Transfer Option Agreement among Baidu, Inc., Baidu Netcom, Baidu Online and Robin Yanhong Li dated July 10, 2019</td>
</tr>
<tr>
<td>4.85*</td>
<td>Translation of the Amended and Restated Equity Pledge Agreement between Baidu Online and Robin Yanhong Li dated July 10, 2019</td>
</tr>
<tr>
<td>4.86*</td>
<td>Translation of the Termination Agreement of Current Control Contracts among Baidu, Inc., Baidu Online, Baidu Netcom, Robin Yanhong Li and Hailong Xiang dated August 20, 2019</td>
</tr>
<tr>
<td>4.87*</td>
<td>Translation of Proxy Agreement between Shanshan Cui and Baidu, Inc., dated August 20, 2019</td>
</tr>
<tr>
<td>4.88*</td>
<td>Translation of the Operating Agreement among Baidu Online, Baidu Netcom, Shanshan Cui, and Robin Yanhong Li, dated August 20, 2019</td>
</tr>
<tr>
<td>4.89*</td>
<td>Translation of the Loan Agreement between Baidu Online and Shanshan Cui dated August 20, 2019</td>
</tr>
<tr>
<td>4.90*</td>
<td>Translation of the Exclusive Equity Purchase and Transfer Option Agreement among Baidu, Inc., Baidu Online, Shanshan Cui and Baidu Netcom dated August 20, 2019</td>
</tr>
<tr>
<td>4.91*</td>
<td>Translation of the Equity Pledge Agreement between Baidu Online and Shanshan Cui dated August 20, 2019</td>
</tr>
<tr>
<td>8.1*</td>
<td>List of Principal Subsidiaries and Consolidated Affiliated Entities</td>
</tr>
<tr>
<td>11.1</td>
<td>Code of Business Conduct and Ethics (incorporated by reference to Exhibit 99.14 of our Registration Statement on Form F-1 (file no. 333-126534) filed with the Securities and Exchange Commission on July 12, 2005)</td>
</tr>
<tr>
<td>12.1*</td>
<td>Certification by Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</td>
</tr>
<tr>
<td>12.2*</td>
<td>Certification by Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</td>
</tr>
<tr>
<td>13.1**</td>
<td>Certification by Principal Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</td>
</tr>
<tr>
<td>13.2**</td>
<td>Certification by Principal Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</td>
</tr>
<tr>
<td>Exhibit Number</td>
<td>Description of Document</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>15.1*</td>
<td>Consent of Maples and Calder (Hong Kong) LLP</td>
</tr>
<tr>
<td>15.2*</td>
<td>Consent of Han Kun Law Offices</td>
</tr>
<tr>
<td>15.3*</td>
<td>Consent of Ernst &amp; Young Hua Ming LLP</td>
</tr>
<tr>
<td>101.INS*</td>
<td>Inline XBRL Instance Document—this instance document does not appear in the Interactive Data File because its XBRL tags are not embedded within the Inline XBRL document</td>
</tr>
<tr>
<td>101.SCH*</td>
<td>Inline XBRL Taxonomy Extension Schema Document</td>
</tr>
<tr>
<td>101.CAL*</td>
<td>Inline XBRL Taxonomy Extension Calculation Linkbase Document</td>
</tr>
<tr>
<td>101.DEF*</td>
<td>Inline XBRL Taxonomy Extension Definition Linkbase Document</td>
</tr>
<tr>
<td>101.LAB*</td>
<td>Inline XBRL Taxonomy Extension Label Linkbase Document</td>
</tr>
<tr>
<td>101.PRE*</td>
<td>Inline XBRL Taxonomy Extension Presentation Linkbase Document</td>
</tr>
<tr>
<td>104</td>
<td>Cover Page Interactive Data File (embedded within the Inline XBRL document)</td>
</tr>
</tbody>
</table>

* Filed herewith
** Furnished herewith
SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing its annual report on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Baidu, Inc.

By: /s/ Robin Yanhong Li

Name: Robin Yanhong Li
Title: Chairman and Chief Executive Officer

Date: March 13, 2020
Table of Contents

BAIDU, INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reports of Independent Registered Public Accounting Firm</td>
<td>F-2 – F-5</td>
</tr>
<tr>
<td>Consolidated Balance Sheets as of December 31, 2018 and 2019</td>
<td>F-6</td>
</tr>
<tr>
<td>Consolidated Statements of Comprehensive Income (Loss) for the</td>
<td>F-7</td>
</tr>
<tr>
<td>Years Ended December 31, 2017, 2018 and 2019</td>
<td></td>
</tr>
<tr>
<td>Consolidated Statements of Cash Flows for the Years Ended December</td>
<td>F-8 – F-9</td>
</tr>
<tr>
<td>31, 2017, 2018 and 2019</td>
<td></td>
</tr>
<tr>
<td>Consolidated Statements of Shareholders’ Equity for the Years Ended</td>
<td>F-10 – F-11</td>
</tr>
<tr>
<td>December 31, 2017, 2018 and 2019</td>
<td></td>
</tr>
<tr>
<td>Notes to the Consolidated Financial Statements</td>
<td>F-12 – F-80</td>
</tr>
</tbody>
</table>

F-1
REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Baidu, Inc.

Opinion on the Financial Statements
We have audited the accompanying consolidated balance sheets of Baidu, Inc. (the “Company”) as of December 31, 2018 and 2019, the related consolidated statements of comprehensive income (loss), cash flows and shareholders’ equity for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company’s internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 13, 2020 expressed an unqualified opinion thereon.

Adoption of New Accounting Standards
As discussed in Note 2 to the consolidated financial statements, the Company changed its method for accounting for revenue from contracts with customers using a modified retrospective approach and its method for accounting for the recognition, measurement, presentation and disclosure of certain equity securities in the year ended December 31, 2018.

Basis for Opinion
These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter
The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.
Valuation of equity investments accounted for using the measurement alternative

Description of the Matter
As of December 31, 2019, the carrying amount of the Company’s equity investments accounted for using the measurement alternative was RMB24,686 million. As discussed in Notes 2, 4 and 23 to the consolidated financial statements, the Company elected to use the measurement alternative to measure equity investments without readily determinable fair values at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer, if any. For the year ended December 31, 2019, gross unrealized gains (upward adjustments) of RMB1,447 million and gross unrealized losses (downward adjustments excluding impairment) of RMB863 million were recognized on equity investments still held at the reporting date in other income.

Auditing the valuation of equity investments accounted for using the measurement alternative was complex as significant judgment is required in the determination of whether an investment held by the Company is similar to an instrument of the same issuer with an observable price change in an orderly transaction, and the resulting price adjustment for the different rights and obligations of the instruments. This process entails an evaluation of the difference in rights and obligations between the two instruments, such as liquidation preferences and redemption features, and the selection of appropriate valuation methodologies and underlying assumptions to measure the price adjustment.

How We Addressed the Matter in Our Audit
We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company’s processes of identifying similar instruments and determining the price adjustment of equity investments accounted for using the measurement alternative. For example, we tested controls over management’s assessment of whether the instruments with observable price changes in orderly transactions compared to those held by the Company are similar. We also tested controls over management’s review of the price adjustments recognized for the equity investments held.

To audit the valuation of equity investments accounted for using the measurement alternative, we performed audit procedures that included, among others, obtaining an understanding of management’s process for identifying observable price changes in orderly transactions and their framework for considering differences in rights and obligations for assessing whether instruments are similar. On a sample basis, we read the investment agreements to compare the rights and obligations of the instruments with observable price changes in orderly transactions to the instruments held by the Company. We assessed the reasonableness of the probability of exit events as it relates to liquidation and redemption preferences, based on information available as of the observable transaction date. We evaluated the appropriateness of the valuation methodologies and underlying assumptions used by management to derive the price adjustments with the assistance of our internal valuation specialists, including benchmarking expected volatility to those of comparable companies. In addition, we recalculated the adjustments made to carrying values of the equity investments held and traced the unrealized gains or losses to the amounts recorded in the Company’s accounting records.

/s/ Ernst & Young Hua Ming LLP

We have served as the Company’s auditor since 2007.
Beijing, The People’s Republic of China
March 13, 2020

F-3
REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Baidu, Inc.

Opinion on Internal Control Over Financial Reporting

We have audited Baidu, Inc.’s internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Baidu, Inc. (the “Company”) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the consolidated balance sheets of the Company as of December 31, 2018 and 2019, the related consolidated statements of comprehensive income (loss), cash flows and shareholders’ equity for each of the three years in the period ended December 31, 2019, and the related notes and our report dated March 13, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management’s Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

F-4
Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young Hua Ming LLP

Beijing, The People's Republic of China
March 13, 2020
Baidu, Inc.
CONSOLIDATED BALANCE SHEETS
(Amounts in millions of Renminbi (“RMB”), and in millions of U.S. Dollars (“US$”), except for number of shares and per share data)

<table>
<thead>
<tr>
<th>Notes</th>
<th>As of December 31</th>
<th>2018</th>
<th>2019</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td>US$</td>
</tr>
<tr>
<td>ASSETS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current assets:</td>
<td>Cash and cash equivalents</td>
<td>27,638</td>
<td>33,443</td>
<td>4,804</td>
</tr>
<tr>
<td></td>
<td>Restricted cash</td>
<td>2,189</td>
<td>996</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>Short-term investments</td>
<td>111,026</td>
<td>112,824</td>
<td>16,221</td>
</tr>
<tr>
<td></td>
<td>Accounts receivable, net of allowance of RMB599 and RMB928 (US$133) for 2018 and 2019, respectively</td>
<td>5,015</td>
<td>7,416</td>
<td>1,065</td>
</tr>
<tr>
<td></td>
<td>Other current assets, net</td>
<td>6,841</td>
<td>9,189</td>
<td>1,320</td>
</tr>
<tr>
<td>Total current assets</td>
<td>155,094</td>
<td>165,562</td>
<td>23,782</td>
<td></td>
</tr>
<tr>
<td>Non-current assets:</td>
<td>Fixed assets, net</td>
<td>17,903</td>
<td>18,311</td>
<td>2,630</td>
</tr>
<tr>
<td></td>
<td>Intangible assets, net</td>
<td>9,181</td>
<td>7,887</td>
<td>1,133</td>
</tr>
<tr>
<td></td>
<td>Goodwill</td>
<td>18,536</td>
<td>18,250</td>
<td>2,621</td>
</tr>
<tr>
<td></td>
<td>Long-term investments, net</td>
<td>80,454</td>
<td>69,410</td>
<td>9,970</td>
</tr>
<tr>
<td></td>
<td>Amounts due from related parties</td>
<td>4,297</td>
<td>3,564</td>
<td>512</td>
</tr>
<tr>
<td></td>
<td>Deferred tax assets, net</td>
<td>2,324</td>
<td>2,193</td>
<td>315</td>
</tr>
<tr>
<td></td>
<td>Operating lease right-of-use assets</td>
<td>7,332</td>
<td>1,053</td>
<td>151</td>
</tr>
<tr>
<td></td>
<td>Other non-current assets</td>
<td>9,777</td>
<td>8,807</td>
<td>1,264</td>
</tr>
<tr>
<td>Total non-current assets</td>
<td>142,472</td>
<td>135,754</td>
<td>19,498</td>
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</tr>
<tr>
<td>Total assets</td>
<td>297,566</td>
<td>301,316</td>
<td>43,280</td>
<td></td>
</tr>
<tr>
<td>LIABILITIES AND EQUITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liabilities:</td>
<td>Short-term loans</td>
<td>3,046</td>
<td>2,618</td>
<td>376</td>
</tr>
<tr>
<td></td>
<td>Accounts payable and accrued liabilities</td>
<td>35,381</td>
<td>32,701</td>
<td>4,698</td>
</tr>
<tr>
<td></td>
<td>Customer deposits and deferred revenue</td>
<td>9,221</td>
<td>11,062</td>
<td>1,589</td>
</tr>
<tr>
<td></td>
<td>Deferred income</td>
<td>523</td>
<td>529</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>Long-term loans, current portion</td>
<td>84</td>
<td>737</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>Notes payable, current portion</td>
<td>6,871</td>
<td>5,219</td>
<td>750</td>
</tr>
<tr>
<td></td>
<td>Amounts due to related parties</td>
<td>1,727</td>
<td>2,331</td>
<td>320</td>
</tr>
<tr>
<td></td>
<td>Operating lease liabilities</td>
<td>2,283</td>
<td>4,486</td>
<td>644</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>56,853</td>
<td>57,380</td>
<td>8,243</td>
<td></td>
</tr>
<tr>
<td>Non-current liabilities:</td>
<td>Deferred income</td>
<td>54</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Deferred revenue</td>
<td>1,309</td>
<td>1,099</td>
<td>145</td>
</tr>
<tr>
<td></td>
<td>Amounts due to related parties</td>
<td>4,360</td>
<td>3,846</td>
<td>552</td>
</tr>
<tr>
<td></td>
<td>Notes payable</td>
<td>7,456</td>
<td>7,804</td>
<td>1,121</td>
</tr>
<tr>
<td></td>
<td>Convertible senior notes</td>
<td>4712</td>
<td>12,297</td>
<td>1,766</td>
</tr>
<tr>
<td></td>
<td>Deferred tax liabilities</td>
<td>4,099</td>
<td>3,273</td>
<td>470</td>
</tr>
<tr>
<td></td>
<td>Operating lease liabilities</td>
<td>2,283</td>
<td>4,486</td>
<td>644</td>
</tr>
<tr>
<td></td>
<td>Other non-current liabilities</td>
<td>236</td>
<td>299</td>
<td>44</td>
</tr>
<tr>
<td>Total non-current liabilities</td>
<td>56,853</td>
<td>57,380</td>
<td>8,243</td>
<td></td>
</tr>
<tr>
<td>Total liabilities</td>
<td>121,814</td>
<td>128,501</td>
<td>18,458</td>
<td></td>
</tr>
<tr>
<td>Commitments and contingencies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Redeemable noncontrolling interests</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class A ordinary shares, par value US$0.00005 per share, 825,000,000 shares authorized as at December 31, 2018 and 2019; 27,733,692 shares and 27,381,621 shares issued and outstanding as at December 31, 2018 and 2019, respectively</td>
<td>18</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Class B ordinary shares, par value US$0.00005 per share, 35,400,000 shares authorized as at December 31, 2018 and 2019; 7,201,254 shares and 7,201,254 shares issued and outstanding as at December 31, 2018 and 2019, respectively</td>
<td>18</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>33,441</td>
<td>38,714</td>
<td>5,561</td>
<td></td>
</tr>
<tr>
<td>Retained earnings</td>
<td>129,246</td>
<td>126,268</td>
<td>18,137</td>
<td></td>
</tr>
<tr>
<td>Accumulated other comprehensive income (loss)</td>
<td>210</td>
<td>(1,383)</td>
<td>(59)</td>
<td></td>
</tr>
<tr>
<td>Total Baidu, Inc. shareholders’ equity</td>
<td>162,897</td>
<td>161,637</td>
<td>18,458</td>
<td></td>
</tr>
<tr>
<td>Noncontrolling interests</td>
<td>12,139</td>
<td>8,107</td>
<td>1,164</td>
<td></td>
</tr>
<tr>
<td>Total equity</td>
<td>175,036</td>
<td>171,706</td>
<td>24,663</td>
<td></td>
</tr>
<tr>
<td>Total liabilities, redeemable noncontrolling interests and equity</td>
<td>297,566</td>
<td>301,316</td>
<td>43,280</td>
<td></td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of the consolidated financial statements.

F-6
BAIDU, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Amounts in millions of Renminbi ("RMB"), and in millions of U.S. Dollars ("US$"), except for number of shares and per share (or ADS) data)

<table>
<thead>
<tr>
<th>Notes</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>US$</td>
</tr>
<tr>
<td>Revenues:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online marketing services</td>
<td>73,146</td>
<td>81,912</td>
<td>78,093</td>
<td>11,217</td>
</tr>
<tr>
<td>Others</td>
<td>11,663</td>
<td>20,365</td>
<td>29,320</td>
<td>4,212</td>
</tr>
<tr>
<td><strong>Total revenues</strong></td>
<td><strong>2,84,809</strong></td>
<td><strong>102,277</strong></td>
<td><strong>107,413</strong></td>
<td><strong>15,429</strong></td>
</tr>
<tr>
<td>Operating costs and expenses:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of revenues</td>
<td>43,062</td>
<td>51,744</td>
<td>62,850</td>
<td>9,028</td>
</tr>
<tr>
<td>Selling, general and administrative</td>
<td>13,128</td>
<td>19,231</td>
<td>19,910</td>
<td>2,860</td>
</tr>
<tr>
<td>Research and development</td>
<td>12,928</td>
<td>15,772</td>
<td>18,346</td>
<td>2,635</td>
</tr>
<tr>
<td><strong>Total operating costs and expenses</strong></td>
<td><strong>69,118</strong></td>
<td><strong>86,747</strong></td>
<td><strong>101,106</strong></td>
<td><strong>14,523</strong></td>
</tr>
<tr>
<td><strong>Operating profit</strong></td>
<td><strong>15,691</strong></td>
<td><strong>15,530</strong></td>
<td><strong>6,307</strong></td>
<td><strong>906</strong></td>
</tr>
<tr>
<td>Other income:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest income</td>
<td>3,154</td>
<td>4,451</td>
<td>6,060</td>
<td>870</td>
</tr>
<tr>
<td>Interest expense</td>
<td>(1,615)</td>
<td>(1,883)</td>
<td>(2,960)</td>
<td>(425)</td>
</tr>
<tr>
<td>Foreign exchange gain (loss), net</td>
<td>(482)</td>
<td>(122)</td>
<td>(33)</td>
<td>(5)</td>
</tr>
<tr>
<td>Loss from equity method investments</td>
<td>4</td>
<td>(79)</td>
<td>(1,254)</td>
<td>(180)</td>
</tr>
<tr>
<td>Others, net</td>
<td>4</td>
<td>4,598</td>
<td>9,428</td>
<td>(8,460)</td>
</tr>
<tr>
<td><strong>Total other income (loss), net</strong></td>
<td><strong>5,592</strong></td>
<td><strong>11,795</strong></td>
<td><strong>(6,647)</strong></td>
<td><strong>(955)</strong></td>
</tr>
<tr>
<td><strong>Income (loss) before income taxes</strong></td>
<td><strong>21,283</strong></td>
<td><strong>27,325</strong></td>
<td><strong>(340)</strong></td>
<td><strong>(49)</strong></td>
</tr>
<tr>
<td>Income taxes</td>
<td>14</td>
<td>2,995</td>
<td>4,743</td>
<td>1,948</td>
</tr>
<tr>
<td><strong>Net income (loss)</strong></td>
<td><strong>18,288</strong></td>
<td><strong>22,582</strong></td>
<td><strong>(2,288)</strong></td>
<td><strong>(328)</strong></td>
</tr>
<tr>
<td>Less: net income (loss) attributable to noncontrolling interests</td>
<td>(13)</td>
<td>(4,991)</td>
<td>(4,345)</td>
<td>(624)</td>
</tr>
<tr>
<td><strong>Net income attributable to Baidu, Inc.</strong></td>
<td><strong>18,301</strong></td>
<td><strong>27,573</strong></td>
<td><strong>2,057</strong></td>
<td><strong>296</strong></td>
</tr>
<tr>
<td>Earnings per share for Class A and Class B ordinary shares:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td>527.51</td>
<td>786.36</td>
<td>56.84</td>
<td>8.16</td>
</tr>
<tr>
<td>Diluted</td>
<td>524.08</td>
<td>780.27</td>
<td>55.96</td>
<td>8.04</td>
</tr>
<tr>
<td>Earnings per ADS (1 Class A ordinary share equals 10 ADSs):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td>52.75</td>
<td>78.64</td>
<td>5.68</td>
<td>0.82</td>
</tr>
<tr>
<td>Diluted</td>
<td>52.41</td>
<td>78.03</td>
<td>5.60</td>
<td>0.80</td>
</tr>
<tr>
<td>Weighted average number of Class A and Class B ordinary shares outstanding:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td>34,725,123</td>
<td>34,898,589</td>
<td>34,834,497</td>
<td>34,834,497</td>
</tr>
<tr>
<td>Diluted</td>
<td>34,952,391</td>
<td>35,171,043</td>
<td>34,884,854</td>
<td>34,884,854</td>
</tr>
<tr>
<td>Other comprehensive income (loss):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign currency translation adjustments</td>
<td>803</td>
<td>194</td>
<td>(782)</td>
<td>(113)</td>
</tr>
<tr>
<td>Unrealized gains (losses) on available-for-sale investments, net of reclassification</td>
<td>1,575</td>
<td>92</td>
<td>(708)</td>
<td>(102)</td>
</tr>
<tr>
<td><strong>Other comprehensive income (loss), net of tax</strong></td>
<td><strong>2,378</strong></td>
<td><strong>286</strong></td>
<td><strong>(1,490)</strong></td>
<td><strong>(215)</strong></td>
</tr>
<tr>
<td>Comprehensive income (loss)</td>
<td><strong>20,666</strong></td>
<td><strong>22,868</strong></td>
<td><strong>(3,778)</strong></td>
<td><strong>(543)</strong></td>
</tr>
<tr>
<td>Less: comprehensive income (loss) attributable to noncontrolling interests and redeemable noncontrolling interests</td>
<td>(348)</td>
<td>(3,985)</td>
<td>(4,242)</td>
<td>(699)</td>
</tr>
<tr>
<td><strong>Comprehensive income attributable to Baidu, Inc.</strong></td>
<td><strong>21,014</strong></td>
<td><strong>26,853</strong></td>
<td><strong>464</strong></td>
<td><strong>66</strong></td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of the consolidated financial statements.

F-7
<table>
<thead>
<tr>
<th>Year Ended December 31</th>
<th>Cash flows from operating activities</th>
<th>Cash flows from investing activities</th>
<th>Other investing activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Net income (loss)</td>
<td>Acquisition of fixed assets</td>
<td>Loans provided to related parties</td>
</tr>
<tr>
<td></td>
<td>18,288</td>
<td>(4,779)</td>
<td>12,270</td>
</tr>
<tr>
<td></td>
<td>22,582</td>
<td>(553)</td>
<td>(8,632)</td>
</tr>
<tr>
<td></td>
<td>(2,288)</td>
<td>(9,087)</td>
<td>12,270</td>
</tr>
<tr>
<td></td>
<td>(328)</td>
<td>(385)</td>
<td>(8,632)</td>
</tr>
<tr>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
</tr>
<tr>
<td></td>
<td>18,288</td>
<td>22,582</td>
<td>12,270</td>
</tr>
<tr>
<td></td>
<td>22,582</td>
<td>(2,288)</td>
<td>(8,632)</td>
</tr>
<tr>
<td></td>
<td>(328)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>US$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjustments to reconcile net income to net cash generated from operating activities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depreciation of fixed assets and computer parts</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Amortization of intangible assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deferred income, net</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Share-based compensation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provision for doubtful accounts</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Investment and interest income</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Amortization and impairment of produced content</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Impairment of other assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Loss from equity method investments</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Gain) loss on disposal of subsidiaries</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Barter transaction revenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other non-cash expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Changes in operating assets and liabilities, net of effects of acquisitions and disposals:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accounts receivable</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Amounts due from related parties</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Customer deposits and deferred revenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accounts payable and accrued liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deferred income</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Amounts due to related parties</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Net cash provided by operating activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Net cash used in investing activities</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of the consolidated financial statements.

F-8
### Baidu, Inc.

**CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)**

(Amounts in millions of Renminbi ("RMB"), and in millions of U.S. Dollars ("US$"))

<table>
<thead>
<tr>
<th>For the Years Ended December 31</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>US$</td>
</tr>
<tr>
<td><strong>Cash flows from financing activities:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from short-term loans</td>
<td>751</td>
<td>3,787</td>
<td>2,738</td>
<td>393</td>
</tr>
<tr>
<td>Repayments of short-term loans</td>
<td>(826)</td>
<td>(1,055)</td>
<td>(3,166)</td>
<td>(455)</td>
</tr>
<tr>
<td>Repayments of long-term loans</td>
<td>299</td>
<td>1,168</td>
<td>946</td>
<td>136</td>
</tr>
<tr>
<td>Proceeds from issuance of long-term notes</td>
<td>3,330</td>
<td>(98)</td>
<td>(168)</td>
<td>(24)</td>
</tr>
<tr>
<td>Loans borrowed from related parties</td>
<td></td>
<td>3,732</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from issuance of long-term notes</td>
<td></td>
<td>18,050</td>
<td>(10)</td>
<td>(1)</td>
</tr>
<tr>
<td>Repayment of long-term notes</td>
<td>(4,957)</td>
<td>(6,846)</td>
<td>(6,912)</td>
<td>(993)</td>
</tr>
<tr>
<td>Proceeds from issuance of convertible notes, net of issuance costs</td>
<td>8,463</td>
<td>5,035</td>
<td>7,910</td>
<td>1,136</td>
</tr>
<tr>
<td>Purchase of capped calls</td>
<td></td>
<td>(465)</td>
<td>(567)</td>
<td>(81)</td>
</tr>
<tr>
<td>Proceeds from issuance of subsidiaries’ shares</td>
<td>4,046</td>
<td>15,689</td>
<td>401</td>
<td>57</td>
</tr>
<tr>
<td>Repurchase of ordinary shares</td>
<td>(1,723)</td>
<td>(3,312)</td>
<td>(4,958)</td>
<td>(712)</td>
</tr>
<tr>
<td>Proceeds from exercise of share options</td>
<td>453</td>
<td>676</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>Proceeds from third-party investors for sale of financial products</td>
<td>101,189</td>
<td>15,143</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repayment to third-party investors for sale of financial products</td>
<td>(82,987)</td>
<td>(33,376)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from secured borrowings from third-party financial institutions</td>
<td>16,008</td>
<td>10,380</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repayment of secured borrowings from third-party financial institutions</td>
<td>(2,730)</td>
<td>(13,426)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other financing activities</td>
<td>(8)</td>
<td>(105)</td>
<td>(15)</td>
<td></td>
</tr>
<tr>
<td><strong>Net cash provided by (used in) financing activities</strong></td>
<td>44,557</td>
<td>15,082</td>
<td>(3,873)</td>
<td>(556)</td>
</tr>
</tbody>
</table>

Effect of exchange rate changes on cash, cash equivalents and restricted cash: (316) 1,902 1

**Net increase in cash, cash equivalents and restricted cash** 120 18,491 4,612 663

Cash, cash equivalents and restricted cash at beginning of the year: 11,216 11,336 29,827 4,284

**Cash, cash equivalents and restricted cash at end of the year** 11,336 29,827 34,439 4,947

### Supplemental disclosures:

- **Interest paid**
  - 1,205 1,579 2,448 352
- **Income taxes paid**
  - 3,300 5,509 4,100 589

### Non-cash investing and financing activities:

- **Acquisition of fixed assets included in accounts payable and accrued liabilities**
  - 1,167 1,516 1,020 147
- **Acquisition of licensed copyrights included in accounts payable and accrued liabilities**
  - 4,040 6,337 5,486 788
- **Acquisition of licensed copyrights from nonmonetary content exchanges**
  - 782 642 968 139

**Non-cash acquisitions of investments**

765 764 28 4

The accompanying notes are an integral part of the consolidated financial statements.

F-9
### Baidu, Inc.

**CONSOLIDATED STATEMENTS OF SHAREHOLDERS’ EQUITY**

(Amounts in millions of Renminbi (“RMB”), and in millions of U.S. Dollars (“US$”), except for number of shares)

<table>
<thead>
<tr>
<th></th>
<th>Attributable to Baidu, Inc.</th>
<th>Accumulated other comprehensive income</th>
<th>Noncontrolling interests</th>
<th>Total shareholders’ equity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of shares</td>
<td>Amount</td>
<td>Additional paid-in capital</td>
<td>Retained earnings</td>
</tr>
<tr>
<td>Balances at December 31, 2016</td>
<td>34,726,805</td>
<td>8,323</td>
<td>85,734</td>
<td>(1,783)</td>
</tr>
<tr>
<td>Net income</td>
<td></td>
<td></td>
<td></td>
<td>18,301</td>
</tr>
<tr>
<td>Other comprehensive income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issuance of shares by the Company’s subsidiaries</td>
<td></td>
<td></td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Acquisition of noncontrolling interests in a subsidiary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise of share-based awards</td>
<td>235,210</td>
<td>454</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share-based compensation</td>
<td></td>
<td>3,264</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accretion of redeemable noncontrolling interests</td>
<td></td>
<td></td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Repurchase and retirement of ordinary shares</td>
<td>(145,783)</td>
<td></td>
<td></td>
<td>(1,724)</td>
</tr>
<tr>
<td>Disposal of subsidiaries’ shares</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balances at December 31, 2017</td>
<td>34,816,232</td>
<td>12,088</td>
<td>102,328</td>
<td>930</td>
</tr>
<tr>
<td>Cumulative effect of accounting change</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td></td>
<td></td>
<td></td>
<td>27,573</td>
</tr>
<tr>
<td>Other comprehensive income</td>
<td></td>
<td></td>
<td></td>
<td>1,134</td>
</tr>
<tr>
<td>Issuance of shares by the Company’s subsidiaries</td>
<td></td>
<td></td>
<td>14,984</td>
<td></td>
</tr>
<tr>
<td>Exercise of share-based awards</td>
<td>325,879</td>
<td>689</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share-based compensation</td>
<td></td>
<td>4,340</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accretion of redeemable noncontrolling interests</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repurchase and retirement of ordinary shares</td>
<td>(207,165)</td>
<td></td>
<td></td>
<td>(3,312)</td>
</tr>
<tr>
<td>Disposal of subsidiaries’ shares</td>
<td></td>
<td>1,323</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversion of iQIYI preferred shares recognized as redeemable noncontrolling interests to ordinary shares</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity component of convertible senior notes, net of issuance costs</td>
<td></td>
<td>206</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase of capped call</td>
<td>(264)</td>
<td></td>
<td>(211)</td>
<td></td>
</tr>
<tr>
<td>Balances at December 31, 2018</td>
<td>34,934,546</td>
<td>33,241</td>
<td>129,246</td>
<td>210</td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of the consolidated financial statements.
### BAIDU, INC.

**CONSOLIDATED STATEMENTS OF SHAREHOLDERS’ EQUITY (CONTINUED)**

(Amounts in millions of Renminbi (“RMB”), and in millions of U.S. Dollars (“US$”), except for number of shares)

<table>
<thead>
<tr>
<th>Ordinary shares</th>
<th>Attributable to Baidu, Inc.</th>
<th>Accumulated other comprehensive income (loss)</th>
<th>Noncontrolling interests</th>
<th>Total shareholders’ equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of shares</td>
<td>Amount</td>
<td>Additional paid-in capital</td>
<td>Retained earnings</td>
<td></td>
</tr>
<tr>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
</tr>
<tr>
<td><strong>Balances at December 31, 2018</strong></td>
<td>34,934,946</td>
<td>—</td>
<td>33,441</td>
<td>129,246</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>—</td>
<td>—</td>
<td>2,057</td>
<td>—</td>
</tr>
<tr>
<td><strong>Other comprehensive income</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Business combinations</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Acquisition of non-controlling interests in a subsidiary</strong></td>
<td>—</td>
<td>—</td>
<td>(22)</td>
<td>—</td>
</tr>
<tr>
<td><strong>Issuance of shares by the Company’s subsidiaries to noncontrolling interest</strong></td>
<td>—</td>
<td>—</td>
<td>(19)</td>
<td>—</td>
</tr>
<tr>
<td><strong>Exerciser of share-based awards</strong></td>
<td>312,463</td>
<td>—</td>
<td>18</td>
<td>—</td>
</tr>
<tr>
<td><strong>Share-based compensation</strong></td>
<td>—</td>
<td>—</td>
<td>5,045</td>
<td>—</td>
</tr>
<tr>
<td><strong>Dividends paid and payable by the Company’s subsidiaries</strong></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Accretion of redeemable noncontrolling interests</strong></td>
<td>—</td>
<td>—</td>
<td>(77)</td>
<td>—</td>
</tr>
<tr>
<td><strong>Repurchase and retirement of ordinary shares</strong></td>
<td>(664,534)</td>
<td>—</td>
<td>—</td>
<td>(4,958)</td>
</tr>
<tr>
<td><strong>Disposal of subsidiaries’ shares</strong></td>
<td>—</td>
<td>—</td>
<td>13</td>
<td>—</td>
</tr>
<tr>
<td><strong>Equity component of convertible senior notes, net of issuance costs</strong></td>
<td>—</td>
<td>—</td>
<td>559</td>
<td>—</td>
</tr>
<tr>
<td><strong>Purchase of capped call</strong></td>
<td>—</td>
<td>—</td>
<td>(321)</td>
<td>—</td>
</tr>
<tr>
<td><strong>Balances at December 31, 2019</strong></td>
<td>34,582,875</td>
<td>—</td>
<td>38,714</td>
<td>126,268</td>
</tr>
<tr>
<td><strong>Balances at December 31, 2019, in US$</strong></td>
<td>—</td>
<td>—</td>
<td>5,561</td>
<td>18,137</td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of the consolidated financial statements.

F-11
BAIDU, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2017, 2018 and 2019

1. ORGANIZATION, CONSOLIDATION AND PRESENTATION OF FINANCIAL STATEMENTS

Baidu, Inc. (“Baidu” or the “Company”) was incorporated under the laws of the Cayman Islands on January 18, 2000. The Company, its subsidiaries, VIEs and subsidiaries of the VIEs are hereinafter collectively referred to as the “Group.”

As of December 31, 2019, the Company has subsidiaries incorporated in countries and jurisdictions including the People’s Republic of China (“PRC”), Hong Kong, Japan, Cayman Islands and British Virgin Islands (“BVI”). As of December 31, 2019, the Company also effectively controls a number of variable interest entities (“VIEs”) through the Primary Beneficiaries, as defined below. The VIEs include:

- Beijing Baidu Netcom Science Technology Co., Ltd. (“Baidu Netcom”), controlled by the Company;
- Beijing Perusal Technology Co., Ltd. (“Beijing Perusal”), controlled by the Company;
- Beijing iQIYI Science & Technology Co., Ltd. (“Beijing iQIYI”), and other VIEs controlled by iQIYI, Inc. (“iQIYI VIEs”); and
- Other VIEs controlled by the Company or the Company’s subsidiaries.

The Group offers online marketing services, operates AI-powered new business initiatives, and operates an online video platform offering membership services of its content library and online marketing services. The Group’s principal geographic market is in the PRC. The Company does not conduct any substantive operations of its own, but conducts its primary business operations through its subsidiaries and VIEs in the PRC.

PRC laws and regulations prohibit or restrict foreign ownership of internet content, advertising, audio and video services, and mobile application distribution businesses, etc. To comply with these foreign ownership restrictions, the Group operates its websites and primarily provides services subject to such restriction in the PRC through the VIEs, the PRC legal entities that were established or whose equity shares were held by the individuals authorized by the Group. The paid-in capital of the VIEs was mainly funded by the Company or its subsidiaries through loans extended to the authorized individuals who were the shareholders of the VIEs. The Company or its subsidiaries has entered into proxy agreements or powers of attorney and exclusive equity purchase option agreement with the VIEs and nominee shareholders of the VIEs through the Company or its subsidiaries (“Primary Beneficiaries”), which give the Primary Beneficiaries the power to direct the activities that most significantly affect the economic performance of the VIEs and to acquire the equity interests in the VIEs when permitted by the PRC laws, respectively. Certain exclusive agreements have been entered into with the VIEs through the Primary Beneficiaries or their wholly-owned subsidiaries in the PRC, which obligate the Primary Beneficiaries to absorb losses or receive economic benefits of the VIEs’ that could potentially be significant to the VIEs or entitle the Primary Beneficiaries to receive economic benefits from the VIEs that could potentially be significant to the VIEs. In addition, the Group has entered into certain agreements with the shareholders of the VIEs through the Primary Beneficiaries or their wholly-owned subsidiaries, including loan agreements for the paid-in capital of the VIEs and equity pledge agreements for the equity interests in the VIEs held by the shareholders of the VIEs.

Despite the lack of legal majority ownership, there exists a parent-subsidiary relationship between the Primary Beneficiaries and the VIEs through the aforementioned agreements with the shareholders of the VIEs. The shareholders of the VIEs effectively assigned all of their voting rights underlying their equity interest in the VIEs to the Primary Beneficiaries. In addition, through the other exclusive agreements, which consist of operating agreements, technology consulting and services agreements and license agreements, the Primary Beneficiaries, by themselves or their wholly-owned subsidiaries in the PRC, demonstrate their ability and intention to continue to exercise the ability to absorb losses or receive economic benefits that could potentially be significant to the
VIEs. The VIEs are subject to operating risks, which determine the variability of the Company’s interest in those entities. Based on these contractual arrangements, the Company consolidates the VIEs as required by Accounting Standards Codification (“ASC”) Topic 810, Consolidation.

Unrecognized revenue-producing assets held by the VIEs include certain internet content provisions and other licenses, domain names and trademarks. The internet content provisions and other licenses, which are held by the VIEs that provide the relevant services, are required under relevant PRC laws, rules and regulations for the operation of Internet businesses in the PRC, and therefore are integral to the Company’s operations.

The principal terms of the agreements entered into amongst the VIEs, their respective shareholders and the Primary Beneficiaries before the amendments made in March 2018 are further described below.

**Loan Agreements**

Pursuant to loan agreements amongst the shareholders of Baidu Netcom and Baidu Online Network Technology (Beijing) Co., Ltd. (“Baidu Online”), one of the Company’s subsidiaries, Baidu Online provided interest-free loans in an aggregate amount of RMB13.4 billion (US$1.9 billion) to the shareholders of Baidu Netcom solely for the latter to fund the capitalization of Baidu Netcom. The loans can be repaid only with the proceeds from the sale of the shareholders’ equity interest in Baidu Netcom to Baidu Online or its designated person. The term of the loan agreements will expire on July 9, 2029 and August 19, 2029, and can be extended with the written consent of both parties before its expiration.

Pursuant to loan agreements amongst the shareholders of Baidu Perusal and Baidu Online, the amount of loans extended to the respective shareholders of Beijing Perusal is RMB3.2 billion (US$459 million). The term of the loan agreements will expire on March 30, 2028 and October 29, 2029, and can be extended with the written consent of both parties before its expiration. Each of the loan agreements amongst Baidu Online or other subsidiaries and the respective shareholders of Beijing Perusal or other VIEs, including iQIYI VIEs, contains substantially the same terms as those described above, except that the amount of the loans and the contract expiration date varies.

**Exclusive Equity Purchase and Transfer Option Agreement**

Pursuant to the exclusive equity purchase and transfer option agreement amongst the shareholders of Baidu Netcom, Baidu Netcom and Baidu Online, the shareholders of Baidu Netcom irrevocably granted Baidu Online or its designated person(s) an exclusive option to purchase, to the extent permitted under PRC law, all or part of the equity interests in Baidu Netcom for the cost of the initial contributions to the registered capital or the minimum amount of consideration permitted by applicable PRC law. The shareholders should remit to Baidu Online any amount that is paid by Baidu Online or its designated person(s) in connection with the purchased equity interest. Baidu Online or its designated person(s) have sole discretion to decide when to exercise the option, whether in part or in full. Any and all dividends and other capital distributions made by Baidu Netcom to its shareholders should be repaid to Baidu Online in full amount. Baidu Online would provide unlimited financial support to Baidu Netcom if, in the normal operation of business, Baidu Netcom would become in need of any form of reasonable financial support. If Baidu Netcom were to incur any loss and as a result cannot repay any loans from Baidu Online, Baidu Online should unconditionally forgive any such loans to Baidu Netcom given that Baidu Netcom provides sufficient proof for its loss and incapacity to repay. The agreement will terminate when the shareholders of Baidu Netcom have transferred all their equity interests in Baidu Netcom to Baidu Online or its designated person(s) or upon expiration of the term of business of Baidu Online or Baidu Netcom.

Each of the exclusive equity purchase and transfer option agreements amongst Baidu Online or other subsidiaries, Beijing Perusal and their shareholders, or other VIE and their shareholders contains substantially the
same terms as those described above. Each of the agreements will terminate upon the transfer of all the equity interests held by the shareholders of Beijing Perusal or other VIEs, including iQIYI VIEs, as the case may be, to Baidu Online or its designated person(s) or upon expiration of the term of business of Baidu Online, Beijing Perusal or other VIEs, including iQIYI VIEs.

Commitment Letters

Pursuant to the commitment letter dated January 30, 2013, under the condition that Beijing iQIYI remains as a consolidated affiliated entity of iQIYI under United States generally accepted accounting principles (“U.S. GAAP”) and the relevant contractual arrangements remain in effect, iQIYI commits to provide unlimited financial support to Beijing iQIYI, if Beijing iQIYI requires any form of reasonable financial support for its normal business operations. If Beijing iQIYI incurs any losses and as a result cannot repay its loans from iQIYI and Beijing QIYI Century Science & Technology Co., Ltd (“Beijing QIYI Century”), one of iQIYI’s subsidiaries, iQIYI and Beijing QIYI Century would unconditionally forgive their loans to Beijing iQIYI, if Beijing iQIYI provides sufficient proof for its loss and incapacity to repay.

The commitment letters executed by other iQIYI VIEs contain terms similar to the terms described above.

Proxy Agreement/Power of Attorney

Pursuant to the proxy agreement between Baidu Online and the shareholders of Baidu Netcom, the shareholders of Baidu Netcom agreed to entrust all the rights to exercise their voting power and any other rights as shareholders of Baidu Netcom to the person(s) designated by Baidu Online. The shareholders of Baidu Netcom have each executed an irrevocable power of attorney to appoint the person(s) designated by Baidu Online as their attorney-in-fact to vote on their behalf on all matters requiring shareholder approval. The proxy agreement would be in effect for an unlimited term unless terminated in writing by Baidu Online. The power of attorney would be in effect for as long as the shareholders of Baidu Netcom hold any equity interests in Baidu Netcom.

Each of the proxy agreements or shareholder voting rights trust agreements amongst Baidu Online or other subsidiaries and the shareholders of Beijing Perusal and other VIEs contains substantially the same terms as those described above. Each of the proxy agreements will be in effect for an unlimited term unless terminated in writing by Baidu Online or other subsidiaries. Each of the powers of attorney will be in effect for as long as the shareholder of Beijing Perusal or other VIEs, including iQIYI VIEs, holds any equity interests in Beijing Perusal or other VIEs, including iQIYI VIEs, as the case may be.

Operating Agreement

Pursuant to the operating agreement amongst Baidu Online, Baidu Netcom and the shareholders of Baidu Netcom, Baidu Online provides guidance and instructions on Baidu Netcom’s daily operations and financial affairs. Baidu Online has the power to appoint senior executives of Baidu Netcom. The shareholders of Baidu Netcom must appoint the candidates recommended by Baidu Online as their representatives on Baidu Netcom’s board of directors. In addition, Baidu Online agrees to guarantee Baidu Netcom’s performance under any agreements or arrangements relating to Baidu Netcom’s business arrangements with any third party. In return, Baidu Netcom agrees that without the prior consent of Baidu Online, Baidu Netcom will not engage in any transactions that could materially affect the assets, liabilities, rights or operations of Baidu Netcom, including, without limitation, incurrence or assumption of any indebtedness, sale or purchase of any assets or rights, incurrence of any encumbrance on any of its assets or intellectual property rights in favor of a third party or transfer of any agreements relating to its business operation to any third party. The agreement will be in effect for an unlimited term, until the term of business of Baidu Online or Baidu Netcom expires and extension is denied by the relevant approval authorities.
Each of the operating agreements amongst Baidu Online or other subsidiaries, Beijing Perusal and their shareholders or other VIEs including iQIYI VIEs and their shareholders contains substantially the same terms as those described above. Each of the agreements will be in effect for an unlimited term, until the term of business of Baidu Online, Beijing Perusal or other VIEs, including iQIYI VIEs, expires and extension is denied by the relevant approval authorities.

**Exclusive Technology Consulting and Services Agreement**

Pursuant to the exclusive technology consulting and services agreement between Baidu Online and Baidu Netcom, Baidu Online has the exclusive right to provide technology consulting and services related to, among other things, the maintenance of servers, software development, design of advertisements, and e-commerce technical services to Baidu Netcom. Baidu Online owns the intellectual property rights resulting from the performance of this agreement. Baidu Netcom agrees to pay service fees to Baidu Online and Baidu Online has the right to adjust the service fees at its sole discretion without the consent of Baidu Netcom. The agreement will be in effect for an unlimited term, until the term of business of one party expires and extension is denied by the relevant approval authorities.

Each of the exclusive technology consulting and services agreements between Baidu Online or other subsidiaries and Beijing Perusal or other VIEs, including iQIYI VIEs, contains substantially the same terms as those described above, except the basis of determining the service fees may differ.

**License Agreements**

Baidu Online and Baidu Netcom entered into a software license agreement and a web layout copyright license agreement (collectively, the “License Agreements”). Pursuant to the License Agreements between Baidu Online and Baidu Netcom, Baidu Online has granted to Baidu Netcom the right to use (including but not limited to) a software license and a web layout copyright license. Baidu Netcom may only use the licenses in its own business operations. Baidu Online has the right to adjust the service fees at its sole discretion. The software license agreement and web layout copyright license agreement were renewed since their original expiration and would be in effect for an unlimited term, until the term of business of one party expires and extension is denied by the relevant approval authorities.

Baidu Online entered into web layout copyright license agreements with Beijing Perusal. Each of the license agreements between the Baidu Online and Beijing Perusal or other VIEs contains substantially the same terms as those described above. Each of the web layout copyright license agreements was renewed in 2013 and would be in effect for an unlimited term, until the term of business of one party expires and extension is denied by the relevant approval authorities.

Pursuant to the trademark license agreement and the software usage license agreement amongst Beijing QIYI Century and Beijing iQIYI effective November 23, 2011, Beijing QIYI Century granted a non-exclusive and non-transferable license, without sublicensing rights, to Beijing iQIYI to use its trademarks and software. Beijing iQIYI may only use the licenses in its own business operations. Beijing QIYI Century has the right to adjust the service fees at its sole discretion. The initial term of the two agreements is five years and the software usage license agreement may be extended upon the written consent of Beijing QIYI Century. The trademark license agreement is automatically extended for successive one-year periods after its expiration unless Beijing QIYI Century early terminates the agreement in accordance with the provisions of the agreement. The software usage license agreement was extended for another five years after its initial term.
Business Cooperation Agreement

Pursuant to the business cooperation agreement amongst Beijing QIYI Century and Beijing iQIYI effective November 23, 2011, Beijing iQIYI agrees to provide Beijing QIYI Century with services, including internet information services, online advertising and other services reasonably necessary within the scope of Beijing QIYI Century’s business. Beijing iQIYI agrees to use, technology services provided by Beijing QIYI Century on its website, including but not limited to, P2P download and video on-demand systems. Beijing QIYI Century agrees to pay specified service fees to Beijing iQIYI as consideration for the internet information services and other services provided by Beijing iQIYI. Beijing iQIYI has the right to waive the service fees at its discretion. The term of this agreement is ten years and can be renewed at Beijing QIYI Century’s discretion.

