
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
WASHINGTON, D.C. 20549

FORM 20-F

(Mark One)

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, 2022.

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

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: 001-38696

Niu Technologies

(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)

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(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol (s)	Name of each exchange on which registered
American depository shares (one American depository share representing two Class A ordinary shares, par value US\$0.0001 per share)	NIU	The Nasdaq Stock Market LLC (The Nasdaq Global Market)
Class A ordinary shares, par value US\$0.0001 per share*		The Nasdaq Stock Market LLC (The Nasdaq Global Market)

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

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

(Title of Class)

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Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None
(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

137,719,542 Class A ordinary shares and 16,542,020 Class B ordinary shares, par value US\$0.0001 per share, as of December 31, 2022.

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

Note - Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically 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 is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See the definitions 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 an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, 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.

†The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes No

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP International Financial Reporting Standards as issued by the International Accounting Standards Board Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

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

Indicate by check mark whether the registrant has filed all documents and 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 a plan confirmed by a court.

Yes No

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INTRODUCTION

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

- “ADRs” are to the American depositary receipts that evidence the ADSs;
- “ADSs” are to the American depositary shares, each of which represents two Class A ordinary shares;
- “Class A ordinary shares” are to our Class A ordinary shares, par value US\$0.0001 per share;
- “Class B ordinary shares” are to our Class B ordinary shares, par value US\$0.0001 per share;
- “NIU,” “we,” “us,” and “our” are to Niu Technologies, our Cayman Islands holding company, its subsidiaries, and, in the context of describing our operations and consolidated financial information, the VIE and the subsidiaries of the VIE. The VIE is a domestic company incorporated in mainland China in which we do not have any equity ownership but whose financial results have been consolidated into our consolidated financial statements based solely on contractual arrangements in accordance with U.S. GAAP. See “Item 4. Information on the Company—C. Organizational Structure” for an illustrative diagram of our corporate structure;
- “ordinary shares” are to our Class A and Class B ordinary shares, par value US\$0.0001 per share;
- “our company” is to Niu Technologies, our Cayman Islands holding company;
- “the variable interest entity” and “the VIE” are to Beijing Niudian Technology Co., Ltd., or Beijing Niudian;
- “our WFOE” are to Beijing Niudian Information Technology Co., Ltd., or Niudian Information;
- “RMB” and “Renminbi” are to the legal currency of mainland China; and
- “US\$,” “U.S. dollars,” “\$,” and “dollars” are to the legal currency of the United States.

Unless otherwise noted, all translations from Renminbi to U.S. dollars and from U.S. dollars to Renminbi in this annual report were made at a rate of RMB6.8972 to US\$1.00, the exchange rate in effect as of December 30, 2022 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.

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 mission, goals and strategies;
- our future business development, financial conditions and results of operations;
- the expected growth of smart electric two-wheeled vehicle industry;
- our expectations regarding demand for and market acceptance of our products and services;
- our expectations regarding our relationships with our users/customers, suppliers, strategic partners and other stakeholders;
- competition in our industry; and
- relevant government policies and regulations relating to our industry.

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 3 Key Information— D. 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.