Equity Pledge Agreement

Pursuant to the equity pledge agreement between Baidu Online and the shareholders of Baidu Netcom, the shareholders of Baidu Netcom pledged all of their equity interests in Baidu Netcom to Baidu Online to guarantee their obligations under the loan agreement and Baidu Netcom’s performance of its obligations under the exclusive technology consulting and services agreement. If Baidu Netcom or its shareholders breach their respective contractual obligations, Baidu Online, as the pledgee, will be entitled to certain rights, including the right to sell the pledged equity interests. The shareholders of Baidu Netcom agreed not to dispose of the pledged equity interests or take any actions that would prejudice Baidu Online’s interest. The equity pledge agreement will expire two years after expiration of the term or the fulfillment by Baidu Netcom and its shareholders of their respective obligations under the exclusive technology consulting and services agreement and the loan agreement.

Each of the equity pledge agreements amongst Baidu Online or other subsidiaries and the shareholders of Beijing Perusal or other VIEs, including iQIYI VIEs, contains substantially the same terms, including its term to expiration, as those described above.

Through the design of the aforementioned agreements, the shareholders of the VIEs effectively assigned their full voting rights to Baidu Online, which gives Baidu Online the power to direct the activities that most significantly impact the VIEs’ economic performance. Baidu Online obtains the ability to approve decisions made by the VIEs and the ability to acquire the equity interests in the VIEs when permitted by PRC law. Baidu Online is obligated to absorb losses or receive economic benefits of the VIEs that could potentially be significant to the VIEs through providing unlimited financial support to the VIEs or is entitled to receive economic benefits from the VIEs that could potentially be significant to the VIEs through the exclusive technology consulting and service fees. As a result of these contractual agreements, Baidu Online is determined to be the primary beneficiary of the VIEs. Despite the lack of technical majority ownership, there exists a parent-subsidiary relationship between the Company and the VIEs through these contractual agreements, and the Company consolidates the VIEs through Baidu Online.

Through the Contractual Arrangements, the shareholders of the VIEs effectively assigned all of their voting rights underlying their equity interest in iQIYI VIEs to iQIYI. In addition, through the other exclusive agreements, which consist of the operation agreements, business cooperating agreement, exclusive technology consulting and services agreements and trademark and software usage license agreements, iQIYI, through its wholly-owned subsidiaries in the PRC, have the right to receive economic benefits from iQIYI VIEs that potentially could be significant to iQIYI VIEs. Lastly, through the commitment letters, iQIYI has the obligation to absorb losses of iQIYI VIEs that could potentially be significant to iQIYI VIEs. Therefore, iQIYI is considered the primary beneficiary of iQIYI VIEs and consolidates iQIYI VIEs and their subsidiaries.
In March 2018, the contractual agreements for certain VIEs, including Baidu Netcom and Beijing Perusal, were amended to include the following terms:

a. Exclusive equity purchase and transfer option agreement

The Company has (i) an exclusive option to purchase, when and to the extent permitted under PRC laws, all or part of the equity interests in the VIE or all or part of the assets held by the VIE, (ii) an exclusive right to cause the nominee shareholders to transfer their equity interest in the VIE to the Company or any designated person and (iii) an obligation to provide unlimited financial support to the VIEs when the VIEs become in need of any form of reasonable financial support in the normal operation of business. If the VIEs were to incur any loss and as a result cannot repay any loans from the Company, the Company will unconditionally forgive any such loans to the VIEs upon provision by the VIEs of sufficient proof for its loss and incapacity to repay.

b. Proxy Agreements/Power of Attorney

The appointment of any individuals to exercise the powers and rights assigned pursuant to the Proxy Agreement requires the approval of the Company. All the activities in relation to such powers and rights assigned are directed and approved by the Company. The shareholders of the VIEs agreed to entrust all the rights to exercise their voting power and any other rights as shareholders of the VIEs to the person(s) designated by the Company. The shareholders of the VIEs have each executed an irrevocable power of attorney to appoint the person(s) designated by the Company as their attorney-in-fact to vote on their behalf on all matters requiring shareholder approval.

As a result, the power and the rights pursuant to the Proxy Agreements have since been effectively reassigned from Baidu Online to the Company which has the power to direct the activities of the VIEs that most significantly impact the VIEs’ economic performance. The Company or its subsidiaries is also obligated to absorb the expected losses or receive economic benefits of the VIE through the agreements mentioned above. Therefore, the Company has replaced Baidu Online as the Primary Beneficiary of Baidu Netcom and Beijing Perusal since March 2018. As the VIEs were subject to indirect control by the Company through its subsidiaries immediately before and direct control immediately after the contractual agreements were amended, the change of the primary beneficiary of the VIEs was accounted for as a common control transaction based on the carrying amount of the net assets transferred.

In the opinion of the Company’s legal counsel, (i) the ownership structure relating to the VIEs of the Company is in compliance with existing PRC laws and regulations; (ii) the contractual arrangements with the VIEs and their shareholders are valid, binding and enforceable, and will not result in any violation of PRC laws or regulations currently in effect; and (iii) the performance of the VIEs and their shareholders is in compliance with the articles of association and business licenses of the VIEs.

However, uncertainties in the PRC legal system could cause the Company’s current ownership structure to be found in violation of any existing and/or future PRC laws or regulations and could limit the Company’s ability, through the Primary Beneficiaries, to enforce its rights under these contractual arrangements. Furthermore, shareholders of the VIEs may have interests that are different with those of the Company, which could potentially increase the risk that they would seek to breach the existing terms of the aforementioned agreements.

In addition, if the current structure or any of the contractual arrangements were found to be in violation of any existing or future PRC laws, the Company may be subject to penalties, which may include but not be limited to, the cancellation or revocation of the Company’s business and operating licenses, being required to restructure the Company’s operations or discontinue the Company’s operating activities. The imposition of any of these or other penalties may result in a material and adverse effect on the Company’s ability to conduct its operations. In such case, the Company may not be able to operate or control the VIEs, which may result in deconsolidation of the VIEs.

F-17
The following tables set forth the financial statement balances and amounts of the VIEs and their subsidiaries were included in the consolidated financial statements after the elimination of intercompany balances and transactions among VIEs and their subsidiaries within the Group.

<table>
<thead>
<tr>
<th></th>
<th>As of December 31</th>
<th>2018</th>
<th>2019</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td>US$</td>
</tr>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td>(in millions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>1,895</td>
<td>2,313</td>
<td>332</td>
<td></td>
</tr>
<tr>
<td>Short-term investments</td>
<td>2,912</td>
<td>1,892</td>
<td>272</td>
<td></td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>3,750</td>
<td>5,023</td>
<td>722</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>4,275</td>
<td>5,759</td>
<td>827</td>
<td></td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>12,832</td>
<td>14,987</td>
<td>2,153</td>
<td></td>
</tr>
<tr>
<td>Fixed assets, net</td>
<td>4,183</td>
<td>3,839</td>
<td>551</td>
<td></td>
</tr>
<tr>
<td>Intangible assets, net</td>
<td>4,032</td>
<td>3,076</td>
<td>442</td>
<td></td>
</tr>
<tr>
<td>Long-term investments, net</td>
<td>18,923</td>
<td>21,825</td>
<td>3,135</td>
<td></td>
</tr>
<tr>
<td>Operating lease right-of-use assets</td>
<td>—</td>
<td>6,525</td>
<td>937</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>12,639</td>
<td>12,325</td>
<td>1,770</td>
<td></td>
</tr>
<tr>
<td><strong>Total non-current assets</strong></td>
<td>39,777</td>
<td>47,590</td>
<td>6,835</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>52,609</td>
<td>62,577</td>
<td>8,988</td>
<td></td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable and accrued liabilities</td>
<td>13,889</td>
<td>15,774</td>
<td>2,266</td>
<td></td>
</tr>
<tr>
<td>Customer deposits and deferred revenue</td>
<td>3,704</td>
<td>4,841</td>
<td>695</td>
<td></td>
</tr>
<tr>
<td>Operating lease liabilities</td>
<td>—</td>
<td>2,110</td>
<td>303</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>1,219</td>
<td>1,967</td>
<td>283</td>
<td></td>
</tr>
<tr>
<td><strong>Total current third-party liabilities</strong></td>
<td>18,812</td>
<td>24,692</td>
<td>3,547</td>
<td></td>
</tr>
<tr>
<td>Operating lease liabilities</td>
<td>—</td>
<td>4,227</td>
<td>607</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>2,417</td>
<td>2,068</td>
<td>297</td>
<td></td>
</tr>
<tr>
<td><strong>Total non-current third-party liabilities</strong></td>
<td>2,417</td>
<td>6,295</td>
<td>904</td>
<td></td>
</tr>
<tr>
<td>Amounts due to the Company and its non-VIE subsidiaries, net</td>
<td>22,398</td>
<td>17,121</td>
<td>2,459</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>43,627</td>
<td>48,108</td>
<td>6,910</td>
<td></td>
</tr>
</tbody>
</table>

Certain figures included in “Third-party liabilities” and “Inter-company liabilities” have been reclassified to “Amounts due to the Company and its non-VIE subsidiaries” in the table above to conform to the current year presentation.

<table>
<thead>
<tr>
<th></th>
<th>For the years ended December 31</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>US$</td>
</tr>
<tr>
<td>Total revenues</td>
<td></td>
<td>29,208</td>
<td>33,992</td>
<td>51,988</td>
<td>7,468</td>
</tr>
<tr>
<td>Net loss</td>
<td></td>
<td>(626)</td>
<td>(6,834)</td>
<td>(2,950)</td>
<td>(424)</td>
</tr>
<tr>
<td>Net cash provided by operating activities</td>
<td>3,698</td>
<td>2,386</td>
<td>1,649</td>
<td>237</td>
<td></td>
</tr>
<tr>
<td>Net cash used in by investing activities</td>
<td>(5,725)</td>
<td>(16,674)</td>
<td>(4,829)</td>
<td>(694)</td>
<td></td>
</tr>
<tr>
<td>Net cash provided by financing activities</td>
<td>2,985</td>
<td>11,916</td>
<td>3,604</td>
<td>518</td>
<td></td>
</tr>
</tbody>
</table>

F-18
As of December 31, 2019, there were no pledge or collateralization of the VIEs’ assets that can only be used to settle obligations of the VIEs, other than aforementioned in the equity pledge agreements and collateralization of a VIE’s office building or restricted cash as described in Note 10. The amount of the net assets of the VIEs was RMB14.5 billion (US$2.1 billion) as of December 31, 2019. The creditors of the VIEs’ third-party liabilities did not have recourse to the general credit of the Company in normal course of business. The Company did not provide or intend to provide financial or other supports not previously contractually required to the VIEs during the years presented.

Basis of Presentation
The consolidated financial statements are prepared in accordance with United States generally accepted accounting principles ("U.S. GAAP").

Principles of Consolidation
The consolidated financial statements include the financial statements of the Company, its subsidiaries, VIEs and subsidiaries of the VIEs. All inter-company transactions and balances between the Company, its subsidiaries, VIEs and subsidiaries of the VIEs are eliminated upon consolidation. The Company included the results of operations of acquired businesses from the respective dates of acquisition.

Use of Estimates
The preparation of the financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Management evaluates estimates, including those related to the standalone selling prices of performance obligations and amounts of variable considerations of revenue contracts, accounts receivable and contract assets allowances, credit loss allowance for micro loan receivables, fair values of certain debt and equity investments, fair values of retained interests related to disposed entities, amortization and useful lives of licensed copyrights and produced content, ultimate revenue of produced content, deferred tax valuation allowance and the valuation and recognition of share-based compensation arrangements, among others. Management bases the estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results could differ from these estimates.

Currency Translation for Financial Statements Presentation
Translations of amounts from RMB into US dollar $ (USD) for the convenience of the reader have been calculated at the exchange rate of RMB6.9618 per US$1.00 on December 31, 2019, the last business day in fiscal year 2019, as published on the website of the United States Federal Reserve Board. No representation is made that the RMB amounts could have been, or could be, converted into U.S. dollars at such rate.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Foreign Currency
The Company’s functional currency is the US$. The Company’s subsidiaries, VIEs and subsidiaries of the VIEs determine their functional currencies based on the criteria of ASC Topic 830, Foreign Currency Matters. The
BAIDU, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2017, 2018 and 2019

Company uses the RMB as its reporting currency. The Company uses the exchange rate as of the balance sheet date to translate its assets and liabilities and the average daily exchange rate for each month to translate its income and expense items to reporting currency. Any translation gains (losses) are recorded in other comprehensive income (loss). Transactions denominated in foreign currencies are measured and recorded into the functional currency at the exchange rates prevailing on the transaction dates. Assets and liabilities denominated in foreign currencies other than functional currency are remeasured into the functional currency at the exchange rates prevailing at the balance sheet date. Exchange gains and losses are included in earnings as a component of “Other income (loss), net.”

Segment Reporting

As of December 31, 2018 and 2019, the Company had two reportable segments, Baidu Core and iQIYI. Baidu Core mainly provides search-based, feed-based and other online marketing services, as well as products and services from our new AI initiatives. Search Services and Transaction Services were combined into Baidu Core beginning April 2017, to reflect the Company’s strategic and operational change to de-emphasize its transaction services business and shift more resources to support its online marketing and other services. iQIYI is an online entertainment service provider that offers original, professionally produced and partner-generated content on its platform. In early April 2018, iQIYI completed its initial public offering (“IPO”) on the Nasdaq Global Market.

The Company’s chief executive officer, who has been identified as the chief operating decision marker (“CODM”), reviews the operating results of Baidu Core and iQIYI, to allocate resources and assess the Company’s performance. Accordingly, the financial statements include segment information which reflects the current composition of the reportable segments in accordance with ASC Topic 280, Segment Reporting.

Business Combinations

The Company accounts for its business combinations using the purchase method of accounting in accordance with ASC Topic 805, Business Combinations. The purchase method of accounting requires that the consideration transferred to be allocated to the assets, including separately identifiable assets and liabilities the Company acquired, based on their estimated fair values. The consideration transferred in an acquisition is measured as the aggregate of the fair values at the date of exchange of the assets given, liabilities incurred, and equity instruments issued as well as the contingent considerations as of the acquisition date. The costs directly attributable to the acquisition are expensed as incurred. Identifiable assets, liabilities and contingent liabilities acquired or assumed are measured separately at their fair value as of the acquisition date, irrespective of the extent of any noncontrolling interests. The excess of (i) the total of cost of acquisition, fair value of the noncontrolling interests and acquisition date fair value of any previously held equity interest in the acquiree over (ii) the fair value of the identifiable net assets of the acquiree, is recorded as goodwill. If the cost of acquisition is less than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in earnings.

In a business combination achieved in stages, the Company remeasures its previously held equity interest in the acquiree immediately before obtaining control at its acquisition-date fair value and the re-measurement gain or loss, if any, is recognized in earnings.

The determination and allocation of fair values to the identifiable assets acquired, liabilities assumed and noncontrolling interests is based on various assumptions and valuation methodologies requiring considerable judgment from management. The most significant variables in these valuations are discount rates, terminal values, the number of years on which to base the cash flow projections, as well as the assumptions and estimates used to determine the cash inflows and outflows. The Company determines discount rates to be used based on the
risk inherent in the related activity’s current business model and industry comparisons. Terminal values are based on the expected life of assets, and forecasted cash flows over that period.

Cash, Cash Equivalents and Restricted Cash

Cash and cash equivalents
Cash and cash equivalents primarily consist of cash, money market funds, investments in interest bearing demand deposit accounts, time deposits and highly liquid investments with original maturities of three months or less from the date of purchase and are stated at cost which approximates their fair value.

Restricted cash
Restricted cash mainly consists of the cash reserved in escrow accounts at certain banks as online payment service deposits and cash pledged for bank loan facility.

In November 2016, the FASB issued Accounting Standards Update No. 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash, which requires companies to include amounts generally described as restricted cash and restricted cash equivalents in cash and cash equivalents when reconciling beginning-of-period and end-of-period total amounts presented in the statement of cash flows. The Company adopted the new standard effective January 1, 2018, using the retrospective transition method. All restricted cash was presented on the face of consolidated balance sheet as “Restricted cash”.

Accounts Receivable, net of allowance
Accounts receivable are recognized and carried at the original invoiced amount less an allowance for any potential uncollectible amounts. An estimate for doubtful accounts is made when collection of the full amount is no longer probable. Receivable balances are written off when they are deemed uncollectible. The Company generally does not require collateral from its customers.

The Company maintains allowances for doubtful accounts for estimated losses resulting from the failure of customers to make payments on time. The Company reviews the accounts receivable on a periodic basis and makes general and specific allowances when there is doubt as to the collectability of individual balances. In evaluating the collectability of individual receivable balances, the Company considers many factors, including the age of the balance, the customer’s payment history, the customer’s current credit-worthiness and current economic trends.

Receivables from Online Payment Agencies, net of allowance
Receivables from online payment agencies are funds due from the third-party online payment service providers for clearing transactions. Funds were paid or deposited by customers or users through these online payment agencies for services provided by the Company. The Company carefully considers and monitors the credit worthiness of the third-party payment service providers used. An allowance for doubtful accounts is recorded in the period in which a loss is determined to be probable. Receivable balances are written off when they are deemed uncollectible. The balances are included in “Other current assets, net” on the consolidated balance sheets. As of December 31, 2018 and 2019, no allowance for doubtful accounts was provided for the receivables from online payment agencies.
Investments

Short-term investments
All highly liquid investments with original maturities of greater than three months, but less than twelve months, are classified as short-term investments. Investments that are expected to be realized in cash during the next twelve months are also included in short-term investments.

The Company accounts for short-term debt investments in accordance with ASC Topic 320, Investments—Debt Securities (“ASC 320”). The Company classifies the short-term investments in debt as “held-to-maturity,” “trading” or “available-for-sale,” whose classification determines the respective accounting methods stipulated by ASC 320. Dividend and interest income, including amortization of the premium and discount arising at acquisition, for all categories of investments in securities are included in earnings. Any realized gains or losses on the sale of the short-term investments are determined on a specific identification method, and such gains and losses are reflected in earnings during the period in which gains or losses are realized.

Securities that the Company has positive intent and ability to hold to maturity are classified as held-to-maturity securities and stated at amortized cost. For individual securities classified as held-to-maturity securities, the Company evaluates whether a decline in fair value below the amortized cost basis is other-than-temporary, in accordance with ASC 320. Other-than-temporary impairment loss is recognized in earnings equal to the entire excess of the debt security’s amortized cost basis over its fair value at the balance sheet date of the reporting period for which the assessment is made.

Securities that are bought and held principally for the purpose of selling them in the near term are classified as trading securities, in accordance with ASC 320. Unrealized holding gains and losses for trading securities are included in earnings.

Debt investments not classified as trading or as held-to-maturity are classified as available-for-sale debt securities, which are reported at fair value, with unrealized gains and losses recorded in “Accumulated other comprehensive income (loss)” . An impairment loss on the available-for-sale debt securities is recognized in earnings when the decline in value is determined to be other-than-temporary.

Long-term investments
The Company’s long-term investments consist of equity investments with readily determinable fair value, equity method investments, held-to-maturity debt investments, available-for-sale debt investments, equity investments without readily determinable fair value, and other investments accounted for at fair value.

The Company adopted ASC Topic 321, Investments–Equity Securities (“ASC 321”) from January 1, 2018 and the cumulative effect of RMB1.9 billion representing the unrealized gains of available-for-sale equity securities before the adoption was recorded as an adjustment to the opening retained earnings. Pursuant to ASC 321, equity investments, except for those accounted for under the equity method, those that result in consolidation of the investee and certain other investments, are measured at fair value, and any changes in fair value are recognized in earnings. For equity securities without readily determinable fair value and do not qualify for the existing practical expedient in ASC Topic 820, Fair Value Measurements and Disclosures (“ASC 820”) to estimate fair value using the net asset value per share (or its equivalent) of the investment, the Company elected to use the measurement alternative to measure those investments at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same
issuer, if any. Significant judgments are required to determine whether (i) observable price changes in orderly transactions are for instruments that are considered similar, and (ii) appropriate valuation methodologies and underlying assumptions, including expected volatility and the probability of exit events as it relates to liquidation and redemption features used to measure the price adjustments for the difference in rights and obligations between instruments. Equity securities with readily determinable fair values are measured at fair value, and any changes in fair value are recognized in earnings.

For equity investments measured at fair value with changes in fair value recorded in earnings, the Company does not assess whether those securities are impaired. For equity investments that the Company elects to use the measurement alternative, the Company makes a qualitative assessment of whether the investment is impaired at each reporting date. If a qualitative assessment indicates that the investment is impaired, the entity has to estimate the investment’s fair value in accordance with the principles of ASC 820. If the fair value is less than the investment’s carrying value, the Company recognizes an impairment loss in net income equal to the difference between the carrying value and fair value.

Investments that the Company has positive intent and ability to hold to maturity are classified as held-to-maturity investments and stated at amortized cost. For individual securities classified as held-to-maturity investments, the Company evaluates whether a decline in fair value below the amortized cost basis is other-than-temporary, in accordance with ASC 320. Other-than-temporary impairment loss is recognized in earnings equal to the entire excess of the debt investment’s amortized cost basis over its fair value at the balance sheet date of the reporting period for which the assessment is made.

Available-for-sale debt investments are convertible debt instruments issued by private companies and investment in preferred shares that is redeemable at the Company’s option, which are measured at fair value. Interest income is recognized in earnings. All other changes in the carrying amount of these debt investments are recognized in other comprehensive income. An impairment loss on the available-for-sale debt investments, if any, is recognized in earnings when the decline in value is determined to be other-than-temporary.

Investments in entities in which the Company can exercise significant influence but does not own a majority equity interest or control are accounted for using the equity method of accounting in accordance with ASC Topic 323, Investments—Equity Method and Joint Ventures (“ASC 323”). Under the equity method, the Company initially records its investment at cost and the difference between the cost of the equity investee and the amount of the underlying equity in the net assets of the equity investee is accounted for as if the investee were a consolidated subsidiary. The Company subsequently adjusts the carrying amount of its investment to recognize the Company’s proportionate share of each equity investee’s net income or loss into earnings. The Company will discontinue applying the equity method if an investment (plus additional financial support provided to the investee, if any) has been reduced to zero. When the Company has other investments in its equity-method investee and is not required to advance additional funds to that investee, the Company would continue to report its share of equity method losses in its statement of comprehensive income after its equity-method investment in ordinary shares has been reduced to zero, to the extent of and as an adjustment to the adjusted basis of the Company’s other investments in the investee. Such losses are first applied to those investments of a lower liquidation preference before being further applied to the investments of a higher liquidation preference. The Company adopted a one-quarter lag in reporting for its share of equity income/(loss) in all of its equity method investees.

The Company evaluates the equity method investments for impairment whenever events or changes in circumstances indicate that the carrying amount of the investment might not be recoverable. Factors considered by the Company when determining whether an investment has been other-than-temporarily-impaired, includes,
but not limited to, the length of the time and the extent to which the market value has been less than cost, the financial performance and near-term prospect of the investee, and the Company's intent and ability to retain the investment until the recovery of its cost. An impairment loss on the equity method investments is recognized in earnings when the decline in value is determined to be other-than-temporary and is allocated to the individual net assets underlying equity method investments in the following order: 1) reduce any equity method goodwill to zero; 2) reduce the individual basis differences related to the investee's long-lived assets pro rata based on their amounts relative to the overall basis difference at the impairment date and 3) reduce the individual basis difference of the investee's remaining assets in a systematic and rational manner.

In accordance with ASC 946-320 Financial Services—Investment Companies, Investments—Debt and Equity Securities, the Company accounts for long-term equity investments in unlisted companies held by consolidated investment companies at fair value. These investments were initially recorded at their transaction price net of transaction costs, if any. Fair value of these investments are re-measured periodically in accordance with ASC 820.

**Fair Value Measurements of Financial Instruments**

Financial instruments are in the form of cash and cash equivalents, restricted cash, short-term investments, accounts receivable, amounts due from and due to related parties, other receivables, long-term investments, short-term loans, accounts payable and accrued liabilities, customer advances and deposits, derivative instruments, notes payable, convertible senior notes and long-term loans. The carrying values of the aforementioned financial instruments included in current assets and liabilities approximate their respective fair values because of their general short maturities. The carrying amounts of long-term loans approximate fair values as the related interest rates currently offered by financial institutions for similar debt instruments of comparable maturities. The fair value of long-term investments that are not reported at fair value are disclosed in Note 23.

**Fixed Assets**

Fixed assets are stated at cost less accumulated depreciation. Depreciation is recorded on a straight-line basis over the shorter of the estimated useful lives of the assets or the term of the related lease, as follows:

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Useful Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office building</td>
<td>43 to 45 years</td>
</tr>
<tr>
<td>Office building related facility, machinery and equipment</td>
<td>15 years</td>
</tr>
<tr>
<td>Computer equipment</td>
<td>3 to 5 years</td>
</tr>
<tr>
<td>Office equipment</td>
<td>3 to 5 years</td>
</tr>
<tr>
<td>Vehicles</td>
<td>5 years</td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>over the shorter of lease terms or estimated useful lives of the assets</td>
</tr>
</tbody>
</table>

Fixed assets have no estimated residual value except for the office building and its related facility, machinery and equipment, which have an estimated residual value of 4% of the cost.

Repair and maintenance costs are charged to expense as incurred, whereas the cost of renewals and betterments that extend the useful life of fixed assets are capitalized as additions to the related assets. Retirements, sales and disposals of assets are recorded by removing the cost and accumulated depreciation from the asset and accumulated depreciation accounts with any resulting gain or loss reflected in earnings. All direct and indirect costs that are related to the construction of fixed assets and incurred before the assets are ready for their intended
use are capitalized as construction in progress. Construction in progress is transferred to specific fixed assets items and depreciation of these assets commences when they are ready for their intended use.

Interest costs are capitalized if they are incurred during the acquisition, construction or production of a qualifying asset and such costs could have been avoided if expenditures for the assets have not been made. Capitalization of interest costs commences when the activities to prepare the asset are in progress and expenditures and borrowing costs are being incurred. Interest costs are capitalized until the assets are ready for their intended use. Interest costs capitalized for the years ended December 31, 2017, 2018 and 2019 were insignificant.

Licensed Copyrights, net
Licensed copyrights consist of professionally-produced content such as films, television series, variety shows and other video content acquired from external parties. The license fees are capitalized and, unless prepaid, a corresponding liability is recorded when the cost of the content is known, the content is accepted by the Company in accordance with the conditions of the license agreement and the content is available for its first showing on the Company’s websites. Licensed copyrights are carried at the lower of unamortized cost or net realizable value. Licensed copyrights are presented on the balance sheet as current and non-current, based on estimated time of usage.

The Company has two types of licensed copyrights, i) non-exclusive licensed copyrights and ii) exclusive licensed copyrights. For non-exclusive licensed copyrights, the Company has the right to broadcast the contents on its own websites. For exclusive licensed copyrights, in addition to the broadcasting right, the Company also has the right to sublicense the underlying contents to external parties.

Non-exclusive licensed copyrights are amortized using an accelerated or a straight-line method based on historical and estimated viewership consumption patterns over its economic useful lives. Estimates of future viewership consumption patterns and economic useful lives for licensed copyrights are reviewed periodically, at least on an annual basis and revised, if necessary. Revisions to the amortization pattern are accounted for as a change in accounting estimate prospectively in accordance with ASC topic 250 (“ASC 250”), Accounting Changes and Error Corrections.

The purchase cost of exclusive licensed copyrights includes a broadcasting right and a right to sublicense the content to external parties, and the Company allocates the content cost to these two rights when the exclusive licensed copyrights are initially recognized based on the relative proportion of the Company’s estimate of the total revenues that will be generated by each right over its economic useful lives. For the broadcasting right, which is the portion of an exclusive licensed copyright that generates direct and indirect online advertising and membership services revenues, the content costs are amortized in accordance with ASC subtopic 920-350 (“ASC 920-350”), Entertainment-Broadcasters: Intangibles—Goodwill and Other, using the same method as non-exclusive licensed copyrights as described above. For the right to sublicense the content to external parties, which is the portion of an exclusive licensed copyright that generates direct content distribution revenues, the content costs are amortized based on its estimated usage pattern. The Company reviews the forecasted total direct content distribution revenues on a periodic basis and any changes in estimates will result in the Company applying a revised fraction to the net carrying amount of the right to sublicense as of the beginning of the fiscal year.

On a periodic basis, the Company evaluates the program usefulness of the broadcasting rights of its licensed copyrights and records these rights at the lower of unamortized cost or estimated net realizable value pursuant to the guidance in ASC 920-350. When there is a change in the expected usage of licensed copyrights, the Company estimates net realizable value of licensed copyrights to determine if any impairment exists.
Net realizable value is determined by estimating the expected cash flows generated from provision of online advertising and membership services, less any direct costs, over the remaining useful lives of the licensed copyrights. The Group estimates online advertising and membership services cash flows for each category of content separately. Estimates that impact advertising and membership services cash flows include anticipated levels of demand for the Group’s advertising and membership services and the expected selling prices of such services. For the right to sublicense to external parties, recoverability is assessed in accordance with ASC 926-20. The Company recognized impairment charges on licensed copyrights of RMB390 million, RMB181 million and nil for the years ended December 31, 2017, 2018 and 2019, respectively.

**Goodwill and Intangible Assets**

**Goodwill**

The Company assesses goodwill for impairment in accordance with ASC Subtopic 350-20, Intangibles—Goodwill and Other: Goodwill (“ASC 350-20”), which requires that goodwill to be tested for impairment at the reporting unit level at least annually and more frequently upon the occurrence of certain events, as defined by ASC 350-20. As of December 31, 2018 and 2019, the Company has two reporting units, consisting of Baidu Core and iQIYI.

The Company has the option to assess qualitative factors first to determine whether it is necessary to perform the two-step test in accordance with ASC 350-20. If the Company believes, as a result of the qualitative assessment, that it is more-likely-than-not that the fair value of the reporting unit is less than its carrying amount, the two-step quantitative impairment test described above is required. Otherwise, no further testing is required. In the qualitative assessment, the Company considers primary factors such as industry and market considerations, overall financial performance of the reporting unit, and other specific information related to the operations. In performing the two-step quantitative impairment test, the first step compares the carrying amount of the reporting unit to the fair value of the reporting unit based on either quoted market prices of the ordinary shares or estimated fair value using the market approach. If the fair value of the reporting unit exceeds the carrying value of the reporting unit, goodwill is not impaired and the Company is not required to perform further testing. If the carrying value of the reporting unit exceeds the fair value of the reporting unit, then the Company must perform the second step of the impairment test in order to determine the implied fair value of the reporting unit’s goodwill. The fair value of the reporting unit is allocated to its assets and liabilities in a manner similar to a purchase price allocation in order to determine the implied fair value of the reporting unit goodwill. If the carrying amount of the goodwill is greater than its implied fair value, the excess is recognized as an impairment loss.

The Company performed qualitative assessments for the reporting unit of Baidu Core in 2018 and 2019. Based on the requirements of ASC 350-20, the Company evaluated all relevant factors including, but not limited to, macroeconomic conditions, industry and market conditions, financial performance, and the share price of the Company. The Company weighed all factors in their entirety and concluded that it was not more-likely-than-not the fair value was less than the carrying amount of Baidu Core, and further impairment testing on goodwill was unnecessary as of December 31, 2018 and 2019.

The Company elected to assess goodwill for impairment using the two-step process for the reporting unit of iQIYI. Subsequent to iQIYI’s IPO, the Company primarily considered the quoted market price of iQIYI’s share to determine the fair value of the reporting unit. As of December 31, 2018 and 2019, the fair value of iQIYI exceeded its carrying amount, therefore, goodwill related to the iQIYI reporting unit was not impaired and the Company was not required to perform further testing.

On disposal of a portion of reporting unit that constitutes a business, the attributable amount of goodwill is included in the determination of the amount of profit or loss on disposal. When the Group disposes of a business
within the reporting unit, the amount of goodwill disposed is measured on the basis of the relative fair value of the business disposed and the portion of the reporting unit retained. This relative fair value approach is not used when the business to be disposed was not integrated into the reporting unit after its acquisition, in which case the current carrying amount of the acquired goodwill should be included in the carrying amount of the business to be disposed.

Intangible assets

Intangible assets with finite lives are carried at cost less accumulated amortization. All intangible assets with finite lives are amortized using the straight-line method over the estimated useful lives, except for the sublicensing rights and certain licensed copyrights.

Intangible assets have weighted average useful lives from the date of purchase as follows:

<table>
<thead>
<tr>
<th>Intangible Asset</th>
<th>Useful Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer relationships</td>
<td>5 years</td>
</tr>
<tr>
<td>Software</td>
<td>5 years</td>
</tr>
<tr>
<td>Trademarks</td>
<td>10 years</td>
</tr>
<tr>
<td>User list</td>
<td>5 years</td>
</tr>
<tr>
<td>Licensed copyrights of video contents</td>
<td>3 years</td>
</tr>
<tr>
<td>Others</td>
<td>6 years</td>
</tr>
</tbody>
</table>

Intangible assets with indefinite useful life are not amortized and are tested for impairment annually or more frequently, if events or changes in circumstances indicate that they might be impaired in accordance with ASC Subtopic 350-30, Intangibles-Goodwill and Other: General Intangibles Other than Goodwill (“ASC 350-30”).

Upon the initial application of ASC 842 on January 1, 2019, land use rights were presented as operating lease right-of-use assets (“ROU assets”). Such amount was included in the opening balance of operating lease ROU assets as of January 1, 2019 with no adjustments made to the comparative periods.

Produced Content, net

The Company produces original content in-house and collaborates with external parties. The cost incurred in the physical production of original content includes direct production costs, production overhead and acquisition costs and is reported separately as “Produced content” on the consolidated balance sheet. Produced content also includes cash expenditures made to acquire a proportionate share of certain rights to films including profit sharing, distribution and/or other rights. Production costs exceeding the estimated total revenues to be earned (“ultimate revenue”) are expensed as cost of revenues. Ultimate revenue estimates include contracted revenue, if any, and revenue expected to be earned not exceeding ten years from the date of initial release from all sources, including exhibition, licensing, or exploitation of produced content if the Company has demonstrated a history of earning such revenue. The Company estimates ultimate revenue to be earned during the economic useful lives of produced content based on anticipated release patterns and historical results of similar produced content, which are identified based on various factors, including cast and crew, target audience and popularity. The Company amortizes produced content using an accelerated method based on historical and estimated usage patterns of its produced contents. Significant management judgement is required to estimate the growth rates for the Company’s membership services and online advertising revenue, which could significantly impact estimated ultimate revenue and usage patterns of produced content. These estimates are periodically reviewed and adjusted, if appropriate. The difference between expenses determined using the new estimates and any amounts previously expensed during the fiscal year is recognized in the period of revision.
The Company reviews unamortized produced content costs for impairment whenever events or circumstances indicate that the fair value of the produced content may be less than its unamortized cost.

**Impairment of Long-Lived Assets Other Than Goodwill**

The Company evaluates long-lived assets, such as fixed assets and purchased or internally developed intangible assets with finite lives other than licensed copyrights and produced contents, for impairment whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable in accordance with ASC Topic 360, *Property, Plant and Equipment*. When such events occur, the Company assesses the recoverability of the asset group based on the undiscounted future cash flows the asset group is expected to generate and recognizes an impairment loss when estimated undiscounted future cash flows expected to result from the use of the asset group plus net proceeds expected from disposition of the asset group, if any, is less than the carrying value of the asset group. If the Company identifies an impairment, the Company reduces the carrying amount of the asset group to its estimated fair value based on a discounted cash flow approach or, when available and appropriate, to comparable market values. The Company uses estimates and judgments in its impairment tests and if different estimates or judgments had been utilized, the timing or the amount of any impairment charges could be different. Asset groups to be disposed of would be reported at the lower of the carrying amount or fair value less costs to sell, and no longer depreciated. The assets and liabilities of a disposal group classified as held for sale would be presented separately in the appropriate asset and liability sections of the consolidated balance sheets.

**Leases**

The Company adopted ASU No. 2016-02, Leases (Topic 842) (“ASU 2016-02”) from January 1, 2019 by using the modified retrospective method and did not restate the comparable periods. The Company has elected the package of practical expedients, which allows the Company not to reassess (1) whether any expired or existing contracts as of the adoption date are or contain a lease, (2) lease classification for any expired or existing leases as of the adoption date and (3) initial direct costs for any expired or existing leases as of the adoption date. The Company also elected the practical expedient not to separate lease and non-lease components of contracts, except for bandwidth service included in internet data center (“IDC”) facilities lease contracts. Lastly, the Company elected the short-term lease exemption for all contracts with lease terms of 12 months or less.

The Company determines if an arrangement is a lease or contains a lease at lease inception. For operating leases, the Company recognizes an ROU asset and a lease liability based on the present value of the lease payments over the lease term on the consolidated balance sheets at commencement date. For finance leases, assets are included in property and equipment on the consolidated balance sheets. As most of the Company’s leases do not provide an implicit rate, the Company estimates its incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments. The incremental borrowing rate is estimated to approximate the interest rate on a collateralized basis with similar terms and payments, and in economic environments where the leased asset is located. The Company’s leases often include options to extend and lease terms include such extended terms when the Company is reasonably certain to exercise those options. Lease terms also include periods covered by options to terminate the leases when the Company is reasonably certain not to exercise those options. Lease expense is recorded on a straight-line basis over the lease term.

Upon adoption, the Company recognized ROU assets of RMB5.4 billion (US$782 million) and total lease liabilities (including current and non-current) RMB5.0 billion (US$716 million) for operating leases as of January 1, 2019. Total ROU assets included RMB265 million of land use rights that were previously presented in intangible assets on the consolidated balance sheet as of December 31, 2018. The impact of adopting ASU 2016-02 on the Company’s opening retained earnings and current year net income was insignificant. As of December 31, 2019, the Company recognized operating lease ROU assets of RMB7.3 billion (US$1.1 billion) and total lease liabilities RMB 6.8 billion (US$972 million), including current portion of RMB2.3 billion (US$328 million) for operating leases.
Revenue Recognition

The Company adopted ASC Topic 606, *Revenue from Contracts with Customers* (“ASC 606”) from January 1, 2018, using the modified retrospective method. Revenues for the years ended December 31, 2018 and 2019 were presented under ASC 606, and revenues for the year ended December 31, 2017 was not adjusted and continue to be presented under ASC Topic 605, *Revenue Recognition*. The cumulative effect of adopting ASC 606 resulted in an increase of RMB933 million to the opening balance of retained earnings at January 1, 2018, which is primarily related to the Company’s online marketing revenues.

Revenue is recognized when control of promised goods or services is transferred to the Company’s customers in an amount of consideration to which an entity expects to be entitled to in exchange for those goods or services. Starting from January 1, 2018, value added taxes (“VAT”) was reclassified from cost of revenue to net against revenues in accordance with ASC 606. Therefore, revenue for fiscal 2017 was reported gross of VAT and revenues for 2018 and 2019 were reported net of VAT.

The Company recognized VAT of RMB4.8 billion, RMB6.1 billion and RMB6.4 billion (US$925 million) for the years ended December 31, 2017, 2018 and 2019, respectively.

<table>
<thead>
<tr>
<th>For the years ended</th>
<th>December 31, 2017</th>
<th>December 31, 2018</th>
<th>December 31, 2019</th>
<th>December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online marketing</td>
<td>73,146</td>
<td>81,912</td>
<td>78,093</td>
<td>11,217</td>
</tr>
<tr>
<td>iQIYI membership service</td>
<td>6,532</td>
<td>10,603</td>
<td>14,415</td>
<td>2,071</td>
</tr>
<tr>
<td>iQIYI content distribution</td>
<td>1,192</td>
<td>2,163</td>
<td>2,544</td>
<td>365</td>
</tr>
<tr>
<td>Interest income earned from provision of financial services</td>
<td>1,658</td>
<td>1,724</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Others</td>
<td>2,281</td>
<td>5,875</td>
<td>12,361</td>
<td>1,776</td>
</tr>
<tr>
<td><strong>Total revenue</strong></td>
<td><strong>84,809</strong></td>
<td><strong>102,277</strong></td>
<td><strong>107,413</strong></td>
<td><strong>15,429</strong></td>
</tr>
</tbody>
</table>

The Company’s revenue recognition policies effective on the adoption date of ASC 606 are as follows:

**Performance-based online marketing services**

*Cost-per-click* (“CPC”)

The Company’s auction-based P4P platform enables customers to bid for priority placement of paid sponsored links and reach users who search for information related to their products or services. P4P online marketing customers can choose from search-based and feed-based online marketing services, and select criteria for their inventory purchase, such as daily spending limit and user profile targeted, including, but not limited to, users from specific regions in China and users online during specific time period. Revenue is recognized when all of the revenue recognition criteria are met, which is generally when a user clicks on one of the customer-sponsored links or feed-based marketing.

**Other performance-based online marketing services**

To the extent the Company provides online marketing services based on performance criteria other than cost-per-click, such as the number of downloads (and user registration) of mobile apps and the pre-determined ratios of
completed transaction volumes, revenue is recognized when the specified performance criteria are met along with the satisfaction of other applicable revenue recognition criteria.

Online display advertising services

The Company provides online display advertising services to its customers by integrating text description, image and/or video, and displaying the advertisement in the search result, in Baidu Feed or on other properties. The Company recognizes revenue on a pro-rata basis over the contractual term for cost per time advertising arrangements, commencing on the start date of the display advertisement, or based on the number of times that the advertisement has been displayed for cost per thousand impressions advertising arrangements.

Baidu Union online marketing services

Baidu Union is a program through which the Company expands distribution of its customers’ sponsored links or advertisements by leveraging the traffic of Baidu Union partners’ online properties. The Company acquires traffic from Baidu Union partners and is responsible for service fulfillment, pricing and bearing inventory risks. As principal, the Company recognizes revenue on a gross basis, based on customer billing. Payments made to Baidu Union partners are recorded as traffic acquisition costs, which are included in “cost of revenues” in the consolidated statements of comprehensive income.

Online marketing services customers are required to pay a deposit before using our services. Once their account balance falls below a designated amount, they will receive an automated notice from the Company to replenish their accounts. Customer deposit is deducted when a user clicks on the customer’s link in the search result or when other performance criteria other than CPC have been satisfied. The Company offers payment terms to certain customers based on their credit history with the Company and other credit factors. The Company may also offer payment terms to certain agencies, as is common in the industry.

Collection

Certain customers of online marketing services are required to pay a deposit before using our services and are sent automated reminders to replenish their accounts when the balance falls below a designated amount. The deposits received are recorded as customer deposits and deferred revenue on the consolidated balance sheets. The amounts due to the Company are deducted from the deposited amounts when users click on the paid sponsored links in the search results or other performance criteria have been satisfied. In addition, the Company offers payment terms to some of our customers based on their historical marketing placements and credibility. The Company also offers longer payment terms to certain online payment agencies, consistent with industry practice.

Payment terms and conditions vary by customer and are based on the billing schedule established in our contracts or purchase orders with customers, but we generally provide credit terms to customers within one year; therefore, we have determined that our contracts do not include a significant financing component.

Sales incentives

The Company provides sales incentives to agents that entitle them to receive price reduction on the online marketing services by meeting certain cumulative consumption requirements. The Company accounts for these incentives granted to customers as a variable consideration and net them against revenue. The amount of variable consideration is measured based on the most likely amount of incentives to be provided to customers.
Membership services
The Company offers membership services that allow subscribers access to a library of premium content or personal cloud service, in exchange for non-refundable upfront membership fees. When the receipt of membership fees is for services to be delivered over a period of time, the receipt is initially recorded as deferred revenue and revenue is recognized ratably over the membership period as services are rendered. Membership services revenue also includes fees earned from on-demand content purchases and the sale of right to other services, such as other memberships, which the Company acquires and controls before they are transferred to customers.

Content distribution
The Company generates revenues from sub-licensing content licensed from vendors for cash or through nonmonetary exchanges mainly with other online video broadcasting companies. The exclusive licensing agreements the Company enters into with the vendors have a specified license period and provide the Company rights to sub-license these contents to other parties. The Company enters into a non-exclusive sub-license agreement with a sub-licensee for a period that falls within the original exclusive license period. For cash sub-licensing transactions, the Company is entitled to receive the sub-license fee under the sub-licensing arrangements and does not have any future obligation once it has provided the underlying content to the sub-licensee (which is provided at or before the beginning of the sub-license period). The sub-licensing of content represents a license of functional intellectual property that grants a right to use the Company’s licensed copyrights, and is recognized at the point in time when the licensed copyright is made available for the customer’s use and benefit.

The Company also enters into nonmonetary transactions to exchange online broadcasting rights of licensed copyrights with other online video broadcasting companies from time to time. The exchanged licensed copyrights provide rights for each party to broadcast the licensed copyrights received on its own website only. Each transferring party retains the right to continue broadcasting the exclusive content on its own website and/or sublicense the rights to the content it surrendered in the exchange. The Company accounts for these nonmonetary exchanges based on the fair value of the asset received starting from January 1, 2018, when ASC 606 was adopted. Barter sublicensing revenues are recognized in accordance with the same revenue recognition criteria above. The Company estimates the fair value of the licensed copyrights received based on various factors, including the purchase price of similar non-exclusive and/or exclusive contents, broadcasting schedule, cast and crew, themes popularity, and box office. The attributable cost of sublicensing transactions, whether for cash or through nonmonetary exchanges, is recognized as cost of revenues through the amortization of the sublicensing right component of the exclusive licensed copyright, calculated based on its estimated usage pattern.

The Company recognized barter sublicensing revenues of RMB763 million, RMB1.1 billion and 683 million (US$98 million) and related costs of RMB650 million, RMB1.0 billion and RMB570 million (US$82 million) for the years ended December 31, 2017, 2018 and 2019, respectively.

Financial services
The Company offers financial services which include provision of installment payment services to consumers and wealth management services to third-party investors. Interest income earned from provision of financial services is reported as “Other revenues” and reported on a net basis after deduction of related interest costs incurred. The Company recognized gross interest income of RMB3.5 billion and RMB3.3 billion and interest costs of RMB1.9 billion and RMB1.6 billion for the years ended December 31, 2017 and 2018, respectively. The financial services business was disposed of in August 2018 (Note 4).
Cloud services
The Company provides cloud services, which include computing, database, storage and other services and allow customers to use hosted software over the contract period without taking possession of the software, generally on either a subscription or consumption basis. Revenue related to cloud services provided on a subscription basis is recognized ratably over the contract period. Revenue related to cloud services provided on a consumption basis, such as the amount of storage used in a period, is recognized based on the customer utilization of such resources.

Sales of hardware
The Company sells hardware products via distributors or directly to end customers. Revenue from the sales of hardware is recognized when control of the goods is transferred to customers, which generally occurs when the products are delivered and accepted by the customers. Revenue is recorded net of sales incentives and return allowance.