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

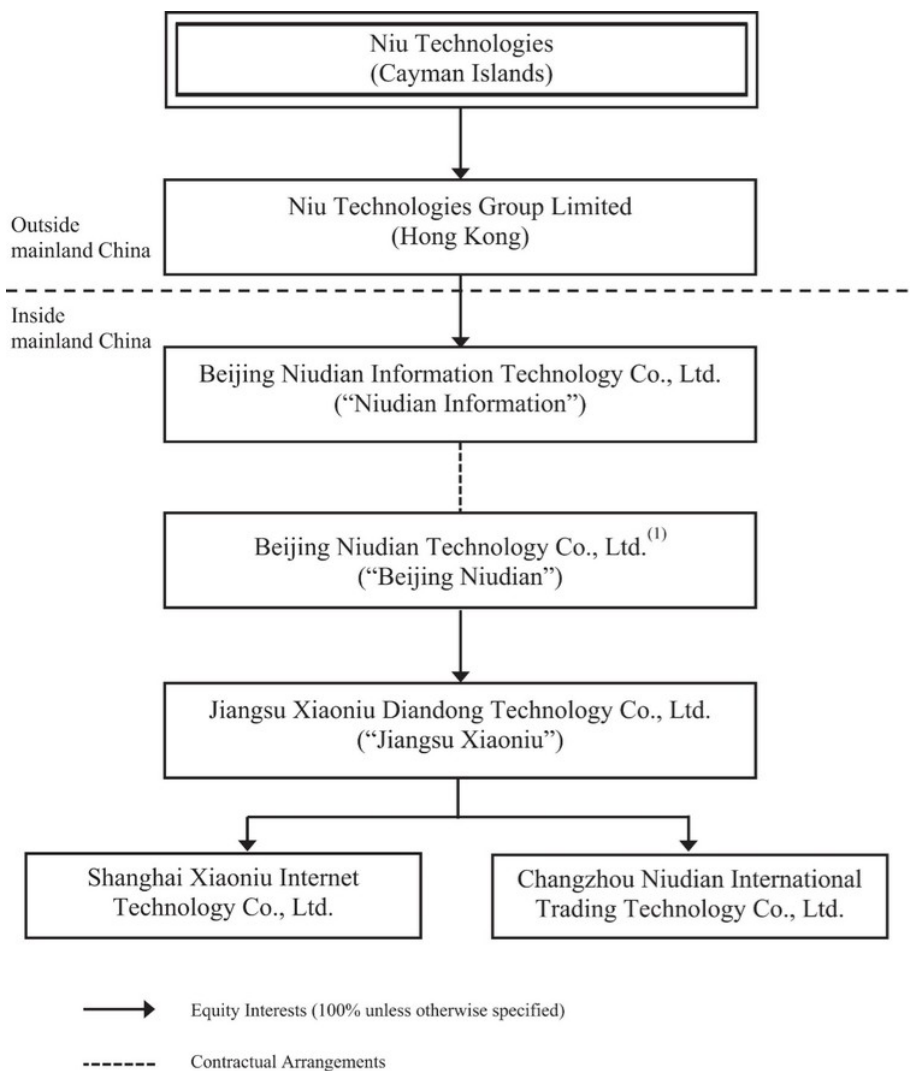
Our Holding Company Structure and Contractual Arrangements with the VIE

Niu Technologies is not an operating company in mainland China but a Cayman Islands holding company with operations primarily conducted through (i) our mainland China subsidiaries and (ii) contractual arrangements with the VIE based in mainland China. The laws and regulations of mainland China restrict and impose conditions on foreign direct 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 mainland China through the VIE, and rely on contractual arrangements among our mainland China subsidiaries, the VIE and its shareholders to conduct the business operations of the VIE. The VIE is consolidated for accounting purposes, but is not an entity in which our Cayman Islands holding company, or our investors, own equity. Revenues contributed by the VIE accounted for all of our total revenues for the year ended December 31, 2020, 2021 and 2022, respectively. As used in this annual report, “our company” refers to Niu Technologies, whereas “NIU,” “we,” “us,” and “our” refer to Niu Technologies, its subsidiaries, and, in the context of describing our operations and consolidated financial information, the VIE and its subsidiaries. Investors in our ADSs are not purchasing equity interest in the VIE in mainland China, but instead are purchasing equity interest in a holding company incorporated in the Cayman Islands.

A series of contractual agreements, including power of attorney, second amended and restated equity pledge agreement, amended and restated exclusive business cooperation agreements, second amended and restated exclusive option agreements and spousal consent letters, have been entered into by and among our subsidiaries, the VIE and its shareholders. Terms contained in each set of contractual arrangements with the VIE and its shareholders are substantially similar. As a result of the contractual arrangements, we have conducted the business operations and are considered the primary beneficiary of these companies, and we have consolidated financial results of these companies in our consolidated financial statements. For more details of these contractual arrangements, see “Item 4. Information on the Company—C. Organizational Structure—Contractual Arrangements with the VIE.”