Other revenue recognition related policies
For arrangements that include multiple performance obligations, primarily for advertisements to be displayed in different spots, placed under different forms and displayed at different times, the Company would evaluate all of the performance obligations in the arrangement to determine whether each performance obligation is distinct. Consideration is allocated to each performance obligation based on its standalone selling price. The Company generally determines standalone selling prices based on the prices charged to customers on a standalone basis or estimate it using an expected cost plus margin approach. If a promised good or service does not meet the criteria to be considered distinct, it is combined with other promised goods or services until a distinct bundle of goods or services exists.

Timing of revenue recognition may differ from the timing of invoicing to customers. For certain services customers are required to pay before the services are delivered to the customer. When either party to a revenue contract has performed, the Company recognizes a contract asset or a contract liability on the consolidated balance sheet, depending on the relationship between the entity’s performance and the customer’s payment. Contract liabilities were mainly related to fees for membership services to be provided over the membership period, which were presented as deferred revenue on the consolidated balance sheets. The year over year increase in deferred revenue as compared to the year ended December 31, 2018 is a result of the increase in consideration received from the Company’s customers. Revenue recognized for the year ended December 31, 2019 that was included in contract liabilities as of January 1, 2019 was RMB31.1 billion (US$444 million).

Contract assets represent unbilled amounts related to the Group’s rights to consideration for advertising services delivered and are included in “Other current assets, net” on the consolidated balance sheets. As of December 31, 2018 and 2019, contract assets were RMB1.4 billion and RMB1.9 billion (US$269 million), net of allowance for doubtful accounts of RMB21 million and RMB7 million (US$1 million), respectively. The increase in the balance of contract assets was primarily due to more outstanding advertising contracts as of December 31, 2019 compared to the prior year for which the Group had commenced to provide advertisement placements but had not completed all specified advertising services in the contract, which corresponds to when the Group has the right to bill its customers.

The Company does not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which the Company recognizes revenue at the amount to which it has the right to invoice for services performed.
Cost of Revenues

Cost of revenues consists primarily of traffic acquisition costs, bandwidth costs, depreciation, content costs, payroll, cost of hardware sold and related costs of operations. Starting from January 1, 2018, VAT was recorded net against revenue instead of as cost of revenue.

Traffic acquisition costs represent the amounts paid or payable to Baidu Union partners who direct search queries to the Company’s websites or distribute the Company’s customers’ paid links through their properties. These payments are primarily based on revenue sharing arrangements under which the Company pays its Baidu Union partners and other business partners a percentage of the fees it earns from its online marketing customers.

Advertising and Promotional Expenses

Advertising and promotional expenses, including advertisements through various forms of media and kinds of marketing and promotional activities, are included in “Selling, general and administrative expense” in the consolidated statements of comprehensive income (loss) and are expensed when incurred. Advertising and promotional expenses for the years ended December 31, 2017, 2018 and 2019 were RMB4.6 billion, RMB10.1 billion and RMB10.5 billion (US$1.5 billion), respectively.

Government Subsidies

Government subsidies primarily consist of financial subsidies received from provincial and local governments for operating a business in their jurisdictions and compliance with specific policies promoted by the local governments. For certain government subsidies, there are no defined rules and regulations to govern the criteria necessary for companies to receive such benefits, and the amount of financial subsidy is determined at the discretion of the relevant government authorities. The government subsidies of non-operating nature with no further conditions to be met are recorded as non-operating income in “Other income, net” when received. The government subsidies with certain operating conditions are recorded as “Deferred income” when received and will be recorded as operating income when the conditions are met.

Income Taxes

The Company recognizes income taxes under the liability method. Deferred income taxes are recognized for differences between the financial reporting and tax bases of assets and liabilities at enacted tax rates in effect for the years in which the differences are expected to reverse. The Company records a valuation allowance against the amount of deferred tax assets that it determines is not more-likely-than-not to be realized. The effect on deferred taxes of a change in tax rates is recognized in earnings in the period that includes the enactment date.

The Company applies the provisions of ASC Topic 740, Income Taxes (“ASC 740”), in accounting for uncertainty in income taxes. ASC 740 clarifies the accounting for uncertainty in income taxes by prescribing the recognition threshold a tax position is required to meet before being recognized in the financial statements. The Company has elected to classify interest and penalties related to an uncertain tax position (if and when required) as part of income tax expense in the consolidated statements of comprehensive income. As of and for the years ended December 31, 2017, 2018 and 2019, the amounts of unrecognized tax benefits as well as interest and penalties associated with uncertainty in income taxes were insignificant.

Share-based Compensation

The Company accounts for share-based compensation in accordance with ASC Topic 718, Compensation-Stock Compensation (“ASC 718”). The Company has elected to recognize share-based compensation using the
straight-line method for all share-based awards issued with no performance conditions. For awards with performance conditions, compensation cost is recognized on an accelerated basis if it is probable that the performance condition will be achieved.

Forfeitures are estimated based on historical experience and are periodically reviewed. Cancellation of an award accompanied by the concurrent grant of a replacement award is accounted for as a modification of the terms of the cancelled award (“modified awards”). The compensation costs associated with the modified awards are recognized if either the original vesting condition or the new vesting condition is achieved. Total recognized compensation cost for the awards is at least equal to the fair value of the awards at the grant date unless at the date of the modification the performance or service conditions of the original awards are not expected to be satisfied. The incremental compensation cost is measured as the excess of the fair value of the replacement award over the fair value of the cancelled award at the cancellation date. Therefore, in relation to the modified awards, the Company recognizes share-based compensation over the vesting periods of the replacement award, which comprises, (i) the amortization of the incremental portion of share-based compensation over the remaining vesting term and (ii) any unrecognized compensation cost of the original award, using either the original term or the new term, whichever results in higher expenses for each reporting period.

The Company accounts for share awards issued to non-employees in accordance with the provisions of ASC Subtopic 505-50, Equity: Equity-based Payments to Non-Employees. Prior to adopting ASU 2018-07, Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting to simplify the accounting for share-based payments to nonemployees (“ASU 2018-07”) on January 1, 2019, the Company uses the Black-Scholes-Merton option pricing model method to measure the value of options granted to non-employees at each vesting date to determine the appropriate charge to share-based compensation.

The Company’s adopted ASU 2018-07 on January 1, 2019 using the modified retrospective method. Subsequent to the adoption, the Company measures equity-classified nonemployee awards using their fair value on grant date. The impact of adopting the new standard was insignificant.

**Earnings Per Share (“EPS”)**

The Company computes earnings per Class A and Class B ordinary shares in accordance with ASC Topic 260, Earnings Per Share (“ASC 260”), using the two-class method. Under the provisions of ASC 260, basic earnings per share is computed using the weighted average number of ordinary shares outstanding during the period except that it does not include unvested ordinary shares subject to repurchase or cancellation. The Company adjusts for the accretion of the redeemable noncontrolling interests in the calculation of income available to ordinary shareholders of the Company used in the earnings per share calculation.

Diluted earnings per share is computed using the weighted average number of ordinary shares and, if dilutive, potential ordinary shares outstanding during the period. Potentially dilutive securities such as stock options, restricted shares and convertible senior notes have been excluded from the computation of diluted net income per share if their inclusion is anti-dilutive. Potential ordinary shares consist of the incremental ordinary shares issuable upon the exercise of stock options, restricted shares subject to forfeiture, and contracts that may be settled in the Company’s stock or cash. The dilutive effect of outstanding stock options and restricted shares is reflected in diluted earnings per share by application of the treasury stock method. The computation of the diluted earnings per Class A ordinary share assumes the conversion of Class B ordinary shares to Class A ordinary shares, while diluted earnings per Class B ordinary share does not assume the conversion of such shares. The Company adjusts for the securities issued by subsidiaries and equity method investees in the calculation of income available to ordinary shareholders of the Company used in the diluted earnings per share calculation.
The liquidation and dividend rights of the holders of the Company’s Class A and Class B ordinary shares are identical, except with respect to voting rights. As a result, and in accordance with ASC 260, the undistributed earnings for each year are allocated based on the contractual participation rights of the Class A and Class B ordinary shares as if the earnings for the year had been distributed. As the liquidation and dividend rights are identical, the undistributed earnings are allocated on a proportionate basis. Further, as the conversion of Class B ordinary shares is assumed in the computation of the diluted earnings per Class A ordinary share, the undistributed earnings are equal to net income for that computation.

For the purposes of calculating the Company’s basic and diluted earnings per Class A and Class B ordinary shares, the ordinary shares relating to the options that were exercised are assumed to have been outstanding from the date of exercise of such options.

**Contingencies**

The Company records accruals for certain of its outstanding legal proceedings or claims when it is probable that a liability will be incurred and the amount of loss can be reasonably estimated. The Company evaluates, on a quarterly basis, developments in legal proceedings or claims that could affect the amount of any accrual, as well as any developments that would make a loss contingency both probable and reasonably estimable. The Company discloses the amount of the accrual if it is material.

When a loss contingency is not both probable and estimable, the Company does not record an accrued liability but discloses the nature and the amount of the claim, if material. However, if the loss (or an additional loss in excess of the accrual) is at least reasonably possible, then the Company discloses an estimate of the loss or range of loss, unless it is immaterial or an estimate cannot be made. The assessment of whether a loss is probable or reasonably possible, and whether the loss or a range of loss is estimable, often involves complex judgments about future events. Management is often unable to estimate the loss or a range of loss, particularly where (i) the damages sought are indeterminate, (ii) the proceedings are in the early stages, or (iii) there is a lack of clear or consistent interpretation of laws specific to the industry-specific complaints among different jurisdictions. In such cases, there is considerable uncertainty regarding the timing or ultimate resolution of such matters, including eventual loss, fine, penalty or business impact, if any.

**Concentration of Risks**

**Concentration of credit risk**

Financial instruments that potentially subject the Company to significant concentration of credit risk primarily consist of cash and cash equivalents, restricted cash, short-term investments, accounts receivable, contract assets and amounts due from related parties. As of December 31, 2019, the Company has RMB147.4 billion (US$21.2 billion) in cash and cash equivalents, restricted cash, and short-term investments, 92% and 8% of which are held by financial institutions in the PRC and international financial institutions outside of the PRC, respectively. The Company’s total cash and cash equivalents, restricted cash, and short-term investments held at three financial institutions in the PRC exceeded 10%, representing 24%, 21% and 18% of the Company’s total cash and cash equivalents, restricted cash, and short-term investments as of December 31, 2019, respectively.

PRC state-owned banks, such as Bank of China, are subject to a series of risk control regulatory standards, and PRC bank regulatory authorities are empowered to take over the operation and management when any of those banks faces a material credit crisis. The Company does not foresee substantial credit risk with respect to cash and cash equivalents, restricted cash and short-term investments held at the PRC state-owned banks. Meanwhile,
China does not have an official deposit insurance program, nor does it have an agency similar to what was the Federal Deposit Insurance Corporation (FDIC) in the U.S. In the event of bankruptcy of one of the financial institutions in which the Company has deposits or investments, it may be unlikely to claim its deposits or investments back in full. The Company selected reputable international financial institutions with high rating rates to place its foreign currencies. The Company regularly monitors the rating of the international financial institutions to avoid any potential defaults. There has been no recent history of default in relation to these financial institutions.

Accounts receivable and contract assets are typically unsecured and derived from revenue earned from customers and agents in China, which are exposed to credit risk. The risk is mitigated by credit evaluations the Company performs on its customers and its ongoing monitoring process of outstanding balances. The Company maintains reserves for estimated credit losses and these losses have generally been within its expectations. As of December 31, 2018 and 2019, the Company had no single customer with a receivable balance exceeding 10% of the total accounts receivable balance.

Amounts due from related parties are typically unsecured. In evaluating the collectability of the amounts due from related parties, the Company considers many factors, including the related parties’ repayment history and their credit-worthiness. An allowance for doubtful accounts is made when collection of the full amount is no longer probable.

**Business and economic risks**

The Company participates in the dynamic and competitive high technology industry and believes that changes in any of the following areas could have a material adverse effect on the Company’s future financial position, results of operations and cash flows: changes in the overall demand for services and products; changes in business offerings; competitive pressures due to existing and new entrants; advances and new trends in new technologies and industry standards; changes in bandwidth suppliers; changes in certain strategic relationships or customer relationships; regulatory considerations; copyright regulations; brand maintenance and enhancement; and risks associated with the Company’s ability to attract and retain employees necessary to support its growth.

The Company’s operations could be adversely affected by significant political, economic and social uncertainties, epidemic and trade war disruptions in the PRC.

**Currency convertibility risk**

Substantially all of the Company’s businesses are transacted in RMB, which is not freely convertible into foreign currencies. All foreign exchange transactions take place either through Bank of China or other banks authorized to buy and sell foreign currencies at the exchange rates quoted by the People’s Bank of China. Foreign exchange transactions, including foreign currency payments, require the approval of the People’s Bank of China and/or regulatory institutions.

**Foreign currency exchange rate risk**

The functional currency and the reporting currency of the Company are the USD and the RMB, respectively. The Company’s exposure to foreign currency exchange rate risk primarily relates to cash and cash equivalents.
restricted cash, short-term investments, long-term investments, accounts and notes payable and convertible senior notes denominated in the USD. On
June 19, 2010, the People’s Bank of China announced the end of the RMB’s de facto peg to the USD, a policy which was instituted in late 2008 in the
face of the global financial crisis, to further reform the RMB exchange rate regime and to enhance the RMB’s exchange rate flexibility. On March 15,
2014, the People’s Bank of China announced the widening of the daily trading band for RMB against USD. The appreciation of the USD against the
RMB was approximately 1.26% in 2019. Most of the revenues and costs of the Company are denominated in RMB, while a portion of cash and cash
equivalents, restricted cash, short-term investments, long-term investments, notes payable and convertible senior notes are denominated in the USD. It is
difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the RMB and the USD in the
future. Any significant fluctuation of the valuation of RMB may materially
affect
the Company’s cash flows, revenues, earnings and financial position,
and the value of, and any dividends payable on, the ADS in USD.

Derivative Instruments
ASC Topic 815, Derivatives and Hedging (“ASC 815”), requires all contracts which meet the definition of a derivative to be recognized on the balance
sheet as either assets or liabilities and recorded at fair value. Changes in the fair value of derivative financial instruments are either recognized
periodically in earnings or in other comprehensive income (loss) depending on the use of the derivative and whether it qualifies for hedge accounting.
Changes in fair values of derivatives not qualified as hedges are reported in earnings.

Recent Accounting Pronouncements
In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial
Instruments (“ASU 2016-13”) which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost. ASU
2016-13 replaces the existing incurred loss impairment model with an expected loss methodology, which will result in more timely recognition of credit
losses. ASU 2016-13 is effective for annual reporting periods, and interim periods within those years, beginning after December 15, 2019. The
Company does not expect any material impact on net assets and the consolidated statement of comprehensive income (loss) as a result of adopting the
new standard.

In January 2017, the FASB issued ASU 2017-04, Simplifying the Test for Goodwill Impairment (“ASU 2017-04”), which simplifies the accounting for
goodwill impairment by eliminating Step two from the goodwill impairment test. If the carrying amount of a reporting unit exceeds its fair value, an
impairment loss shall be recognized in an amount equal to that excess, versus determining an implied fair value in Step two to measure the impairment
loss. The guidance is effective for annual and interim impairment tests performed in periods beginning after December 15, 2019. Early adoption is
permitted for all entities for annual and interim goodwill impairment testing dates on or after January 1, 2017. The guidance should be applied on a
prospective basis. The Company does not expect any material impact on its consolidated financial statements and related disclosures as a result of
adopting the new standard.

In March 2019, the FASB issued ASU 2019-02, Improvements to Accounting for Costs of Films and License Agreements for Program Materials ("ASU 2019-02"). ASU 2019-02 aligns the accounting for production costs of an episodic television series with the accounting for production costs of films by
removing the content distinction for capitalization. ASU 2019-02 also requires testing capitalized produced and licensed content for impairment using a
fair value model at a film group level when the produced and licensed contents are predominantly monetized with other produced and/or licensed
contents. A film or film group represents the lowest level for which identifiable cash flows are largely independent of the cash flows of other produced
or licensed contents, which is the unit of account for testing impairment. The predominant monetization strategy
should be reassessed if there is a significant change to the monetization strategy of a produced or licensed content. Further, ASU 2019-02 requires that an entity reassess estimates of the use of a film in a film group and account for changes, if any, prospectively. The presentation and disclosure requirements in ASU 2019-02 also increase the transparency of information provided to users of financial statements about produced and licensed content. This update will be effective for the Company’s fiscal years beginning after December 15, 2019, and interim periods within those fiscal years.

The Company will adopt ASU 2019-02 on January 1, 2020 and report cash outflows for the costs incurred to obtain rights for both produced and licensed content as operating cash outflows in the statement of cash flows. As the majority of the Company’s produced and licensed content are predominantly monetized as a group, upon adoption of the new standard, they will be reviewed for impairment when there are events or changes in circumstances that indicate such assessment should be made.

3. BUSINESS COMBINATIONS

Business combinations in 2018:

During the year ended December 31, 2018, the Company completed several business combinations, to complement its existing businesses and achieve synergies. The acquired entities individually and in aggregate were insignificant. Results of the acquired entities' operations have been included in the Company’s consolidated financial statements since the acquisition dates.

<table>
<thead>
<tr>
<th>Purchase consideration</th>
<th>RMB (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net assets acquired, excluding intangible assets and the related deferred tax liabilities</td>
<td>1,545</td>
</tr>
<tr>
<td>Intangible assets, net</td>
<td>1,424</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>(292)</td>
</tr>
<tr>
<td>Pre-existing equity interests</td>
<td>(1,651)</td>
</tr>
<tr>
<td>Noncontrolling interests</td>
<td>(1,312)</td>
</tr>
<tr>
<td>Redeemable non-controlling interests (Note 17)</td>
<td>(698)</td>
</tr>
<tr>
<td>Goodwill</td>
<td>3,362</td>
</tr>
<tr>
<td></td>
<td>2,378</td>
</tr>
</tbody>
</table>

The aggregate purchase price allocation includes acquisition of certain acquirees, which were equity method investees of the Company prior to the acquisitions. In aggregate, a re-measurement gain relating to the Company’s pre-existing equity interest of RMB630 million was recognized during the year ended December 31, 2018. The Company applied the equity method of accounting by recognizing its share of the profit or loss in these equity method investees up to their respective dates of acquisition.

Goodwill, which is non-deductible for tax purposes, is primarily attributable to the synergies expected to be achieved from the acquisitions.

Neither the results of operations since the acquisition dates nor the pro forma results of operations of the acquirees were presented because the effects of these business combinations, individually and in the aggregate, were not significant to the Company’s consolidated results of operations.
Business combinations in 2019:

During the year ended December 31, 2019, the Company completed several business combinations, total purchase consideration in aggregate was RMB1.2 billion (US$168 million), among which RMB978 million (US$140 million) was allocated to goodwill. The Company expects to achieve significant synergies from such acquisitions which it plans to complement its existing businesses. The acquired entities were considered insignificant, both individually and in aggregate. Results of the acquired entities’ operations have been included in the Company’s consolidated financial statements since the acquisition date.

<table>
<thead>
<tr>
<th>Purchase consideration</th>
<th>RMB (in millions)</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,168</td>
<td>168</td>
</tr>
<tr>
<td>Net assets acquired, excluding intangible assets and the related deferred tax liabilities</td>
<td>229</td>
<td>33</td>
</tr>
<tr>
<td>Intangible assets, net</td>
<td>543</td>
<td>78</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>(134)</td>
<td>(19)</td>
</tr>
<tr>
<td>Noncontrolling interests</td>
<td>(266)</td>
<td>(38)</td>
</tr>
<tr>
<td>Redeemable non-controlling interests (Note 17)</td>
<td>(182)</td>
<td>(26)</td>
</tr>
<tr>
<td>Goodwill</td>
<td>978</td>
<td>140</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,168</strong></td>
<td><strong>168</strong></td>
</tr>
</tbody>
</table>

Goodwill, which is non-deductible for tax purposes, is primarily attributable to the synergies expected to be achieved from the acquisitions.

Neither the results of operations since the acquisition dates nor the pro forma results of operations of the acquirees were presented because the effects of these business combinations, individually and in the aggregate, were not significant to the Company’s consolidated results of operations.

The valuations used in the purchase price allocation described above were determined by the Company with the assistance of independent third-party valuation firms. The valuation reports considered generally accepted valuation methodologies such as the income, market and cost approaches. As the acquirees are all private companies, the fair value estimates of pre-existing equity method investments or noncontrolling interests are based on significant inputs considered by market participants which mainly include (a) discount rate, (b) projected terminal value based on future cash flow (c) financial multiple of companies in the same industry and (d) adjustment for lack of control or lack of marketability.

4. INVESTMENTS

Short-term Investments

As of December 31, 2019, the Company’s short-term investments comprised of only debt securities. Short-term held-to-maturity investments were mainly deposits in commercial banks with maturities of less than one year and the Company had the positive intent and ability to hold those securities to maturity. The short-term available-for-sale investments include wealth management products issued by commercial banks and other financial institutions.
During the years ended December 31, 2017, 2018 and 2019, the Company recorded interest income from its short-term investments of RMB3.0 billion, RMB3.9 billion and RMB5.4 billion (US$771 million) in the consolidated statements of comprehensive income, respectively.

Short-term investments classification as of December 31, 2018 and 2019 were shown as below:

<table>
<thead>
<tr>
<th></th>
<th>As of December 31, 2018</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost or Amortized cost</td>
<td>Gross unrecognized holding gains</td>
<td>Gross unrecognized holding losses</td>
<td>Gross unrealized gains</td>
<td>Gross unrealized losses</td>
<td>Fair value</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td>RMB (In millions)</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
</tr>
<tr>
<td>Held-to-maturity debt investments</td>
<td>27,388</td>
<td>119</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>27,507</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available-for-sale debt investments</td>
<td>83,100</td>
<td>—</td>
<td>—</td>
<td>1,216</td>
<td>(78)</td>
<td>84,238</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>As of December 31, 2019</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost or Amortized cost</td>
<td>Gross unrecognized holding gains</td>
<td>Gross unrecognized holding losses</td>
<td>Gross unrealized gains</td>
<td>Gross unrealized losses</td>
<td>Fair value</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td>RMB (In millions)</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
</tr>
<tr>
<td>Held-to-maturity debt investments</td>
<td>107,287</td>
<td>367</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>107,654</td>
<td>15,464</td>
<td></td>
</tr>
<tr>
<td>Available-for-sale debt investments</td>
<td>5,440</td>
<td>—</td>
<td>—</td>
<td>197</td>
<td>—</td>
<td>5,637</td>
<td>810</td>
<td></td>
</tr>
</tbody>
</table>

**Long-term Investments**

**Equity investments at fair value with readily determinable fair value**

Equity investments at fair value with readily determinable fair value represent investments in the equity securities of publicly listed companies, for which the Company does not have significant influence. Starting in January 1, 2018 after adopting ASC 321, these investments were classified as equity investments at fair value with readily determinable fair value and reported at fair value. Changes in fair value are recognized in earnings, instead of accumulated other comprehensive income (loss).

**Equity investments at fair value without readily determinable fair value**

In accordance with ASC 321, the Company elected to use the measurement alternative to measure such investments at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer, if any.
The total carrying value of equity investments measured at fair value using the measurement alternative held as of December 31, 2018 and 2019 were as follows:

<table>
<thead>
<tr>
<th></th>
<th>As of December 31, 2018</th>
<th>As of December 31, 2019</th>
<th>As of December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RMB (In millions)</td>
<td>RMB (In millions)</td>
<td>US$</td>
</tr>
<tr>
<td>Initial cost basis</td>
<td>26,728</td>
<td>21,211</td>
<td>3,047</td>
</tr>
<tr>
<td>Cumulative unrealized gains</td>
<td>6,271</td>
<td>5,636</td>
<td>810</td>
</tr>
<tr>
<td>Cumulative unrealized losses (including impairment)</td>
<td>(3,730)</td>
<td>(2,161)</td>
<td>(311)</td>
</tr>
<tr>
<td>Total carrying value</td>
<td>29,269</td>
<td>24,686</td>
<td>3,546</td>
</tr>
</tbody>
</table>

Total unrealized and realized gains and losses of equity securities without readily determinable fair values in 2018 and 2019 were as follows:

<table>
<thead>
<tr>
<th></th>
<th>For the years ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
</tr>
<tr>
<td></td>
<td>RMB (In millions)</td>
</tr>
<tr>
<td>Gross unrealized gains</td>
<td>7,119</td>
</tr>
<tr>
<td>Gross unrealized losses (including impairment)</td>
<td>(2,867)</td>
</tr>
<tr>
<td>Net unrealized gains (losses) on equity securities held</td>
<td>4,252</td>
</tr>
<tr>
<td>Net realized gains on equity securities sold</td>
<td>124</td>
</tr>
<tr>
<td>Total net gains recognized in other income, net</td>
<td>4,376</td>
</tr>
</tbody>
</table>

(1) Gross unrealized losses (downward adjustments excluding impairment) were RMB2,412 million and RMB863 million (US$124 million) for the years ended December 31, 2018 and 2019, respectively.

In May 2017, the Company completed the disposal of its mobile game business, and recognized a gain of RMB923 million in “Other income, net.”

In August 2017, the Company completed the disposal of Xiaodu Life Technology Ltd (“Xiaodu”), a former subsidiary of the Company engaged in the business of takeout delivery services, to Rajax Holding, a China based delivery company. The Company recognized a total gain of RMB4.6 billion in “Other income, net.” in 2017.

In October 2017, the Company completed the share purchase transaction of China United Network Communication Limited (“China Unicom”), a listed telecommunications company in China. The total purchase consideration was RMB7.0 billion in cash with RMB4.0 billion attributable to noncontrolling interest. The China Unicom investment was held by a non-wholly-owned subsidiary of the Company and was accounted for as a cost method investment, due to a three-year holding requirement before adopting ASC 321. Subsequent to the adoption of ASC 321 it was accounted for as an equity investment at fair value, using the measurement alternative in 2018 and as equity investment with readily determinable fair value at the end of 2019.

**Equity method investments**

The carrying amounts of the Company’s equity method investments were RMB44.1 billion and RMB27.1 billion (US$3.9 billion) as of December 31, 2018 and 2019, respectively. For the years ended December 31, 2018 and 2019, the impairment recognized for equity method investments were RMB167 million and RMB9.2 billion (US$1.3 billion), respectively.
Equity Investment in Trip.com International, Ltd. (“Trip”) (formally known as Ctrip)

In October 2015, the Company deconsolidated the financial results of Qunar and accounted for the investment in Trip under the equity method in accordance with ASC 323, following a share exchange transaction with Trip (“Trip transaction”), which exchanged certain Class A and Class B ordinary shares in Qunar Cayman Islands Limited (“Qunar”) for certain newly-issued ordinary shares of Trip. The Company recorded the investment in Trip at the fair value of the shares acquired on the closing date of the Trip transaction. A gain of RMB24.4 billion arising from the Trip transaction was recognized in “Other income(loss), net” in the consolidated statements of comprehensive income for the year ended December 31, 2015, with a corresponding increase in the carrying value of the investment. During 2019, the market value of Trip had significantly declined and remained below the carrying value of the investment for a prolonged period of time. Therefore, the Company concluded that the decline in market value of the investment in Trip was other-than-temporary as of September 30, 2019 and an impairment charge of RMB8.9 billion (US$1.3 billion) was recorded in the third quarter of 2019. The Company made an adjustment to the equity method goodwill on acquisition of RMB8.9 billion (US$1.3 billion) accordingly.

In October 2019, the Company disposed an aggregate of 36 million American Depositary Shares of Trip for cash consideration of US$988 million. The Company recognized a disposal loss of RMB43 million (US$6 million).

After the partial disposal of the investment in Trip, the Company held approximately 12% equity interest in Trip and the Company can actively participate in the operating and financing policies of Trip through its two seats on Trip’s board of directors with a total of nine members. Accordingly, the Company continues to have significant influence over Trip and accounts for its remaining investment as an equity method investment in accordance with ASC 323.

As of December 31, 2019, the Company’s investments in Trip had a fair value of RMB16.2 billion (US$2.3 billion), based on the closing share price.

The following tables set forth the summarized financial information of Trip:

<table>
<thead>
<tr>
<th></th>
<th>As of September 30,(^{\text{(\ast)}})</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018(^{\text{(\ast)}})</td>
<td>2019</td>
<td>2019</td>
</tr>
<tr>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td>US$</td>
</tr>
<tr>
<td>Current assets</td>
<td>84,464</td>
<td>75,578</td>
<td>10,856</td>
</tr>
<tr>
<td>Non-current assets</td>
<td>104,906</td>
<td>127,505</td>
<td>18,315</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>69,065</td>
<td>74,118</td>
<td>10,646</td>
</tr>
<tr>
<td>Non-current liabilities</td>
<td>30,318</td>
<td>25,134</td>
<td>3,610</td>
</tr>
<tr>
<td>Noncontrolling interests</td>
<td>2,231</td>
<td>2,047</td>
<td>294</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>For the twelve months ended September 30,(^{\text{(\ast)}})</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017(^{\text{(\ast)}})</td>
<td>2018(^{\text{(\ast)}})</td>
<td>2019</td>
</tr>
<tr>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
</tr>
<tr>
<td>Total revenues</td>
<td>25,731</td>
<td>29,944</td>
<td>34,958</td>
</tr>
<tr>
<td>Gross profit</td>
<td>20,725</td>
<td>24,019</td>
<td>27,627</td>
</tr>
<tr>
<td>Income from operations</td>
<td>2,626</td>
<td>3,302</td>
<td>4,271</td>
</tr>
<tr>
<td>Net income</td>
<td>2,282</td>
<td>2,807</td>
<td>3,764</td>
</tr>
<tr>
<td>Net income attributable to the investees</td>
<td>2,284</td>
<td>2,806</td>
<td>3,813</td>
</tr>
</tbody>
</table>
The Company adopted a one-quarter lag in reporting its share of equity income in Trip.

Trip adopted ASC 606, on a fully retrospective basis, and ASC 321 (collectively “new standards”) from January 1, 2018. The impact of the new standards on the Company’s financial statements is immaterial, and prior period financial information of Trip was not restated.

Disposal of financial services business

In April 2018, the Company entered into definitive agreements relating to the disposal of its wholly-owned financial services business, which provided consumer credit, wealth management and other financial services. To facilitate the divesture, the Company conducted a series of legal restructuring and recapitalization of entities conducting the financial services business (“Du Xiaoman”), which were accounted for as transactions under common control.

In August 2018, Du Xiaoman issued preferred shares to third-party investors, which resulted in the Company becoming a minority shareholder of Du Xiaoman. Accordingly, Du Xiaoman was deconsolidated from the Group and a disposal gain of RMB5.5 billion was recognized in “Other income(loss), net” including RMB4.2 billion relates to the re-measurement of the Company’s retained investment in Du Xiaoman. The disposal of Du Xiaoman did not meet the definition of a discontinued operation per ASC Subtopic 205-20, Presentation of Financial Statements—Discontinued Operations, as the divesture did not represent a shift in strategy nor had a major impact to the Group’s operation and financial results.

The Company retained an equity interest of 41% on a fully diluted basis, and accounted for Du Xiaoman as an equity method investment in accordance with ASC 323, as it retained significant influence over Du Xiaoman. The carrying amount of the Du Xiaoman investment in excess of the Company's proportionate interest in Du Xiaoman was recognized as equity method goodwill of RMB3.5 billion, intangible assets of RMB851 million and related deferred tax liabilities of RMB213 million.

Deconsolidation of one of the Company’s subsidiaries

In December 2019, the Company lost control and therefore deconsolidated one of its subsidiaries. A non-cash disposal loss of RMB801 million was recognized in “Others, net.” The Company continued to have significant influence over the entity and accounted for its remaining equity interest in the entity as an equity method investment in accordance with ASC 323.

As of December 31, 2018 and 2019, in addition to the aforementioned equity method investments, the Company held other equity method investments through its subsidiaries or VIEs and over which had significant influence.

As of September 30, 2018 and 2019, equity method investments other than Trip are summarized as a group as follow:

<table>
<thead>
<tr>
<th>As of September 30, 2018</th>
<th>As of September 30, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RMB</td>
</tr>
<tr>
<td></td>
<td>(in millions)</td>
</tr>
<tr>
<td>Current assets</td>
<td>100,313</td>
</tr>
<tr>
<td>Non-current assets</td>
<td>11,050</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>78,935</td>
</tr>
<tr>
<td>Non-current liabilities</td>
<td>2,718</td>
</tr>
<tr>
<td>Noncontrolling interests</td>
<td>1,706</td>
</tr>
</tbody>
</table>

F-43
### Table of Contents

BAIDU, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2017, 2018 and 2019

<table>
<thead>
<tr>
<th></th>
<th>For the twelve months ended September 30, 2017</th>
<th>2018</th>
<th>2019</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RMB (In millions)</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
</tr>
<tr>
<td>Total revenues</td>
<td>1,681</td>
<td>4,633</td>
<td>12,598</td>
<td>1,810</td>
</tr>
<tr>
<td>Gross profit</td>
<td>671</td>
<td>916</td>
<td>6,247</td>
<td>897</td>
</tr>
<tr>
<td>Loss from operations</td>
<td>(303)</td>
<td>(418)</td>
<td>(680)</td>
<td>(98)</td>
</tr>
<tr>
<td>Net loss</td>
<td>(310)</td>
<td>(372)</td>
<td>(638)</td>
<td>(92)</td>
</tr>
<tr>
<td>Net loss attributable to the investees</td>
<td>(311)</td>
<td>(352)</td>
<td>(933)</td>
<td>(134)</td>
</tr>
</tbody>
</table>

(i) The Company adopted a one-quarter lag in reporting its shares of equity income in all of its investees.

#### Investments accounted for at fair value

Long-term equity investments in unlisted companies held by consolidated investment companies are accounted for at fair value in accordance with ASC Subtopic 946-320, *Financial Services—Investment Companies, Investments—Debt and Equity Securities*. These investments are carried at fair value with realized or unrealized gains and losses recorded in “Other income(loss), net” in the consolidated statements of comprehensive income.

The methodology used in the determination of fair value for held-to-maturity debt investments, available-for-sale debt investments, equity investments with readily determinable fair value and other investment securities accounted for at fair value are disclosed in Note 23.

Long-term investments classification, excluding equity method investments and equity investments at fair value without readily determinable fair value, as of December 31, 2018 and 2019 are shown as below:

<table>
<thead>
<tr>
<th></th>
<th>As of December 31, 2018</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
</tr>
<tr>
<td>Equity investments at fair value with readily determinable fair value</td>
<td>5,605</td>
<td>—</td>
<td>—</td>
<td>664</td>
<td>(1,841)</td>
<td>4,428</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available-for-sale debt investment</td>
<td>1,167</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1,167</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments accounted for at fair value</td>
<td>1,139</td>
<td>—</td>
<td>—</td>
<td>318</td>
<td>—</td>
<td>1,457</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>As of December 31, 2019</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>RMB</td>
<td>US$</td>
</tr>
<tr>
<td>Equity investments at fair value with readily determinable fair value</td>
<td>11,769</td>
<td>—</td>
<td>—</td>
<td>2,195</td>
<td>(2,630)</td>
<td>11,334</td>
<td>1,628</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available-for-sale debt investments</td>
<td>3,913</td>
<td>—</td>
<td>—</td>
<td>138</td>
<td>(81)</td>
<td>3,970</td>
<td>570</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments accounted for at fair value</td>
<td>1,309</td>
<td>—</td>
<td>—</td>
<td>597</td>
<td>(87)</td>
<td>1,819</td>
<td>261</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term held-to-maturity investments</td>
<td>496</td>
<td>—</td>
<td>(5)</td>
<td>—</td>
<td>—</td>
<td>491</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F-44
Available-for-sale debt investments are convertible debt instruments issued by private companies and investment in preferred shares that is redeemable at the Company’s option, which are measured at fair value. Investment in preferred shares that are redeemable at the Company’s option have no contractual maturity date.

The following table summarizes the estimated fair value of available-for-sale debt investments with stated contractual dates, classified by the contractual maturity date of the investments:

<table>
<thead>
<tr>
<th>maturity date</th>
<th>2018 (In millions)</th>
<th>2019 (In millions)</th>
<th>2019 US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due in 1 year</td>
<td>—</td>
<td>505</td>
<td>73</td>
</tr>
<tr>
<td>Due in 1 year through 5 years</td>
<td>—</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Due in 5 year through 10 years</td>
<td>—</td>
<td>1,486</td>
<td>213</td>
</tr>
<tr>
<td>Not due at a single maturity date</td>
<td>1,167</td>
<td>1,969</td>
<td>283</td>
</tr>
<tr>
<td>Total</td>
<td>1,167</td>
<td>3,970</td>
<td>570</td>
</tr>
</tbody>
</table>

5. ACCOUNTS RECEIVABLE

The movements in the allowance for doubtful accounts were as follows:

<table>
<thead>
<tr>
<th></th>
<th>2017 (In millions)</th>
<th>2018</th>
<th>2019</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as of January 1</td>
<td>177</td>
<td>316</td>
<td>599</td>
<td>86</td>
</tr>
<tr>
<td>Amounts charged to expenses</td>
<td>190</td>
<td>299</td>
<td>331</td>
<td>47</td>
</tr>
<tr>
<td>Amounts written off</td>
<td>(51)</td>
<td>(16)</td>
<td>(2)</td>
<td>—</td>
</tr>
<tr>
<td>Balance as of December 31</td>
<td>316</td>
<td>599</td>
<td>928</td>
<td>133</td>
</tr>
</tbody>
</table>
6. OTHER ASSETS

<table>
<thead>
<tr>
<th></th>
<th>2018 RMB</th>
<th>2019 RMB</th>
<th>2019 US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepaid expenses</td>
<td>658</td>
<td>955</td>
<td>137</td>
</tr>
<tr>
<td>Advances to suppliers</td>
<td>1,686</td>
<td>964</td>
<td>138</td>
</tr>
<tr>
<td>Receivables from online payment agencies</td>
<td>892</td>
<td>585</td>
<td>84</td>
</tr>
<tr>
<td>Deposits</td>
<td>247</td>
<td>787</td>
<td>113</td>
</tr>
<tr>
<td>Licensed copyrights</td>
<td>1,176</td>
<td>1,225</td>
<td>176</td>
</tr>
<tr>
<td>Contract assets, net</td>
<td>1,415</td>
<td>1,876</td>
<td>269</td>
</tr>
<tr>
<td>VAT prepayments</td>
<td>436</td>
<td>1,605</td>
<td>231</td>
</tr>
<tr>
<td>Income tax prepayments</td>
<td>2</td>
<td>499</td>
<td>72</td>
</tr>
<tr>
<td>Others</td>
<td>329</td>
<td>693</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total other current assets</strong></td>
<td><strong>6,841</strong></td>
<td><strong>9,189</strong></td>
<td><strong>1,320</strong></td>
</tr>
<tr>
<td>Long-term prepaid expenses</td>
<td>5,331</td>
<td>4,176</td>
<td>599</td>
</tr>
<tr>
<td>Produced content, net</td>
<td>3,736</td>
<td>4,355</td>
<td>626</td>
</tr>
<tr>
<td>Others</td>
<td>710</td>
<td>276</td>
<td>39</td>
</tr>
<tr>
<td><strong>Total other non-current assets</strong></td>
<td><strong>9,777</strong></td>
<td><strong>8,807</strong></td>
<td><strong>1,264</strong></td>
</tr>
</tbody>
</table>

The Company entered into finance leases for certain computer servers and equipment. The gross amount and the accumulated depreciation of these servers and equipment were RMB201 million and RMB201 million, respectively, as of December 31, 2018, and the amounts as of December 31, 2019 were not material.

Depreciation expense, including assets under finance leases, for the years ended December 31, 2017, 2018 and 2019, was RMB3.8 billion, RMB3.7 billion and RMB5.6 billion (US$799 million), respectively. Impairment charges on fixed assets for the years ended December 31, 2017, 2018 and 2019 were not material.

7. FIXED ASSETS

<table>
<thead>
<tr>
<th></th>
<th>2018 RMB</th>
<th>2019 RMB</th>
<th>2019 US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer equipment</td>
<td>26,186</td>
<td>29,592</td>
<td>4,251</td>
</tr>
<tr>
<td>Office building</td>
<td>4,168</td>
<td>4,628</td>
<td>665</td>
</tr>
<tr>
<td>Office building related facility, machinery and equipment</td>
<td>2,168</td>
<td>2,317</td>
<td>333</td>
</tr>
<tr>
<td>Vehicles</td>
<td>190</td>
<td>203</td>
<td>29</td>
</tr>
<tr>
<td>Office equipment</td>
<td>813</td>
<td>944</td>
<td>135</td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>352</td>
<td>391</td>
<td>56</td>
</tr>
<tr>
<td>Construction in progress</td>
<td>720</td>
<td>313</td>
<td>45</td>
</tr>
<tr>
<td><strong>Accumulated depreciation and impairment</strong></td>
<td><strong>(16,694)</strong></td>
<td><strong>(20,077)</strong></td>
<td><strong>(2,884)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>34,597</strong></td>
<td><strong>38,388</strong></td>
<td><strong>5,514</strong></td>
</tr>
<tr>
<td><strong>Accumulated depreciation and impairment</strong></td>
<td><strong>17,903</strong></td>
<td><strong>18,311</strong></td>
<td><strong>2,630</strong></td>
</tr>
</tbody>
</table>
8. GOODWILL AND INTANGIBLE ASSETS

Goodwill

The Company had two reporting units, Baidu Core and iQIYI, as of December 31, 2018 and 2019.

The changes in the carrying amount of goodwill for each reporting unit from 2018 to 2019 was as follows:

<table>
<thead>
<tr>
<th></th>
<th>Baidu Core</th>
<th>iQIYI</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RMB (In millions)</td>
<td>RMB</td>
<td>RMB</td>
</tr>
<tr>
<td>Balance at December 31, 2017</td>
<td>12,530</td>
<td>3,276</td>
<td>15,806</td>
</tr>
<tr>
<td>Goodwill acquired</td>
<td>2,750</td>
<td>612</td>
<td>3,362</td>
</tr>
<tr>
<td>Goodwill disposed</td>
<td>(569)</td>
<td>—</td>
<td>(569)</td>
</tr>
<tr>
<td>Foreign currency translation and other adjustments</td>
<td>(63)</td>
<td>—</td>
<td>(63)</td>
</tr>
<tr>
<td>Balance at December 31, 2018</td>
<td>14,648</td>
<td>3,888</td>
<td>18,536</td>
</tr>
<tr>
<td>Goodwill acquired</td>
<td>978</td>
<td>—</td>
<td>978</td>
</tr>
<tr>
<td>Goodwill disposed</td>
<td>(1,265)</td>
<td>—</td>
<td>(1,265)</td>
</tr>
<tr>
<td>Foreign currency translation and other adjustments</td>
<td>1</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>Balance at December 31, 2019</td>
<td>14,362</td>
<td>3,888</td>
<td>18,250</td>
</tr>
<tr>
<td>Balance at December 31, 2019, in US$</td>
<td>2,063</td>
<td>558</td>
<td>2,621</td>
</tr>
</tbody>
</table>

(i) Disposition during the year ended December 31, 2019 was primarily related to the disposal of a subsidiary (Note 4).

Intangible Assets

<table>
<thead>
<tr>
<th></th>
<th>Gross carrying value RMB</th>
<th>Accumulated impairment RMB</th>
<th>Accumulated amortization RMB</th>
<th>Net carrying value RMB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land use right</td>
<td>464</td>
<td>(130)</td>
<td>(69)</td>
<td>265</td>
</tr>
<tr>
<td>Customer relationships</td>
<td>589</td>
<td>—</td>
<td>(476)</td>
<td>113</td>
</tr>
<tr>
<td>Software</td>
<td>693</td>
<td>(7)</td>
<td>(506)</td>
<td>180</td>
</tr>
<tr>
<td>Trademarks</td>
<td>942</td>
<td>(2)</td>
<td>(499)</td>
<td>441</td>
</tr>
<tr>
<td>User list</td>
<td>684</td>
<td>(2)</td>
<td>(679)</td>
<td>3</td>
</tr>
<tr>
<td>Licensed copyrights</td>
<td>18,081</td>
<td>—</td>
<td>(11,324)</td>
<td>6,757</td>
</tr>
<tr>
<td>Others</td>
<td>2,291</td>
<td>(7)</td>
<td>(862)</td>
<td>1,422</td>
</tr>
<tr>
<td></td>
<td>23,744</td>
<td>(148)</td>
<td>(14,415)</td>
<td>9,181</td>
</tr>
</tbody>
</table>
The Company recognized impairment loss on intangible assets excluding licensed copyrights of RMB139 million, RMB5 million and RMB406 million (US$58 million) for the years ended December 31, 2017, 2018 and 2019, respectively. For impairment charges on licensed copyrights, please refer to Note 2.

Amortization expense of intangible assets were RMB7.9 billion, RMB12.5 billion and RMB13.5 billion (US$1.9 billion), for the years ended December 31, 2017, 2018 and 2019 respectively.

Estimated amortization expense relating to the existing intangible assets with finite lives for each of the next five years is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>RMB (In millions)</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>For the years ending December 31, 2020</td>
<td>3,943</td>
<td>566</td>
</tr>
<tr>
<td>2021</td>
<td>2,036</td>
<td>292</td>
</tr>
<tr>
<td>2022</td>
<td>1,044</td>
<td>150</td>
</tr>
<tr>
<td>2023</td>
<td>364</td>
<td>52</td>
</tr>
<tr>
<td>2024</td>
<td>121</td>
<td>17</td>
</tr>
</tbody>
</table>

The carrying amounts of intangible assets with indefinite useful lives were insignificant as of December 31, 2018 and 2019.
9. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

<table>
<thead>
<tr>
<th>Item</th>
<th>2018 (In millions) RMB</th>
<th>2019 (In millions) RMB</th>
<th>2019 (In millions) US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrued payroll and welfare</td>
<td>1,898</td>
<td>2,407</td>
<td>346</td>
</tr>
<tr>
<td>Tax payable</td>
<td>2,342</td>
<td>3,115</td>
<td>447</td>
</tr>
<tr>
<td>Interest payable</td>
<td>382</td>
<td>310</td>
<td>45</td>
</tr>
<tr>
<td>Users’ and distributors’ deposits</td>
<td>661</td>
<td>641</td>
<td>92</td>
</tr>
<tr>
<td>Purchase of fixed assets and computer parts</td>
<td>1,890</td>
<td>1,220</td>
<td>175</td>
</tr>
<tr>
<td>Traffic acquisition costs</td>
<td>2,911</td>
<td>2,772</td>
<td>398</td>
</tr>
<tr>
<td>Bandwidth costs</td>
<td>2,085</td>
<td>2,492</td>
<td>358</td>
</tr>
<tr>
<td>Content acquisition costs</td>
<td>8,873</td>
<td>7,267</td>
<td>1,044</td>
</tr>
<tr>
<td>Funds collected on behalf of service providers</td>
<td>353</td>
<td>498</td>
<td>72</td>
</tr>
<tr>
<td>Payable to merchants</td>
<td>340</td>
<td>310</td>
<td>45</td>
</tr>
<tr>
<td>Accrued other operating expenses</td>
<td>10,680</td>
<td>8,925</td>
<td>1,282</td>
</tr>
<tr>
<td>Others</td>
<td>2,966</td>
<td>2,744</td>
<td>394</td>
</tr>
<tr>
<td>Total</td>
<td>35,381</td>
<td>32,701</td>
<td>4,698</td>
</tr>
</tbody>
</table>

10. LOANS PAYABLE

**Short-term Loans**

Short-term loans as of December 31, 2018 and 2019 were secured loans borrowed by iQIYI, amounted to RMB3.0 billion and RMB2.6 billion (US$376 million), respectively, which consisted of RMB denominated borrowings from financial institutions in the PRC and were repayable within one year.

Repayment of all short-term loans is guaranteed by the subsidiaries and VIEs of iQIYI and either collateralized by an office building of one of iQIYI’s VIEs with a carrying amount of RMB562 million (US$81 million) as of December 31, 2019 or collateralized by restricted cash balances totaling RMB965 million (US$139 million) as of December 31, 2019.

As of December 31, 2018 and 2019, the weighted average interest rates for the outstanding borrowings were approximately 4.47% and 4.05%, respectively, and the aggregate amounts of unused lines of credit for short-term loans were RMB781 million and RMB1.6 billion (US$233 million), respectively.

**Long-term Loans**

**Baidu**

In June 2016, the Company entered into a five-year term revolving facility agreement with a group of 21 syndicated bankers, pursuant to which the Company is entitled to borrow an unsecured USD denominated floating rate loan of US$1.0 billion with a term of five years and to borrow an unsecured USD denominated revolving loan of US$1.0 billion for five years. The facility was priced at 110 basis points over LIBOR and is intended for the general working capital of the Company. In June 2016, the Company drew down two tranches of US$250 million each under the facility commitment. In November 2016, the Company drew down another two tranches of US$250 million each under the facility commitment. In connection with the facility agreements, the Company entered into four interest rate swap agreements, pursuant to which the loans would be settled with a
fixed annual interest rate of 2.11%, 2.10%, 2.78% and 2.78% respectively, during the respective term of the loans.

The interest rate swap agreements met the definition of a derivative in accordance with ASC 815, Derivatives and Hedging (“ASC 815”). The derivatives related to the interest rate swap agreements are accounted for at fair value and included in “Other non-current assets” on the consolidated balance sheets.

iQIYI

In April 2017, iQIYI entered into a three-year loan agreement with Bank of China, pursuant to which iQIYI is entitled to borrow a secured RMB denominated loan of RMB299 million for the general working capital of iQIYI. In April 2017, iQIYI drew down RMB299 million with an interest rate of 4.47%, pursuant to the agreement, the principal shall be repaid by installments from 2017 to 2020. The repayment of the loan is guaranteed by a subsidiary of iQIYI and collateralized by an office building of one of iQIYI’s VIEs with a carrying amount of RMB562 million (US$81 million) as of December 31, 2019. RMB25 million was repaid when it became due. As of December 31, 2018 and 2019, the total outstanding borrowings were RMB284 million and RMB274 million (US$39 million), respectively, among which RMB10 million and RMB274 million (US$39 million), respectively, were repayable within one year and were included in “Long-term loans, current portion” balance.

In September 2019, iQIYI entered into a two-year loan agreement with JPMorgan Chase Bank, N.A., pursuant to which iQIYI is entitled to borrow a secured RMB denominated loan of RMB800 million (US$115 million) for the general working capital of iQIYI. In 2019, iQIYI drew down RMB448 million (US$64 million) with an interest rate of 3.55%, pursuant to the agreement, the principal shall be repaid by installments from 2019 to 2021. The repayment of the loan is collateralized by long-term held-to-maturity debt securities with a stated cost of RMB494 million (US$71 million). RMB3 million (US$424 thousand) was repaid when it became due in 2019. As of December 31, 2019, the total outstanding borrowings were RMB445 million (US$64 million), among which RMB34 million (US$5 million) was repayable within one year and were included in “Long-term loans, current portion” balance.

In December 2018, certain supplier invoices selected by iQIYI of RMB525 million were factored to a financial institution (“the 2018 factored receivables”) at a discount. These supplier invoices were recorded as accounts payables in the Company’s consolidated balance sheet. The factored receivables were further transferred to a securitization vehicle, whereby debt securities securitized by the factored receivables. The debt securities were issued to third party investors for the gross proceeds of RMB446 million, with maturities in December 2019 and December 2020. The proceeds raised from issuance of the asset-backed debt securities were used by the financial institution to factor the supplier invoices. At the same time, the credit terms of the iQIYI’s corresponding trade payables were extended to mirror the maturity of the asset-backed debt securities, and the effective interest rate was 7.00%.

In November 2019, certain supplier invoices selected by iQIYI of RMB587 million (US$84 million) were factored to a financial institution (the “2019 factored receivables”) at a discount. These supplier invoices were recorded as accounts payables in the Company’s consolidated balance sheets. The 2019 factored receivables were further transferred to a securitization vehicle, whereby debt securities securitized by the 2019 factored receivables. The debt securities were issued to third party investors for the gross proceeds of RMB500 million (US$72 million) and mature in November 2021. The proceeds raised from the issuance of the asset-backed debt securities were used by the financial institutions to factor the supplier invoices. At the same time, the credit terms of iQIYI’s corresponding trade payables were extended to mirror the maturity of the asset-backed debt securities, and the effective interest rate was 5.97%.
As of December 31, 2019, the outstanding borrowings from asset-backed debt securities were RMB898 million (US$129 million). RMB75 million (US$11 million) of 2018 asset-backed debt securities was repaid when it became due in December 2019. RMB429 million (US$62 million) of asset-backed debt securities is repayable within one year and are included in “Long-term loans, current portion” and the remaining balance of RMB469 million (US$67 million) of 2019 asset-backed debt securities is included in non-current “Long-term loans” on the consolidated balance sheets.

11. NOTES PAYABLE

Baidu, Inc.

The Company issued and publicly sold unsecured senior notes, and the detail of the tranches are shown as flow:

<table>
<thead>
<tr>
<th>Notes</th>
<th>Issue date</th>
<th>Principal amount (US$ million)</th>
<th>Mature date</th>
<th>Effective interest rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017 Notes</td>
<td>November 28, 2012</td>
<td>750</td>
<td>November 28, 2017</td>
<td>2.36%*</td>
</tr>
<tr>
<td>2022 Ten-year Notes</td>
<td>November 28, 2012</td>
<td>750</td>
<td>November 28, 2022</td>
<td>3.59%</td>
</tr>
<tr>
<td>2018 Notes</td>
<td>August 6, 2013</td>
<td>1,000</td>
<td>August 6, 2018</td>
<td>3.39%*</td>
</tr>
<tr>
<td>2019 Notes</td>
<td>June 9, 2014</td>
<td>1,000</td>
<td>June 9, 2019</td>
<td>3.00%*</td>
</tr>
<tr>
<td>2020 Notes</td>
<td>June 30, 2015</td>
<td>750</td>
<td>June 30, 2020</td>
<td>3.13%</td>
</tr>
<tr>
<td>2025 Notes</td>
<td>June 30, 2015</td>
<td>500</td>
<td>June 30, 2025</td>
<td>4.22%</td>
</tr>
<tr>
<td>2022 Five-year Notes</td>
<td>July 6, 2017</td>
<td>900</td>
<td>July 6, 2022</td>
<td>3.08%</td>
</tr>
<tr>
<td>2027 Notes</td>
<td>July 6, 2017</td>
<td>600</td>
<td>July 6, 2027</td>
<td>3.73%</td>
</tr>
<tr>
<td>2023 Notes</td>
<td>March 29, 2018</td>
<td>1,000</td>
<td>September 29, 2023</td>
<td>3.99%</td>
</tr>
<tr>
<td>2028 March Notes</td>
<td>March 29, 2018</td>
<td>500</td>
<td>March 29, 2028</td>
<td>4.50%</td>
</tr>
<tr>
<td>2024 Notes</td>
<td>November 14, 2018</td>
<td>850</td>
<td>May 14, 2024</td>
<td>4.51%/4.54%</td>
</tr>
<tr>
<td>2028 November Notes</td>
<td>November 14, 2018</td>
<td>400</td>
<td>November 14, 2028</td>
<td>4.99%</td>
</tr>
</tbody>
</table>

* 2017 Notes, 2018 Notes and 2019 Notes were fully repaid when they became due.

The 2017 Notes, 2018 Notes, 2019 Notes, 2020 Notes, 2022 Ten-year Notes, 2025 Notes, 2022 Five-year Notes, 2027 Notes, 2023 Notes, 2028 March Notes, 2024 Notes and 2028 November Notes are collectively referred to as the “Notes”.

The 2017 Notes bear interest at the rate of 2.25% per annum and the 2022 Ten-year Notes bear interest at the rate of 3.50% per annum. Interest is payable semi-annually in arrears on and of each year, beginning on May 28, 2013.

The 2018 Notes bear interest at the rate of 3.25% per annum. Interest is payable semi-annually in arrears on and of each year, beginning on February 6, 2014.

The 2019 Notes bear interest at the rate of 2.75% per annum. Interest is payable semi-annually in arrears on and of each year, beginning on December 9, 2014.

The 2020 Notes bear interest at the rate of 3.00% per annum and the 2025 Notes bear interest at the rate of 4.13% per annum. Interest is payable semi-annually in arrears on and of each year, beginning on December 30, 2015.

The 2022 Five-year Notes bear interest at the rate of 2.88% per annum and the 2027 Notes bear interest at the rate of 3.63% per annum. Interest is payable semi-annually in arrears on and of each year, beginning on January 6, 2018.
The 2023 Notes bear interest at the rate of 3.88% per annum and the 2028 March Notes bear interest at the rate of 4.38% per annum. Interest is payable semi-annually in arrears on and of each year, beginning on September 29, 2018.

The 2024 Notes including US$600 million issued in November and US$250 million in December 2018, respectively, bear interest at the rate of 4.38% per annum and the 2028 November Notes bear interest at the rate of 4.88% per annum. Interest is payable semi-annually in arrears on and of each year, beginning on May 14, 2019.

At maturity, the Notes are payable at their principal amount plus accrued and unpaid interest thereon.

The Notes do not contain any financial covenants or other significant restrictions. In addition, the Notes are unsecured and rank lower than any secured obligation of the Group and have the same liquidation priority as any other unsecured liabilities of the Group, but senior to those expressly subordinated obligations, if any. The Company may, at its discretion, redeem all or any portion of the Notes at any time, at the greater of the principal amount and the make whole amount plus accrued and unpaid interest. In addition, for the 2023 Notes, 2028 March Notes, 2024 Notes and 2028 November Notes, the Company may at its discretion, redeem all or any portion of the Notes at one or three months before the maturity date of the respective notes, at a price equal to the greater of 100% of the principal amount of such Notes plus accrued and unpaid interest, if any, to (but not including) the redemption date. As of December 31, 2019, the Company does not intend to redeem any portion of the Notes prior to the stated maturity dates. For certain of the notes, the Company has the obligation to redeem the notes if a change in control occurs as defined in the indenture of the Notes.

The unpaid Notes were issued at a discount amounting to US$18 million. The total issuance costs of US$30 million were presented as a direct deduction from the principal amount of the Notes on the consolidated balance sheets. Both the discount and the issuance costs are amortized as interest expense using the effective interest rate method through the maturity dates of the Notes.

The principal amount and unamortized discount and debt issuance costs as of December 31, 2018 and 2019 were as follows:

<table>
<thead>
<tr>
<th></th>
<th>As of December 31,</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018 (RMB)</td>
<td>2019 (RMB)</td>
<td>2019 (US$)</td>
</tr>
<tr>
<td>Principal amount</td>
<td>49,867</td>
<td>43,519</td>
<td>6,251</td>
</tr>
<tr>
<td>Unamortized discount and debt issuance costs</td>
<td>(261)</td>
<td>(210)</td>
<td>(30)</td>
</tr>
<tr>
<td></td>
<td>49,606</td>
<td>43,309</td>
<td>6,221</td>
</tr>
</tbody>
</table>

F-52
The following table summarizes the aggregate required repayments of the principal amounts of the Company’s long-term debts (including the notes payable and loans payable (Note 10) but excluding convertible notes (Note 12)), in the succeeding five years and thereafter:

<table>
<thead>
<tr>
<th></th>
<th>RMB (In millions)</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>For the years ending December 31, 2020</td>
<td>5,987</td>
<td>860</td>
</tr>
<tr>
<td>2021</td>
<td>7,902</td>
<td>1,135</td>
</tr>
<tr>
<td>2022</td>
<td>11,487</td>
<td>1,650</td>
</tr>
<tr>
<td>2023</td>
<td>6,962</td>
<td>1,000</td>
</tr>
<tr>
<td>2024</td>
<td>5,918</td>
<td>850</td>
</tr>
<tr>
<td>Thereafter</td>
<td>13,924</td>
<td>2,000</td>
</tr>
</tbody>
</table>

12. CONVERTIBLE NOTES

iQIYI 2018 Convertible Notes

In January 2017, iQIYI issued US$1.5 billion of convertible notes (the “iQIYI 2018 Convertible Notes”) in a private placement, among which US$300 million was purchased by the Company and the remaining US$1.2 billion was purchased by external investors. The iQIYI 2018 Convertible Notes bear interest at a coupon rate of 1.50% per annum with a maturity date of January 25, 2018. The iQIYI 2018 Convertible Notes can be converted into preferred shares in a qualified financing or at iQIYI’s election. The conversion option does not meet the definition of a derivative under ASC 815. On October 26, 2017, the US$1.5 billion iQIYI 2018 Convertible Notes and the related accrued interest were converted into 1,014,436,019 iQIYI’s Series G preferred shares. Upon the completion of iQIYI’s IPO, all preferred shares were converted into Class A ordinary shares of iQIYI (Note 17).

iQIYI 2023 Convertible Notes

In December 2018, iQIYI issued US$750 million convertible senior notes due 2023 (“iQIYI 2023 Convertible Notes”). The iQIYI 2023 Convertible Notes are senior, unsecured obligations of iQIYI, and interest is payable semi-annually in cash at a rate of 3.75% per annum with a maturity date of December 1, 2023, unless previously repurchased, redeemed or converted prior to such date. The initial conversion rate of the iQIYI 2023 Convertible Notes is 37.1830 of iQIYI’s ADSs per US$1,000 principal amount of the iQIYI 2023 Convertible Notes. Upon conversion, iQIYI will pay or deliver to such converting holders, as the case may be, cash, ADSs, or a combination of cash and ADSs, at its election.

Concurrently with the issuance of the iQIYI 2023 Convertible Notes, iQIYI purchased capped call options on iQIYI’s ADS with certain counterparties at a price of US$68 million. The capped call exercise price is equal to the initial conversion price of the iQIYI 2023 Convertible Notes and the cap price is US$38.42 per ADS, subject to certain adjustments under the terms of the capped call transaction. The cost of the capped call was recorded as a reduction of the Company’s additional paid-in capital and non-controlling interests on the consolidated balance sheets with no subsequent changes in fair value be recorded.

As the conversion option may be settled entirely or partially in cash at iQIYI’s option, the Company separated the iQIYI 2023 Convertible Notes into liability and equity components in accordance with ASC 470-20, Debt with Conversion and Other Options. The carrying amount of the liability component was calculated by measuring the fair value of a similar liability that does not have an associated conversion feature. The carrying amount of the equity component representing the conversion option was determined by deducting the fair value
of the liability component from the initial proceeds and recorded as additional paid-in capital. Debt issuance costs were allocated to the liability and equity components based on the same proportion as the recognized amounts bifurcated based on gross proceeds from the iQIYI 2023 Convertible Notes. The difference between the principal amount of the iQIYI 2023 Convertible Notes and the liability component is considered debt discount and is amortized at an effective interest rate of 7.04% to accrete the discounted carrying value of the iQIYI 2023 Convertible Notes to its face value on December 1, 2021, the put date of the iQIYI 2023 Convertible Notes. The holders may require iQIYI to repurchase all or portion of the iQIYI 2023 Convertible Notes for cash on December 1, 2021, or upon a fundamental change, at a repurchase price equal to 100% of the principal amount, plus accrued and unpaid interest.

iQIYI 2025 Convertible Notes

In March 2019, iQIYI issued US$1.2 billion convertible senior notes due 2025 (“iQIYI 2025 Convertible Notes”). The iQIYI 2025 Convertible Notes are senior, unsecured obligations of iQIYI, and interest is payable semi-annually in cash at a rate of 2.00% per annum with a maturity date of April 1, 2025, unless previously repurchased, redeemed or converted prior to such date. The initial conversion rate of the iQIYI 2025 Convertible Notes is 33.0003 of iQIYI’s ADSs per US$1,000 principal amount of the iQIYI 2025 Convertible Notes. Upon conversion, iQIYI will pay or deliver to such converting holders, as the case may be, cash, ADSs, or a combination of cash and ADSs, at its election. Concurrently with the issuance of the iQIYI 2025 Convertible Notes, iQIYI purchased capped call options on iQIYI’s ADS with certain counterparties at a price of US$85 million. The capped call exercise price is equal to the initial conversion price of the iQIYI 2025 Convertible Notes and the cap price is US$40.02 per ADS, subject to certain adjustments under the terms of the capped call transaction. The cost of the capped call was recorded as a reduction of the Company’s additional paid-in capital and non-controlling interests on the consolidated balance sheets with no subsequent changes in fair value be recorded.

The accounting of iQIYI 2025 Convertible Notes is similar to that of iQIYI 2023 Convertible Notes. The difference between the principal amount of the iQIYI 2025 Convertible Notes and the liability component is considered debt discount and is amortized at an effective interest rate of 6.01% to accrete the discounted carrying value of the iQIYI 2025 Convertible Notes to its face value on April 1, 2023, the put date of the Notes. The holders may require iQIYI to repurchase all or portion of the iQIYI 2025 Convertible Notes for cash on April 1, 2023, or upon a fundamental change, at a repurchase price equal to 100% of the principal amount, plus accrued and unpaid interest.

The iQIYI 2023 Convertible Notes and the iQIYI 2025 Convertible Notes are collectively referred to the Convertible Notes. As of December 31, 2018 and 2019, the principal amount of the liability component of the Convertible Notes were RMB5.2 billion and RMB13.6 billion (US$2.0 billion), unamortized debt discount were RMB446 million and RMB1.3 billion (US$184 million), and the net carrying amount of the liability component were RMB4.7 billion and RMB12.3 billion (US$1.8 billion), respectively. The carrying amount of the equity component of the Notes were RMB362 million and RMB1.3 billion (US$194 million), respectively. For the years ended December 31, 2018 and 2019, the amount of interest cost recognized relating to both the contractual interest coupon and amortization of the discount on the liability component were RMB24 million and RMB670 million (US$96 million), respectively. As of December 31, 2019, the liability component of the iQIYI 2023 Convertible Notes and the iQIYI 2025 Convertible Notes will be accreted up to the principal amount of US$750 million and US$1.2 billion over a remaining period of 1.92 years and 3.25 years, respectively.

The aggregate scheduled maturities of RMB5.2 billion (US$750 million) and RMB8.4 billion (US$1.2 billion) of the Convertible Notes will be repaid when they become due in 2023 and 2025, respectively, assuming no
conversion or redemption of the Convertible Notes prior to maturity, all convertible note holders hold the Convertible Notes to maturity and iQIYI elects to pay the amounts owed in cash.

13. LEASES

Leases are classified as operating leases or finance leases in accordance with ASC 842. The Company’s operating leases mainly related to land, office facilities, IDC facilities and vehicles. For leases with terms greater than 12 months, the Company records the related asset and lease liability at the present value of lease payments over the term. Certain leases include rental escalation clauses, renewal options and/or termination options, which are factored into the Company’s determination of lease payments when appropriate. As of December 31, 2019, finance leases were insignificant.

As of December 31, 2019, the weighted average remaining lease term was 6.3 years and weighted average discount rate was 4.45% for the Group’s operating leases.

Operating lease cost for the year ended December 31, 2019 was RMB2.7 billion (US$382 million), which excluded cost of short-term contracts. Short-term lease cost for the year ended December 31, 2019 was RMB434 million (US$62 million). Variable lease cost was immaterial for the year ended December 31, 2019. For the year ended December 31, 2019, no lease cost for operating or finance leases was capitalized. Supplemental cash flow information related to operating leases was as follows:

<table>
<thead>
<tr>
<th>For the year ended December 31, 2019</th>
<th>RMB</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash payments for operating leases</td>
<td>2,631</td>
<td>378</td>
</tr>
<tr>
<td>ROU assets obtained in exchange for operating lease liabilities</td>
<td>3,896</td>
<td>560</td>
</tr>
</tbody>
</table>

Future lease payments under operating leases as of December 31, 2019 were as follows:

<table>
<thead>
<tr>
<th>Operating leases</th>
<th>RMB (In millions)</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year ending December 31,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>2,350</td>
<td>337</td>
</tr>
<tr>
<td>2021</td>
<td>1,705</td>
<td>245</td>
</tr>
<tr>
<td>2022</td>
<td>1,307</td>
<td>188</td>
</tr>
<tr>
<td>2023</td>
<td>1,080</td>
<td>155</td>
</tr>
<tr>
<td>2024</td>
<td>628</td>
<td>90</td>
</tr>
<tr>
<td>Thereafter</td>
<td>295</td>
<td>57</td>
</tr>
<tr>
<td>Total future lease payments</td>
<td>7,465</td>
<td>1,072</td>
</tr>
<tr>
<td>Less: Imputed interest</td>
<td>696</td>
<td>100</td>
</tr>
<tr>
<td>Total lease liability balance</td>
<td>6,769</td>
<td>972</td>
</tr>
</tbody>
</table>

As of December 31, 2019, additional operating leases that have not yet commenced were immaterial.

F-55
14. INCOME TAXES

Cayman Islands and BVI

Under the current laws of the Cayman Islands and BVI, the Company is not subject to tax on income or capital gains. Additionally, upon payment of dividends by the Company to its shareholders, no Cayman Islands withholding tax will be imposed.

Hong Kong

Subsidiaries in Hong Kong are subject to Hong Kong Profits Tax rate at 16.5%, and foreign-derived income is exempted from income tax. There are no withholding taxes in Hong Kong on remittance of dividends.

Japan

As a result of the Japanese tax regulations amendments, the effective income tax rate are approximately 32%, 31% and 31% for the years ended December 31, 2017, 2018 and 2019, respectively.

China

Effective from January 1, 2008, the PRC’s statutory, Enterprise Income Tax (“EIT”) rate is 25%. Preferential EIT rates at 15% and 10% are available for qualified “High and New Technology Enterprises” (“HNTEs”) and “Key Software Enterprise” (“KSE”), respectively. The HNTE certificate is effective for a period of three years and the KSE is subject to relevant governmental authorities’ annual assessment based on self-assessment supporting documents filed with the tax authorities each year.

Baidu Online, Baidu China and Baidu International enjoyed a reduced tax rate of 10% as qualified KSEs in 2017 and 2018. Certain other PRC subsidiaries and VIEs, including Baidu Netcom, are qualified HNTEs and enjoy a reduced tax rate of 15% for the years presented, which will expire in 2020, 2021 and 2022. Certain entities must file required supporting documents with the tax authorities before using the preferential rates. Whether the entity is entitled to enjoy a preferential rate as a KSE is subject to relevant governmental authorities’ assessment each year. An entity could re-apply for the HNTE certificate when the prior certificate expires. Historically, all of the Company’s subsidiaries and VIEs successfully re-applied for the certificates when the prior ones expired.

A certificate for the current year might be obtained in the following year as a result of the stringent inspection and approval process by the governmental authorities. The Company would record an income tax reversal in the year when the certificate is obtained for the over-paid or over-accrued provisional tax in connection with the grant of a more favorable tax rate for the prior year.

Under the current EIT Law, dividends for earnings derived from January 1, 2008 and onwards paid by PRC entities to any of their foreign non-resident enterprise investors are subject to a 10% withholding tax. A lower tax rate will be applied if tax treaty or arrangement benefits are available. Under the tax arrangement between the PRC and Hong Kong, the reduced withholding tax rate for dividends paid by PRC entities is 5% provided the Hong Kong investors meet the requirements as stipulated by relevant PRC tax regulations, such as the beneficiary owner test. Capital gains derived from PRC are also subject to a 10% PRC withholding tax.
Income (loss) before income taxes consists of:

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRC</td>
<td>22,088 RMB</td>
<td>23,524 RMB</td>
<td>13,076 RMB</td>
</tr>
<tr>
<td>Non-PRC</td>
<td>(805) RMB</td>
<td>3,801 RMB</td>
<td>(13,416) RMB</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>21,283 RMB</td>
<td>27,325 RMB</td>
<td>(340) RMB</td>
</tr>
</tbody>
</table>

Except for the investment related gain recognized, the pre-tax losses from non-PRC operations consist primarily of operating costs, administration expenses, interest expenses and share-based compensation expenses.

Income taxes consist of:

<table>
<thead>
<tr>
<th></th>
<th>2017 RMB</th>
<th>2018 RMB</th>
<th>2019 RMB</th>
<th>2019 US$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current income tax</strong></td>
<td>4,224 RMB</td>
<td>6,184 RMB</td>
<td>3,564 RMB</td>
<td>511 US$</td>
</tr>
<tr>
<td><strong>Income tax refund due to reduced tax rate</strong></td>
<td>(473) RMB</td>
<td>(680) RMB</td>
<td>(920) RMB</td>
<td>(132) US$</td>
</tr>
<tr>
<td><strong>Adjustments of deferred tax assets due to change in tax rates</strong></td>
<td>7 RMB</td>
<td>— RMB</td>
<td>9 RMB</td>
<td>1 US$</td>
</tr>
<tr>
<td><strong>Deferred income tax benefit</strong></td>
<td>(763) RMB</td>
<td>(761) RMB</td>
<td>(705) RMB</td>
<td>(101) US$</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,995 RMB</td>
<td>4,743 RMB</td>
<td>1,948 RMB</td>
<td>279 US$</td>
</tr>
</tbody>
</table>

The reconciliation of the actual income taxes to the amount of tax computed by applying the aforementioned statutory income tax rate to pre-tax income is as follows:

<table>
<thead>
<tr>
<th></th>
<th>2017 RMB</th>
<th>2018 RMB</th>
<th>2019 RMB</th>
<th>2019 US$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expected taxation at PRC statutory tax rate</strong></td>
<td>5,321 RMB</td>
<td>6,831 RMB</td>
<td>(85) RMB</td>
<td>(12) US$</td>
</tr>
<tr>
<td><strong>Effect of differing tax rates in different jurisdictions</strong></td>
<td>854 RMB</td>
<td>493 RMB</td>
<td>3,299 RMB</td>
<td>474 US$</td>
</tr>
<tr>
<td><strong>Non-taxable income</strong></td>
<td>(913) RMB</td>
<td>(1,555) RMB</td>
<td>(419) RMB</td>
<td>(60) US$</td>
</tr>
<tr>
<td><strong>Non-deductible expenses</strong></td>
<td>653 RMB</td>
<td>935 RMB</td>
<td>2,124 RMB</td>
<td>305 US$</td>
</tr>
<tr>
<td><strong>Research and development super-deduction</strong></td>
<td>(905) RMB</td>
<td>(1,047) RMB</td>
<td>(1,245) RMB</td>
<td>(179) US$</td>
</tr>
<tr>
<td><strong>Effect of PRC preferential tax rates and tax holiday</strong></td>
<td>(2,095) RMB</td>
<td>(2,250) RMB</td>
<td>(1,327) RMB</td>
<td>(191) US$</td>
</tr>
<tr>
<td><strong>Effect of tax rate changes on deferred taxes</strong></td>
<td>7 RMB</td>
<td>— RMB</td>
<td>9 RMB</td>
<td>1 US$</td>
</tr>
<tr>
<td><strong>Reversal of prior year’s EIT</strong></td>
<td>(579) RMB</td>
<td>(616) RMB</td>
<td>(1,134) RMB</td>
<td>(163) US$</td>
</tr>
<tr>
<td><strong>PRC withholding tax</strong></td>
<td>101 RMB</td>
<td>553 RMB</td>
<td>(224) RMB</td>
<td>(32) US$</td>
</tr>
<tr>
<td><strong>Addition to valuation allowance</strong></td>
<td>551 RMB</td>
<td>1,399 RMB</td>
<td>950 RMB</td>
<td>136 US$</td>
</tr>
<tr>
<td><strong>Taxation for the year</strong></td>
<td>2,995 RMB</td>
<td>4,743 RMB</td>
<td>1,948 RMB</td>
<td>279 US$</td>
</tr>
<tr>
<td><strong>Effective tax rate</strong></td>
<td>14%</td>
<td>17%</td>
<td>(57.3%)</td>
<td>(57.3%)</td>
</tr>
<tr>
<td><strong>Effect of preferential tax rates inside the PRC on basic earnings per Class A and Class B ordinary share</strong></td>
<td>60.33</td>
<td>64.47</td>
<td>38.09</td>
<td>5.47</td>
</tr>
</tbody>
</table>
The tax effects of temporary differences that gave rise to the deferred tax balances at December 31, 2018 and 2019 are as follows:

<table>
<thead>
<tr>
<th></th>
<th>As of December 31, 2018 (RMB)</th>
<th>As of December 31, 2019 (RMB)</th>
<th>US$ (In millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deferred tax assets:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision for doubtful receivables</td>
<td>252</td>
<td>332</td>
<td>48</td>
</tr>
<tr>
<td>Accrued expenses, payroll and others</td>
<td>4,284</td>
<td>4,820</td>
<td>692</td>
</tr>
<tr>
<td>Fixed assets depreciation</td>
<td>60</td>
<td>151</td>
<td>22</td>
</tr>
<tr>
<td>Net operating loss carry-forward</td>
<td>1,609</td>
<td>1,733</td>
<td>249</td>
</tr>
<tr>
<td>Less: valuation allowance</td>
<td>(3,881)</td>
<td>(4,843)</td>
<td>(696)</td>
</tr>
<tr>
<td>Deferred tax assets, net</td>
<td>2,324</td>
<td>2,193</td>
<td>315</td>
</tr>
<tr>
<td><strong>Deferred tax liabilities:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-lived assets arising from acquisitions</td>
<td>360</td>
<td>275</td>
<td>40</td>
</tr>
<tr>
<td>Withholding tax on PRC subsidiaries’ undistributed earnings</td>
<td>619</td>
<td>1,621</td>
<td>233</td>
</tr>
<tr>
<td>Tax on capital gains</td>
<td>2,778</td>
<td>1,159</td>
<td>166</td>
</tr>
<tr>
<td>Other</td>
<td>342</td>
<td>218</td>
<td>31</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,099</strong></td>
<td><strong>3,273</strong></td>
<td><strong>470</strong></td>
</tr>
</tbody>
</table>

As of December 31, 2019, the Company had tax losses of approximately RMB9.9 billion (US$1.4 billion) deriving from entities in the PRC, Hong Kong and Japan. The tax losses in Japan can be carried forward for nine years to offset future taxable profit. The tax losses in PRC can be carried forward for five years to offset future taxable profit, and the period was extended to 10 years for entities qualified as HNTE in 2019 and thereafter. The tax losses of entities in the PRC and Japan will expire from 2020 to 2029. The tax losses in Hong Kong can be carried forward with no expiration date.

The Company evaluated its income tax uncertainty under ASC 740. ASC 740 clarifies the accounting for uncertainty in income taxes by prescribing the recognition threshold a tax position is required to meet before being recognized in the financial statements. The Company elects to classify interest and penalties related to an uncertain tax position, if and when required, as part of income tax expense in the consolidated statements of comprehensive income(loss). As of and for the years ended December 31, 2018 and 2019, there were no significant impact from tax uncertainties on the Company’s financial position and result of operations. The Company does not expect the amount of unrecognized tax benefits to increase significantly in the next 12 months. In general, the PRC tax authorities have up to five years to conduct examinations of the tax filings of the Company’s PRC subsidiaries. Accordingly, the PRC subsidiaries’ tax years of 2014 through 2019 remain open to examination by the respective tax authorities. The Company may also be subject to the examination of the tax filings in other jurisdictions, which are not material to the consolidated financial statements.

In 2013, the Company accrued RMB581 million of withholding tax for the potential remittance of earnings from the PRC subsidiaries to their offshore parent companies in the form of dividend distribution, because the Company believes that the underlying dividends will be distributed in the future considering future merger and
acquisition activities. In 2019, the Company accrued RMB1.0 billion of withholding tax for the potential remittance of earnings from the PRC subsidiaries to their offshore parent companies in the form of dividend distribution. The Company did not provide for additional deferred income taxes and foreign withholding taxes on the undistributed earnings of foreign subsidiaries during the years presented on the basis of its intent to permanently reinvest its foreign subsidiaries’ earnings. As of December 31, 2019, the total amount of undistributed earnings from the PRC subsidiaries and the VIEs for which no withholding tax has been accrued was RMB145.9 billion (US$21.0 billion). Determination of the amount of unrecognized deferred tax liability related to these earnings is not practicable. Under the PRC tax regulations, dividends from PRC companies to their overseas parents on earnings derived from January 1, 2008 onwards are subject to PRC dividend withholding tax at 10%. Such rate could be reduced to 5% with applicable treaty.

15. EMPLOYEE DEFINED CONTRIBUTION PLAN

Full time employees of the Group in the PRC participate in a government mandated multi-employer defined contribution plan pursuant to which certain pension benefits, medical care, unemployment insurance, employee housing fund and other welfare benefits are provided to employees. Chinese labor regulations require that the Group make contributions to the government for these benefits based on certain percentages of the employees’ salaries. The Group has no legal obligation for the benefits beyond the contributions. Total amounts for such employee benefits, which were expensed as incurred, were RMB2.6 billion, RMB2.9 billion and RMB3.2 billion (US$464 million) for the years ended December 31, 2017, 2018 and 2019, respectively.

16. COMMITMENTS AND CONTINGENCIES

Capital Commitments

The Group’s capital commitments primarily relate to commitments in connection with the expansion and improvement of its network infrastructure and its plan to build additional office buildings and cloud computing based data centers. Total capital commitments contracted but not yet reflected in the financial statements amounted to RMB560 million (US$81 million) as of December 31, 2019. Almost all of the commitments relating to the network infrastructure, office building and cloud computing based data centers are to be fulfilled within one year.

Commitments for bandwidth and property management fees

Future minimum payments under non-cancelable agreements for bandwidth and property management fees consist of the following as of December 31, 2019:

<table>
<thead>
<tr>
<th>Year</th>
<th>RMB (In millions)</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>652</td>
<td>94</td>
</tr>
<tr>
<td>2021</td>
<td>109</td>
<td>16</td>
</tr>
<tr>
<td>2022</td>
<td>77</td>
<td>11</td>
</tr>
<tr>
<td>2023</td>
<td>65</td>
<td>9</td>
</tr>
<tr>
<td>2024</td>
<td>63</td>
<td>9</td>
</tr>
<tr>
<td>Thereafter</td>
<td></td>
<td>63</td>
</tr>
</tbody>
</table>

Upon the adoption of ASC 842 on January 1, 2019, future minimum lease payments for operating lease commitments as of December 31, 2019 are disclosed in Note 13.
Licensed Copyrights and Produced Content Commitments

Future minimum payments under non-cancelable agreements for licensed copyrights and produced content consist of the following as of December 31, 2019:

<table>
<thead>
<tr>
<th>Year</th>
<th>RMB</th>
<th>USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>8,935</td>
<td>1,284</td>
</tr>
<tr>
<td>2021</td>
<td>6,496</td>
<td>933</td>
</tr>
<tr>
<td>2022</td>
<td>4,246</td>
<td>610</td>
</tr>
<tr>
<td>2023</td>
<td>1,534</td>
<td>220</td>
</tr>
<tr>
<td>2024</td>
<td>774</td>
<td>111</td>
</tr>
<tr>
<td>Thereafter</td>
<td>315</td>
<td>45</td>
</tr>
<tr>
<td>Total</td>
<td>22,300</td>
<td>3,203</td>
</tr>
</tbody>
</table>

Investment Commitments

The Group’s investment commitments primarily relate to capital contributions obligation under certain arrangements which do not have contractual maturity date. The total investment commitments contracted but not yet reflected in the financial statements amounted to RMB1.3 billion (US$183 million).

Guarantees

The Group accounts for guarantees in accordance with ASC Topic 460, Guarantees (“ASC 460”). Accordingly, the Company evaluates its guarantees if any to determine whether (a) the guarantee is specifically excluded from the scope of ASC 460, (b) the guarantee is subject to ASC 460 disclosure requirements only, but not subject to the initial recognition and measurement provisions, or (c) the guarantee is required to be recorded in the financial statements at fair value.

The corporate by-laws require that the Company indemnify its officers and directors, as well as those who act as directors and officers of other entities at the Company’s request, against expenses, judgments, fines, settlements and other amounts actually and reasonably incurred in connection with any proceedings arising out of their services to the Company. In addition, the Company entered into separate indemnification agreements with each director and each executive officer of the Company that provide for indemnification of these directors and officers under similar circumstances and under additional circumstances. The indemnification obligations are more fully described in the by-laws and the indemnification agreements. The Company purchases standard directors and officers insurance to cover claims or a portion of the claims made against its directors and officers. Since a maximum obligation is not explicitly stated in the Company’s by-laws or in the indemnification agreements and will depend on the facts and circumstances that arise out of any future claims, the overall maximum amount of the obligations cannot be reasonably estimated.

Historically, the Company was not required to make payments related to these obligations, and the fair value for these obligations was nil on the consolidated balance sheets as of December 31, 2018 and 2019.

Litigation

The Group was involved in certain cases pending in various PRC, Japan, U.S. and Brazil courts and arbitration as of December 31, 2019. These cases include copyright infringement cases, unfair competition cases, and
BAIDU, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2017, 2018 and 2019

defamation cases, among others. Adverse results in these lawsuits may include awards of damages and may also result in, or even compel, a change in
the Company’s business practices, which could result in a loss of revenue or otherwise harm the business of the Company.

For many proceedings, the Company is currently unable to estimate the reasonably possible loss or a range of reasonably possible losses as the
proceedings are in the early stages, and/or there is a lack of clear or consistent interpretation of laws specific to the industry-specific complaints among
different jurisdictions. As a result, there is considerable uncertainty regarding the timing or ultimate resolution of such matters, which includes eventual
loss, fine, penalty or business impact, if any, and therefore, an estimate for the reasonably possible loss or a range of reasonably possible losses cannot
be made. However, the Company believes that such matters, individually and in the aggregate, when finally resolved, are not reasonably likely to have a
material adverse effect on the Company’s consolidated results of operations, financial position and cash flows. With respect to the limited number of
proceedings for which the Company was able to estimate the reasonably possible losses or the range of reasonably possible losses, such loss estimates
were insignificant.

17. REDEEMABLE NONCONTROLLING INTERESTS

<table>
<thead>
<tr>
<th></th>
<th>2017 RMB</th>
<th>2018 RMB</th>
<th>2019 RMB</th>
<th>2019 US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as of January 1</td>
<td>5,492</td>
<td>11,022</td>
<td>716</td>
<td>104</td>
</tr>
<tr>
<td>Business combination (Note 3)</td>
<td>—</td>
<td>698</td>
<td>182</td>
<td>26</td>
</tr>
<tr>
<td>Other comprehensive (loss)</td>
<td>(335)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Issuance of subsidiary shares</td>
<td>—</td>
<td>—</td>
<td>100</td>
<td>14</td>
</tr>
<tr>
<td>Disposal of subsidiary shares</td>
<td>(2,376)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Accretion of redeemable noncontrolling interests</td>
<td>(17)</td>
<td>146</td>
<td>111</td>
<td>15</td>
</tr>
<tr>
<td>Conversion of convertible notes of iQIYI</td>
<td>8,258</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Conversion of iQIYI preferred shares recognized as redeemable noncontrolling interests to ordinary shares</td>
<td>—</td>
<td>(11,150)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Balance as of December 31</td>
<td>11,022</td>
<td>716</td>
<td>1,109</td>
<td>159</td>
</tr>
</tbody>
</table>

In November 2014, iQIYI completed a round of preferred shares financing with US$300 million from the external preferred shareholders. In October
2017, the US$1.2 billion iQIYI 2018 Convertible Notes (Note 12) plus related interest purchased by external investors was converted to iQIYI’s new
round preferred shares. As the preferred shares could be redeemed by such shareholders upon the occurrence of certain events that are not solely within
the control of iQIYI, these preferred shares were accounted for as redeemable noncontrolling interests. Upon completion of the IPO of iQIYI, all
preferred shares of iQIYI held by external preferred shareholders were automatically re-designated and converted on a one-for-one basis into Class A
ordinary shares of iQIYI.

In October 2015, Xiaodu issued 250,000,000 preferred shares to certain shareholders for a total consideration of US$250 million. In May 2016, Xiaodu
issued an additional 42,105,264 preferred shares to certain other shareholders for a total consideration of US$100 million. As the preferred shares could
be redeemed by such shareholders upon the occurrence of certain events that are not solely within the control of Xiaodu, these preferred shares were
accounted for as redeemable noncontrolling interests. In August 2017, the Company completed the disposal of Xiaodu to Rajax Holding in exchange for
its equity shares.

In October 2018, the Company acquired additional shares of a former equity method investee, resulting in the investee becoming a subsidiary of the
Company. The subsidiary had issued 159,820,917 outstanding preferred

F-61
shares to certain shareholders, which could be redeemed by such shareholders upon the occurrence of certain events that are not solely within the control of the subsidiary. Therefore, these preferred shares were accounted for as redeemable noncontrolling interests (Note 3).

The Company accounts for the changes in accretion to the redemption value in accordance with ASC Topic 480, *Distinguishing Liabilities from Equity*. The Company elects to use the effective interest method to account for the changes of redemption value over the period from the date of issuance to the earliest redemption date of the noncontrolling interest.

18. **SHAREHOLDERS’ EQUITY**

**Ordinary Shares**

The authorized share capital consisted of 870,400,000 ordinary shares at a par value of US$0.00005 per share, of which 825,000,000 shares were designated as Class A ordinary shares, 35,400,000 as Class B ordinary shares, and 10,000,000 shares designated as preferred shares. The rights of the holders of Class A and Class B ordinary shares are identical, except with respect to voting and conversion rights. Each share of Class A ordinary shares is entitled to one vote per share and is not convertible into Class B ordinary shares under any circumstances. Each share of Class B ordinary shares is entitled to ten votes per share and is convertible into one Class A ordinary share at any time by the holder thereof. Upon any transfer of Class B ordinary shares by the holder thereof to any person or entity that is not an affiliate of such holder, such Class B ordinary shares would be automatically converted into an equal number of Class A ordinary shares. The number of Class B ordinary shares transferred to Class A ordinary shares was 200,000 shares, nil and nil in the years ended December 31, 2017, 2018 and 2019, respectively.

As of December 31, 2019, there were 27,381,621 and 7,201,254 Class A and Class B ordinary shares outstanding, respectively. As of December 31, 2018 and 2019, there were no preferred shares issued and outstanding.

On October 29, 2015, the Company announced a share repurchase program under which the Company proposed to acquire up to an aggregate of US$2.0 billion of its shares over the next 24 months. On June 27, 2018, the Company announced a share repurchase program under which the Company proposed to acquire up to an aggregate of US$1.0 billion of its ordinary shares over the next 12 months in the open market or through privately negotiated transactions, depending on market conditions and in accordance with applicable rules and regulations.

On May 16, 2019, the Company announced a share repurchase program under which the Company proposed to acquire up to an aggregate of US$1.0 billion of its ordinary shares, effective until July 1, 2020 in the open market or through privately negotiated transactions, depending on market conditions and in accordance with applicable rules and regulations.

The Company repurchased 145,783, 207,165 and 664,534 Class A ordinary shares from the open market with an aggregate purchase price of RMB1.7 billion, RMB3.3 billion and RMB5.0 billion (US$712 million) during the years ended December 31, 2017, 2018 and 2019. The repurchased shares were cancelled under Cayman Islands law upon repurchase and the difference between the par value and the repurchase price was debited to retained earnings.
Retained Earnings

In accordance with the Regulations on Enterprises with Foreign Investment of China and their articles of association, the Company’s PRC subsidiaries, being foreign invested enterprises established in China, are required to make appropriations to certain statutory reserves, namely a general reserve fund, an enterprise expansion fund, a staff welfare fund and a bonus fund, all of which are appropriated from net profit as reported in their PRC statutory accounts. Each of the Company’s PRC subsidiaries is required to allocate at least 10% of its after-tax profits to a general reserve fund until such fund has reached 50% of its respective registered capital. Appropriations to the enterprise expansion fund and staff welfare and bonus funds are at the discretion of the Company’s subsidiaries.

In accordance with the China Company Laws, the Company’s VIEs must make appropriations from their after-tax profits as reported in their PRC statutory accounts to non-distributable reserve funds, namely a statutory surplus fund, a statutory public welfare fund and a discretionary surplus fund. Each of the Company’s VIEs is required to allocate at least 10% of its after-tax profits to the statutory surplus fund until such fund has reached 50% of its respective registered capital. Appropriations to the statutory public welfare fund and the discretionary surplus fund are made at the discretion of the Company’s VIEs.

General reserve and statutory surplus funds are restricted to set-off against losses, expansion of production and operation and increasing registered capital of the respective company. Staff welfare and bonus fund and statutory public welfare funds are restricted to capital expenditures for the collective welfare of employees. The reserves are not allowed to be transferred to the Company in terms of cash dividends, loans or advances, nor are they allowed for distribution except under liquidation.

<table>
<thead>
<tr>
<th></th>
<th>As of December 31,</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018 RMB</td>
<td>2019 RMB (In millions)</td>
<td>2019 US$</td>
</tr>
<tr>
<td>PRC statutory reserve funds</td>
<td>515</td>
<td>626</td>
<td>90</td>
</tr>
<tr>
<td>Unreserved retained earnings</td>
<td>128,731</td>
<td>125,642</td>
<td>18,047</td>
</tr>
<tr>
<td>Total retained earnings</td>
<td>129,246</td>
<td>126,268</td>
<td>18,137</td>
</tr>
</tbody>
</table>

Under PRC laws and regulations, there are restrictions on the Company’s PRC subsidiaries and VIEs with respect to transferring certain of their net assets to the Company either in the form of dividends, loans, or advances. Amounts of net assets restricted include paid in capital and statutory reserve funds of the Company’s PRC subsidiaries and the net assets of the VIEs in which the Company has no legal ownership, totaling RMB25.7 billion and RMB40.8 billion (US$5.9 billion) as of December 31, 2018 and 2019, respectively.

Furthermore, cash transfers from the Company’s PRC subsidiaries to their parent companies outside of China are subject to PRC government control of currency conversion. Shortages in the availability of foreign currency may restrict the ability of the PRC subsidiaries and consolidated affiliated entities to remit sufficient foreign currency to pay dividends or other payments to the Company, or otherwise satisfy their foreign currency denominated obligations.