However, the contractual arrangements may not be as effective as direct ownership in the VIE and we may incur substantial costs to enforce the terms of the arrangements. If the VIE or its shareholders fail to perform their respective obligations under the contractual arrangements, we could be limited in our ability to enforce the contractual arrangements with the VIE, and these agreements have not been tested in courts of mainland China. Furthermore, if we lose our right to direct the activities of the VIE or our right to receive substantially all the economic benefits and residual returns from the VIE and we are not able to restructure our ownership structure and operations in a satisfactory manner, we would not be able to continue to consolidate the financial results of these entities in our financial statements. See “Item 3. Key Information—D. Risk Factors—Risks Related to Our Corporate Structure— We rely on contractual arrangements with the VIE and its shareholders for a large portion of our business operations, which may not be as effective as direct ownership.” and “Item 3. Key Information—D. Risk Factors—Risks Related to Our Corporate Structure—The shareholders of the VIE may have potential conflicts of interest with us, which may materially and adversely affect our business and financial condition.”

The following diagram illustrates our corporate structure, including our principal subsidiaries, the VIE and its principal subsidiaries, as of the date of this annual report:



(1) Token Yilin Hu, Yi' nan Li, Yuqin Zhang and Changlong Sheng each holds 89.74%, 5.00%, 2.63% and 2.63% of the equity interest in Beijing Niudian, respectively. All of the shareholders of Beijing Niudian are beneficial owners of the shares of our company. Mr. Token Yilin Hu is also a director of our company.

There are also substantial uncertainties regarding the interpretation and application of the current and future laws, regulations and rules of mainland China regarding the status of the rights of our Cayman Islands holding company with respect to its contractual arrangements with the VIE and its shareholders. It is uncertain whether any new laws or regulations of mainland China relating to variable interest entity structures will be adopted or if adopted, what they would provide. If we or any of the VIE is found to be in violation of any existing or future laws or regulations of mainland China, or fail to obtain or maintain any of the required permits or approvals, the relevant PRC regulatory authorities would have broad discretion to take action in dealing with such violations or failures. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Corporate Structure—If the PRC government finds that the agreements that establish the structure for operating some of our operations in mainland China do not comply with the regulations of mainland China relating to the relevant industries, or if these regulations or the interpretation of existing regulations change or are interpreted differently in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations” and “—Uncertainties exist with respect to the interpretation and implementation of the newly enacted Foreign Investment Law of the PRC and how it may impact the viability of our current corporate structure, corporate governance and business operations.”

Our corporate structure is subject to risks associated with our contractual arrangements with the VIE. Our company and its investors may never have a direct ownership interest in the businesses that are conducted by the VIE. Uncertainties in the PRC legal system could limit our ability to enforce these contractual arrangements, and these contractual arrangements have not been tested in a court of law. If the PRC government finds that the agreements that establish the structure for operating our business in mainland China do not comply with the laws and regulations of mainland China, or if these regulations or the interpretation of existing regulations change or are interpreted differently in the future, we and the VIE could be subject to severe penalties or be forced to relinquish our interests in those operations. This would result in the VIE being deconsolidated. The majority of our assets, including the necessary licenses to conduct business in mainland China, are held by the VIE. A significant part of our revenues are generated by the VIE. An event that results in the deconsolidation of the VIE would have a material effect on our operations and result in the value of the securities of our company diminish substantially or even become worthless. Our company, our mainland China subsidiaries and the VIE, and investors of our company face uncertainty about potential future actions by the PRC government that could affect the enforceability of the contractual arrangements with the VIE and, consequently, significantly affect the financial performance of the VIE and our company as a whole. Our company may not be able to repay its indebtedness, and the ADSs of our company may decline in value or become worthless, if we are unable to assert contractual control over the assets of our mainland China subsidiaries and the VIE that conduct all or substantially all of our operations. For a detailed description of the risks associated with our corporate structure, please refer to risks disclosed under “Item 3. Key Information—D. Risk Factors—Risks Related to Our Corporate Structure.”

Our company and the VIE face various legal and operational risks and uncertainties associated with being based in or having the majority of our operations in China and we are subject to the complex and evolving laws and regulations of mainland China. For example, we face risks associated with regulatory approvals on offshore offerings, the use of the VIE, anti-monopoly regulatory actions, and oversight on cybersecurity and data privacy. These risks could result in a material adverse change in our operations and the value of our ADSs, significantly limit or completely hinder our ability to continue to offer securities to investors, or cause the value of such securities to significantly decline or become worthless. For a detailed description of risks related to doing business in China, see “Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China.”