F-63
The changes in accumulated other comprehensive income (loss) by component, net of tax, were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Foreign currency translation adjustment</th>
<th>Unrealized gains on available-for-sale investments (in millions)</th>
<th>Total RMB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at December 31, 2016</td>
<td>(2,026)</td>
<td>243</td>
<td>(1,783)</td>
</tr>
<tr>
<td>Other comprehensive income before reclassification</td>
<td>732</td>
<td>2,574</td>
<td>3,306</td>
</tr>
<tr>
<td>Amounts reclassified from accumulated other comprehensive income</td>
<td>71</td>
<td>(999)</td>
<td>928</td>
</tr>
<tr>
<td>Net current-period other comprehensive income</td>
<td>803</td>
<td>1,575</td>
<td>2,378</td>
</tr>
<tr>
<td>Other comprehensive loss attribute to noncontrolling interests and redeemable noncontrolling interests</td>
<td>335</td>
<td>—</td>
<td>335</td>
</tr>
<tr>
<td>Balance at December 31, 2017</td>
<td>(888)</td>
<td>1,818</td>
<td>930</td>
</tr>
<tr>
<td>Cumulative effect of accounting change*</td>
<td>—</td>
<td>(1,854)</td>
<td>(1,854)</td>
</tr>
<tr>
<td>Other comprehensive income before reclassification</td>
<td>114</td>
<td>4,117</td>
<td>4,231</td>
</tr>
<tr>
<td>Amounts reclassified from accumulated other comprehensive income</td>
<td>80</td>
<td>(2,171)</td>
<td>(2,091)</td>
</tr>
<tr>
<td>Net current-period other comprehensive income</td>
<td>194</td>
<td>92</td>
<td>286</td>
</tr>
<tr>
<td>Other comprehensive income attribute to noncontrolling interests and redeemable noncontrolling interests</td>
<td>(1,006)</td>
<td>—</td>
<td>(1,006)</td>
</tr>
<tr>
<td>Balance at December 31, 2018</td>
<td>(1,700)</td>
<td>1,910</td>
<td>210</td>
</tr>
<tr>
<td>Other comprehensive income (loss) before reclassification</td>
<td>207</td>
<td>1,981</td>
<td>2,188</td>
</tr>
<tr>
<td>Amounts reclassified from accumulated other comprehensive income (loss)</td>
<td>(989)</td>
<td>(2,689)</td>
<td>(3,678)</td>
</tr>
<tr>
<td>Net current-period other comprehensive income (loss)</td>
<td>(782)</td>
<td>(708)</td>
<td>(1,490)</td>
</tr>
<tr>
<td>Other comprehensive loss (income) attribute to noncontrolling interests and redeemable noncontrolling interests</td>
<td>(102)</td>
<td>(1)</td>
<td>(103)</td>
</tr>
<tr>
<td>Balance at December 31, 2019</td>
<td>(2,584)</td>
<td>1,201</td>
<td>(1,383)</td>
</tr>
<tr>
<td>Balance at December 31, 2019, in US$</td>
<td>(372)</td>
<td>173</td>
<td>(199)</td>
</tr>
</tbody>
</table>

* Adjustment of net unrealized gains related to available-for-sale equity investments from accumulated other comprehensive income to opening retained earnings as a result of the adoption of ASC 321 on January 1, 2018.

The amounts reclassified out of accumulated other comprehensive income represent realized foreign currency translation adjustments, which mainly arising from disposal of partial interests in Trip, and gains on the available-for-sale investments upon their sales, which were then recorded in “Other income, net” in the consolidated statements of comprehensive income. The amounts reclassified were determined on the basis of specific identification.

In October 2019, the Company completed the partial disposal of its investment in Trip and the corresponding accumulated other comprehensive income of RMB989 million (US$ 142 million) was reclassified to earnings.

F-64
The following table sets forth the tax benefit (expense) allocated to each component of other comprehensive income (loss) for the years ended December 31, 2017, 2018 and 2019:

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrealized gains on available-for-sale investments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other comprehensive income (loss) before reclassification</td>
<td>(215)</td>
<td>(409)</td>
<td>(280)</td>
<td>(40)</td>
</tr>
<tr>
<td>Amounts reclassified from accumulated other comprehensive income (loss)</td>
<td>163</td>
<td>328</td>
<td>402</td>
<td>58</td>
</tr>
<tr>
<td>Net current-period other comprehensive income (loss)</td>
<td>(52)</td>
<td>(81)</td>
<td>122</td>
<td>18</td>
</tr>
</tbody>
</table>

19. **EARNINGS PER SHARE (“EPS”)**

A reconciliation of net income attributable to Baidu, Inc. in the consolidated statements of comprehensive income to the numerator for the computation of basic and diluted per share for the years ended December 31, 2017, 2018 and 2019 is as follows:

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income attributable to Baidu, Inc.</td>
<td>18,301</td>
<td>27,573</td>
<td>2,057</td>
<td>296</td>
</tr>
<tr>
<td>Accretion of the redeemable noncontrolling interests</td>
<td>17</td>
<td>(130)</td>
<td>(77)</td>
<td>(11)</td>
</tr>
<tr>
<td>Numerator for basic EPS computation</td>
<td>18,318</td>
<td>27,443</td>
<td>1,980</td>
<td>285</td>
</tr>
<tr>
<td>Impact of subsidiaries’ and investees’ diluted earnings per share</td>
<td>—</td>
<td>—</td>
<td>(28)</td>
<td>(4)</td>
</tr>
<tr>
<td>Numerator for diluted EPS computation</td>
<td>18,318</td>
<td>27,443</td>
<td>1,952</td>
<td>281</td>
</tr>
</tbody>
</table>
The following table sets forth the computation of basic and diluted earnings per Class A and Class B ordinary share.

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A RMB Class B RMB</td>
<td>Class A RMB Class B RMB</td>
<td>Class A RMB Class B RMB</td>
<td>Class A US$ Class B US$</td>
</tr>
<tr>
<td>Earnings per share – basic:</td>
<td>527.51</td>
<td>527.51</td>
<td>786.36</td>
</tr>
<tr>
<td>Numerator</td>
<td>14,488</td>
<td>3,830</td>
<td>21,780</td>
</tr>
<tr>
<td>Denominator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted average ordinary shares outstanding</td>
<td>27,464,760</td>
<td>7,260,363</td>
<td>27,697,335</td>
</tr>
<tr>
<td>Denominator used for basic EPS</td>
<td>27,464,760</td>
<td>7,260,363</td>
<td>27,697,335</td>
</tr>
<tr>
<td>Earnings per share – diluted:</td>
<td>524.08</td>
<td>524.08</td>
<td>780.27</td>
</tr>
<tr>
<td>Numerator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allocation of net income attributable to Baidu, Inc. for diluted computation</td>
<td>14,513</td>
<td>3,805</td>
<td>21,824</td>
</tr>
<tr>
<td>Reallocation of net income attributable to Baidu, Inc. as a result of conversion of Class B to Class A shares</td>
<td>3,805</td>
<td>—</td>
<td>5,619</td>
</tr>
<tr>
<td>Numerator for diluted EPS calculation</td>
<td>18,318</td>
<td>3,805</td>
<td>27,443</td>
</tr>
<tr>
<td>Denominator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighted average ordinary shares outstanding</td>
<td>27,464,760</td>
<td>7,260,363</td>
<td>27,697,335</td>
</tr>
<tr>
<td>Denominator used for diluted EPS</td>
<td>34,952,391</td>
<td>35,171,043</td>
<td>34,884,854</td>
</tr>
<tr>
<td>Earnings per ADS:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denominator used for earnings per ADS – basic</td>
<td>274,647,600</td>
<td>276,973,350</td>
<td>276,332,430</td>
</tr>
<tr>
<td>Denominator used for earnings per ADS – diluted</td>
<td>349,523,907</td>
<td>351,710,430</td>
<td>348,848,540</td>
</tr>
<tr>
<td>Earnings per ADS – basic</td>
<td>52.75</td>
<td>52.75</td>
<td>52.75</td>
</tr>
<tr>
<td>Earnings per ADS – diluted</td>
<td>52.41</td>
<td>52.41</td>
<td>52.41</td>
</tr>
</tbody>
</table>

The Company did not include certain stock options, restricted shares and the effect of convertible senior notes in the computation of diluted earnings per share for the years ended December 31, 2017, 2018 and 2019 because those stock options, restricted shares and convertible senior notes were antidilutive for earnings per share for the respective years.

20. SHARE-BASED AWARDS PLAN

Baidu, Inc.

2008 Share Incentive plan

In December 2008, the Company adopted a share incentive plan (the “2008 Plan”), which provides for the granting of share incentives, including incentive share options (“ISOs”), restricted shares and any other form of...
award pursuant to the 2008 Plan, to members of the board, employees, consultants and non-employees of the Company. The Company reserved 3,428,777 ordinary shares for issuance under the 2008 Plan, which expired in the year 2018. The vesting schedule, time and condition to exercise options was determined by the compensation committee. The term of the options may not exceed ten years from the date of the grant, except that five years is the maximum term of an ISO granted to an employee who holds more than 10% of the voting power of the Company’s share capital.

Under the 2008 Plan, the exercise price of an option may be amended or adjusted at the discretion of the compensation committee, the determination of which would be final, binding and conclusive. To the extent not prohibited by applicable laws or exchange rules, a downward adjustment of the exercise prices would be effective without the approval of the Company’s shareholders or the approval of the affected grantees. If the Company grants an ISO to an employee who, at the time of that grant, owns shares representing more than 10% of the voting power of all classes of the Company’s share capital, the exercise price cannot be less than 110% of the fair market value of the Company’s ordinary shares on the date of that grant.

2018 Share Incentive Plan

In July 2018, the Company adopted a share incentive plan (the “2018 Plan”), which provides for the granting of share incentives, including ISOs, restricted shares and any other form of award pursuant to the 2018 Plan, to members of the board, employees, consultants, and non-employees of the Company. The 2018 Plan has a ten-year term and a maximum number of 3,443,950 Class A ordinary shares available for issuance pursuant to all awards under the 2018 Plan.

Under the 2018 Plan, the exercise price of an option may be amended or adjusted at the discretion of the compensation committee, the determination of which would be final, binding and conclusive. To the extent not prohibited by applicable laws or exchange rules, a downward adjustment of the exercise prices would be effective without the approval of the Company’s shareholders or the approval of the affected grantees. If the Company grants an ISO to an employee who, at the time of that grant, owns shares representing more than 10% of the voting power of all classes of the Company’s share capital, the exercise price cannot be less than 110% of the fair market value of the Company’s ordinary shares on the date of that grant.

Share options

The following table summarizes the option activity for the year ended December 31, 2019:

<table>
<thead>
<tr>
<th>Shares Options</th>
<th>Number of shares</th>
<th>Weighted average exercise price (US$)</th>
<th>Weighted average remaining contractual life (Years)</th>
<th>Aggregate intrinsic value (US$ in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding, December 31, 2018</td>
<td>225,684</td>
<td>1,751</td>
<td>7</td>
<td>40</td>
</tr>
<tr>
<td>Granted</td>
<td>231,152</td>
<td>980</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercised</td>
<td>(11,849)</td>
<td>221</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forfeited/Cancelled</td>
<td>(71,806)</td>
<td>1,715</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outstanding, December 31, 2019</td>
<td>373,181</td>
<td>1,329</td>
<td>8</td>
<td>72</td>
</tr>
<tr>
<td>Vested and expected to vest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>at December 31, 2019</td>
<td>297,956</td>
<td>1,373</td>
<td>8</td>
<td>53</td>
</tr>
<tr>
<td>Exercisable at December 31, 2019</td>
<td>122,933</td>
<td>1,777</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

The aggregate intrinsic value in the table above represents the difference between the Company’s closing stock price on the last trading day in 2019 and the exercise price.
Total intrinsic value of options exercised for the years ended December 31, 2017, 2018 and 2019 was RMB403 million, RMB474 million and RMB77 million (US$11 million), respectively. The total fair value of options vested during the years ended December 31, 2017, 2018 and 2019 was RMB195 million, RMB956 million and RMB216 million (US$31 million), respectively.

Share options are usually subject to vesting schedules ranging from two to four years. As of December 31, 2019, RMB439 million (US$63 million) of unrecognized share-based compensation cost related to share options is expected to be recognized over a weighted-average vesting period of 2.6 years. To the extent the actual forfeiture rate is different from the original estimate, actual share-based compensation costs related to these awards may be different from expectation.

The fair value of each option award was estimated on the date of grant using the Black-Scholes-Merton valuation model. The volatility assumption was estimated based on historical volatility of the Company’s share price applying the guidance provided by ASC 718. Assumptions of the expected term were based on the vesting and contractual terms and employee demographics. The risk-free rate for periods within the contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of grant.

The following table presents the assumptions used to estimate the fair values of the share options granted in the years presented:

<table>
<thead>
<tr>
<th></th>
<th>For the years ended December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
</tr>
<tr>
<td>Risk-free interest rate</td>
<td>1.81%~2.08%</td>
</tr>
<tr>
<td>Dividend yield</td>
<td>—</td>
</tr>
<tr>
<td>Expected volatility range</td>
<td>35.99%~38.41%</td>
</tr>
<tr>
<td>Expected life (in years)</td>
<td>4.99~6.01</td>
</tr>
</tbody>
</table>

In addition, the Company recognizes share-based compensation expense net of estimated forfeiture rates, to recognize compensation cost for shares expected to vest over the service period of the award. Estimated forfeiture rates are primarily based on historical experience of employee turnover. To the extent the Company revises this estimate in the future, share-based compensation expense could be materially impacted in the year of revision, as well as in the following years.

The exercise price of options granted during the years ended December 31, 2017, 2018 and 2019 equaled the market price of the ordinary shares on the grant date. The weighted-average grant-date fair value of options granted during the years ended December 31, 2017, 2018, and 2019 was US$747, US$1,029, and US$384, respectively.

Restricted Shares

Restricted Shares activity for the year ended December 31, 2019 was as follows:

<table>
<thead>
<tr>
<th>Restricted Shares</th>
<th>Number of shares</th>
<th>Weighted average grant date fair value (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unvested, December 31, 2018</td>
<td>791,444</td>
<td>2,060</td>
</tr>
<tr>
<td>Granted</td>
<td>1,122,857</td>
<td>1,276</td>
</tr>
<tr>
<td>Vested</td>
<td>(300,614)</td>
<td>1,972</td>
</tr>
<tr>
<td>Forfeited/Cancelled</td>
<td>(193,633)</td>
<td>1,860</td>
</tr>
<tr>
<td>Unvested, December 31, 2019</td>
<td>1,420,054</td>
<td>1,486</td>
</tr>
</tbody>
</table>
The total fair value of the Restricted Shares vested during the years ended December 31, 2017, 2018 and 2019 was RMB2.1 billion, RMB3.4 billion, RMB4.1 billion (US$593 million), respectively. The weighted-average grant-date fair value of the Restricted Shares granted during the years ended December 31, 2017, 2018, and 2019 was US$1,978, US$2,232, and US$1,276, respectively.

As of December 31, 2019, there was RMB7.2 billion (US$1.0 billion) of unrecognized share-based compensation cost related to Restricted Shares, which is expected to be recognized over a weighted-average vesting period of 3.1 years. To the extent the actual forfeiture rate is different from the original estimate, the actual share-based compensation costs related to these awards may be different from expectation. To the extent the Company revises this estimate in the future, share-based compensation expense could be materially impacted in the year of revision, as well as in the following years.

**Subsidiaries-iQIYI**

**2010 Equity Incentive Plan**

In October 2010, iQIYI adopted its 2010 Equity Incentive Plan (the “iQIYI 2010 Plan”), which permits the grant of restricted shares, options and share appreciation rights to the employees, directors, officers and consultants to purchase iQIYI’s ordinary shares. The iQIYI 2010 Plan is valid and effective for a term of ten years commencing from its adoption. Except for service conditions, there were no other vesting conditions for all the awards under the 2010 Plan. As of December 31, 2019, the share option pool under the iQIYI 2010 Plan approved by the Board of Directors of iQIYI was 589,729,714 iQIYI’s ordinary shares. All options granted vest over a four-year period, with 25% of the awards vesting on the first anniversary, and the remaining 75% of the awards vesting on a quarterly basis thereafter.

The following table sets forth the summary of employee option activity under the iQIYI’s 2010 Plan:

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of shares</th>
<th>Weighted average exercise price (US$)</th>
<th>Weighted average remaining contractual life (Years)</th>
<th>Aggregate intrinsic value (US$ in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding, December 31, 2018</td>
<td>380,579,031</td>
<td>0.47</td>
<td>9</td>
<td>630</td>
</tr>
<tr>
<td>Granted</td>
<td>94,625,573</td>
<td>0.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forfeited</td>
<td>(8,855,266)</td>
<td>0.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercised</td>
<td>(59,436,720)</td>
<td>0.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outstanding, December 31, 2019</td>
<td>406,912,618</td>
<td>0.48</td>
<td>7</td>
<td>1,031</td>
</tr>
<tr>
<td>Vested and expected to vest at December 31, 2019</td>
<td>385,280,004</td>
<td>0.48</td>
<td>7</td>
<td>977</td>
</tr>
<tr>
<td>Exercisable at December 31, 2019</td>
<td>211,537,760</td>
<td>0.45</td>
<td>6</td>
<td>542</td>
</tr>
</tbody>
</table>

As of December 31, 2019, there was RMB2.2 billion (US$314 million) of unrecognized share-based compensation cost related to share options granted by iQIYI. That deferred cost is expected to be recognized over a weighted-average vesting period of 2.8 years.
2017 Share Incentive Plan

In November 2017, iQIYI adopted its 2017 Share Incentive Plan (the “iQIYI 2017 Plan”). Under the iQIYI 2017 Plan, iQIYI is authorized to grant options, restricted shares and restricted share units to members of the board, employees, consultants and other individuals for which the maximum aggregate number of ordinary shares which may be issued pursuant to all awards is 720,000 iQIYI’s ordinary shares. The iQIYI 2017 Plan is valid and effective for a term of ten years commencing from its adoption. Except for service conditions, there are no other vesting conditions for all the awards issued under the 2017 Plan. As of December 31, 2019, the unrecognized share-based compensation cost related to its Restricted Shares is insignificant.

The following table summarizes the share-based compensation cost recognized by iQIYI:

<table>
<thead>
<tr>
<th></th>
<th>For the years ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017 RMB</td>
</tr>
<tr>
<td>Expensed as cost of revenues</td>
<td>35</td>
</tr>
<tr>
<td>Expensed as selling, general and administrative</td>
<td>131</td>
</tr>
<tr>
<td>Expensed as research and development</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>233</td>
</tr>
</tbody>
</table>

The following table summarizes the total share-based compensation cost recognized by the Group:

<table>
<thead>
<tr>
<th></th>
<th>For the years ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017 RMB</td>
</tr>
<tr>
<td>Expensed as cost of revenues</td>
<td>183</td>
</tr>
<tr>
<td>Expensed as selling, general and administrative</td>
<td>973</td>
</tr>
<tr>
<td>Expensed as research and development</td>
<td>2,088</td>
</tr>
<tr>
<td></td>
<td>3,244</td>
</tr>
</tbody>
</table>

21. RELATED PARTY TRANSACTIONS

Related party transactions primarily related to online marketing services provided by the Company to Trip, which amounted to RMB750 million, RMB774 million and RMB627 million (US$90 million) for the years ended December 31, 2017, 2018 and 2019, respectively. The Company also provided online marketing services, cloud services and other services to Du Xiaoman, revenue for services provided amounted to RMB256 million and RMB731 million (US$105 million) for the years ended December 31, 2018 and 2019. The Company’s related party transactions with Investee A, over which the Company has significant influence, mainly related to hardware products purchased from and sold to Investee A, which amounted to nil and nil for the year ended December 31, 2017, RMB102 million and RMB77 million for the year ended December 31, 2018, RMB1.9 billion (US$276 million) and RMB249 million (US$36 million) for the year ended December 31, 2019. Other related party transactions were insignificant for each of the years presented, which included reimbursements to Robin Li’s use of an aircraft beneficially owned by his family member used for the Company’s business purposes.

F-70
As of December 31, 2018 and 2019, amounts due from/due to related parties were as follows:

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RMB</td>
<td>RMB</td>
<td></td>
</tr>
<tr>
<td><strong>Amounts due from related parties, current:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trip(i)</td>
<td>58</td>
<td>96</td>
<td>14</td>
</tr>
<tr>
<td>Du Xiaoman(ii)</td>
<td>77</td>
<td>737</td>
<td>106</td>
</tr>
<tr>
<td>Investee A(iii)</td>
<td>325</td>
<td>345</td>
<td>50</td>
</tr>
<tr>
<td>Other related parties(iv)</td>
<td>325</td>
<td>416</td>
<td>59</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>785</td>
<td>1,594</td>
<td>229</td>
</tr>
<tr>
<td><strong>Amounts due from related parties, non-current:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Du Xiaoman(ii)</td>
<td>3,884</td>
<td>3,391</td>
<td>487</td>
</tr>
<tr>
<td>Other related parties(v)</td>
<td>413</td>
<td>173</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,297</td>
<td>3,564</td>
<td>512</td>
</tr>
<tr>
<td><strong>Amounts due to related parties, current:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trip(vi)</td>
<td>12</td>
<td>49</td>
<td>7</td>
</tr>
<tr>
<td>Du Xiaoman(vii)</td>
<td>934</td>
<td>973</td>
<td>140</td>
</tr>
<tr>
<td>Investee A(viii)</td>
<td>488</td>
<td>476</td>
<td>68</td>
</tr>
<tr>
<td>Investee B(ix)</td>
<td>186</td>
<td>249</td>
<td>36</td>
</tr>
<tr>
<td>Other related parties(x)</td>
<td>107</td>
<td>484</td>
<td>69</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,727</td>
<td>2,231</td>
<td>320</td>
</tr>
<tr>
<td><strong>Amounts due to related parties, non-current:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Du Xiaoman(x)</td>
<td>3,729</td>
<td>3,430</td>
<td>493</td>
</tr>
<tr>
<td>Investee B(xi)</td>
<td>631</td>
<td>410</td>
<td>58</td>
</tr>
<tr>
<td>Other related parties(xii)</td>
<td>—</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,360</td>
<td>3,846</td>
<td>552</td>
</tr>
</tbody>
</table>

(i) The balances mainly represent amounts arising from services the Company provided to Trip.
(ii) The balance represents long-term loans due from Du Xiaoman with interest rate ranging from 4.28% to 5.00% in 2018, and 0.00% to 0.50% in 2019, based on the re-entered agreements, and amounts arising from services the Company provided to Du Xiaoman. In 2018, the Company provided a long-term loan in the amount of RMB500 million to Du Xiaoman, which were reclassified to current liability within one year as of December 31, 2019 with interest rate 5.00%.
(iii) The balances mainly represent an interest-bearing loan provided to Investee A, which is an equity investee. The Company is in the process of acquiring the equity interest that it does not currently own for approximately US$300 million. If the transaction is completed, Investee A will become a subsidiary of the Company.
(iv) The balances mainly represent amounts arising from services the Company provided to its investees in ordinary course of business.
(v) The balance consists of amount due from the Company’s investees in the ordinary course of business.
(vi) The balances mainly represent amounts arising from services provided by Trip.
(vii) The balance represents amount due to Du Xiaoman arising from services provided by Du Xiaoman to the Company in the ordinary course of business and for other unsettled payments, and loans provided by Du Xiaoman.
(viii) The balances mainly represent amounts arising from hardware products purchased from Investee A, and an interest-bearing loan provided by the Investee A.
(ix) The balances mainly represent deferred revenue relating to the future services to be provided by the Company to Investee B which is an equity method investment investee.
The balances mainly represent amounts arising from services provided by the Company’s investees.

The balance represents mainly long-term loans provided by Du Xiaoman with interest rates ranging from 3.78% and 4.28%, respectively, and maturing at November 13, 2021 and August 24, 2023, respectively. In 2019, interest rates were revised to 0.00%.

The balance represents mainly deferred revenue relating to the future services to be provided over 7 years by the Company to investees.

22. SEGMENT REPORTING

The Company’s operations are organized into two segments, consisting of Baidu Core and iQIYI. Baidu Core mainly provides online marketing services and new AI initiatives. iQIYI is an online entertainment service provider, offers original, professionally produced and partner-generated content on its platform.

The Company derives the results of the segments directly from its internal management reporting system. The CODM reviews the performance of each segment based on its operating results and uses these results to evaluate the performance of, and to allocate resources to, each of the segments. Because substantially all of the Group’s long-lived assets and revenues are located in and derived from the PRC, geographical segments are not presented. The Company does not allocate assets to its segments as the CODM does not evaluate the performance of segments using asset information.

The table below provides a summary of the Group’s operating segment operating results for the year ended December 31, 2017.

<table>
<thead>
<tr>
<th>For the year ended December 31, 2017</th>
<th>Baidu Core</th>
<th>iQIYI</th>
<th>Intersegment eliminations &amp; adjustments</th>
<th>Consolidated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenues</td>
<td>67,681</td>
<td>17,378</td>
<td>(250)</td>
<td>84,809</td>
</tr>
<tr>
<td>Operating costs and expenses:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of revenues</td>
<td>25,688</td>
<td>17,386</td>
<td>(12)</td>
<td>43,062</td>
</tr>
<tr>
<td>Selling, general and administrative</td>
<td>10,586</td>
<td>2,675</td>
<td>(133)</td>
<td>13,128</td>
</tr>
<tr>
<td>Research and development</td>
<td>11,692</td>
<td>1,270</td>
<td>(34)</td>
<td>12,928</td>
</tr>
<tr>
<td>Total operating costs and expenses</td>
<td>47,966</td>
<td>21,331</td>
<td>(179)</td>
<td>69,118</td>
</tr>
<tr>
<td>Operating profit (loss)</td>
<td>19,715</td>
<td>(3,953)</td>
<td>(71)</td>
<td>15,691</td>
</tr>
<tr>
<td>Total other income (loss), net</td>
<td>5,385</td>
<td>208</td>
<td>(1)</td>
<td>5,592</td>
</tr>
<tr>
<td>Income (loss) before income taxes</td>
<td>25,100</td>
<td>(3,745)</td>
<td>(72)</td>
<td>21,283</td>
</tr>
<tr>
<td>Income taxes</td>
<td>3,001</td>
<td>(8)</td>
<td>2</td>
<td>2,995</td>
</tr>
<tr>
<td>Net income (loss)</td>
<td>22,099</td>
<td>(3,737)</td>
<td>(74)</td>
<td>18,288</td>
</tr>
<tr>
<td>Less: net income (loss) attributable to noncontrolling interests</td>
<td>(9)</td>
<td>—</td>
<td>(4)</td>
<td>(13)</td>
</tr>
<tr>
<td>Net income (loss) attributable to Baidu, Inc.</td>
<td>22,108</td>
<td>(3,737)</td>
<td>(70)</td>
<td>18,301</td>
</tr>
</tbody>
</table>

F-72
The table below provides a summary of the Group’s operating segment operating results for the year ended December 31, 2018.

<table>
<thead>
<tr>
<th></th>
<th>Baidu Core</th>
<th>iQIYI</th>
<th>Intersegment eliminations</th>
<th>Consolidated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total revenues</strong></td>
<td>78,271</td>
<td>24,989</td>
<td>(983)</td>
<td>102,277</td>
</tr>
<tr>
<td><strong>Operating costs and expenses:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of revenues</td>
<td>25,370</td>
<td>27,133</td>
<td>(759)</td>
<td>51,744</td>
</tr>
<tr>
<td>Selling, general and administrative</td>
<td>15,310</td>
<td>4,168</td>
<td>(247)</td>
<td>19,231</td>
</tr>
<tr>
<td>Research and development</td>
<td>13,783</td>
<td>1,994</td>
<td>(5)</td>
<td>15,772</td>
</tr>
<tr>
<td><strong>Total operating costs and expenses</strong></td>
<td>54,463</td>
<td>33,295</td>
<td>(1,011)</td>
<td>86,747</td>
</tr>
<tr>
<td><strong>Operating profit (loss)</strong></td>
<td>23,808</td>
<td>(8,306)</td>
<td>28</td>
<td>15,530</td>
</tr>
<tr>
<td><strong>Total other income (loss), net</strong></td>
<td>13,169</td>
<td>(676)</td>
<td>(698)</td>
<td>11,795</td>
</tr>
<tr>
<td><strong>Income (loss) before income taxes</strong></td>
<td>36,977</td>
<td>(8,982)</td>
<td>(670)</td>
<td>27,325</td>
</tr>
<tr>
<td>Income taxes</td>
<td>4,664</td>
<td>79</td>
<td>—</td>
<td>4,743</td>
</tr>
<tr>
<td><strong>Net income (loss)</strong></td>
<td>32,313</td>
<td>(9,061)</td>
<td>(670)</td>
<td>22,582</td>
</tr>
<tr>
<td>Less: net income (loss) attributable to noncontrolling interests</td>
<td>(1,292)</td>
<td>49</td>
<td>(3,748)</td>
<td>(4,991)</td>
</tr>
<tr>
<td><strong>Net income (loss) attributable to Baidu, Inc.</strong></td>
<td>33,605</td>
<td>(9,110)</td>
<td>3,078</td>
<td>27,573</td>
</tr>
</tbody>
</table>

F-73
The table below provides a summary of the Group’s operating segment operating results for the year ended December 31, 2019.

<table>
<thead>
<tr>
<th></th>
<th>Baidu Core</th>
<th>iQIYI</th>
<th>Intersegment eliminations</th>
<th>Consolidated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenues</td>
<td>RMB 79,711</td>
<td>US$ 11,450</td>
<td>RMB 28,994</td>
<td>US$ 4,165</td>
</tr>
<tr>
<td>Operating costs and expenses:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of revenues</td>
<td>RMB 34,019</td>
<td>US$ 4,887</td>
<td>RMB 30,348</td>
<td>US$ 4,359</td>
</tr>
<tr>
<td>Selling, general and administrative expenses</td>
<td>RMB 14,733</td>
<td>US$ 2,116</td>
<td>RMB 5,237</td>
<td>US$ 753</td>
</tr>
<tr>
<td>Research and development</td>
<td>RMB 15,698</td>
<td>US$ 2,255</td>
<td>RMB 2,667</td>
<td>US$ 383</td>
</tr>
<tr>
<td>Total operating costs and expenses</td>
<td>RMB 64,450</td>
<td>US$ 9,258</td>
<td>RMB 38,252</td>
<td>US$ 5,495</td>
</tr>
<tr>
<td>Operating profit (loss)</td>
<td>RMB 15,261</td>
<td>US$ 2,192</td>
<td>RMB (9,258)</td>
<td>US$ (1,330)</td>
</tr>
<tr>
<td>Total other income (loss), net</td>
<td>(RMB 5,680)</td>
<td>(US$ 816)</td>
<td>(RMB 816)</td>
<td>(US$ 116)</td>
</tr>
<tr>
<td>Income (loss) before income taxes</td>
<td>RMB 9,581</td>
<td>US$ 1,376</td>
<td>RMB (10,225)</td>
<td>US$ (1,469)</td>
</tr>
<tr>
<td>Income taxes</td>
<td>RMB 1,896</td>
<td>US$ 272</td>
<td>RMB 52</td>
<td>US$ 7</td>
</tr>
<tr>
<td>Net income (loss)</td>
<td>RMB 7,685</td>
<td>US$ 1,104</td>
<td>RMB (10,277)</td>
<td>US$ (1,476)</td>
</tr>
<tr>
<td>Less: net income (loss) attributable to noncontrolling interests</td>
<td>RMB 105</td>
<td>US$ 15</td>
<td>RMB 46</td>
<td>US$ 7</td>
</tr>
<tr>
<td>Net income (loss) attributable to Baidu, Inc.</td>
<td>RMB 7,580</td>
<td>US$ 1,089</td>
<td>RMB (10,323)</td>
<td>US$ (1,483)</td>
</tr>
</tbody>
</table>

23. FAIR VALUE MEASUREMENTS

ASC 820 establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1 – Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.
Level 2 – Include observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.
Level 3 – Unobservable inputs which are supported by little or no market activity.

ASC 820 describes three main approaches to measuring the fair value of assets and liabilities: (1) market approach; (2) income approach and (3) cost approach. The market approach uses prices and other relevant information generated from market transactions involving identical or comparable assets or liabilities. The income approach uses valuation techniques to convert future amounts to a single present value amount. The measurement is based on the value indicated by current market expectations about those future amounts. The cost approach is based on the amount that would currently be required to replace an asset.
Assets and Liabilities Measured or Disclosed at Fair Value on a recurring basis

In accordance with ASC 820, the Company measures equity investments with readily determinable fair value, investments accounted for at fair value, available-for-sale debt investments and derivatives instruments at fair value on a recurring basis. The fair value of time deposits are determined based on the prevailing interest rates in the market. The fair values of the Company’s held-to-maturity debt investments as disclosed are determined based on the discounted cash flow model using the discount curve of market interest rates. The fair value of the Company’s short-term available-for-sale debt investments are measured using the income approach, based on quoted market interest rates of a similar instrument and other significant inputs derived from or corroborated by observable market data. The fair values of the Company’s equity investments in the equity securities of publicly listed companies are measured using quoted market prices. The fair value of derivative instruments of interest rate swaps are based on broker quotes. The fair value of financial liability is based on quoted market price of a similar asset to the underlying assets. Investments accounted for at fair value are equity investments in unlisted companies held by consolidated investment companies, these investments and our long-term available-for-sale debt investments do not have readily determinable market value, which were categorized as Level 3 in the fair value hierarchy. The Company uses a combination of valuation methodologies, including market and income approaches based on the Company’s best estimate, which is determined by using information including but not limited to the pricing of recent rounds of financing, future cash flow forecasts, liquidity factors and multiples of a selection of comparable companies.

The fair value of the Company’s notes payable are extracted directly from their quoted market prices. The fair value of the convertible senior notes are based on broker quotes. The Company carries the convertible senior notes at face value less unamortized debt discount and issuance costs on its consolidated balance sheets, and presents the fair value for disclosure purposes only. For further information on the convertible senior notes see Note 12.
Assets and liabilities measured on a recurring basis or disclosed at fair value are summarized below:

<table>
<thead>
<tr>
<th>Fair value disclosure</th>
<th>Total fair value at December 31, 2018 (In millions)</th>
<th>Quoted prices in active markets for identical assets (Level 1) RMB</th>
<th>Significant other observable inputs (Level 2) RMB</th>
<th>Significant unobservable inputs (Level 3) RMB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash equivalents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time deposits</td>
<td>4,264</td>
<td>4,264</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Money market fund</td>
<td>3,723</td>
<td>3,723</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term investments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Held-to-maturity debt investments</td>
<td>27,507</td>
<td>27,507</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term notes payable</td>
<td>68,763</td>
<td>68,763</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convertible senior notes</td>
<td>4,923</td>
<td>4,923</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair value measurements on a recurring basis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term investments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available-for-sale debt investments</td>
<td>79,558</td>
<td>79,558</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term investments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity investments at fair value with readily determinable fair value</td>
<td>4,428</td>
<td>4,428</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments accounted for at fair value</td>
<td>1,457</td>
<td>1,457</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available-for-sale debt investments</td>
<td>1,167</td>
<td>1,167</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other non-current assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derivative instruments</td>
<td>193</td>
<td></td>
<td>187</td>
<td>6</td>
</tr>
<tr>
<td>Total assets measured at fair value</td>
<td>86,803</td>
<td>4,428</td>
<td>79,745</td>
<td>2,630</td>
</tr>
<tr>
<td>Accounts payable and accrued liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derivative instruments</td>
<td>123</td>
<td></td>
<td>123</td>
<td></td>
</tr>
<tr>
<td>Amounts due to related parties, non-current</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial liability</td>
<td>341</td>
<td></td>
<td>341</td>
<td></td>
</tr>
<tr>
<td>Total liabilities measured at fair value</td>
<td>464</td>
<td></td>
<td>341</td>
<td>123</td>
</tr>
</tbody>
</table>
**Table of Contents**

BAIDU, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2017, 2018 and 2019

<table>
<thead>
<tr>
<th>Total fair value at December 31, 2019</th>
<th>Fair value measurement or disclosure at December 31, 2019 using</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quoted prices in active markets for identical assets (Level 1)</td>
</tr>
<tr>
<td></td>
<td>RMB</td>
</tr>
</tbody>
</table>

**Fair value disclosure**

**Cash equivalents**
- Time deposits: 10,848 RMB, 1,558 US$
- Money market fund: 1,719 RMB, 247 US$

**Short-term investments**
- Held-to-maturity debt investments: 107,654 RMB, 15,464 US$

**Long-term investments:**
- Held-to-maturity debt investment: 491 RMB, 70 US$
- Long-term notes payable: 45,282 RMB, 6,504 US$
- Convertible senior notes: 14,142 RMB, 2,031 US$

**Fair value measurements on a recurring basis**

**Short-term investments**
- Available-for-sale debt investments: 5,637 RMB, 810 US$

**Long-term investments**
- Equity investments at fair value with readily determinable fair value: 11,334 RMB, 1,628 US$
- Investments accounted for at fair value: 1,819 RMB, 261 US$
- Available-for-sale debt investments: 3,970 RMB, 570 US$

**Other non-current assets**
- Derivative instruments: 24 RMB, 4 US$

**Total assets measured at fair value**
- 22,784 RMB, 3,273 US$
- 11,334 RMB
- 5,661 RMB
- 5,789 RMB

**Accounts payable and accrued liabilities**
- Derivative instruments: 125 RMB

**Amounts due to related parties, current**
- Financial liability: 401 RMB

**Total liabilities measured at fair value**
- 526 RMB
- 76 US$
- 401 RMB
- 125 RMB

F-77
Reconciliations of assets categorized within Level 3 under the fair value hierarchy are as follow:

**Investments accounted for at fair value:**

<table>
<thead>
<tr>
<th></th>
<th>RMB (In millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at December 31, 2017</td>
<td>321</td>
</tr>
<tr>
<td>Additions</td>
<td>822</td>
</tr>
<tr>
<td>Disposals</td>
<td>(5)</td>
</tr>
<tr>
<td>Net unrealized fair value increase recognized in earning</td>
<td>293</td>
</tr>
<tr>
<td>Foreign currency translation adjustments</td>
<td>26</td>
</tr>
<tr>
<td><strong>Balance at December 31, 2018</strong></td>
<td>1,457</td>
</tr>
<tr>
<td>Additions</td>
<td>282</td>
</tr>
<tr>
<td>Disposals</td>
<td>(128)</td>
</tr>
<tr>
<td>Net unrealized fair value increase recognized in earning</td>
<td>197</td>
</tr>
<tr>
<td>Foreign currency translation adjustments</td>
<td>11</td>
</tr>
<tr>
<td><strong>Balance at December 31, 2019</strong></td>
<td>1,819</td>
</tr>
<tr>
<td><strong>Balance at December 31, 2019, in US$</strong></td>
<td>261</td>
</tr>
</tbody>
</table>

**Available-for-sale debt investments:**

<table>
<thead>
<tr>
<th></th>
<th>RMB (In millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at December 31, 2017</td>
<td>—</td>
</tr>
<tr>
<td>Additions</td>
<td>1,167</td>
</tr>
<tr>
<td><strong>Balance at December 31, 2018</strong></td>
<td>1,167</td>
</tr>
<tr>
<td>Additions</td>
<td>2,785</td>
</tr>
<tr>
<td>Disposals</td>
<td>(20)</td>
</tr>
<tr>
<td>Net unrealized fair value increase recognized in other comprehensive income</td>
<td>91</td>
</tr>
<tr>
<td>Accrued interest</td>
<td>48</td>
</tr>
<tr>
<td>Impairment</td>
<td>(81)</td>
</tr>
<tr>
<td>Foreign currency translation adjustments</td>
<td>(20)</td>
</tr>
<tr>
<td><strong>Balance at December 31, 2019</strong></td>
<td>3,970</td>
</tr>
<tr>
<td><strong>Balance at December 31, 2019, in US$</strong></td>
<td>570</td>
</tr>
</tbody>
</table>
Assets measured at fair value on a non-recurring basis

The Company measures non-financial assets such as certain equity investments on a nonrecurring basis when impairment charges are recognized due to declining financial performances and changes in business circumstances of these investees. The Company’s non-financial long-lived assets, such as intangible assets, goodwill and fixed assets, would be measured at fair value only if they were determined to be impaired on an other-than-temporary basis.

The Company uses a combination of valuation methodologies, including market and income approaches based on the Company’s best estimate to determine the fair value of these non-financial assets. Inputs used in these methodologies primarily included future cash flows, discount rate, expected volatility and the selection of comparable companies operating in similar businesses. The fair values of the Company’s equity method investments in publicly listed companies are measured using quoted market prices.

For equity securities accounted for under the measurement alternative, when there are observable price changes in orderly transactions for identical or similar investments of the same issuer, the investments are re-measured to fair value (Note 4). The non-recurring fair value measurements to the carrying amount of an investment usually requires management to estimate a price adjustment for the different rights and obligations between a similar instrument of the same issuer with an observable price change in an orderly transaction and the investment held by the Company. These non-recurring fair value measurements were measured as of the observable transaction dates. The valuation methodologies involved require management to use the observable transaction price at the transaction date and other unobservable inputs (level 3) such as volatility of comparable companies and probability of exit events as it relates to liquidation and redemption preferences.

The following table summarizes our assets held as of December 31, 2018 and 2019 for which a non-recurring fair value measurement was recorded during the year ended December 31, 2018 and 2019:

<table>
<thead>
<tr>
<th></th>
<th>Total fair value (RMB)</th>
<th>Quoted Prices in Active Markets for Identical Assets (Level 1)</th>
<th>Significant Other Observable inputs (Level 2)</th>
<th>Significant unobservable inputs (Level 3)</th>
<th>Fair value adjustment</th>
<th>Impairment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As of December 31, 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term investments</td>
<td>19,739</td>
<td>2,835</td>
<td>—</td>
<td>4,983</td>
<td>14,756</td>
<td>(622)</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(5)</td>
</tr>
<tr>
<td><strong>As of December 31, 2019</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term investments</td>
<td>22,778</td>
<td>3,272</td>
<td>14,105</td>
<td>358</td>
<td>8,315</td>
<td>(9,989)</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>76</td>
<td>11</td>
<td>—</td>
<td>—</td>
<td>76</td>
<td>(406)</td>
</tr>
</tbody>
</table>

24. SUBSEQUENT EVENTS

In December 2019, novel coronavirus (COVID-19) was first reported to have surfaced in Wuhan, China. Subsequent to December 31, 2019, COVID-19 has spread rapidly to many parts of China and other parts of the world. The epidemic has resulted in quarantines, travel restrictions, and the temporary closure of stores and facilities in China and elsewhere.
Substantially all of the Group’s revenue and workforce are concentrated in China. Consequently, the COVID-19 outbreak may materially adversely affect our business operations and the Group’s financial condition and operating results for 2020, including but not limited to material negative impact to the Group’s total revenues, slower collection of accounts receivables and additional allowance for doubtful accounts and significant downward adjustments or impairment to the Group’s long-term investments. Because of the significant uncertainties surrounding the COVID-19 outbreak, the extent of the business disruption and the related financial impact cannot be reasonably estimated at this time.
Amended and Restated Loan Agreement

This Amended and Restated Loan Agreement (this “Agreement”) is made as of July 10, 2019 in Beijing, by and between:

**Party A:** Baidu Online Network Technology (Beijing) Co., Ltd.
Registered Address: 3/F, No. 10 Shangdi 10th Street, Haidian District, Beijing

**Party B:** Robin Yanhong Li
ID No.

**WHEREAS:**
1. Party A is a wholly foreign-owned enterprise incorporated under the laws of the People’s Republic of China (the “PRC”);
2. Party B is a Chinese citizen holding 99.5% equity interests in Beijing Baidu Netcom Science Technology Co., Ltd. (“Baidu Netcom”); and
3. Party A and Party B have entered into an Amended and Restated Loan Agreement dated May 7, 2018 (the “Original Loan Agreement”), under which Party A lent a loan equal to RMB6,389,173,600 to Party B for payment of the price of its acquiring 99.5% equity interests in Baidu Netcom. Party A and Party B intend to enter into this Agreement to replace the Original Loan Agreement and set forth their respective new rights and obligations.

**NOW, THEREFORE,** Party A and Party B agree as follows through negotiations:

1. Pursuant to the terms and subject to the conditions of this Agreement, Party A agrees to provide to Party B and Party B agrees to accept, a loan at an aggregate amount of RMB13,354,173,600.
2. Party B confirms its receipt of the loan and has applied the loan in its entirety to pay the price for its acquiring equity interests in Baidu Netcom.
3. The term of the loan under this Agreement shall commence on the day of receipt of the loan by Party B until the 10th anniversary of the date on which this Agreement is executed, which term is renewable upon agreement by the Parties in writing; provided, however, that the loan provided hereunder could be accelerated for immediate repayment by Party B pursuant to this Agreement at the request of Party A in writing at any time during the term of the loan or any renewal thereof if:
   (1) Party B resigns from or is dismissed by Party A or any affiliate of Party A;
   (2) Party B is dead, without civil legal capacity or with limited civil legal capacity;
(3) Party B is found with criminal offense or involvement therein;

(4) A claim is raised against Party B by any third party for an amount exceeding RMB100,000; or

(5) Subject to the laws of the PRC, Party A or any of its nominees may make investment in Baidu Netcom for operation of value-added telecommunication services and other services, such as internet information services, and Baidu, Inc. or any of its nominees has elected to exercise its option by issuing a written notice to Party B to purchase the equity interests in Baidu Netcom under the Amended and Restated Exclusive Equity Purchase and Transfer Option Agreement referenced in article 4 hereof.

4. It is agreed and acknowledged that, subject to and to the extent permitted by the laws of the PRC, Baidu, Inc., as the holding company of Party A, shall have the right but no obligation to purchase or nominate any other person (including any natural person, legal entity or other entity) to purchase all or any part of the equity interests in Baidu Netcom held by Party B (the “Option”), provided that Baidu, Inc. shall issue a written notice to Party B to exercise the Option. Upon Baidu, Inc.’s issuance of such written notice, Party B shall, as requested and instructed by Party A, immediately transfer all of its equity interests in Baidu Netcom to Baidu, Inc. or any of its nominees at the original investment price (the “Original Investment Price”) or any other price acceptable to Baidu, Inc. required under applicable laws. It is agreed and acknowledged that upon exercising the Option by Baidu, Inc., if the lowest price of the equity interests permitted under applicable laws is higher than the Original Investment Price, the price payable by Baidu, Inc. or any of its nominees shall be the lowest price permitted under applicable laws. The Parties agree to enter into an Amended and Restated Exclusive Equity Purchase and Transfer Option Agreement with respect to the foregoing in this Article 4.

5. It is agreed and acknowledged that Party B shall repay the loan only as follows: upon its maturity and at the request of Party A in writing, the loan provided hereunder shall be repaid by Party B (or any of its heirs, successors or assigns) with the proceeds from transfer of its equity interests in Baidu Netcom to Baidu, Inc. or any of its nominees to the extent permitted under the PRC laws, or otherwise agreed by the Parties.

6. It is agreed and acknowledged that in connection with transfer of the equity interests by Party B to Baidu, Inc. or any of its nominees upon maturity of the loan, if the proceeds from such transfer are legally required to or otherwise exceed the principal of the loan, Party B agrees to pay such excess amount, net of any individual income tax and other taxes and fees payable by Party B, to Baidu, Inc. or any of its nominees at sole decision of Baidu, Inc. to the extent permissible by the law.
7. It is agreed and acknowledged that Party B shall not be deemed to have fulfilled its obligations under this Agreement until:

   (1) it has transferred all of its equity interests in Baidu Netcom to Baidu, Inc. or any of its nominees; and
   (2) it has paid to Party A all of the proceeds from the equity interest transfer or the maximum amount thereof permitted under applicable laws (including principal and the highest interest accrued thereupon permitted under applicable laws) as repayment of the loan.

8. To secure performance of its obligations under this Agreement, Party B agrees to pledge all of his equity interests in Baidu Netcom to Party A (the "Equity Pledge"). It is acknowledged that an Amend and Restated Equity Pledge Agreement in respect of the foregoing in this Article 8 has been made as of July 10, 2019.

9. As of the date hereof, Party A represents and warrants to Party B that:

   (1) Party A is a wholly foreign-owned enterprise incorporated and validly existing under the laws of the PRC;
   (2) Party A has the right to execute and perform this Agreement. The execution and performance of this agreement by Party A comply with its business scope, articles or any other organization document, and Party A has obtained all approvals and authorizations necessary and appropriate for its execution and performance of this Agreement;
   (3) The principal of the loan to Party B is legally owned by Party A;
   (4) Execution and performance of this Agreement by Party A does not violate any law, regulation, approval, authorization, notice or other governmental document by which it is bound or affected, or any agreement between Party A and any third party, or any covenant made by Party A to any third party; and
   (5) This Agreement, once executed, shall constitute legal, valid obligations of Party A and enforceable against Party A in accordance with its terms.

10. As of the date hereof until the end of this Agreement, Party B represents and warrants to Party A that:

   (1) Baidu Netcom is a limited liability company incorporated and validly existing under the laws of the PRC and Party B is a legal holder of the equity interests in Baidu Netcom;
   (2) Party B has the right to execute and perform this Agreement. The execution and performance by Party B of this Agreement comply with the articles or any other organizational document of Baidu Netcom, and Party B has obtained all approvals and authorizations necessary and appropriate for its execution and performance of this Agreement.
Execution and performance of this Agreement by Party B does not violate any law, regulation, approval, authorization, notice or other governmental document by which it is bound or affected, or any agreement between Party B and any third party, or any covenant made by Party B to any third party;

This Agreement, once executed, shall constitute legal, valid obligations of Party B and enforceable against Party B in accordance with its terms;

Party B has made all contributions required by law for its holding equity interests in Baidu Netcom;

Unless otherwise provided under the Amended and Restated Equity Pledge Agreement and the Amended and Restated Exclusive Equity Purchase and Transfer Option Agreement, Party B does not create any mortgage, pledge or other security over its equity interests in Baidu Netcom, or make any offer to any third party to transfer its equity interests, or make any promise as to any offer to purchase its equity interests from any third party, or execute any agreement with any third party to transfer its equity interests;

There are no pending or potential disputes, litigation, arbitration, administrative proceedings or other legal proceedings in connection with the equity interests in Baidu Netcom held by Party B; and

Baidu Netcom has completed all necessary governmental approvals, licenses, registrations and filings.

11. Party B undertakes that during the term of this Agreement, it shall:

   (1) not sell, transfer, pledge or otherwise dispose of its equity interests or other interests in Baidu Netcom, or to allow creation of any other security interest thereupon without the prior written consent of Party A, except for the equity pledge or other right created for the benefit of Party A;

   (2) not vote for, support or execute any shareholder resolutions at Baidu Netcom’s shareholder’s meetings permitting sale, transfer, pledge or other disposal of any of its legal or beneficiary ownership of the equity interests in Baidu Netcom or creation of any other security interest thereupon without the prior written consent of Party A, except for those made to Party A or any of its nominees;

   (3) not vote for, support or execute any shareholder resolutions at Baidu Netcom’s shareholder meetings permitting Baidu Netcom to merge or combine with, or acquire or invest in, any person without Party A’s prior written consent;

   (4) promptly inform Party A of any pending or threatened litigation, arbitration or administrative proceeding relating to the equity interests of Baidu Netcom;
execute all necessary or appropriate documents, take all necessary or appropriate actions and bring all necessary or
appropriate lawsuits or make all necessary and appropriate defenses against all claims in order to maintain its ownership of
equity interests in Baidu Netcom;

refrain from any act and/or omission that may materially affect the assets, business and liabilities of Baidu Netcom without
the prior written consent of Party A;

appoint any person nominated by Party A as executive director of Baidu Netcom, upon Party A’s request;

in connection with Party A’s exercise of the Option provided hereunder, transfer promptly and unconditionally all equity
interests in Baidu Netcom held by Party B to Party A and/or any of its nominees, to the extent and within the scope
permissible under the laws of the PRC;

not request Baidu Netcom to distribute dividends or profits to it;

upon transfer of its equity interests in Baidu Netcom to Party A or any of its nominees, pay the entire proceeds received by it
from transfer of the equity interests to Party A as repayment of the loan or otherwise to the extent permitted under the laws of
the PRC; and

strictly comply with the terms of this Agreement, perform the obligations under this Agreement, and refrain from any act or
omission that could affect the validity and enforceability of this Agreement.

12. Party B undertakes that in its capacity of a shareholder of Baidu Netcom and during the term of this Agreement, it shall procure Baidu
Netcom:

(1) not to supplement, amend or modify its articles of association, or increase or decrease its registered capital, or to change its
capital structure in any form without the prior written consent of Party A;

(2) to maintain its existence and handle matters prudently and affectively in accordance with good financial and business rules
and practices;

(3) not to sell, transfer, mortgage or otherwise dispose of, nor to permit the creation of any other security interest on, any of its
legal or beneficial interests in its assets, business or income without the prior written consent of Party A, at any time as of the
date of this Agreement;

(4) not to incur, succeed, guarantee or permit the existence of any liabilities without the prior written consent of Party A, except
for any liabilities (i) arising from the ordinary or day-to-day course of business instead of through Party B; and (ii) disclosed
to Party A or approved by Party A in writing;
(5) to operate all businesses on a continued basis and maintain the value of its assets;

(6) not to execute any material contracts (for the purpose of this Section 12(6), a contract will be deemed material if its value exceeds RMB500,000) without the prior written consent of Party A, other than those executed during the ordinary course of business;

(7) to provide all information regarding its operations and financial affairs at Party A’s request;

(8) not to merge or combine with, acquire or invest in, any other person without the prior written consent of Party A;

(9) not to distribute dividends to the shareholders without the prior written consent of Party A, and upon Party A’s request, to promptly distribute all distributable profits to the shareholders.

(10) to promptly inform Party A of any pending or threatened litigation, arbitration or administrative proceeding relating to its assets, business or revenue;

(11) to execute all necessary or appropriate documents, take all necessary or appropriate actions and bring all necessary or appropriate lawsuits or make all necessary and appropriate defenses against all claims in order to maintain its ownership of its assets; and

(12) to strictly comply with the terms of the Exclusive Technology Consulting and Services Agreement dated March 1, 2004, the Exclusive Technology Consulting and Services Supplementary Agreement dated August 9, 2004, and the Exclusive Technology Consulting and Services Agreement dated March 22, 2005, each by Baidu Netcom and Party A (collectively, the “Services Agreements”) and other agreements, duly perform its obligations thereunder, and refrain from any act or omission that could affect the validity and enforceability thereof.

13. This Agreement is binding upon, and inures the benefit of, each of the Parties and their respective heirs, successors and permitted assigns. Without prior written consent of Party A, Party B shall not transfer, pledge or otherwise assign any of its rights, interests or obligations hereunder.

14. Party B agrees that Party A may assign its rights and obligations hereunder to a third party by a written notice to Party B when it considers necessary. No further consent from Party B is required for such transfer.
15. Execution, validity, interpretation, performance, amendment, termination and dispute resolution of this Agreement are governed by the laws of the PRC.

16. Arbitration

   (1) Both Parties shall strive to resolve any dispute, conflicts, or claims arising from the interpretation or performance (including any issue relating to the existence, validity and termination) of this Agreement through negotiations in good faith. If no resolution is made within thirty (30) days after one Party requests for such resolution, either Party may submit such matter to China International Economic and Trade Arbitration Commission (the “CIETAC”) in accordance with its then-effect rules. The arbitration award shall be final and conclusive and binding upon the Parties.

   (2) The place of the arbitration shall be Beijing.

   (3) The arbitration language shall be Chinese.

17. This Agreement shall be made as of the date of its execution, and the Parties agree and confirm that the terms and conditions of this Agreement will become effective from the date when Party B receives the loan and expire on the date when each Party has completed its obligations hereunder.

18. Party B shall not terminate or revoke this Agreement under any circumstances unless (1) Party A is found with gross negligence, fraud, or other material misconduct; or (2) Party A is in bankruptcy.

19. This Agreement shall not be amended or modified without the written consent of the Parties hereto. Any matters not agreed upon in this Agreement may be supplemented by all Parties through the execution of a written agreement. The above amendments, modifications, supplements and any attachment of this Agreement shall be integral parts of this Agreement.

20. This Agreement constitutes the entire agreements of the Parties with respect to the transaction herein and supersedes all prior verbal discussions and written agreements between the Parties, including without limitation the Original Loan Agreement. The Original Loan Agreement shall terminate as of the date on which this Agreement becomes effective and cease to have any effect upon the Parties.

21. This Agreement is severable. The invalidity or unenforceability of any term shall not affect the validity or enforceability of the remainder of this Agreement.

22. Each Party shall strictly protect the confidentiality of any information regarding the other Party’s business, operation, financial situation or other confidential information obtained under this Agreement or during the performance of this Agreement.
23. Any obligation that is accrued or becomes due prior to expiry or early termination of this Agreement shall survive such expiry or early termination. Articles 15, 16, and 22 shall survive expiry or termination of this Agreement.

24. This Agreement shall be executed in two originals, and each Party shall hold one thereof. Both originals shall have the same legal effect.

(No text below)
IN WITNESS WHEREOF, the Parties have executed or caused this Agreement to be executed by its legal or authorized representative on its behalf as of the date first written above.

Party A:

Baidu Online Network Technology (Beijing) Co., Ltd. (seal)

Signature:  /s/Shanshan Cui  
Legal representative/authorized representative

Party B:

Robin Yanhong Li

Signature:  /s/Robin Yanhong Li
This Amended and Restated Exclusive Equity Purchase and Transfer Option Agreement (this “Agreement”) is entered into by and among the following parties in Beijing, PRC on July 10, 2019:

Party A: Baidu, Inc.
Address: M&C Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands

Party B: Baidu Online Network Technology (Beijing) Co., Ltd.
Address: 3/F, Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing

Party C: Robin Yanhong Li
ID No.:

Party D: Beijing Baidu Netcom Science Technology Co., Ltd.
Address: 2/F, Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing

In this Agreement, Party A, Party B, Party C and Party D are called collectively as the “Parties” and each of them is a “Party.”

WHEREAS:
1. Party A is a Cayman Islands company incorporated under the laws of Cayman Islands and an affiliate of Party B;
2. Party B is a wholly foreign-owned enterprise incorporated under the laws of the People’s Republic of China (the “PRC”);
3. Party D is a liability limited company incorporated in Beijing, the PRC;
4. Party C is a shareholder of Party D owning 99.5% equity interests in Party D (the “Equity Interest”);
5. Party B and Party C entered into an Amended and Restated Loan Agreement dated July 10, 2019 (the “Loan Agreement”), whereby Party C confirms its receipt of a loan in an aggregate amount of RMB13,354,173,600 from Party B;
6. Party B and Party D entered into a series of agreement dated March 22, 2005, including the Exclusive Technology Consulting and Services Agreement (the “Services Agreement”), whereby Party B provides exclusive technology consulting and services to Party D;
7. Party B and Party C entered into an Amended and Restated Equity Pledge Agreement (the “Equity Pledge Agreement”) dated July 10, 2019, whereby Party C transfers all of the Equity Interest to Party B; and
8. Party A and Party C entered into a Proxy Agreement dated March 31, 2018 (the "Proxy Agreement"), whereby Party C authorizes the entity or individual designated by Party A to exercise all voting and other rights of Party C as a shareholder at the shareholders meeting of Party D.

9. The Parties have entered into an Amended and Restated Exclusive Equity Purchase and Transfer Option Agreement dated May 7, 2018 (the "Original Exclusive Equity Purchase and Transfer Option Agreement"). The Parties desire to enter into this Agreement to restate and amend the Original Exclusive Equity Purchase and Transfer Option Agreement, and this Agreement shall replace and supersede the Original Exclusive Equity Purchase and Transfer Option Agreement once this Agreement becomes effective.

NOW, THEREFORE, the Parties agree as follows through negotiations and to be bound hereby:

1. Purchase and Sale of Equity Interest

1.1 Granting of Rights

Party C hereby irrevocably grants to Party A an option to purchase or cause any one or more designated persons ("Designated Persons") to purchase, to the extent permitted under PRC law, with the steps determined by Party A, at the price specified in Section 1.3 of this Agreement, and at any time from Party C (the "Transferor"), a portion or all of the equity interests held by Party C in Party D (the "Option"). No Option shall be granted to any third party other than Party A and/or the Designated Persons. Party D hereby agrees to granting of the Option by Party C to Party A and/or the Designated Persons. For purpose of this Section 1.1 and this Agreement, "person" means any individual, corporation, joint venture, partnership, enterprise, trust or unincorporated organization.

1.2 Exercise Steps

Subject to PRC law and regulations, Party A and/or the Designated Persons may exercise the Option by issuing a written notice (the "Option Notice") to the Transferor, specifying the equity interest to be purchased from the Transferor (the "Purchased Equity Interest") and the manner of such purchase.

1.3 Purchase Price

1.3.1 If Party A exercises the Option, the purchase price of the Purchased Equity Interest ("Purchase Price") shall be equal to the actual paid-in capital paid by the Transferor for the Purchased Equity Interest, unless then applicable PRC laws and regulations require appraisal of the Purchased Equity Interest or other restrictions on the Purchase price.
1.3.2 If the applicable PRC laws require appraisal of the Purchased Equity Interest or other restrictions on the Purchase Price at the time that Party A exercises the Option, the Parties agree that the Purchase Price shall be set at the lowest price permissible under applicable law.

1.4 Transfer of the Purchased Equity Interest

At each exercise of the Option:

1.4.1 The Transferor shall, in accordance with the terms and conditions of this Agreement and the Option Notice in connection with the Purchased Equity Interest, enter into an equity transfer agreement with Party A and/or the Designated Persons (as applicable) for each transfer in the substance and form satisfactory to Party A;

1.4.2 The Transferor shall execute all other requisite contracts, agreements or documents, obtain all requisite government approvals and consents, and take all necessary actions to unconditionally transfer the valid ownership of the Purchased Equity Interest to Party A and/or the Designated Persons free of any security interest, and cause Party A and/or the Designated Persons to be the registered owner(s) of the Purchased Equity Interest. For purpose of this Section 1.4.2 and this Agreement, “Security Interest” includes without limitation guaranty, mortgage, pledge, third-party right or interest, any share option, right of acquisition, right of first refusal, right of set-off, ownership retention or other security arrangements; provided, however, that it does not include any security interest arising under the Equity Pledge Agreement.

1.5 Payment

Payment of the Purchase Price shall be made in the manner determined through negotiations between Party A and/or the Designated Persons and the Transferor in accordance with then applicable laws at the exercise of the Option. The Parties hereby agree that, subject to applicable laws, Transferor shall repay to Party B any amount that is paid by Party A and/or the Designated Persons to the Transferor in connection with the Purchased Equity Interest.

2. Covenants Relating to the Equity Interest

2.1 Covenants Relating to Party D

Party C and Party D hereby covenant, in relation to Party D:

2.1.1 Not to supplement, amend or modify Party D's articles of association in any way, or to increase or decrease its registered capital, or to change its registered capital structure in any way without Party A's prior written consent;

2.1.2 To maintain the corporate existence of Party D and operate its business and deal with matters prudently and effectively according to good financial and business rules and practices;
2.1.3 Not to sell, transfer, mortgage or otherwise dispose of, or permit any other security interest to be created on, any of Party D’s assets, business or legal or beneficial interests in its revenue at any time after the signing of this Agreement without Party A’s prior written consent;

2.1.4 Not to incur, succeed to, guarantee or permit the existence of any liability, without Party A’s prior written consent, except (i) liabilities arising from the normal course of business, but not arising from loans; and (ii) liabilities disclosed to Party A and approved by Party A in writing;

2.1.5 To operate persistently all the business in the normal course of business to maintain the value of Party D’s assets, and not to commit any act or omission that would affect its operations and asset value;

2.1.6 Without prior written consent by Party A, not to enter into any material agreement, other than agreements entered into in Party D’s normal course of business (for purpose of this paragraph, an agreement will be deemed material if its value exceeds RMB500,000);

2.1.7 Not to provide loans or credit to any person without Party A’s prior written consent;

2.1.8 To provide all information relating to Party D’s operations and financial conditions upon the request of Party A;

2.1.9 To purchase and maintain insurance from insurance companies accepted by Party A. The amount and category of the insurance shall be the same as those of the insurance normally procured by companies engaged in similar businesses and possessing similar properties or assets in the area where Party D is located;

2.1.10 Not to merge or consolidate with, or acquire or invest in, any person without Party A’s prior written consent;

2.1.11 To promptly notify Party A of any pending or threatened suit, arbitration or administrative proceedings concerning Party D’s assets, business or revenue;

2.1.12 To execute all necessary or appropriate documents, take all necessary or appropriate actions and to bring all necessary or appropriate claims or to make all necessary and appropriate defenses against all claims in order for Party D to maintain the ownership over all its assets;

2.1.13 Not to distribute dividends to Party D’s shareholders in any way without Party A’s prior written consent; provided, however, that Party D shall promptly distribute all or part of its distributable profits to its shareholders upon Party A’s request; and

2.1.14 At the request of Party A, to appoint persons nominated by Party A to be executive directors of Party D.

2.2 Covenants Relating to the Transferor
Party C hereby covenants:

2.2.1 Not to sell, transfer, mortgage or otherwise dispose of, or allow any other security interest to be created on, the legal or beneficial interest in the Equity Interest at any time after the signing of this Agreement without Party A's prior written consent, other than the pledge created on the Transferor’s Equity Interest in accordance with the Equity Pledge Agreement;

2.2.2 Without Party A's prior written consent, not to vote for or sign any shareholders’ resolution at Party D’s shareholders’ meetings to approve the sale, transfer, mortgage or disposition in any other manner of, or the creation of any other security interest on, any legal or beneficial interest in the Equity Interest, except to or for the benefit of Party A or its designated persons;

2.2.3 Without Party A's prior written consent, not to vote for or sign any shareholders’ resolution at Party D’s shareholders’ meetings to approve Party D's merger or consolidation with, acquisition of or investment in, any person;

2.2.4 To promptly notify Party A of any pending or threatened suit, arbitration or administrative proceedings concerning the Equity Interest owned by it;

2.2.5 To execute all necessary or appropriate documents, to take all necessary or appropriate actions and to bring all necessary or appropriate claims or to make all necessary and appropriate defenses against all claims in order to maintain his ownership over the Equity Interest;

2.2.6 At the request of Party A, to appoint persons nominated by Party A to be executive directors of Party D;

2.2.7 At any time upon the request of Party A, to transfer its Equity Interest immediately and unconditionally to the representative designated by Party A, and waive its preemptive right with respect to the transfer of equity interest by the other shareholder of Party D;

2.2.8 To fully comply with the provisions of this Agreement and the other agreements entered into jointly or respectively by and among the Transferor, Party D and Party A, perform all obligations under these agreements and not commit any act or omission that would affect the validity and enforceability of these agreements; and

2.2.9 To transfer to Party A all dividends and any other form of profit distributed to it by Party D.

2.3 Covenants Relating to Party A

Party A hereby covenants:

2.3.1 If Party D needs any loan or other capital support in its business, under acceptable and reasonable scope, Party A shall provide such capital support without imposing any condition or restriction; and
2.3.2 If Party D cannot repay the loan from Party A as loss incurred and has sufficient evidence to prove, Party A agrees that it will unconditionally give up its right to require Party D to repay the loan.

3. **Representations and Warranties**

As of the date of this Agreement and each transfer date, each of the Transferor and Party D hereby represents and warrants to Party A as follows:

3.1 It has the power and authority to execute and deliver this Agreement, and any equity transfer agreement (the “Transfer Agreement”) to which it is a party for each transfer of the Purchased Equity under this Agreement and to perform its obligations under this Agreement and any Transfer Agreement. Once executed, this Agreement and any Transfer Agreement to which it is a party will constitute a legal, valid and binding obligation of it enforceable against it in accordance with its terms;

3.2 The execution, delivery and performance of this Agreement or any Transfer Agreement by it will not: (i) violate any relevant PRC laws and regulations; (ii) conflict with its articles of association or other organizational documents; (iii) violate or constitute a default under any contract or instrument to which it is party or that binds upon it; (iv) violate any condition for the grant and/or continued effectiveness of any permit or approval granted to it; or (v) cause any permit or approval granted to it to be suspended, cancelled or attached with additional conditions;

3.3 Party D has good and marketable ownership of all of its assets and has not created any security interest on the said assets;

3.4 Party D has no outstanding liabilities, except (i) liabilities arising in its normal course of business; and (ii) liabilities disclosed to Party A and approved by Party A in writing;

3.5 There are currently no existing, pending or threatened litigations, arbitrations or administrative proceedings related to the Equity Interest, Party D’s assets or Party D; and

3.6 The Transferor has good and marketable ownership interest in the Equity Interest and has not created any security interest on such Equity Interest, other than the security interest pursuant to the Equity Pledge Agreement and the restrictions provided under the Proxy Agreement and hereunder.

4. **Assignment of Agreement**

4.1 Neither Party C or Party D may assign its rights and obligations under this Agreement to any third party without the prior written consent of Party A.

4.2 Party C and Party D hereby agree that Party A may assign all its rights and obligation under this Agreement to a third party as Party A sees fit, in which case Party A only needs to give a written notice to Party C and Party D and no further consent of Party C or Party D is required.
5. **Effectiveness and Term**

5.1 This Agreement shall be effective as of the date first set forth above and expire when all Equity Interest held by Party B is transferred to Party A and/or Designated Persons in accordance with this Agreement.

5.2 If the duration of operation (including any extension thereof) of Party A or Party D is expired or terminated for other reasons within the term set forth in Section 5.1, this Agreement shall be terminated simultaneously, except in the situation where Party A has assigned its rights and obligations in accordance with Section 4.2 hereof.

6. **Applicable Law and Dispute Resolution**

6.1 **Applicable Law**

The formation, validity, interpretation and performance of and resolution of any dispute arising from this Agreement shall be protected and governed by the laws of the PRC.

6.2 **Dispute Resolution**

Any dispute arising in connection with the interpretation and performance of the provisions of this Agreement shall be resolved by the Parties in good faith through negotiations. In case no resolution can be reached by the Parties within thirty (30) days after either party makes a request for dispute resolution through negotiations, either party may refer such dispute to China International Economic and Trade Arbitration Commission ("CIETAC") for arbitration in accordance with CIETAC’s arbitration rules then in effect. The seat of arbitration shall be Beijing and language of proceedings shall be Chinese. The arbitral award shall be final and binding upon the Parties.

7. **Taxes and Expenses**

Every Party shall, in accordance with PRC laws, bear any and all transfer and registration taxes, expenses and charges incurred by or levied on it with respect to the preparation and execution of this Agreement and each Transfer Agreement and the consummation of the transactions contemplated under this Agreement and each Transfer Agreement.

8. **Notices**

Any notice or other communication forms which is given by the parties hereto shall be in Chinese and delivered personally to the addresses listed as below or the addresses designated by the Parties. The notice time which is deemed as the time when the notice actually reaches the addressee follows: (a) the notice time of the notice delivered personally shall be the day when the person conducts the delivery; (b) the notice time of the notice delivered as mail shall be the tenth (10th) day following the mailing date of the registered mail by air (marked by seal) or shall be the fourth (4th) day following the day handing to internally recognized delivery services organizations; (c) the notice time of the notice delivered by facsimile shall be the acceptance time on the delivery confirmation; and (d) on the day of successful delivery if it is delivered by electronic mail evidenced by the confirmation generated from the mail delivery system or without receipt of delivery failure or return message from the mail delivery system within 24 hours.
9. **Confidentiality**

The Parties acknowledge and confirm any oral or written materials exchanged by the Parties in connection with this Agreement are confidential. The Parties shall maintain the confidentiality of all such materials. Without the written approval by the other Parties, any Party shall not disclose to any third party any relevant materials, but the following circumstances shall be excluded:

a. Materials that are or will become known by the public (through no fault of the receiving party);

b. Materials required to be disclosed by the applicable laws or rules of the stock exchange; and
c. Materials disclosed by each Party to its legal or financial advisors relating the transactions contemplated by this Agreement, and such legal or financial advisors shall comply with the confidentiality provisions similar to this article.

The disclosure of information by the staff or consultants of any party shall be deemed as disclosure by the party itself. This Article 9 shall survive any invalidity, termination, expiration or unenforceability of this Agreement.

10. Further Assurances
The Parties agree to promptly execute documents and take further actions that are reasonably required for, or beneficial to, the purpose of performing the provisions and carrying out the intent of this Agreement.

11. Breach Liabilities
11.1 Party A shall have the right to terminate this Agreement and/or hold Party C or Party D liable for any damages if Party C or Party D is in material breach of any provision under this Agreement. This Section 11.1 shall not be prejudicial to any other right of Party A under this Agreement.

11.2 Unless otherwise legally required, neither Party C or Party D may terminate or otherwise end this Agreement under any circumstance.

12. Miscellaneous
12.1 Amendment, Modification or Supplement
Any amendment or supplement to this Agreement shall be made by the Parties in writing. The amendments or supplements duly executed by each Party shall be deemed as a part of this Agreement and shall have the same legal effect as this Agreement.

12.2 Entire Agreement
Notwithstanding Article 5 of this Agreement, the Parties acknowledge that once this Agreement becomes effective, it shall constitute the entire agreements of the Parties with respect to the subject matters hereof and shall supersede all prior oral and/or written agreements and understandings by the Parties with respect to the subject matters hereof.

12.3 Severability
If any provision of this Agreement is judged to be invalid, illegal or unenforceable in any respect according to any applicable law or regulation, the validity, legality and enforceability of the other provisions hereof shall not be affected or impaired in any way. The Parties shall, through good-faith negotiations, replace those invalid, illegal or unenforceable provisions with valid provisions that may bring about economic effects as similar as possible to those from such invalid, illegal or unenforceable provisions.
12.4 Headings

The headings contained in this Agreement are for the convenience of reference only and shall not be used for the interpretation or explanation or otherwise affect the meaning of the provisions of this Agreement.

12.5 Language and counterparts

This Agreement is executed in Chinese in four originals; each Party holds one original and each original has the same legal effect.

12.6 Successor

This Agreement shall bind upon and inure to the benefit of the successors and permitted assigns of each Party.

12.7 Survival

Any obligation arising from or becoming due under this Agreement before its expiration or premature termination shall survive such expiration or early termination. Articles 6, 8 and 9 and this Section 12.7 shall survive the termination of this Agreement.

12.8 Waiver

Any Party may waive the terms and conditions of this Agreement by a written instrument signed by the Parties. Any waiver by a Party to a breach by the other Parties in a specific situation shall not be construed as a waiver to any similar breach by the other Parties in other situations.
IN WITNESS WHEREOF, the Parties have executed or caused this Agreement to be executed by its legal or authorized representative on its behalf as of the date first written above.

Party A:

Baidu, Inc.

Signature: /s/ Robin Yanhong Li
Title: Director

Party B:

Baidu Online Network Technology (Beijing) Co., Ltd. (seal)

Signature: /s/ Shanshan Cui
Title: Legal Representative

Party C:

Robin Yanhong Li

Signature: /s/ Robin Yanhong Li

Party D:

Beijing Baidu Netcom Science Technology Co., Ltd. (seal)

Signature: /s/ Zhixiang Liang
Title: Legal Representative
AMENDED AND RESTATED EQUITY PLEDGE AGREEMENT

This Equity Pledge Agreement (this “Agreement”) is made as of July 10, 2019 in Beijing, PRC by and between:

Pledgee:

Party A: Baidu Online Network Technology (Beijing) Co., Ltd.
Registered Address: 3/F, Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing;

And

Pledgor:

Party B: Robin Yanhong Li
ID No.
Address:

WHEREAS:

1. Party A is a wholly foreign-owned enterprise registered in Beijing, the People’s Republic of China (the “PRC”).
2. Party B is a citizen of the PRC holding 99.5% equity interests in Beijing Baidu Netcom Science Technology Co., Ltd. (“Baidu Netcom”), a limited liability company registered in Beijing, the PRC.
3. Party A and Party B entered into an Amended and Restated Loan Agreement dated July 10, 2019 (the “Loan Agreement”), whereby Party B obtains a loan (the “Loan Arrangement”) in an aggregate amount of RMB13,354,173,600 (the “Loan”).
4. Party A and Baidu Netcom entered into an Exclusive Technology Consulting and Services Agreement dated March 22, 2005 (the “Services Agreement”), pursuant to which Baidu Netcom shall pay Party A technical consulting and services fees (the “Service Fees”) for the technology consulting and services provided by Party A.
5. In order to ensure that Party B will repay the Loan of RMB13,354,173,600 under the Loan Agreement and Party A will be able to collect the Service Fees from Baidu Netcom, Party B agrees to pledge its equity interests in Baidu Netcom (i.e., a registered capital equal to RMB13,354,173,600) as security for the Loan and other obligations under the Loan Arrangement and the Service Agreement. Party A and Party B intend to enter into this Agreement to specify their respective rights and obligations in respect of such pledge.
6. The Parties have entered into an Amended and Restated Equity Pledge Agreement dated May 7, 2018 (the “Original Equity Pledge Agreement”). The Parties hereby agree to enter into this Agreement to amend and restate the Original Equity Pledge Agreement, and this Agreement shall replace and supersede the Original Equity Pledge Agreement as of the date of its becoming effective.
NOW THEREFORE, the Pledgee and the Pledgor agree as follows through negotiations:

1. Definitions

Unless otherwise provided in this Agreement, the following terms shall have the following meanings:

1.1 “Pledge”: refers to the full content of Article 2 hereunder.

1.2 “Equity Interests”: refers to all of the equity interests in Baidu Netcom legally held by the Pledgor (for purpose of this Agreement, the Equity Interests pledged herein means the registered capital equal to RMB13,354,173,600).

1.3 “Ratio of Pledge”: refers to the proportion of the value of the Pledge under this Agreement to the total amount of the Service Fees and the Loan.

1.4 “Term of Pledge”: refers to the period provided for under Article 3.2 hereunder.

1.5 “Principal Agreement”: refers to the Services Agreements and the agreements under the Loan Arrangement.

1.6 “Event of Default”: refers to any event listed in Article 7.1 hereunder.

1.7 “Notice of Default”: refers to the notice of default issued by the Pledgee in accordance with this Agreement.

2. Pledge

The Pledgor will pledge all of his Equity Interests in Baidu Netcom to the Pledgee as security for (i) all his obligations under the Loan Arrangement (i.e., RMB13,354,173,600) and (ii) all obligations of Baidu Netcom under the Services Agreement (the “Secured Obligations”). “Pledge” refers to the priority entitled to the Pledgee in receiving proceeds from disposal of all or part of the Equity Interests at a discounted value, or auction or sale of the Equity Interests pledged hereunder.

3. Ratio of Pledge and Term of Pledge

3.1 Ratio of the Pledge

The Ratio of the Pledge shall be approximately 100%.

3.2 Term of the Pledge
3.2.1 The Pledge shall take effect as of the date when the pledge of the Equity Interest is recorded in the Register of Shareholders of Baidu Netcom and registered with the competent industrial and commercial authority, and shall remain in effect until two (2) years after all Secured Obligations under the Principal Agreement have been fulfilled.

3.2.2 During the term of the Pledge, the Pledgee shall be entitled to dispose of the Pledge in accordance with this Agreement in the event that the Pledgor fails to perform his obligations under the Loan Arrangement or Baidu Netcom fails perform its obligations under the Services Agreement.

4. Possession of Pledge Documents

4.1 During the Term of Pledge under this Agreement, the Pledgor shall deliver its capital contribution certificate and the register of shareholders of Baidu Netcom to the possession of the Pledgee within one (1) week from the date of this Agreement.

4.2 The Pledgee shall be entitled to receiving dividends arising from the Equity Interests.

4.3 The Pledge under this Agreement will be recorded in the Register of Shareholders of Baidu Netcom (See Appendix I) after the date of this Agreement.

5. Representations and Warranties of the Pledgor

5.1 The Pledgor is the legal owner of the Equity Interests and has approved the Pledge with resolutions adopted at its shareholders meeting (See Appendix II).

5.2 Except for the benefit of the Pledgee, no other pledge or security has been created upon the Equity Interests.

6. Covenants of the Pledgor

6.1 During the term of this Agreement, the Pledgor covenants for its benefits of the Pledgee that the Pledgor shall:

6.1.1 not transfer or assign the Equity Interests, create or permit creation of any other pledge which could affect the rights or benefits of the Pledgee without prior written consent of the Pledgee;

6.1.2 comply with and implement the laws and regulations with respect to the pledge of rights; present to the Pledgee the notices, orders or suggestions with respect to the Pledge issued or made by relevant government authorities within five (5) days upon receiving such notices, orders or suggestions; comply with such notices, orders or suggestions or, alternatively, at the reasonable request of the Pledgee or with consent from the Pledgee, raise objection to such notices, orders or suggestions; and
6.1.3 timely notify the Pledgee of any event or any notice to its knowledge which may affect the Pledgor’s right to all or any part of the Equity Interests, and any event or any notice to its knowledge which may change the Pledgor’s warranties and obligations under this Agreement or affect the Pledgor’s performance of its obligations under this Agreement.

6.2 The Pledgor agrees that the Pledgee’s right to the Pledge under this Agreement shall not be disrupted or prejudiced by any legal proceeding initiated by the Pledgor or any successor of the Pledgor or any person authorized by the Pledgor or any other person.

6.3 The Pledgor promises to the Pledgee that in order to protect or perfect the security for the payment of the Loan and the Services Fees, the Pledgor shall execute in good faith and cause other parties who have interests in the Pledge to execute, all title certificates and contracts and/or to perform any other actions (and cause other parties who have interests to take action) as required by the Pledgee and facilitate the exercise of the rights and authorization vested in the Pledgee under this Agreement.

6.4 The Pledgor promises to the Pledgee that he will execute all amendment (if applicable and necessary) in connection with the certificate of the Equity Interests with the Pledgee or its designated person (being a natural person or a legal entity) and, within a reasonable period, provide to the Pledgee all notices, orders and decisions about the Pledge as the Pledgee deems necessary.

6.5 The Pledgor promises to the Pledgee that he will comply with and perform all the guarantees, covenants, warranties, representations and conditions for the benefit of the Pledgee. The Pledgor shall indemnify the Pledgee for all losses suffered by the Pledgee due to the Pledgor’s failure to perform in whole or in part its guarantees, covenants, warranties, representations and conditions.

6.6 During the term of this Agreement, the Pledgor will not make any action/omission which may affect the value of the Equity Interests so as to maintain or increase the value. The Pledgor shall timely notify the Pledgee of any event which may decrease the value of the Equity Interests or affect the Pledgor’s performance of the obligations under this Agreement, and shall provide assets acceptable to the Pledgee as guarantee for the decreased value of the Equity Interests upon the Pledgee’s request.

6.7 To the extent permitted under applicable laws or regulations, the Pledgor shall make best efforts to cooperate with all the registration, filing or other procedures relating to the Pledge as required by relevant laws and regulations.

7. Event of Default

7.1 Each of the following events shall be regarded as an Event of Default:

7.1.1 Pledgor fails to perform its obligations under the Loan Arrangement, including without limitation the obligation to repay the Loan of RMB13,354,173,600 under the Loan Agreement;
7.1.2 Baidu Netcom fails to make due and full payment of the Services Fees or perform other obligations under the Services Agreement;

7.1.3 Any representation or warranty made by the Pledgor in Article 5 hereof is materially misleading or erroneous, and/or the Pledgor breaches any warranty in Article 5 hereof;

7.1.4 The Pledgor breaches any covenant under Article 6 hereof;

7.1.5 The Pledgor breaches any other provision of this Agreement;

7.1.6 The Pledgor waives the pledged Equity Interests or transfers or assigns the pledged Equity Interests without prior written consent from the Pledgee;

7.1.7 Any of the Pledgor’s external loans, guaranties, compensations, undertakings or other obligations (1) is accelerated for repayment due to any default; or (2) fails to be duly repaid or performed and makes the Pledgee believe that the Pledgor’s ability to perform the obligations hereunder has been affected;

7.1.8 Baidu Netcom is incapable of repaying its general debts or other debts;

7.1.9 This Agreement becomes illegal or the Pledgor is not capable of continuing to perform the obligations hereunder due to any reason other than a Force Majeure event;

7.1.10 There have been adverse change to the properties owned by the Pledgor, causing the Pledgee to believe that the capability of the Pledgor to perform the obligations hereunder has been affected;

7.1.11 The successor or receiver of Baidu Netcom only partially performs or refuses to perform the payment obligation under the Services Agreement; and

7.1.12 The breach of the other provisions of this Agreement by the Pledgor due to its action or omission.

7.2 The Pledgor shall immediately give a written notice to the Pledgee if it becomes knowledge of the Pledgor that any event specified under Article 7.1 hereof or any event that may result in the foregoing events has occurred.

7.3 Unless an event of default under Article 7.1 hereof has been resolved to the Pledgee’s satisfaction, the Pledgee, at any time when the event of default occurs thereafter, may give a written Notice of Default to the Pledgor, requiring the Pledgor to immediately make full payment of the outstanding amount under the Loan Arrangement or under the Services Agreement or requesting to exercise the Pledge in accordance with Article 8 hereof.
8. **Exercise of the Pledge**

8.1 The Pledgor shall not transfer or assign the Equity Interest without prior written consent from the Pledgee prior to the full performance of his obligations under the Loan Arrangement and supplementary agreement and full payment of all Service Fees under the Services Agreement, whichever is later.

8.2 The Pledgee shall give a Notice of Default to the Pledgor when the Pledgee exercises the Pledge.

8.3 Subject to Article 7.3, the Pledgee may exercise the Pledge when the Pledgee gives a Notice of Default in accordance with Article 7.3 or at any time thereafter.

8.4 The Pledgee is entitled to priority in receiving payment in the form of all or part of the Equity Interest at a discounted value, or from the proceeds from the auction or sale of all or part of the Equity Interest in accordance with legal procedure, until the outstanding debt and all other payables of the Pledgor under Loan Arrangement and Services Agreement are repaid.

8.5 The Pledgor shall not hinder the Pledgee from exercising the Pledge in accordance with this Agreement and shall give necessary assistance so that the Pledgee could fully exercise its Pledge.

9. **Assignment**

9.1 The Pledgor shall not assign or transfer its rights and obligations hereunder without prior consent from the Pledgee.

9.2 This Agreement shall be binding upon the Pledgor and his successors and be binding on the Pledgee and each of its successors and permitted assigns.

9.3 To the extent permitted by law, the Pledgee may transfer or assign any or all of its rights and obligations under the Loan Arrangement and supplementary agreements to any person (natural person or legal entity) designated by it at any time. In that case, the assignee shall have the same rights and obligations as those of the Pledgee as if the assignee were an original party hereto. When the Pledgee transfers or assigns the rights and obligations under the Services Agreement, Loan Arrangement and supplementary agreements, it is only required to provide a written notice to the Pledgor, and at the request of the Pledgee, the Pledgor shall execute the relevant agreements and/or documents with respect to such transfer or assignment.

9.4 After the Pledgee has been changed as a result of a transfer or an assignment, the new parties to the Pledge shall execute a new pledge contract.

10. **Effectiveness and Term**

This Agreement is executed on the date first set forth above and becomes effective from the date when the pledge is recorded on Baidu Netcom’s Register of Shareholders.
11. Termination

This Agreement shall terminate when the loan under the Loan Arrangement and the Services Fees under the Services Agreement have been fully repaid and the Pledgor no longer has any outstanding obligations under the Loan Arrangement and Baidu Netcom no longer has any outstanding obligations under the Services Agreement. The Pledgee shall cancel or terminate this Agreement as soon as reasonably practicable thereafter.

12. Fees and Other Charges

12.1 The Pledgor shall be responsible for all of the fees and actual expenses in relation to this Agreement including, but not limited to, legal fees, production costs, stamp tax and any other taxes and charges. If the Pledgee pays the relevant taxes in accordance with the laws, the Pledgor shall fully indemnify the Pledgee for such taxes paid by the Pledgee.

12.2 In the event that the Pledgee has to make a claim against the Pledgor by any means as a result of the Pledgor’s failure to pay any tax or expense payable by the Pledgor under this Agreement, the Pledgor shall be responsible for all the expenses arising from such claim (including but not limited to any taxes, handling fees, management fees, litigation fees, attorney’s fees, and various insurance premiums in connection with the disposition of the Pledge).

13. Force Majeure

13.1 A Force Majeure event refers to any unforeseen event that is beyond a party’s reasonable control and cannot be prevented with reasonable care, which includes but is not limited to acts of governments, changes of law, acts of God, fires, explosions, typhoons, floods, earthquake, tides, lightning or war; provided, however, that any insufficiency of creditworthiness, capital or financing shall not be regarded as an event beyond a party’s reasonable control. The affected party by Force Majeure shall promptly notify the other party of such event resulting in exemption.

13.2 In the event that the affected party is delayed or prevented from performing its obligations under this Agreement by Force Majeure, and only to the extent of such delay and prevention, the affected party shall not be liable for obligations under this Agreement. The affected party shall take appropriate measures to minimize or remove the effects of Force Majeure and attempt to resume performance of the obligations that were delayed or prevented by the event of Force Majeure. After the event of Force Majeure is removed, both Parties agree to resume the performance of this Agreement using their best efforts.

14. Confidentiality

The Parties acknowledge and confirm that all the oral and written materials exchanged relating to this Agreement are confidential. Each party must keep such materials confidential and cannot disclose such materials to any other third party without the other party’s prior written approval, unless: (a) the public knows or will know the materials (not due of the disclosure by the receiving party); (b) the disclosed materials are required by law or stock exchange rules to be disclosed; or (c) materials relating to the transactions under this Agreement are disclosed to the Parties’ legal or financial advisors, who must keep them confidential as well. Disclosure of the confidential information by employees or institutions hired by the Parties is deemed as an act by the Parties, therefore, subjecting them to liability.
15. Dispute Resolution

15.1 This Agreement shall be governed by and construed in accordance with the PRC law.

15.2 The Parties shall strive to resolve any dispute arising from the interpretation or performance of this Agreement through negotiations in good faith. If the negotiations fail, either Party may submit such matter to the China International Economic and Trade Arbitration Commission ("CIETAC") for arbitration in accordance with its rules then in effect. The arbitration proceedings shall be conducted in Chinese and shall take place in Beijing, PRC. The arbitral award shall be final and binding upon the Parties.

16. Notice

Any notice which is given by the Parties hereto for the purpose of performing the rights and obligations hereunder shall be in writing. If such notice is delivered personally, the time of notice is the time when such notice actually reaches the addressee; where such notice is transmitted by telex or facsimile, the notice time is the time when such notice is transmitted. If such notice does not reach the addressee on a business day or reaches the addressee after business hours, the next business day following such day is the date of notice. The delivery place is the address first written above for each of the Parties hereto or the address advised by such party in writing, including facsimile and telex, from time to time.

Party A: Baidu Online Network Technology (Beijing) Co., Ltd.
Address: Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing
Fax: 
Telephone: 

Party B: Robin Yanhong Li
Address: 
Telephone: 

17. Entire Agreement

Notwithstanding provisions in Article 10 hereof, the Parties agree that this Agreement constitutes the entire agreements of the Parties hereto with respect to the subject matter herein upon its effectiveness and supersedes and replaces all prior oral and/or written agreements and understandings relating to the subject matters of this Agreement.
18. **Severability**

Should any provision of this Agreement be held invalid or unenforceable because of inconsistency with applicable laws, such provision shall be invalid or unenforceable only to the extent of such applicable laws without affecting the validity or enforceability of the remainder of this Agreement.

19. **Appendices**

The appendices to this Agreement shall constitute an integral part of this Agreement.

20. **Amendment or Supplement**

20.1 The Parties may amend or supplement this Agreement by written agreement. The amendments or supplements to this Agreement duly executed by both Parties shall form an integral part of this Agreement and shall have the same legal effect as this Agreement.

20.2 This Agreement and any amendments, modifications, supplements, additions or changes hereto shall be in writing and shall be effective upon being executed and sealed by the Parties hereto.

21. **Counterparts**

This Agreement is made in Chinese in two originals, with each Party holding one thereof. All originals shall have the same legal effect.
IN WITNESS WHEREOF, the Parties has executed or caused this Agreement to be executed by its legal or authorized representative on its behalf as of the date first written above.

Party A:

Baidu Online Network Technology (Beijing) Co., Ltd.
(seal)

Signature: /s/ Shanshan Cui
Legal Representative/Authorized Representative

Party B:

Robin Yanhong Li

Signature: /s/ Robin Yanhong Li
Appendices:

1. Register of Shareholders of Beijing Baidu Netcom Science Technology Co., Ltd.
2. Resolution of the Shareholders of Beijing Baidu Netcom Science Technology Co., Ltd.
Appendix I

Register of shareholders of Beijing Baidu Netcom Technology Co., Ltd.

Name of the Shareholder: Robin Yanhong Li
ID number: 
Residence: 
Contribution Amount: RMB13,354,173,600
Percentage of Share Capital: 99.5%
Number of capital contribution certificate: 001

Robin Yanhong Li holds 99.5% equity interests in Beijing Baidu Netcom Science Technology Co., Ltd., the entirety of which has been pledged to Baidu Online Network Technology (Beijing) Co., Ltd.

Name of the Shareholder: Hailong Xiang
ID number: 
Residence: 
Contribution Amount: RMB67,106,400
Percentage of Share Capital: 0.5%
Number of capital contribution certificate: 002

Hailong Xiang holds 0.5% equity interests in Beijing Baidu Netcom Science Technology Co., Ltd., the entirety of which has been pledged to Baidu Online Network Technology (Beijing) Co., Ltd.

Baidu Online Network Technology (Beijing) Co., Ltd. is the pledgee of 100% of the equity interests in Beijing Baidu Netcom Science Technology Co., Ltd.

Beijing Baidu Netcom Science Technology Co., Ltd.
(seal)

Signature: /s/ Zhixiang Liang
Title: Legal representative
Date: July 10, 2019
Resolution of the Shareholders of Beijing Baidu Netcom Science Technology Co., Ltd.

In respect of the Amended and Restated Equity Pledge Agreement dated July 10, 2019 by and between the shareholders of Beijing Baidu Netcom Science Technology Co., Ltd. (the "Company") and Baidu Online Network Technology (Beijing) Co., Ltd., a resolution is unanimously adopted at the shareholders’ meeting of the Company as follows:

It is approved that the shareholders of the Company pledge all of their equity interests in the Company to Baidu Online Network Technology (Beijing) Co., Ltd.

The resolution was signed and delivered dated July 10, 2019 by the undersigned shareholders.

Shareholders:

Robin Yanhong Li  
Signature: /s/ Robin Yanhong Li

Hailong Xiang  
Signature: /s/ Hailong Xiang
Termination Agreement of Current Control Documents

This Termination Agreement of Current Control Documents (this “Agreement”) is made as of August 20, 2019 in Beijing, the People’s Republic of China (the “PRC”, for purposes of this Agreement excluding Hong Kong, Macau and Taiwan) by and among:

**Party A:** Baidu Inc., a company duly formed and validly existing under the laws of the Cayman Islands, with its registered address at M&C Corporate Services Limited, P.O. Box 309 GT, Ugland House, Grand Cayman, KY1-1104, Cayman Islands.

**Party B:** Baidu Online Network Technology (Beijing) Co., Ltd., a limited liability company duly formed and validly existing under the PRC laws, with its registered address at 3/F, Baidu Plaza, No. 10 Shangdi 10th Street, Haidian District, Beijing;

**Party C:** Beijing Baidu Netcom Science Technology Co., Ltd., a limited liability company duly formed and validly existing under the PRC laws, with its registered address at 2/F, Baidu Plaza, No. 10 Shangdi 10th Street, Haidian District, Beijing;

**Party D:** Robin Yanhong Li, a PRC citizen, ID No. ;

And

**Party E:** Hailong Xiang, a PRC citizen, ID No. .

In this Agreement, each of the Parties above are collectively referred to as the “Parties” and individually as a “Party”.

**WHEREAS:**

(1) **Party B**, **Party C**, **Party D** and **Party E** have entered into a Business Operating Agreement dated June 13, 2016, as attached hereto as Appendix 1 (the “Business Operating Agreement”);

(2) **Party A** and **Party E** have entered into a Proxy Agreement dated March 31, 2018, as attached hereto as Appendix 2 (the “Proxy Agreement”);

(3) **Party A**, **Party B**, **Party C** and **Party E** have entered into an Amended and Restated Exclusive Equity Purchase and Transfer Option Agreement dated July 10, 2019, as attached hereto as Appendix 3 (the “Option Agreement”);

(4) **Party B** and **Party E** have entered into an Amended and Restated Equity Pledge Agreement dated July 10, 2019, as attached hereto as Appendix 4 (the “Pledge Agreement”);
Party B and Party E have entered into an Amended and Restated Loan Agreement dated July 10, 2019, as attached hereto as Appendix 6 (the "Loan Agreement");

Each of Party D and Party E has issued a Power of Attorney dated March 31, 2018, as attached hereto as Appendix 6 (the "Power of Attorney");

(The above agreements are collectively referred as the "Current Control Documents")

Pursuant to the Current Control Documents, Party E, as required by Party A, Party B and Party C, has transferred all of its equity interests in Party C to the permitted assigns of Party A, Party B and Party C, and agreed to pay the entire transfer price of the equity interest to Party A or any party designated by Party A; and

Each Party agrees to terminate all of the current Control Documents as agreed herein.

NOW, THEREFORE, the Parties agree as follows through negotiations:

1. Termination of Current Control Documents

1.1 Party B, Party C, Party D and Party E hereby irrevocably agree and acknowledge that the Business Operating Agreement shall terminate and cease to have any effect as of the date hereof.

1.2 Party A and Party E hereby irrevocably agree and acknowledge that the Proxy Agreement shall terminate and cease to have any effect as of the date hereof.

1.3 Party A, Party B, Party C and Party D hereby irrevocably agree and acknowledge that the Option Agreement shall terminate and cease to have any effect as of the date hereof.

1.4 Party B and Party E hereby irrevocably agree and acknowledge that the Pledge Agreement shall terminate and cease to have any effect as of the date hereof, and the Parties shall immediately apply to competent AIC to handle registration for release of the pledge.

1.5 Party B and Party E hereby irrevocably agree and acknowledge that the Loan Agreement shall terminate and cease to have any effect as of the date hereof.

1.6 Party D and Party E hereby irrevocably agree and acknowledge that the Power of Attorney shall terminate and cease to have any effect as of the date hereof.

1.7 As of the date hereof, none of the Parties will have any right under the Current Control Documents and be required to fulfill any of its obligations under the Current Control Documents.
Each of the Parties hereby irrevocably and unconditionally waives any dispute, claim, demand, right, obligation, liability, action, contract or cause of action of any kind or nature it had, has or may have against any other Party, arising directly or indirectly in connection with or as a result of the Current Control Documents.

Without prejudice to the generality of the foregoing, as of the date hereof, each of the Parties hereby waives any commitment, debt, claim, demand, obligation and liability of any sort or nature that such Party or any of its successors, heirs, assigns or estate executors had, has or may have against the other Parties hereto and their respective current and past directors, officers, employees, counsels and agents, affiliates of the forgoing persons and the respective successors and assigns of each of the foregoing, arising in connection with or as a result of the Current Control Documents, including claims and cause of action at law or equity, whether initiated or not, absolute or contingent, known or unknown.

2. Consideration

2.1 The Parties understand the precondition for the above Article 1 to become effective is that Party E has executed relevant equity transfer document as required by Party A, Party B and Party C to transfer all of its equity interests in Party C to a transferee acceptable to Party A, Party B and Party C, and agreed to pay the entire transfer price of such equity transfer to Party A or any party designated by Party A (by way of Party E’s designating the transferee in writing to pay the transfer price directly to the account of Party A or any party designated by Party A), and Party A or its designated party has received such transfer price in full amount.

3. Representations and Warranties

As of the date hereof, each of the Parties hereby represents and warrants to the other Parties, jointly and severally, that:

3.1 it has obtained necessary authorizations to execute this Agreement; its execution and performance of this Agreement will not constitute a conflict, limitation or breach of any law, regulation or agreement by which it is bound or affected;

3.2 this Agreement, once executed, constitutes a legal, valid and binding obligation of it, enforceable against it in accordance with the provisions hereof; and

3.3 there are no litigations, arbitrations or legal, administrative or other proceedings or government investigations relating to the subject matters hereof.
4. **Covenants**

4.1 To smoothly terminate the rights and obligations under the Current Control Documents, each party shall execute all documents and take all actions that are necessary or appropriate, actively assist the other Parties in obtaining relevant government approvals and/or registration documents and go through relevant termination procedures.

5. **Liabilities for Breach**

5.1 Any Party who is in breach of this Agreements and thus renders this Agreement not performable in whole or in part shall take the liabilities for breach and indemnify the other Parties for any loss thus incurred.

6. **Confidentiality**

6.1 The Parties acknowledge and confirm any oral or written materials exchanged by the Parties in connection with this Agreement are confidential. The Parties shall maintain the confidentiality of all such materials. Without the written approval by the other Parties, no Party shall disclose to any third party any relevant materials, but the following circumstances shall be excluded: (a) materials that are or will become known by the public (through no fault of the receiving party); (b) materials required to be disclosed by the applicable laws or rules; and (c) materials disclosed by each Party to its potential investors, legal or financial advisors relating the transactions contemplated by this Agreement, and such investors, legal or financial advisors shall comply with the confidentiality provisions similar to this article. The disclosure of information by the staff or consultants of any party shall be deemed as disclosure by the Party itself. This Article 6 shall survive any termination of this Agreement for any reason whatsoever.

7. **Governing Law and Dispute Resolution**

7.1 The conclusion, validity, interpretation, performance, amendment and resolution of disputes hereunder shall be governed by the laws of the PRC.

7.2 All controversies, claims, disputes arising from the interpretation or performance of this Agreement, or in case of breach, termination or invalidity, shall first be resolved by the Parties through amicable consultation. In case no resolution can be reached by the Parties within thirty (30) days after either party makes a written request for dispute resolution through negotiations, either party may refer such dispute to China International Economic and Trade Arbitration Commission (“CIETAC”) for arbitration in accordance with CIETAC’s arbitration rules then in effect. The seat of arbitration shall be Beijing. The arbitral award shall be final and binding upon the Parties. The arbitration cost shall be decided by the arbitral award.
7.3 During the arbitration, except the matters under dispute and pending arbitration, each Party shall continue to exercise its other rights and fulfill its other obligations hereunder.

8. Miscellaneous

8.1 This Agreement shall become effective upon signature of each Party as of the date first written above.

8.2 This Agreement is made in five counterparts, one for each Party, and all counterparts shall be equally binding.

8.3 The Parties may amend or supplement this Agreement with a written agreement. Any such amendment and/or supplement is an integral part of, and shall be equally binding as this Agreement.

8.4 The invalidity of any provision hereof shall not affect the validity of the other provisions hereof.

(No text below)
IN WITNESS WHEREOF, the Parties have executed or caused this Termination Agreement of Current Control Documents to be executed by its authorized representative on its behalf as of the date first written above.

Party A:

Baidu, Inc.

Signature: /s/ Robin Yanhong Li  
Name:  
Title:  

Party B:

Baidu Online Network Technology (Beijing) Co., Ltd.  
(seal)

Signature: /s/ Shanshan Cui  
Name:  
Title:  

Party C:

Beijing Baidu Netcom Science Technology Co., Ltd.  
(seal)

Signature: /s/ Zhixiang Liang  
Name:  
Title:  

Party D:

Robin Yanhong Li

Signature: /s/ Robin Yanhong Li  

Party E:

Hailong Xiang

Signature: /s/ Hailong Xiang
All shareholders of Beijing Baidu Netcom Science Technology Co., Ltd. (the “Company”) convened an extraordinary meeting at the conference room of the Company on August 20, 2019 with presence of two shareholders, representing the quorum required for such meeting and 100% votes of the shareholders of the Company. It is resolved at the meeting that:

1. It is agreed for the Company to, jointly with Baidu, Inc., Baidu Online Network Technology (Beijing) Co., Ltd., Robin Yanhong Li and Hailong Xiang, execute, deliver and perform the Termination Agreement of Current Control Documents in the form and substance of Schedule I attached hereto (the “Termination Agreement”), as well as any other agreement and document to be executed in connection with consummation of the transaction contemplated under the Termination Agreement.

2. It is agreed that the current control documents (as listed in Schedule II attached hereto) shall terminate and cease to have any effect as of the date of the Termination Agreement as provided thereunder.

3. It is approved for the Company to execute, deliver and perform the Business Operating Agreement made by and among the Company, Baidu Online Network Technology (Beijing) Co., Ltd., and shareholders of the Company, and the Exclusive Equity Purchase and Transfer Option Agreement made by and among the Company, Shanshan Cui as a new shareholder of the Company, Baidu, Inc., and Baidu Online Network Technology (Beijing) Co., Ltd.

4. It is agreed to authorize the legal representative of the Company to sign the above agreement and document on behalf of the Company, and take any and all actions necessary to consummate the transaction contemplated hereunder.

(No text below)
Signature of All Shareholders

Robin Yanhong Li
Signature: /s/ Robin Yanhong Li

Shanshan Cui
Signature: /s/ Shanshan Cui
The sole shareholder of Baidu Online Network Technology (Beijing) Co., Ltd. (the “Company”) hereby resolved as follows in writing in accordance with the articles of the Company on August 20, 2019:

1. It is agreed for the Company to, jointly with Baidu, Inc., Beijing Baidu Netcom Science Technology Co., Ltd., Robin Yanhong Li and Hailong Xiang, execute, deliver and perform the Termination Agreement of Current Control Documents in the form and substance of Schedule I attached hereto (the “Termination Agreement”), as well as any other agreement and document to be executed in connection with consummation of the transaction contemplated under the Termination Agreement.

2. It is agreed that the current control documents (as listed in Schedule II attached hereto) shall terminate and cease to have any effect as of the date of the Termination Agreement as provided thereunder.

3. It is approved for the Company to execute, deliver and perform the Business Operating Agreement made by and among the Company, Beijing Baidu Netcom Science Technology Co., Ltd., and/or shareholders of Beijing Baidu Netcom Science Technology Co., Ltd.

4. It is approved for the Company to execute, deliver and perform the Loan Agreement and the Equity Pledge Agreement, each made by and between the Company and Shanshan Cui as a new shareholder of Beijing Baidu Netcom Science Technology Co., Ltd.

5. It is approved for the Company to execute, deliver and perform the Exclusive Equity Purchase and Transfer Option Agreement made by and among the Company, Baidu, Inc., Baidu Online Network Technology (Beijing) Co., Ltd., and/or Shanshan Cui as a new shareholder of Baidu Online Network Technology (Beijing) Co., Ltd.

6. It is agreed to authorize the legal representative of the Company to sign the above agreement and document on behalf of the Company, and take any and all actions necessary to consummate the transaction contemplated hereunder.

(No text below)
Signature of Shareholder

Baidu Holdings Limited

Signature:  /s/ Robin Yanhong Li
Title:    Director
Shanshan Cui, as President of Baidu Online Network Technology (Beijing) Co., Ltd. (the “Company”), hereby resolved as follows in writing in accordance with the articles of the Company on August 20, 2019:

1. It is agreed for the Company to, jointly with Baidu, Inc., Beijing Baidu Netcom Science Technology Co., Ltd., Robin Yanhong Li and Hailong Xiang, execute, deliver and perform the Termination Agreement of Current Control Documents in the form and substance of Schedule I attached hereto (the “Termination Agreement”), as well as any other agreement and document to be executed in connection with consummation of the transaction contemplated under the Termination Agreement.

2. It is agreed that the current control documents (as listed in Schedule II attached hereto) shall terminate and cease to have any effect as of the date of the Termination Agreement as provided thereunder.

3. It is approved for the Company to execute, deliver and perform the Business Operating Agreement made by and among the Company, Beijing Baidu Netcom Science Technology Co., Ltd., and/or shareholders of Beijing Baidu Netcom Science Technology Co., Ltd.

4. It is approved for the Company to execute, deliver and perform the Loan Agreement and the Equity Pledge Agreement, each made by and between the Company and Shanshan Cui as a new shareholder of Beijing Baidu Netcom Science Technology Co., Ltd.

5. It is approved for the Company to execute, deliver and perform the Exclusive Equity Purchase and Transfer Option Agreement made by and among the Company, Baidu, Inc., Baidu Online Network Technology (Beijing) Co., Ltd., and/or Shanshan Cui as a new shareholder of Baidu Online Network Technology (Beijing) Co., Ltd.

6. It is agreed to authorize the legal representative of the Company to sign the above agreement and document on behalf of the Company, and take any and all actions necessary to consummate the transaction contemplated hereunder.

(No text below)
Shanshan Cui

Signature: /s/ Shanshan Cui
This Equity Transfer Agreement (this “Agreement”) is entered into as of August 20, 2019 in Beijing, the People’s Republic of China (the “PRC”), by and between Hailong Xiang, a PRC citizen with PRC ID No. (the “Transferor”), and Shanshan Cui, a PRC citizen with PRC ID No. (the “Transferee”).

Transferor and Transferee are hereinafter collectively referred to as the “Parties,” individually as a “Party.”

Definitions
Unless otherwise agreed hereunder, the following terms shall have the following meanings:

“Target” means Beijing Baidu Netcom Science Technology Co., Ltd., with registered address at 2/F Baidu Plaza, No. 10 Shangdi 10th Street, Haidian District, Beijing.

“Transfer Subject” means an aggregate of 0.5% equity interests of the Target held by the Transferor (corresponding to the registered capital of RMB67,106,400).

WHEREAS
1. The Target is a limited liability company duly incorporated and validly existing under the PRC laws, with registered capital of RMB13,421,280,000. As of the date hereof the shareholding structure of the Target is set forth as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Shareholder</th>
<th>Amount of Contribution (RMB10,000)</th>
<th>Shareholding Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Robin Yanhong Li</td>
<td>1,335,417.36</td>
<td>99.5%</td>
</tr>
<tr>
<td>2</td>
<td>Hailong Xiang</td>
<td>6,710.64</td>
<td>0.5%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1,342,128.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

2. The Transferor intends to transfer to the Transferee, and the Transferee is willing to accept the transfer of, the aggregate 0.5% equity interests of the Target the Transferor holds.
NOW THEREFORE, in accordance with the relevant PRC laws, rules and regulations, based on the principals of voluntariness, fairness and honesty and upon friendly consultation, with respect to the matters regarding the transfer of the 0.5% equity interest in the Target, the Parties agree as follows:

1. **Transfer Subject**
   1.1 The Transfer Subject of this Agreement is the aggregate 0.5% of the equity interests it holds in the Target, and the Transferor agrees to transfer the Transfer Subject to the Transferee.

2. **Target**
   2.1 The Target is legally existing and has independent legal person status.
   2.2 The Target owns legal approval or licensing documents involved in its conduct of business.

3. **Transfer Price and Payment**
   3.1 Transfer price: the Parties agree that the price of the Transfer Subject hereunder shall be RMB67,106,400.
   3.2 Means of payment: the Transferee will pay the price in cash to the bank account designated by the Transferor in writing.

4. **Change of Registration**
   4.1 The Transferor shall cause the Target to handle the equity change registration procedures of the Target with the registration authority. The date when the registration authority completes the equity change registration procedures and issues new business license of the Target shall be deemed as the date when the transaction is accomplished.

5. **Representations and Warranties of the Transferor**
   5.1 The Transferor has fully paid up its contribution to the registered capital of the Target, and its contribution has been verified and a capital verification report has been obtained therefor. There are no fake or escaped contributions.
   5.2 The Transferor owns legal, valid and full right of disposal on the Transfer Subject hereunder, and the Transfer Subject it holds is free of pledge or any other form of security or third party interest.
6. **Representations and Warranties of the Transferee**

6.1 The acceptance of the Transfer Subject hereunder by the Transferee is in compliance with the provisions of law and regulations and does not violate any industrial policy in the PRC.

6.2 All certificates and materials submitted to the Transferor for purposes of executing this Agreement are true and complete.

6.3 All approval procedures necessary for execution of this Agreement have been duly and validly obtained.

7. **Transaction Expenses**

The transaction expenses arising in connection with the transaction hereunder shall be borne in accordance with provisions of relevant law.

8. **Liabilities for Breach**

8.1 Any Party in violation of this Agreement shall take full compensation responsibilities for any loss incurred to the other Parties as a result of its breach.

8.2 The liabilities to be taken by any Party for its breach of this Agreement shall not be relieved due to termination of this Agreement.

9. **Amendment and Termination of Agreement**

9.1 The Parties may amend or terminate this Agreement through negotiations. Matters not covered herein may be subject to a written supplementary agreement between the Parties.

9.2 In any of the following cases, this Agreement may be terminated:

9.2.1 by either Party, if the purposes of this Agreement cannot be realized for an event of force majeure or any reason not contributable to either Party;

9.2.2 by a Party, if the other Party is incapacitated for performance of this Agreement;
9.2.3 by a Party, if the purposes of this Agreement cannot be realized due to the other Party is in serious breach;
9.2.4 by a Party, if the other Party breaches any of its representations and warranties of Articles 5 and 6 hereof.

10. Governing Law and Dispute Resolution

10.1 This Agreement shall be governed by the laws of the People’s Republic of China.

10.2 Any disputes arising from the interpretation and performance of the terms hereunder shall first be resolved by the Parties through consultation in good faith. In case of a failure to reach an agreement to resolve a dispute between the Parties, either Party may submit the dispute to China International Economic and Trade Arbitration Commission for arbitration in accordance with its then effective arbitration rules. The arbitration shall be held in Beijing. The arbitral award shall be final and binding upon both Parties.

11. Effectiveness

This Agreement shall become effective upon executed by the Parties on the date first written above.

12. Miscellaneous

12.1 The Parties may amend and supplement this Agreement in writing, which shall be attached to this Agreement as appendices. The appendices shall have equal legal effect as this Agreement.

12.2 This Agreement is made in four counterparts, one for each Party and the others shall be filed to relevant registration authority for record.
Transferor:

Hailong Xiang

Signature: /s/ Hailong Xiang

Transferee:

Shanshan Cui

Signature: /s/ Shanshan Cui
EXHIBIT 4.87

Proxy Agreement

This Proxy Agreement (this "Agreement") is made as of August 20, 2019 in Beijing, the People’s Republic of China ("PRC," for purposes of this Agreement, excluding Hong Kong, Macau and Taiwan) by and between:

Party A: Baidu, Inc., with registered address at M&C Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands;

And

Party B: Shanshan Cui, with ID No.

WHEREAS:

1. Party B is a citizen of the PRC and shareholder of Beijing Baidu Netcom Science Technology Co., Ltd. ("Baidu Netcom"). As of the date hereof, Party B holds 0.05% equity interests in Baidu Netcom ("Party B's Equity").

2. Pursuant to the terms and subject to the conditions of this Agreement, Party B agrees to authorize a PRC company or individual designated by Party A to exercise its rights as a shareholder of Baidu Netcom on its behalf, and Party A agrees to accept such authorization.

NOW, THEREFORE, the Parties hereby agree as follows:

1. Party B hereby agrees to irrevocably authorize any entity or individual designated by Party A to exercise on its behalf all of the voting and other rights as a shareholder empowered by the law and Baidu Netcom’s articles of association at the shareholders’ meeting of Baidu Netcom, including without limitation any right regarding sale, transfer, pledge or disposal of all or part of Party B’s equity interests in Baidu Netcom; convening, attending and presiding over shareholders’ meeting of Baidu Netcom as an authorized representative of Baidu Netcom’s shareholders, and designating and electing directors and chairperson of Baidu Netcom as an authorized representative of the shareholders of Baidu Netcom at the shareholders’ meeting.

2. Party A agrees to designate any entity or individual permitted under applicable laws to accept the authorization of Party B under Article 1 hereof, and such entity or individual shall exercise Party B’s voting and other rights as a shareholder on behalf of Party B under this Agreement.

3. Party B hereby acknowledges that, regardless of any change of its equity interests in Baidu Netcom, any entity or individual designated by Party A shall be authorized to exercise all of its voting and other rights as a shareholder on behalf of Party B.

4. Party B hereby acknowledges that if Party A withdraws its designation of the authorized entity or individual, it shall immediately withdraw its authorization to such entity or individual, and authorize any other entity or individual designated by Party A to exercise all of its voting and other rights as a shareholder at the shareholders’ meeting of Baidu Netcom.
5. This Agreement shall be effective upon execution by the Parties or their respective legal or authorized representatives as of the date first written above. This Agreement shall remain permanently valid unless otherwise expressly provided hereunder or terminated by Party A in writing. If any Party’s operating term expires during the term of this Agreement, such Party shall timely renew its operating term to enable this Agreement to be continually valid and implementable. If any Party’s application to renew its operating term fails to obtain approval or consent from competent authority, this Agreement shall terminate upon the end of such Party’s operating term, unless such Party has transferred its rights and obligations pursuant to Article 10 hereof.

6. This Agreement shall remain valid as long as Party B is a holder of any equity interest in Baidu Netcom. During the term of this Agreement, unless otherwise required by law, Party B may not cancel, early terminate or end this Agreement. Notwithstanding the foregoing, Party A shall have the right to terminate this Agreement at any time with a written notice to Party B no less than thirty (30) days in advance.

7. No amendment to this Agreement shall be made unless by agreement of the Parties in writing. Any duly executed amendment or supplement hereto by the Parties is an integral part of, and shall have the same binding effect with, this Agreement.

8. Should any provision hereof be held invalid or unenforceable due to its inconsistency with any applicable law, such provision shall be deemed invalid only to the extent governed by such law without affecting the validity of the remainder hereof.

9. All notices or other correspondences required to be sent by any Party hereunder shall be made in Chinese and delivered to the following addresses of the other Party or any other address designated and notified to such Party from time to time by hand, mail or fax. The notices shall be deemed to have been duly served (a) on the day of delivery if it is sent by hand, (b) on the tenth (10th) day after it is sent by post-prepaid registered airmail (with marking of the mailing day on the postmark), or on the fourth (4th) day after the notice is handed to an internationally recognized express delivery service; (c) at the time of receipt shown on the transmission acknowledgement if it is sent by fax; and (d) on the day of successful delivery if it is delivered by electronic mail evidenced by the confirmation generated from the mail delivery system or without receipt of delivery failure or return message from the mail delivery system within 24 hours.

Party A: Baidu, Inc.
Address: M&C Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands
Attention: Robin Yanhong Li
Fax:
Tel:

Party B: Shanshan Cui
Address:
Fax:
Tel:
10. Unless with Party A's prior written consent, Party B shall not transfer its rights and obligations hereunder to any third party. Party B hereby agrees that Party A may assign its rights and obligations under this Agreement at its own discretion provided that Party A is required to give a written notice to such effect to Party B, and no further consent of Party B is required thereof.

11. Both Parties acknowledge and confirm that any oral or written information exchanged between the Parties in connection with this Agreement are confidential, and both Parties shall keep all such information confidential and not disclose any such information to any third person, except for the information which: (a) is known or will be known by the public (not resulting from unauthorized disclosure by the Party receiving such information); (b) is required to be disclosed by applicable laws or rules or regulations of a stock exchange; or (c) needs to be disclosed to a Party’s legal or financial advisor in connection with the transaction contemplated hereby, provided that such advisor shall be subject to confidential obligations similar to those provided in this Article. Disclosure by any employee of or entity engaged by any Party shall be deemed disclosure by such Party, and such disclosing Party shall be held liable for breach of this Agreement. This Article shall survive any invalidity, amendment, termination, dissolution or unenforceability of this Agreement for any reason whatsoever.

12. (1) The formation, validity, interpretation, performance, amendment and termination of and resolution of any dispute under this Agreement shall be governed by the laws of the PRC.

(2) Any dispute arising in connection with the interpretation and performance of the provisions of this Agreement shall first be resolved by the Parties in good faith through negotiations. If negotiations fail, any Party may submit such dispute to China International Economic and Trade Arbitration Commission for arbitration in accordance with its arbitration rules then in effect. The arbitration shall be held in Beijing and the arbitration language shall be Chinese. The arbitral award shall be final and binding upon both Parties.

13. This Agreement, once becoming effective, constitutes the entire agreements and understandings between the Parties with respect to the subject matter hereof, and supersedes in their entirety all prior oral and written agreements and understandings between the Parties with respect to the subject matter hereof.

14. This Agreement shall be executed in two originals, and each Party shall hold one thereof. Both originals shall have the same legal effect.
IN WITNESS WHEREOF, the Parties have executed or caused this Agreement to be executed by its legal or authorized representative on its behalf as of the date first written above.

Party A:

Baidu, Inc.

Signature: /s/ Robin Yanhong Li
Title: Director

Party B:

Shanshan Cui

Signature: /s/ Shanshan Cui
I, Shanshan Cui, a citizen of the People’s Republic of China (the “PRC”) with ID No. and a shareholder holding 0.05% equity interests of Beijing Baidu Netcom Science Technology Co., Ltd. (“Baidu Netcom”), hereby irrevocably authorizes Shanshan Cui with the following powers and rights in respect of my existing and future equity holding in Baidu Netcom (“My Equity”) during the term of this Power of Attorney:

Shanshan Cui is hereby authorized as my sole and exclusive agent to exercise on my behalf all of my rights as a shareholder to vote at shareholders’ meetings of Baidu Netcom in accordance with PRC laws and the articles of Baidu Netcom, including without limitation the right to sell or transfer any or all of My Equity, and to designate and appoint the general manager of Baidu Netcom as my authorized representative at the shareholders’ meeting of Baidu Netcom.

Such authorization is premised on the condition that Shanshan Cui is an employee of Baidu, Inc. and its affiliates, and Baidu, Inc. agrees to such authorization. Once Shanshan Cui’s employment with Baidu, Inc. and its affiliates terminates, or I am notified by Baidu, Inc. to terminate such authorization, I will withdraw the authorization made hereunder immediately and designate/authorize any other person nominated by Baidu, Inc. to exercise all of my rights as a shareholder to vote at shareholders’ meetings of Baidu Netcom.

Unless otherwise expressly provided herein, this Power of Attorney is irrevocable and continues to have effect as of the date hereof as long as I holds equity interests in Baidu Netcom.

Signature:  /s/ Shanshan Cui
Date: August 20, 2019
POWER OF ATTORNEY

I, Robin Yanhong Li, a citizen of the People’s Republic of China (the “PRC”) with ID No. and a shareholder holding 99.5% equity interests of Beijing Baidu Netcom Science Technology Co., Ltd. (“Baidu Netcom”), hereby irrevocably authorizes Shanshan Cui with the following powers and rights in respect of my existing and future equity holding in Baidu Netcom (“My Equity”) during the term of this Power of Attorney:

Shanshan Cui is hereby authorized as my sole and exclusive agent to exercise on my behalf all of my rights as a shareholder to vote at shareholders’ meetings of Baidu Netcom in accordance with PRC laws and the articles of Baidu Netcom, including without limitation the right to sell or transfer any or all of My Equity, and to designate and appoint the general manager of Baidu Netcom as my authorized representative at the shareholders’ meeting of Baidu Netcom.

Such authorization is premised on the condition that Shanshan Cui is an employee of Baidu, Inc. and its affiliates, and Baidu, Inc. agrees to such authorization. Once Shanshan Cui’s employment with Baidu, Inc. and its affiliates terminates, or I am notified by Baidu, Inc. to terminate such authorization, I will withdraw the authorization made hereunder immediately and designate/authorize any other person nominated by Baidu, Inc. to exercise all of my rights as a shareholder to vote at shareholders’ meetings of Baidu Netcom.

Unless otherwise expressly provided herein, this Power of Attorney is irrevocable and continues to have effect as of the date hereof as long as I holds equity interests in Baidu Netcom.

Signature: /s/ Robin Yanhong Li

Date: August 20, 2019
Business Operating Agreement

This Business Operating Agreement (this “Agreement”) is entered into as of August 20, 2019 in Beijing, the People’s Republic of China (“PRC,” for purposes of this Agreement, excluding Hong Kong Macau and Taiwan) by and among:

Party A: Baidu Online Network Technology (Beijing) Co., Ltd.
Registered Address: 3/F, Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing

Party B: Beijing Baidu Netcom Science Technology Co., Ltd.
Registered Address: 2/F, Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing

Party C:
Robin Yanhong Li, a PRC citizen, ID No. ; and
Shanshan Cui, a PRC citizen, ID No.

WHEREAS:
1. Party A is a wholly foreign-owned enterprise duly incorporated and validly existing under the laws of the PRC, which has the technology expertise and practical experience in the development and design of computer software, and also has rich experience and human resources specializing in information technology and services;
2. Party B is a limited liability company duly incorporated and validly existing under PRC law;
3. Party C is shareholders of Party B owning 100% equity interests in Party B;
4. Party A and Party B have established business relationship by entering into an Exclusive Technology Consulting and Services Agreement (the “Services Agreement”); and
5. Pursuant to the above-mentioned agreement between Party A and Party B, Party B shall make certain payments to Party A, and the daily operations of Party B will have a material effect on Party B’s ability to make such payment to Party A.

NOW THEREFORE, through negotiations, all parties to this Agreement hereby agree as follows:

1. Party A agrees, subject to satisfaction of applicable provisions herein by Party B, to be the guarantor of Party B in the contracts, agreements or transactions entered into between Party B and any third party in connection with Party B’s business and operations, to provide full guarantees for performance of such contracts, agreements or transactions by Party B. As counter-guarantee, Party B agrees to pledge the accounts receivable in its operations and all of its assets to Party A. Under the aforesaid guarantee arrangement, Party A, when necessary, is willing to enter into written guarantee contracts with Party B’s counterparties to assume the guarantor’s liabilities. Party B and Party C shall take all necessary actions (including, but not limited to, executing relevant documents and filing relevant registrations) to carry out the counter-guarantee arrangement with Party A.
2. In consideration of the requirements of Article 1 hereof and to ensure performance of the various business agreements between Party A and Party B and payment by Party B of the amounts payable to Party A thereunder, Party B and Party C hereby agree that, without Party A’s prior written consent, Party B shall not engage in any transaction that may materially affect its assets, liabilities, rights or operations (other than execution of any business contract or agreement, sale or purchase of any asset by Party B in its ordinary course of business and receipt of legal rights by applicable counterparties as a result thereof), including, but not limited to, the following:

2.1 To borrow money from any third party or assume any debt;
2.2 To sell to or acquire from any third party any asset or right, including, but not limited to, any intellectual property rights;
2.3 To provide guarantee for any third party using its assets or intellectual property rights as collaterals; or
2.4 To assign to any third party its business contracts.

3. In order to ensure the performance of the various business agreements between Party A and Party B and the payment by Party B of the amounts payable to Party A thereunder, Party B and Party C hereby agree to accept advice and guidance provided by Party A from time to time relating to its policies on matters such as employment and dismissal of employees, daily operations and management, and financial management.

4. In the event that any agreement between Party A and Party B terminates or expires, Party A shall have the right, but not the obligation, to terminate all agreements between Party A and Party B, including, but not limited to, the Services Agreement.

5. Any amendment or supplement to this Agreement shall be made in writing. The amendment or supplement duly executed by all parties shall form an integral part of this Agreement and shall have the same legal effect as this Agreement.

6. Should any provision of this Agreement be held invalid or unenforceable because of inconsistency with applicable laws, such provision shall be invalid or unenforceable only to the extent of jurisdiction of such applicable laws without affecting the validity or enforceability of the remainder of this Agreement.

7. Neither Party B or Party C may assign its rights and obligations under this Agreement to any third party without the prior written consent of Party A. Party B and Party C hereby agree that Party A may assign its rights and obligations under this Agreement as Party A considers it necessary to do so, in which case Party A only needs to give a written notice to Party B and no further consent of Party B is required.
8. Each party acknowledges and confirms that any oral or written information exchanged pursuant to this Agreement are confidential. Each party shall keep confidential all such information and not disclose any such information to any third party without the prior written consent from the other party except for any information which: (a) is or will become known to the public (without any fault of the receiving party); (b) is required to be disclosed by the applicable laws or rules of stock exchange; or (c) is disclosed by each party to its legal or financial advisor relating to the transactions contemplated by this Agreement, provided that such legal or financial advisor shall comply with the confidentiality provisions set forth in this Article 8. Disclosure of any confidential information by the employee of or any entity engaged by any Party shall be deemed as disclosure by such Party, and such disclosing Party shall be liable for breach under this Agreement. This Article 8 shall survive the invalidity, cancellation, termination or unenforceability of this Agreement for any reason.

9. This Agreement shall be governed by and interpreted in accordance with the laws of the PRC.

10. Any dispute arising in connection with the interpretation and performance of the provisions of this Agreement shall be resolved by the Parties in good faith through negotiations. If no resolution is reached by the Parties through negotiations, any Party may submit such dispute to the China International Economic and Trade Arbitration Commission (the “CIETAC”) for arbitration in accordance with CIETAC’s arbitration rules then in effect. The seat of arbitration shall be in Beijing, and the language of the proceedings shall be Chinese. The arbitral award shall be final and binding upon all of the Parties.

11. This Agreement shall be executed by a duly authorized representative of each Party and become effective as of the date first written above.

12. Once effective, this Agreement shall constitute the entire agreement of the Parties with respect to the subject matters hereof and supersede all prior oral and written agreements and understandings by the Parties with respect to the subject matters hereof.

13. This Agreement shall remain permanently valid unless early terminated as expressly agreed in this Agreement or decided by Party A in writing. If the duration of operation (including any extension thereof) of Party A or Party B is expired or terminated for any other reason within the aforesaid term of this Agreement, such Party shall timely renew its duration of operation to enable this Agreement to continue to be valid and implementable. If a Party’s application to renew its duration of operation fails to obtain the approval or consent of any competent authority, this Agreement shall be terminated simultaneously with the expiration or termination of the duration of operation of such Party, unless such Party has transferred its rights and obligations pursuant to Article 7 of this Agreement.

14. During the term of this Agreement, unless otherwise required under applicable laws, neither Party B or Party C may early terminate or end this Agreement. Notwithstanding the foregoing, Party A shall have the right to terminate this Agreement at any time by issuing a thirty (30) days’ prior written notice to Party B and Party C. During the term of this Agreement, if Party B or Party C is found in breach of this Agreement and fails to correct such breach within fourteen (14) days upon receipt of written notice regarding such breach from Party A, Party A may terminate this Agreement with notice to Party B and Party C in writing.
15. All notices or other correspondences required to be sent by any Party hereunder shall be written in Chinese and delivered to the following addresses of the other Parties or other addresses designated and notified to such Party from time to time via personal delivery, registered mail, post prepaid mail, recognized express delivery service or fax. The notices shall be deemed to have been duly served (a) upon sent if sent by personal delivery, (b) on the tenth (10th) day after the post-prepaid registered airmail is sent (shown on the postmark) if sent by mail, or on the fourth day after the notice is handed to an internationally recognized express delivery service; and (c) at the time of receipt shown on the transmission acknowledgement if sent via fax.

Party A:  Baidu Online Network Technology (Beijing) Co., Ltd.
Address:  3/F, Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing
Attention:  Shanshan Cui
Fax:
Tel:

Party B:  Beijing Baidu Netcom Science Technology Co., Ltd.
Address:  2/F, Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing
Attention:  Zhixiang Liang
Fax:
Tel:

Party C:  
Address:  Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing
Attention:  Robin Yanhong Li/Shanshan Cui
Fax:
Tel:

16. This Agreement is made in four originals, with each party holding one original. All originals shall have the same legal effect.

(No text below)
IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by himself or its duly authorized representative as of the date first written above.

Party A: Baidu Online Network Technology (Beijing) Co., Ltd. (seal)

Signature:  /s/ Shanshan Cui
Title: Legal Representative

Party B: Beijing Baidu Netcom Science Technology Co., Ltd. (seal)

Signature:  /s/ Zhixiang Liang
Title: Legal Representative

Party C:

Signature:  /s/ Robin Yanhong Li
Signature:  /s/ Shanshan Cui
Loan Agreement

This Loan Agreement (this “Agreement”) is entered into on August 20, 2019 in Beijing, by and between:

Party A: Baidu Online Network Technology (Beijing) Co., Ltd.
Registered Address: 3/F, No. 10 Shangdi 10th Street, Haidian District, Beijing

Party B: Shanshan Cui
ID Card No.

WHEREAS:

1. Party A is a wholly foreign-owned enterprise incorporated under the laws of the People’s Republic of China (“PRC”); and
2. Party B is a Chinese citizen holding 0.5% equity interests of Beijing Baidu Netcom Science Technology Co., Ltd. (“Baidu Netcom”);

NOW, THEREFORE, Party A and Party B, through friendly negotiations, agree as follows and intend to be bound hereby:

1. In accordance with the terms and conditions of this Agreement, Party A agrees to provide to Party B, and Party B agrees to accept, a loan in an aggregate amount of RMB67,106,400.
2. Party B confirms the receipt of such loan and has applied the entirety of such loan toward payment of its subscribed contribution in Baidu Netcom.
3. The term of the loan under this Agreement shall commence on the date Party B receives such loan to the date 10 years from the execution of this Agreement, which may be extended upon mutual written consent of the Parties. During the term of the loan or the extended term of the loan, Party A has the right to cause the loan to become due immediately by written notice, and require Party B to repay the loan in accordance to this Agreement if:
   (1) Party B resigns from or is dismissed by Party A or any of its affiliates;
   (2) Party B is dead, without civil legal capacity or with limited civil legal capacity;
   (3) Party B engages in criminal act or is involved in criminal activities;
   (4) Any third party files a claim against Party B that exceeds RMB100,000; or
(5) Subject to compliance with the laws of the PRC, Baidu, Inc. or a person designated by Baidu, Inc. is permitted to invest in Baidu Netcom to conduct internet information service business, value-added telecommunication business and other business, and Baidu, Inc. has issued a written notice relating to the equity purchase of Baidu Netcom to Party B pursuant to the provisions of the Exclusive Equity Purchase and Transfer Option Agreement mentioned in article 4 hereof, to exercise the option.

4. It is agreed and acknowledged that, subject to and to the extent permitted by the laws of the PRC, Baidu, Inc., as the holding company of Party A, shall have the right but no obligation to purchase or nominate any other person (including any natural person, legal entity or other entity) to purchase all or any part of the equity interests in Baidu Netcom held by Party B (the “Option”), provided that Baidu, Inc. shall issue a written notice to Party B to exercise the Option. Upon Baidu, Inc.’s issuance of such written notice, Party B shall, as requested and instructed by Party A, immediately transfer all of its equity interests in Baidu Netcom to Baidu, Inc. or any of its nominees at the original investment price (the “Original Investment Price”) or any other price acceptable to Baidu, Inc. required under applicable laws. It is agreed and acknowledged that upon exercising the Option by Baidu, Inc., if the lowest price of the equity interests permitted under applicable laws is higher than the Original Investment Price, the price payable by Baidu, Inc. or any of its nominees shall be the lowest price permitted under applicable laws. The Parties agree to enter into an Exclusive Equity Purchase and Transfer Option Agreement with respect to the foregoing in this Article 4.

5. It is agreed and acknowledged that Party B shall repay the loan only as follows: upon its maturity and at the request of Party A in writing, the loan provided hereunder shall be repaid by Party B (or any of its heirs, successors or assigns) with the proceeds from transfer of its equity interests in Baidu Netcom to Baidu, Inc. or any of its nominees to the extent permitted under the PRC laws, or otherwise agreed by the Parties.

6. It is agreed and acknowledged that in connection with transfer of the equity interests by Party B to Baidu, Inc. or any of its nominees upon maturity of the loan, if the proceeds from such transfer are legally required to or otherwise exceed the principal of the loan, Party B agrees to pay such excess amount, net of any individual income tax and other taxes and fees payable by Party B, to Baidu, Inc. or any of its nominees at sole decision of Baidu, Inc. to the extent permissible by the law.

7. It is agreed and acknowledged that Party B shall not be deemed to have fulfilled its obligations under this Agreement until:
   (1) Party B has transferred all his equity interests in Baidu Netcom to Baidu, Inc. and/or any of its nominees; and
   (2) Party B has paid the proceeds from such transfer to Party A under Articles 5 and 6 of this Agreement.
8. To secure performance of its obligations under this Agreement, Party B agrees to pledge all of its equity interests in Baidu Netcom to Party A (the “Equity Pledge”). It is acknowledged that an Equity Pledge Agreement in respect of the foregoing in this Article 8 has been made as of August 20, 2019.

9. Party A hereby represents and warrants to Party B that, as of the execution date of this Agreement:
   (1) Party A is a wholly foreign-owned enterprise incorporated and validly existing under the laws of the PRC;
   (2) Party A has the right to execute and perform this Agreement. The execution and performance by Party A of this agreement comply with its business scope, Articles or other institutional documents, and Party A has obtained all necessary and appropriate approvals and authorizations in connection with the execution and performance of this Agreement;
   (3) The principal of the loan to Party B is legally owned by Party A;
   (4) The execution and performance of this Agreement by Party A does not violate any law, regulation, approval, authorization, notice or other governmental document by which it is bound or affected, or any agreement between Party A and any third party, or any promise made by Party A to a third party; and
   (5) This Agreement, once executed, shall constitute a legal, valid and enforceable obligations of Party A.

10. Party B hereby represents and warrants to Party A that, from the execution date of this agreement until this Agreement terminates:
    (1) Baidu Netcom is a limited liability company incorporated and validly existing under the laws of the PRC and Party B is the legal holder of the equity interest of Baidu Netcom;
    (2) Party B has the right to execute and perform this Agreement. The execution and performance by Party B of this Agreement comply with its business scope, Articles or other institutional documents, and Party B has taken necessary actions to obtain all necessary and appropriate approvals and authorizations;
    (3) The execution and performance of this Agreement by Party B does not violate any law, regulation, approval, authorization, notice or other governmental document by which it is bound or affected, or any agreement between Party B and any third party, or any promise made by Party B to a third party;
    (4) This Agreement, once executed, shall constitute a legal, valid and enforceable obligation of Party B;
(5) Party B has paid contribution in full for the equity interests he holds in Baidu Netcom in accordance with applicable laws and regulations;

(6) Unless otherwise provided under the Equity Pledge Agreement and the Exclusive Equity Purchase and Transfer Option Agreement, Party B does not create any mortgage, pledge or other security over his equity interest in Baidu Netcom, make any offer to a third party to transfer his equity, make acceptance for the offer to a third party to purchase his equity, or execute any agreement with a third party to transfer his equity;

(7) There are no pending or potential disputes, litigation, arbitration, administrative proceedings or other legal proceedings in connection with the equity interests of Baidu Netcom held by Party B; and

(8) Baidu Netcom has completed all necessary governmental approvals, licenses, registrations and filings.

11. Party B undertakes, during the term of this Agreement:

(1) not to sell, transfer, pledge or otherwise dispose of his equity interests or other interests in Baidu Netcom, nor to allow the creation of any other security interest over his equity interests without the prior written consent of Party A, except pledges or other rights created for the benefit of Party A;

(2) not to vote for, support or execute any shareholder resolutions at Baidu Netcom’s shareholder’s meetings that permit the sale, transfer, pledge or other disposal of, or the creation of any other security interest on, any of his legal or beneficiary equity interests without the prior written consent of Party A, except those made to Party A or its designated person;

(3) not to vote for, support or execute any shareholder resolutions at Baidu Netcom’s shareholder meetings that permit Baidu Netcom to merge or combine with, or acquire or invest in, any person without Party A’s prior written consent;

(4) to promptly inform Party A of any pending or threatened litigation, arbitration or administrative proceeding relating to the equity interests of Baidu Netcom;

(5) to execute all necessary or appropriate documents, take all necessary or appropriate actions and bring all necessary or appropriate lawsuits or make all necessary and appropriate defenses against all claims in order to maintain his ownership of equity interests in Baidu Netcom;

(6) to refrain from any act and/or omission that may materially affect the assets, business and liabilities of Baidu Netcom without the prior written consent of Party A;
(7) to appoint any person nominated by Party A as director/executive director of Baidu Netcom, upon Party A's request;

(8) in connection with Party A's exercise of the subscription right provided hereunder, to transfer promptly and unconditionally all equity interests in Baidu Netcom held by Party B to Party A and/or its designated person, to the extent and within the scope permissible under the laws of the PRC;

(9) not to request Baidu Netcom to distribute dividends or profits to it;

(10) once Party B transfers the equity interests in Baidu Netcom to Party A or any of its nominees, to pay all proceeds from such transfer to Party A under Articles 5 and 6 of this Agreement;

(11) to strictly comply with the terms of this Agreement, perform the obligations under this Agreement, and refrain from any act or omission that suffices to affect the validity and enforceability of this Agreement.

12. Party B, as the shareholder of Baidu Netcom, undertakes to cause Baidu Netcom, during the term of this Agreement:

(1) not to supplement, amend or modify its articles of association, or increase or decrease its registered capital, or to change its capital structure in any form without the prior written consent of Party A;

(2) to maintain its existence and handle matters prudently and affectively consistent with good financial and business standards and practices;

(3) not to sell, transfer, mortgage or otherwise dispose of, nor to permit the creation of any other security interest on, any of its legal or beneficial interests in its assets, business or income without the prior written consent of Party A, at any time as of the date of this Agreement;

(4) not to incur, succeed, guarantee or permit the existence of any liabilities without the prior written consent of Party A, except the liabilities (i) arising from the ordinary or day-to-day course of business, rather than through Party B; and (ii) disclosed to Party A or approved by Party A in writing;

(5) to operate all businesses on a continued basis and maintain the value of its assets;

(6) not to execute any material contracts (for the purpose of this item, a contract will be deemed material if its value exceeds RMB500,000) without the prior written consent of Party A, other than those executed during the ordinary course of business;
(7) to provide all information about its operations and financial affairs at Party A's request;
(8) not to merge or combine with, acquire or invest in, any other person without the prior written consent of Party A;
(9) not to distribute dividends to the shareholders in any way without the prior written consent of Party A, and upon Party A's request, to promptly distribute all distributable profits to the shareholders;
(10) to promptly inform Party A of any pending or threatened litigation, arbitration or administrative proceeding relating to its assets, business or revenue;
(11) to execute all necessary or appropriate documents, take all necessary or appropriate actions and bring all necessary or appropriate lawsuits or make all necessary and appropriate defenses against all claims in order to maintain its ownership of its assets; and
(12) to strictly comply with the terms of the Exclusive Technology Services Agreement dated March 1, 2004, the Supplement to the Exclusive Technology Services Agreement dated August 9, 2004, and the Exclusive Technology Consulting and Services Agreement, each by Baidu Netcom and Party A (collectively, the “Services Agreements”) and other agreements, duly perform its obligations thereunder, and refrain from any act or omission that could affect the validity and enforceability thereof.

13. This Agreement shall be binding on, and only for the benefits of, all parties hereto and their respective successors and assigns. Without prior written consent of Party A, Party B shall not transfer, pledge or otherwise assign any of its rights, interests or obligations hereunder.
14. Party B agrees that Party A may assign its rights and obligations hereunder to a third party by a written notice to Party B when it considers necessary. No further consent from Party B is required for such transfer.
15. The execution, validity, interpretation, performance, amendment, termination and dispute resolution of this Agreement are governed by the laws of the PRC.
16. Arbitration

(1) Both Parties shall strive to settle any dispute, conflicts, or claims arising from the interpretation or performance (including any issue relating to the existence, validity and termination) of this Agreement through friendly consultation. In case no settlement can be reached within thirty (30) days after one party requests for settlement, any party can submit such matter to China International Economic and Trade Arbitration Commission (the “CIETAC”) in accordance with its then-current rules at the time of application. The arbitration award shall be final and conclusive and binding upon the Parties.
The arbitration shall take place in Beijing.

The arbitration language shall be Chinese.

17. This Agreement shall be concluded as of the date of execution, and the Parties agree and confirm that the terms and conditions of this Agreement will become effective from the date when Party B receives the loan and end on the date when each Party has completed its obligations hereunder.

18. Party B shall not terminate or revoke this Agreement under any circumstances unless (i) Party A commits a gross negligence, fraud, or other material misconduct; or (ii) upon Party A's bankruptcy.

19. This Agreement shall not be amended or modified without the written consent of the Parties hereto. Any matters not agreed upon in this Agreement may be supplemented by all Parties through the execution of a written agreement. The above amendments, modifications, supplements and any attachment of this Agreement shall be integral parts of this Agreement.

20. This Agreement constitutes the entire agreement of the Parties with respect to the transaction herein and supersedes and replaces all prior verbal discussions and written agreements between the Parties.

21. This Agreement is severable. The invalidity or unenforceability of any one clause shall not affect the validity or enforceability of other clauses herein.

22. Each Party shall strictly protect the confidentiality of information concerning the other Party’s business, operation, financial situation or other confidential information obtained under this Agreement or during the performance of this Agreement.

23. Any obligation that is incurred or becomes due before the expiration or early termination of this Agreement shall survive such expiration or early termination. Articles 15, 16, and 22 shall survive termination of this Agreement.

24. This Agreement shall be executed in two counterparts, and each Party shall hold one counterpart. Both counterparts shall have the same legal effect.

(No Text Below)

7
IN WITNESS WHEREOF, the Parties have executed or caused this Agreement to be duly executed by its legal or authorized representative on its behalf as of the date first written above.

Party A:

Baidu Online Network Technology (Beijing) Co., Ltd.
(seal)

Signature: /s/ Shanshan Cui
Legal representative/authorized representative

Party B:

Shanshan Cui

Signature: /s/ Shanshan Cui
Exclusive Equity Purchase and Transfer Option Agreement

This Exclusive Equity Purchase and Transfer Option Agreement (this “Agreement”) is entered into by and among the following parties in Beijing, PRC on August 20, 2019:

**Party A:** Baidu, Inc.
Address: M&C Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands

**Party B:** Baidu Online Network Technology (Beijing) Co., Ltd.
Address: 3/F, Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing

**Party C:** Shanshan Cui
ID No.: 

**Party D:** Beijing Baidu Netcom Science Technology Co., Ltd.
Address: 2/F, Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing

In this Agreement, Party A, Party B, Party C and Party D are called collectively as the “Parties” and each of them is a “Party.”

WHEREAS:

1. Party A is a Cayman Islands company incorporated under the laws of Cayman Islands and an affiliate of Party B;
2. Party B is a wholly foreign-owned enterprise incorporated under the laws of the People’s Republic of China (the “PRC”);
3. Party D is a liability limited company incorporated in Beijing, the PRC;
4. Party C is a shareholder of Party D owning 0.05% equity interests in Party D (the “Equity Interest”);
5. Party B and Party D entered into a series of agreement dated March 22, 2005, including the Exclusive Technology Consulting and Services Agreement (the “Services Agreement”), whereby Party B provides exclusive technology consulting and services to Party D;
6. Party B and Party C entered into an Equity Pledge Agreement (the “Equity Pledge Agreement”) dated August 20, 2019, whereby Party C transfers all of the Equity Interest to Party B; and
7. Party A and Party C entered into a Proxy Agreement dated August 20, 2019 (the “Proxy Agreement”), whereby Party C authorizes the entity or individual designated by Party A to exercise all voting and other rights of Party C as a shareholder at the shareholders meeting of Party D.
NOW THEREFORE, the Parties agree as follows through negotiations and to be bound hereby:

1. **Purchase and Sale of Equity Interest**

1.1 **Granting of Rights**

Party C hereby irrevocably grants to Party A an option to purchase or cause any one or more designated persons (“**Designated Persons**”) to purchase, to the extent permitted under PRC law, with the steps determined by Party A, at the price specified in Section 1.3 of this Agreement, and at any time from Party C (the “**Transferor**”), a portion or all of the equity interests held by Party C in Party D (the “**Option**”). No Option shall be granted to any third party other than Party A and/or the Designated Persons. Party D hereby agrees to granting of the Option by Party C to Party A and/or the Designated Persons. For purpose of this Section 1.1 and this Agreement, “person” means any individual, corporation, joint venture, partnership, enterprise, trust or unincorporated organization.

1.2 **Exercise Steps**

Subject to PRC law and regulations, Party A and/or the Designated Persons may exercise the Option by issuing a written notice (the “**Option Notice**”) to the Transferor, specifying the equity interest to be purchased from the Transferor (the “**Purchased Equity Interest**”) and the manner of such purchase.

1.3 **Purchase Price**

1.3.1 If Party A exercises the Option, the purchase price of the Purchased Equity Interest (“**Purchase Price**”) shall be equal to the actual paid-in capital paid by the Transferor for the Purchased Equity Interest, unless then applicable PRC laws and regulations require appraisal of the Purchased Equity Interest or other restrictions on the Purchase price.

1.3.2 If the applicable PRC laws require appraisal of the Purchased Equity Interest or other restrictions on the Purchase Price at the time that Party A exercises the Option, the Parties agree that the Purchase Price shall be set at the lowest price permissible under applicable law.

1.4 **Transfer of the Purchased Equity Interest**

At each exercise of the Option:

1.4.1 The Transferor shall, in accordance the terms and conditions of this Agreement and the Option Notice in connection with the Purchased Equity Interest, enter into an equity transfer agreement with Party A and/or the Designated Persons (as applicable) for each transfer in the substance and form satisfactory to Party A;
1.4.2 The Transferor shall execute all other requisite contracts, agreements or documents, obtain all requisite government approvals and consents, and take all necessary actions to unconditionally transfer the valid ownership of the Purchased Equity Interest to Party A and/or the Designated Persons free of any security interest, and cause Party A and/or the Designated Persons to be the registered owner(s) of the Purchased Equity Interest. For purpose of this Section 1.4.2 and this Agreement, “Security Interest” includes without limitation guaranty, mortgage, pledge, third-party right or interest, any share option, right of acquisition, right of first refusal, right of set-off, ownership retention or other security arrangements; provided, however, that it does not include any security interest arising under the Equity Pledge Agreement.

1.5 Payment

Payment of the Purchase Price shall be made in the manner determined through negotiations between Party A and/or the Designated Persons and the Transferor in accordance with then applicable laws at the exercise of the Option. The Parties hereby agree that, subject to applicable laws, Transferor shall repay to Party B any amount that is paid by Party A and/or the Designated Persons to the Transferor in connection with the Purchased Equity Interest.

2. Covenants Relating to the Equity Interest

2.1 Covenants Relating to Party D

Party C and Party D hereby covenant, in relation to Party D:

2.1.1 Not to supplement, amend or modify Party D’s articles of association in any way, or to increase or decrease its registered capital, or to change its registered capital structure in any way without Party A’s prior written consent;

2.1.2 To maintain the corporate existence of Party D and operate its business and deal with matters prudently and effectively according to good financial and business rules and practices;

2.1.3 Not to sell, transfer, mortgage or otherwise dispose of, or permit any other security interest to be created on, any of Party D’s assets, business or legal or beneficial interests in its revenue at any time after the signing of this Agreement without Party A’s prior written consent;

2.1.4 Not to incur, succeed to, guarantee or permit the existence of any liability, without Party A’s prior written consent, except (i) liabilities arising from the normal course of business, but not arising from loans; and (ii) liabilities disclosed to Party A and approved by Party A in writing;

2.1.5 To operate persistently all the business in the normal course of business to maintain the value of Party D’s assets, and not to commit any act or omission that would affect its operations and asset value;

2.1.6 Without prior written consent by Party A, not to enter into any material agreement, other than agreements entered into in Party D’s normal course of business (for purpose of this paragraph, an agreement will be deemed material if its value exceeds RMB500,000);
2.1.7 Not to provide loans or credit to any person without Party A's prior written consent;

2.1.8 To provide all information relating to Party D's operations and financial conditions upon the request of Party A;

2.1.9 To purchase and maintain insurance from insurance companies accepted by Party A. The amount and category of the insurance shall be the same as those of the insurance normally procured by companies engaged in similar businesses and possessing similar properties or assets in the area where Party D is located;

2.1.10 Not to merge or consolidate with, or acquire or invest in, any person without Party A's prior written consent;

2.1.11 To promptly notify Party A of any pending or threatened suit, arbitration or administrative proceedings concerning Party D's assets, business or revenue;

2.1.12 To execute all necessary or appropriate documents, take all necessary or appropriate actions and to bring all necessary or appropriate claims or to make all necessary and appropriate defenses against all claims in order for Party D to maintain the ownership over all its assets;

2.1.13 Not to distribute dividends to Party D's shareholders in any way without Party A's prior written consent; provided, however, that Party D shall promptly distribute all or part of its distributable profits to its shareholders upon Party A's request; and

2.1.14 At the request of Party A, to appoint persons nominated by Party A to be executive directors of Party D.

2.2 Covenants Relating to the Transferor

Party C hereby covenants:

2.2.1 Not to sell, transfer, mortgage or otherwise dispose of, or allow any other security interest to be created on, the legal or beneficial interest in the Equity Interest at any time after the signing of this Agreement without Party A's prior written consent, other than the pledge created on the Transferor's Equity Interest in accordance with the Equity Pledge Agreement;

2.2.2 Without Party A's prior written consent, not to vote for or sign any shareholders' resolution at Party D's shareholders' meetings to approve the sale, transfer, mortgage or disposition in any other manner of, or the creation of any other security interest on, any legal or beneficial interest in the Equity Interest, except to or for the benefit of Party A or its designated persons;

2.2.3 Without Party A's prior written consent, not to vote for or sign any shareholders' resolution at Party D's shareholders' meetings to approve Party D's merger or consolidation with, acquisition of or investment in, any person;
2.2.4 To promptly notify Party A of any pending or threatened suit, arbitration or administrative proceedings concerning the Equity Interest owned by it;
2.2.5 To execute all necessary or appropriate documents, to take all necessary or appropriate actions and to bring all necessary or appropriate claims or to make all necessary and appropriate defenses against all claims in order to maintain his ownership over the Equity Interest;
2.2.6 At the request of Party A, to appoint persons nominated by Party A to be executive directors of Party D;
2.2.7 At any time upon the request of Party A, to transfer its Equity Interest immediately and unconditionally to the representative designated by Party A, and waive its preemptive right with respect to the transfer of equity interest by the other shareholder of Party D;
2.2.8 To fully comply with the provisions of this Agreement and the other agreements entered into jointly or respectively by and among the Transferor, Party D and Party A, perform all obligations under these agreements and not commit any act or omission that would affect the validity and enforceability of these agreements; and
2.2.9 To transfer to Party A all dividends and any other form of profit distributed to it by Party D.

2.3 Covenants Relating to Party A

Party A hereby covenants:

2.3.1 If Party D needs any loan or other capital support in its business, under acceptable and reasonable scope, Party A shall provide such capital support without imposing any condition or restriction;

2.3.2 If Party D cannot repay the loan from Party A as loss incurred and has sufficient evidence to prove, Party A agrees that it will unconditionally give up its right to require Party D to repay the loan.

3. Representations and Warranties

As of the date of this Agreement and each transfer date, each of the Transferor and Party D hereby represents and warrants to Party A as follows:

3.1 It has the power and authority to execute and deliver this Agreement, and any equity transfer agreement (the "Transfer Agreement") to which it is a party for each transfer of the Purchased Equity under this Agreement and to perform its obligations under this Agreement and any Transfer Agreement. Once executed, this Agreement and any Transfer Agreement to which it is party will constitute a legal, valid and binding obligation of it enforceable against it in accordance with its terms;
3.2 The execution, delivery and performance of this Agreement or any Transfer Agreement by it will not: (i) violate any relevant PRC laws and
regulations; (ii) conflict with its articles of association or other organizational documents; (iii) violate or constitute a default under any contract or
instrument to which it is party or that binds upon it; (iv) violate any condition for the grant and/or continued effectiveness of any permit or approval
granted to it; or (v) cause any permit or approval granted to it to be suspended, cancelled or attached with additional conditions;

3.3 Party D has good and marketable ownership of all of its assets and has not created any security interest on the said assets;

3.4 Party D has no outstanding liabilities, except (i) liabilities arising in its normal course of business; and (ii) liabilities disclosed to Party A and
approved by Party A in writing;

3.5 There are currently no existing, pending or threatened litigations, arbitrations or administrative proceedings related to the Equity Interest, Party D’s
assets or Party D; and

3.6 The Transferor has good and marketable ownership interest in the Equity Interest and has not created any security interest on such Equity Interest,
other than the security interest pursuant to the Equity Pledge Agreement and the restrictions provided under the Proxy Agreement and hereunder.

4. **Assignment of Agreement**

4.1 Neither Party C or Party D may assign its rights and obligations under this Agreement to any third party without the prior written consent of Party A.

4.2 Party C and Party D hereby agree that Party A may assign all its rights and obligation under this Agreement to a third party as Party A sees fit, in
which case Party A only needs to give a written notice to Party C and Party D and no further consent of Party C or Party D is required.

5. **Effectiveness and Term**

5.1 This Agreement shall be effective as of the date first set forth above and expire when all Equity Interest held by Party B is transferred to Party A
and/or Designated Persons in accordance with this Agreement.

5.2 If the duration of operation (including any extension thereof) of Party A or Party D is expired or terminated for other reasons within the term set
forth in Section 5.1, this Agreement shall be terminated simultaneously, except in the situation where Party A has assigned its rights and obligations in
accordance with Section 4.2 hereof.
6. Applicable Law and Dispute Resolution

6.1 Applicable Law
The formation, validity, interpretation and performance of and resolution of any dispute arising from this Agreement shall be protected and governed by the laws of the PRC.

6.2 Dispute Resolution
Any dispute arising in connection with the interpretation and performance of the provisions of this Agreement shall be resolved by the Parties in good faith through negotiations. In case no resolution can be reached by the Parties within thirty (30) days after either party makes a request for dispute resolution through negotiations, either party may refer such dispute to China International Economic and Trade Arbitration Commission (“CIETAC”) for arbitration in accordance with CIETAC’s arbitration rules then in effect. The seat of arbitration shall be Beijing and language of proceedings shall be Chinese. The arbitral award shall be final and binding upon the Parties.

7. Taxes and Expenses
Every Party shall, in accordance with PRC laws, bear any and all transfer and registration taxes, expenses and charges incurred by or levied on it with respect to the preparation and execution of this Agreement and each Transfer Agreement and the consummation of the transactions contemplated under this Agreement and each Transfer Agreement.

8. Notices
Any notice or other communication forms which is given by the parties hereto shall be in Chinese and delivered personally to the addresses listed as below or the addresses designated by the Parties. The notice time which is deemed as the time when the notice actually reaches the addressee follows: (a) the notice time of the notice delivered personally shall be the day when the person conducts the delivery; (b) the notice time of the notice delivered as mail shall be the tenth (10th) day following the mailing date of the registered mail by air (marked by seal) or shall be the fourth (4th) day following the day handing to internally recognized delivery services organizations; (c) the notice time of the notice delivered by facsimile shall be the acceptance time on the delivery confirmation; and (d) on the day of successful delivery if it is delivered by electronic mail evidenced by the confirmation generated from the mail delivery system or without receipt of delivery failure or return message from the mail delivery system within 24 hours.

Party A: Baidu, Inc.
Address: M&C Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands
Attention: Robin Yanhong Li
Facsimile: 
Telephone:
9. Confidentiality

The Parties acknowledge and confirm any oral or written materials exchanged by the Parties in connection with this Agreement are confidential. The Parties shall maintain the confidentiality of all such materials. Without the written approval by the other Parties, any Party shall not disclose to any third party any relevant materials, but the following circumstances shall be excluded:

a. Materials that are or will become known by the public (through no fault of the receiving party);
b. Materials required to be disclosed by the applicable laws or rules of the stock exchange; and
c. Materials disclosed by each Party to its legal or financial advisors relating the transactions contemplated by this Agreement, and such legal or financial advisors shall comply with the confidentiality provisions similar to this article.

The disclosure of information by the staff or consultants of any party shall be deemed as disclosure by the party itself. This Article 9 shall survive any invalidity, termination, expiration or unenforceability of this Agreement.

10. Further Assurances

The Parties agree to promptly execute documents and take further actions that are reasonably required for, or beneficial to, the purpose of performing the provisions and carrying out the intent of this Agreement.
11. **Breach Liabilities**

11.1 Party A shall have the right to terminate this Agreement and/or hold Party C or Party D liable for any damages if Party C or Party D is in material breach of any provision under this Agreement. This Section 11.1 shall not be prejudicial to any other right of Party A under this Agreement.

11.2 Unless otherwise legally required, neither Party C or Party D may terminate or otherwise end this Agreement under any circumstance.

12. **Miscellaneous**

12.1 Amendment, Modification or Supplement

Any amendment or supplement to this Agreement shall be made by the Parties in writing. The amendments or supplements duly executed by each Party shall be deemed as a part of this Agreement and shall have the same legal effect as this Agreement.

12.2 Entire Agreement

Notwithstanding Article 5 of this Agreement, the Parties acknowledge that once this Agreement becomes effective, it shall constitute the entire agreements of the Parties with respect to the subject matters hereof and shall supersede all prior oral and/or written agreements and understandings by the Parties with respect to the subject matters hereof.

12.3 Severability

If any provision of this Agreement is judged to be invalid, illegal or unenforceable in any respect according to any applicable law or regulation, the validity, legality and enforceability of the other provisions hereof shall not be affected or impaired in any way. The Parties shall, through good-faith negotiations, replace those invalid, illegal or unenforceable provisions with valid provisions that may bring about economic effects as similar as possible to those from such invalid, illegal or unenforceable provisions.

12.4 Headings

The headings contained in this Agreement are for the convenience of reference only and shall not be used for the interpretation or explanation or otherwise affect the meaning of the provisions of this Agreement.

12.5 Language and counterparts

This Agreement is executed in Chinese in four originals; each Party holds one original and each original has the same legal effect.
12.6 Successor

This Agreement shall bind upon and inure to the benefit of the successors and permitted assigns of each Party.

12.7 Survival

Any obligation arising from or becoming due under this Agreement before its expiration or premature termination shall survive such expiration or early termination. Articles 6, 8 and 9 and this Section 12.7 shall survive the termination of this Agreement.

12.8 Waiver

Any Party may waive the terms and conditions of this Agreement by a written instrument signed by the Parties. Any waiver by a Party to a breach by the other Parties in a specific situation shall not be construed as a waiver to any similar breach by the other Parties in other situations.

(No text below)
IN WITNESS WHEREOF, the Parties have executed or caused this Agreement to be executed by its legal or authorized representative on its behalf as of the date first written above.

Party A:
Baidu, Inc.

Signature: /s/ Robin Yanhong Li
Title: Director

Party B:
Baidu Online Network Technology (Beijing) Co., Ltd. (seal)

Signature: /s/ Shanshan Cui
Title: Legal Representative

Party C:
Shanshan Cui

Signature: /s/ Shanshan Cui

Party D:
Beijing Baidu Netcom Science Technology Co., Ltd. (seal)

Signature: /s/ Zhixiang Liang
Title: Legal Representative
EXHIBIT 4.91

This Equity Pledge Agreement (this “Agreement”) is made as of August 20, 2019 in Beijing, PRC by and between:

Pledgee:

Party A: Baidu Online Network Technology (Beijing) Co., Ltd.
Registered Address: 3/F, Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing;
And

Pledgor:

Party B: Shanshan Cui
ID No.
Address:

WHEREAS:

1. Party A is a wholly foreign-owned enterprise registered in Beijing, the People’s Republic of China (the “PRC”).
2. Party B is a citizen of the PRC holding 0.05% equity interests in Beijing Baidu Netcom Science Technology Co., Ltd. (“Baidu Netcom”), a limited liability company registered in Beijing, the PRC.
3. Party A and Party B entered into a Loan Agreement dated August 20, 2019 (the “Loan Agreement”), whereby Party B obtains a loan (the “Loan Arrangement”) up to a total amount of RMB67,106,400 (the “Loan”).
4. Party A and Baidu Netcom entered into an Exclusive Technology Consulting and Services Agreement dated March 22, 2005 (the “Services Agreement”) with permanent term, pursuant to which Baidu Netcom shall pay Party A technical consulting and services fees (the “Service Fees”) for the technology consulting and services provided by Party A.
5. In order to ensure that Party B will perform its obligations under the Loan Agreement and Party A will be able to collect the Service Fees from Baidu Netcom, Party B agrees to pledge its equity interests in Baidu Netcom (i.e., a registered capital equal to RMB67,106,400) as security for the Loan (i.e., RMB67,106,400) and other obligations under the Loan Arrangement and the Service Agreement. Party A and Party B intend to enter into this Agreement to specify their respective rights and obligations in respect of such pledge.

NOW THEREFORE, the Pledgee and the Pledgor agree as follows through negotiations:
1. Definitions

Unless otherwise provided in this Agreement, the following terms shall have the following meanings:

1.1 “Pledge”: refers to the full content of Article 2 hereunder.

1.2 “Equity Interests”: refers to all of the equity interests in Baidu Netcom legally held by the Pledgor (for purpose of this Agreement, the Equity Interests pledged herein means the registered capital equal to RMB 67,106,400).

1.3 “Ratio of Pledge”: refers to the proportion of the value of the Pledge under this Agreement to the total amount of the Service Fees and the Loan.

1.4 “Term of Pledge”: refers to the period provided for under Article 3.2 hereunder.

1.5 “Principal Agreement”: refers to the Services Agreements and the agreements under the Loan Arrangement.

1.6 “Event of Default”: refers to any event listed in Article 7.1 hereunder.

1.7 “Notice of Default”: refers to the notice of default issued by the Pledgee in accordance with this Agreement.

2. Pledge

The Pledgor will pledge all of his Equity Interests in Baidu Netcom to the Pledgee as security for (i) all his obligations under the Loan Arrangement (i.e., RMB 67,106,400) and (ii) all obligations of Baidu Netcom under the Services Agreement (the “Secured Obligations”). “Pledge” refers to the priority entitled to the Pledgee in receiving proceeds from disposal of all or part of the Equity Interests at a discounted value, or auction or sale of the Equity Interests pledged hereunder.

3. Ratio of Pledge and Term of Pledge

3.1 Ratio of the Pledge

The Ratio of the Pledge shall be approximately 100%.

3.2 Term of the Pledge

3.2.1 The Pledge shall take effect as of the date when the pledge of the Equity Interest is recorded in the Register of Shareholders of Baidu Netcom and registered with the competent industrial and commercial authority, and shall remain in effect until two (2) years after all Secured Obligations under the Principal Agreement have been fulfilled.
3.2.2 During the term of the Pledge, the Pledgee shall be entitled to dispose of the Pledge in accordance with this Agreement in the event that the Pledgor fails to perform his obligations under the Loan Arrangement or Baidu Netcom fails perform its obligations under the Services Agreement.

4. Possession of Pledge Documents

4.1 During the Term of Pledge under this Agreement, the Pledgor shall deliver its capital contribution certificate and the register of shareholders of Baidu Netcom to the possession of the Pledgee within one (1) week from the date of this Agreement.

4.2 The Pledgee shall be entitled to receiving dividends arising from the Equity Interests.

4.3 The Pledge under this Agreement will be recorded in the Register of Shareholders of Baidu Netcom (See Appendix I) after the date of this Agreement.

5. Representations and Warranties of the Pledgor

5.1 The Pledgor is the legal owner of the Equity Interests and has approved the Pledge with resolutions adopted at its shareholders meeting (See Appendix II).

5.2 Except for the benefit of the Pledgee, no other pledge or security has been created upon the Equity Interests.

6. Covenants of the Pledgor

6.1 During the term of this Agreement, the Pledgor covenants for its benefits of the Pledgee that the Pledgor shall:

6.1.1 not transfer or assign the Equity Interests, create or permit creation of any other pledge which could affect the rights or benefits of the Pledgee without prior written consent of the Pledgee;

6.1.2 comply with and implement the laws and regulations with respect to the pledge of rights; present to the Pledgee the notices, orders or suggestions with respect to the Pledge issued or made by relevant government authorities within five (5) days upon receiving such notices, orders or suggestions; comply with such notices, orders or suggestions or, alternatively, at the reasonable request of the Pledgee or with consent from the Pledgee, raise objection to such notices, orders or suggestions; and

6.1.3 timely notify the Pledgee of any event or any notice to its knowledge which may affect the Pledgor’s right to all or any part of the Equity Interests, and any event or any notice to its knowledge which may change the Pledgor’s warranties and obligations under this Agreement or affect the Pledgor’s performance of its obligations under this Agreement.
6.2 The Pledgor agrees that the Pledgee’s right to the Pledge under this Agreement shall not be disrupted or prejudiced by any legal proceeding initiated by the Pledgor or any successor of the Pledgor or any person authorized by the Pledgor or any other person.

6.3 The Pledgor promises to the Pledgee that in order to protect or perfect the security for the payment of the Loan and the Services Fees, the Pledgor shall execute in good faith and cause other parties who have interests in the Pledge to execute, all title certificates and contracts and/or to perform any other actions (and cause other parties who have interests to take action) as required by the Pledgee and facilitate the exercise of the rights and authorization vested in the Pledgee under this Agreement.

6.4 The Pledgor promises to the Pledgee that he will execute all amendment (if applicable and necessary) in connection with the certificate of the Equity Interests with the Pledgee or its designated person (being a natural person or a legal entity) and, within a reasonable period, provide to the Pledgee all notices, orders and decisions about the Pledge as the Pledgee deems necessary.

6.5 The Pledgor promises to the Pledgee that he will comply with and perform all the guarantees, covenants, warranties, representations and conditions for the benefit of the Pledgee. The Pledgor shall indemnify the Pledgee for all losses suffered by the Pledgee due to the Pledgor’s failure to perform in whole or in part its guarantees, covenants, warranties, representations and conditions.

6.6 During the term of this Agreement, the Pledgor will not make any action/omission which may affect the value of the Equity Interests so as to maintain or increase the value. The Pledgor shall timely notify the Pledgee of any event which may decrease the value of the Equity Interests or affect the Pledgor’s performance of the obligations under this Agreement, and shall provide assets acceptable to the Pledgee as guarantee for the decreased value of the Equity Interests upon the Pledgee’s request.

6.7 To the extent permitted under applicable laws or regulations, the Pledgor shall make best efforts to cooperate with all the registration, filing or other procedures relating to the Pledge as required by relevant laws and regulations.

7. Event of Default

7.1 Each of the following events shall be regarded as an Event of Default:

7.1.1 Pledgor fails to perform its obligations under the Loan Arrangement, including without limitation the obligation to repay the Loan of RMB67,106,400 under the Loan Agreement;

7.1.2 Baidu Netcom fails to make due and full payment of the Services Fees or perform other obligations under the Services Agreement;

7.1.3 Any representation or warranty made by the Pledgor in Article 5 hereof is materially misleading or erroneous, and/or the Pledgor breaches any warranty in Article 5 hereof;
7.1.4 The Pledgor breaches any covenant under Article 6 hereof;
7.1.5 The Pledgor breaches any other provision of this Agreement;
7.1.6 The Pledgor waives the pledged Equity Interests or transfers or assigns the pledged Equity Interests without prior written consent from the Pledgee;
7.1.7 Any of the Pledgor’s external loans, guaranties, compensations, undertakings or other obligations (1) is accelerated for repayment due to any default; or (2) fails to be duly repaid or performed and makes the Pledgee believe that the Pledgor’s ability to perform the obligations hereunder has been affected;
7.1.8 Baidu Netcom is incapable of repaying its general debts or other debts;
7.1.9 This Agreement becomes illegal or the Pledgor is not capable of continuing to perform the obligations hereunder due to any reason other than a Force Majeure event;
7.1.10 There have been adverse change to the properties owned by the Pledgor, causing the Pledgee to believe that the capability of the Pledgor to perform the obligations hereunder has been affected;
7.1.11 The successor or receiver of Baidu Netcom only partially performs or refuses to perform the payment obligation under the Services Agreement; and
7.1.12 The breach of the other provisions of this Agreement by the Pledgor due to its action or omission.
7.2 The Pledgor shall immediately give a written notice to the Pledgee if it becomes knowledge of the Pledgor that any event specified under Article 7.1 hereof or any event that may result in the foregoing events has occurred.
7.3 Unless an event of default under Article 7.1 hereof has been resolved to the Pledgee’s satisfaction, the Pledgee, at any time when the event of default occurs thereafter, may give a written Notice of Default to the Pledgor, requiring the Pledgor to immediately make full payment of the outstanding amount under the Loan Arrangement or under the Services Agreement or requesting to exercise the Pledge in accordance with Article 8 hereof.

8. **Exercise of the Pledge**

8.1 The Pledgor shall not transfer or assign the Equity Interest without prior written consent from the Pledgee prior to the full performance of his obligations under the Loan Arrangement and supplementary agreement and full payment of all Service Fees under the Services Agreement, whichever is later.
8.2 The Pledgee shall give a Notice of Default to the Pledgor when the Pledgee exercises the Pledge.

8.3 Subject to Article 7.3, the Pledgee may exercise the Pledge when the Pledgee gives a Notice of Default in accordance with Article 7.3 or at any time thereafter.

8.4 The Pledgee is entitled to priority in receiving payment in the form of all or part of the Equity Interest at a discounted value, or from the proceeds from the auction or sale of all or part of the Equity Interest in accordance with legal procedure, until the outstanding debt and all other payables of the Pledgor under Loan Arrangement and Services Agreement are repaid.

8.5 The Pledgor shall not hinder the Pledgee from exercising the Pledge in accordance with this Agreement and shall give necessary assistance so that the Pledgee could fully exercise its Pledge.

9. Assignment

9.1 The Pledgor shall not assign or transfer its rights and obligations hereunder without prior consent from the Pledgee.

9.2 This Agreement shall be binding upon the Pledgor and his successors and be binding on the Pledgee and each of its successors and permitted assigns.

9.3 To the extent permitted by law, the Pledgee may transfer or assign any or all of its rights and obligations under the Loan Arrangement and supplementary agreements to any person (natural person or legal entity) designated by it at any time. In that case, the assignee shall have the same rights and obligations as those of the Pledgee as if the assignee were an original party hereto. When the Pledgee transfers or assigns the rights and obligations under the Services Agreement, Loan Arrangement and supplementary agreements, it is only required to provide a written notice to the Pledgor, and at the request of the Pledgee, the Pledgor shall execute the relevant agreements and/or documents with respect to such transfer or assignment.

9.4 After the Pledgee has been changed as a result of a transfer or an assignment, the new parties to the Pledge shall execute a new pledge contract.

10. Effectiveness and Term

This Agreement is executed on the date first set forth above and becomes effective from the date when the pledge is recorded on Baidu Netcom’s Register of Shareholders.

11. Termination

This Agreement shall terminate when the loan under the Loan Arrangement and the Services Fees under the Services Agreement have been fully repaid and the Pledgor no longer has any outstanding obligations under the Loan Arrangement and Baidu Netcom no longer has any outstanding obligations under the Services Agreement. The Pledgee shall cancel or terminate this Agreement as soon as reasonably practicable thereafter.
12. Fees and Other Charges

12.1 The Pledgor shall be responsible for all of the fees and actual expenses in relation to this Agreement including, but not limited to, legal fees, production costs, stamp tax and any other taxes and charges. If the Pledgee pays the relevant taxes in accordance with the laws, the Pledgor shall fully indemnify the Pledgee for such taxes paid by the Pledgee.

12.2 In the event that the Pledgee has to make a claim against the Pledgor by any means as a result of the Pledgor’s failure to pay any tax or expense payable by the Pledgor under this Agreement, the Pledgor shall be responsible for all the expenses arising from such claim (including but not limited to any taxes, handling fees, management fees, litigation fees, attorney’s fees, and various insurance premiums in connection with the disposition of the Pledge).

13. Force Majeure

13.1 A Force Majeure event refers to any unforeseen event that is beyond a party’s reasonable control and cannot be prevented with reasonable care, which includes but is not limited to acts of governments, changes of law, acts of God, fires, explosions, typhoons, floods, earthquake, tides, lightning or war; provided, however, that any insufficiency of creditworthiness, capital or financing shall not be regarded as an event beyond a party’s reasonable control. The affected party by Force Majeure shall promptly notify the other party of such event resulting in exemption.

13.2 In the event that the affected party is delayed or prevented from performing its obligations under this Agreement by Force Majeure, and only to the extent of such delay and prevention, the affected party shall not be liable for obligations under this Agreement. The affected party shall take appropriate measures to minimize or remove the effects of Force Majeure and attempt to resume performance of the obligations that were delayed or prevented by the event of Force Majeure. After the event of Force Majeure is removed, both Parties agree to resume the performance of this Agreement using their best efforts.

14. Confidentiality

The Parties acknowledge and confirm that all the oral and written materials exchanged relating to this Agreement are confidential. Each party must keep such materials confidential and cannot disclose such materials to any other third party without the other party’s prior written approval, unless: (a) the public knows or will know the materials (not due of the disclosure by the receiving party); (b) the disclosed materials are required by law or stock exchange rules to be disclosed; or (c) materials relating to the transactions under this Agreement are disclosed to the Parties’ legal or financial advisors, who must keep them confidential as well. Disclosure of the confidential information by employees or institutions hired by the Parties is deemed as an act by the Parties, therefore, subjecting them to liability.
15. Dispute Resolution

15.1 This Agreement shall be governed by and construed in accordance with PRC law.

15.2 The Parties shall strive to resolve any dispute arising from the interpretation or performance of this Agreement through negotiations in good faith. If the negotiations fail, either Party may submit such matter to the China International Economic and Trade Arbitration Commission ("CIETAC") for arbitration in accordance with its rules then in effect. The arbitration proceedings shall be conducted in Chinese and shall take place in Beijing, PRC. The arbitral award shall be final and binding upon the Parties.

16. Notice

Any notice which is given by the Parties hereto for the purpose of performing the rights and obligations hereunder shall be in writing. If such notice is delivered personally, the time of notice is the time when such notice actually reaches the addressee; where such notice is transmitted by telex or facsimile, the notice time is the time when such notice is transmitted. If such notice does not reach the addressee on a business day or reaches the addressee after business hours, the next business day following such day is the date of notice. The delivery place is the address first written above for each of the Parties hereto or the address advised by such party in writing, including facsimile and telex, from time to time.

Party A: Baidu Online Network Technology (Beijing) Co., Ltd.
Address: Baidu Building, No. 10 Shangdi 10th Street, Haidian District, Beijing
Fax: 
Telephone: 

Party B: Shanshan Cui
Address: 
Telephone: 

17. Entire Agreement

Notwithstanding provisions in Article 10 hereof, the Parties agree that this Agreement constitutes the entire agreements of the Parties hereto with respect to the subject matter herein upon its effectiveness and supersedes and replaces all prior oral and/or written agreements and understandings relating to the subject matters of this Agreement.

18. Severability

Should any provision of this Agreement be held invalid or unenforceable because of inconsistency with applicable laws, such provision shall be invalid or unenforceable only to the extent of such applicable laws without affecting the validity or enforceability of the remainder of this Agreement.
19. **Appendices**

The appendices to this Agreement shall constitute an integral part of this Agreement.

20. **Amendment or Supplement**

20.1 The Parties may amend or supplement this Agreement by written agreement. The amendments or supplements to this Agreement duly executed by both Parties shall form an integral part of this Agreement and shall have the same legal effect as this Agreement.

20.2 This Agreement and any amendments, modifications, supplements, additions or changes hereto shall be in writing and shall be effective upon being executed and sealed by the Parties hereto.

21. **Counterparts**

This Agreement is made in Chinese in two originals, with each Party holding one thereof and the remainder filed with competent authority. All originals shall have the same legal effect.

(No text below)
IN WITNESS WHEREOF, the Parties have executed or caused this Agreement to be executed by its legal or authorized representative on its behalf as of the date first written above.

Party A:

Baidu Online Network Technology (Beijing) Co., Ltd. (seal)

/s/ Shanshan Cui
Legal Representative/Authorized Representative

Party B:

Shanshan Cui

/s/ Shanshan Cui
Appendices:

1. Register of Shareholders of Beijing Baidu Netcom Science Technology Co., Ltd.
2. Resolution of the Shareholders of Beijing Baidu Netcom Science Technology Co., Ltd.
Register of shareholders of Beijing Baidu Netcom Science Technology Co., Ltd.

<table>
<thead>
<tr>
<th>Name of the Shareholder</th>
<th>ID number:</th>
<th>Residence:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robin Yanhong Li</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contribution Amount:</th>
<th>RMB13,354,173,600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Share Capital:</td>
<td>99.5%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of the Shareholder</th>
<th>ID number:</th>
<th>Residence:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shanshan Cui</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contribution Amount:</th>
<th>RMB67,106,400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Share Capital:</td>
<td>0.05%</td>
</tr>
</tbody>
</table>

Robin Yanhong Li holds 99.5% equity interests in Beijing Baidu Netcom Science Technology Co., Ltd., the entirety of which has been pledged to Baidu Online Network Technology (Beijing) Co., Ltd.

Shanshan Cui holds 0.5% equity interests in Beijing Baidu Netcom Science Technology Co., Ltd., the entirety of which has been pledged to Baidu Online Network Technology (Beijing) Co., Ltd.

Baidu Online Network Technology (Beijing) Co., Ltd. is the pledgee of 100% of the equity interests in Beijing Baidu Netcom Technology Co., Ltd.

**Beijing Baidu Netcom Science Technology Co., Ltd. (seal)**

Signature: /s/ Hailong Xiang
Title: Legal representative
Date: August 20, 2019
Appendix II

Resolution of the Shareholders of Beijing Baidu Netcom Science Technology Co., Ltd.

In respect of the Equity Pledge Agreement dated August 20, 2019 between the shareholders of Beijing Baidu Netcom Science Technology Co., Ltd. (the “Company”) and Beijing Online Network Technology (Beijing) Co., Ltd., a resolution is unanimously adopted at the shareholders’ meeting of the Company as follows:

It is approved that the shareholders of the Company pledge all of their equity interests in the Company to Baidu Online Network Technology (Beijing) Co., Ltd.

The resolution was signed and delivered dated August 20, 2019 by the undersigned shareholders.

Shareholders:

Robin Yanhong Li
Signature: /s/ Robin Yanhong Li

Shanshan Cui
Signature: /s/ Shanshan Cui
List of Principal Subsidiaries and Consolidated Affiliated Entities

Subsidiaries:
- Baidu Holdings Limited — Incorporated in the British Virgin Islands
- Baidu (Hong Kong) Limited — Incorporated in Hong Kong
- Baidu Online Network Technology (Beijing) Co., Ltd. — Incorporated in the PRC
- Baidu (China) Co., Ltd. — Incorporated in the PRC
- Baidu.com Times Technology (Beijing) Co., Ltd. — Incorporated in the PRC
- Baidu International Technology (Shenzhen) Co., Ltd. — Incorporated in the PRC
- Qiyi.com, Inc. — Incorporated in the Cayman Islands

Consolidated Affiliated Entities:
- Beijing Baidu Netcom Science Technology Co., Ltd. — Incorporated in the PRC
- Beijing Perusal Technology Co., Ltd. — Incorporated in the PRC
Exhibit 12.1

Certification by the Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Robin Yanhong Li, certify that:

1. I have reviewed this annual report on Form 20-F of Baidu, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the company’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the company’s internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company’s internal control over financial reporting; and

5. The company’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company’s auditors and the audit committee of the company’s board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company’s ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company’s internal control over financial reporting.

Date: March 13, 2020

By: /s/ Robin Yanhong Li

Name: Robin Yanhong Li

Title: Chief Executive Officer
Certification by the Principal Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Herman Yu, certify that:

1. I have reviewed this annual report on Form 20-F of Baidu, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f) and 15d-15(f)) for the company and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the company’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the company’s internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company’s internal control over financial reporting; and

5. The company’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company’s auditors and the audit committee of the company’s board of directors (or persons performing the equivalent function):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company’s ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company’s internal control over financial reporting.

Date: March 13, 2020

By: /s/ Herman Yu

Name: Herman Yu
Title: Chief Financial Officer
Certification by the Principal Executive Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Baidu, Inc. (the “Company”) on Form 20-F for the year ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Robin Yanhong Li, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 13, 2020

By: /s/ Robin Yanhong Li
Name: Robin Yanhong Li
Title: Chief Executive Officer
Certification by the Principal Financial Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Baidu, Inc. (the “Company”) on Form 20-F for the year ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Herman Yu, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 13, 2020

By: /s/ Herman Yu
Name: Herman Yu
Title: Chief Financial Officer
13 March 2020

Dear Sirs

Baidu, Inc.

We consent to the reference to our firm under the heading “Item 10.E. Additional Information—Taxation—Cayman Islands Tax Considerations” and “Item 16G. Corporate Governance” in Baidu Inc.’s Annual Report on Form 20-F for the year ended 31 December 2019 (the “Annual Report”), which will be filed with the Securities and Exchange Commission (the “SEC”) in the month of March 2020, and further consent to the incorporation by reference into the Registration Statement (Form S-8 No. 333-129374) pertaining to Baidu, Inc.’s 2000 Option Plan, Registration Statement (Form S-8 No. 333-158678) pertaining to Baidu, Inc.’s 2008 Share Incentive Plan, Registration Statement (Form S-8 No. 333-232429) pertaining to Baidu Inc.’s 2018 Share Incentive Plan, and Registration Statement (Form F-3 No. 333-218972) of Baidu, Inc. of the summary of our opinion under the heading “Item 10.E. Additional Information—Taxation—Cayman Islands Tax Considerations” and “Item 16G. Corporate Governance” in the Annual Report. We also consent to the filing with the SEC of this consent letter as an exhibit to the Annual Report.

In giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, or under the Securities Exchange Act of 1934, in each case, as amended, or the regulations promulgated thereunder.

Yours faithfully,

/s/ Maples and Calder (Hong Kong) LLP

Maples and Calder (Hong Kong) LLP
March 13, 2020
Baidu, Inc.
Baidu Campus
No. 10 Shangdi 10th Street
Haidian District, Beijing
People’s Republic of China 100085

Dear Sir/Madam:

We hereby consent to the reference of our name under the heading “Item 4.B. Information on the Company—Business Overview—Regulations” in Baidu, Inc.’s Annual Report on Form 20-F for the year ended December 31, 2019 (the “Annual Report”), which will be filed with the Securities and Exchange Commission (the “SEC”) in the month of March 2020, and further consent to the incorporation by reference into the Registration Statement (Form S-8 No. 333-129374) pertaining to Baidu, Inc.’s 2000 Option Plan, Registration Statement (Form S-8 No. 333-158678) pertaining to Baidu, Inc.’s 2008 Share Incentive Plan, Registration Statement (Form S-8 No. 333-232429) pertaining to Baidu Inc.’s 2018 Share Incentive Plan, and Registration Statement (Form F-3 No. 333-218972) of Baidu, Inc. of the summary of our opinion under the heading “Item 4.B. Information on the Company—Business Overview—Regulations” in the Annual Report. We also consent to the filing of this consent letter with the SEC as an exhibit to the Annual Report.

In giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, or under the Securities Exchange Act of 1934, in each case, as amended, or the regulations promulgated thereunder.

Very truly yours,

/s/ Han Kun Law Offices

Han Kun Law Offices
Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement (Form S-8 No. 333-129374) pertaining to Baidu, Inc.’s 2000 Option Plan,

(2) Registration Statement (Form S-8 No. 333-158678) pertaining to Baidu, Inc.’s 2008 Share Incentive Plan,

(3) Registration Statement (Form S-8 No. 333-232429) pertaining to Baidu Inc.’s 2018 Share Incentive Plan, and

(4) Registration Statement (Form F-3 No. 333-218972) of Baidu, Inc.

of our reports dated March 13, 2020, with respect to the consolidated financial statements of Baidu, Inc. and the effectiveness of internal control over financial reporting of Baidu, Inc. included in this Annual Report (Form 20-F) of Baidu, Inc. for the year ended December 31, 2019.

/s/ Ernst & Young Hua Ming LLP
Beijing, The People’s Republic of China
March 13, 2020