PRC government’s significant authority in regulating our operations and its oversight and control over offerings conducted overseas by, and foreign investment in, China-based issuers could significantly limit or completely hinder our ability to offer or continue to offer securities to investors. Implementation of industry-wide regulations, including data security or anti-monopoly related regulations, in this nature may cause the value of such securities to significantly decline. For more details, see “Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—The PRC government’s significant oversight over our business operation could result in a material adverse change in our operations and the value of our ADSs.”

Risks and uncertainties arising from the PRC legal system, including risks and uncertainties regarding the enforcement of laws and quickly evolving rules and regulations of mainland China, could result in a material adverse change in our operations and the value of our ADSs. For more details, see “Item 3. Key Information—D. Risk Factors—Risks Related to Our Corporate Structure—Uncertainties exist with respect to the interpretation and implementation of the newly enacted Foreign Investment Law of the PRC and how it may impact the viability of our current corporate structure, corporate governance and business operations.”

The Holding Foreign Companies Accountable Act

Pursuant to the Holding Foreign Companies Accountable Act, or the HFCAA, if the SEC determines that we have filed audit reports issued by a registered public accounting firm that has not been subject to inspections by the PCAOB for two consecutive years, the SEC will prohibit our shares or the ADSs from being traded on a national securities exchange or in the over-the-counter trading market in the United States. On December 16, 2021, the PCAOB issued a report to notify the SEC of its determination that the PCAOB was unable to inspect or investigate completely registered public accounting firms headquartered in mainland China and Hong Kong, including our auditor. In May 2022, the SEC conclusively listed us as a Commission-Identified Issuer under the HFCAA following the filing of our annual report on Form 20-F for the fiscal year ended December 31, 2021. On December 15, 2022, the PCAOB issued a report that vacated its December 16, 2021 determination and removed mainland China and Hong Kong from the list of jurisdictions where it is unable to inspect or investigate completely registered public accounting firms. For this reason, we do not expect to be identified as a Commission-Identified Issuer under the HFCAA after we file this annual report on Form 20-F. Each year, the PCAOB will determine whether it can inspect and investigate completely audit firms in mainland China and Hong Kong, among other jurisdictions. If PCAOB determines in the future that it no longer has full access to inspect and investigate completely accounting firms in mainland China and Hong Kong and we continue to use an accounting firm headquartered in one of these jurisdictions to issue an audit report on our financial statements filed with the Securities and Exchange Commission, we would be identified as a Commission-Identified Issuer following the filing of the annual report on Form 20-F for the relevant fiscal year. There can be no assurance that we would not be identified as a Commission-Identified Issuer for any future fiscal year, and if we were so identified for two consecutive years, we would become subject to the prohibition on trading under the HFCAA. See “Item 3. Key Information—D. Risk Factors—Risks Related to Our Business and Industry—The PCAOB had historically been unable to inspect our auditor in relation to their audit work performed for our financial statements and the inability of the PCAOB to conduct inspections of our auditor in the past has deprived our investors with the benefits of such inspections.” And “Item 3. Key Information—D. Risk Factors—Risks Related to Our Business and Industry—Our ADSs may be prohibited from trading in the United States under the HFCAA in the future if the PCAOB is unable to inspect or investigate completely auditors located in mainland China and Hong Kong. The delisting of the ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment.”

Cash Flows through Our Organization

Niu Technologies is a holding company with no material operations of its own. We conduct our operations primarily through our subsidiaries, the VIE and its subsidiaries in mainland China. As a result, although other means are available for us to obtain financing at the holding company level, Niu Technologies’ ability to pay dividends to the shareholders and to service any debt it may incur may depend upon dividends paid by our mainland China subsidiaries and license and service fees paid by the VIE. If any of our subsidiaries incurs debt on its own behalf, the instruments governing such debt may restrict its ability to pay dividends to Niu Technologies. In addition, each of our mainland China subsidiaries and the VIE is required to set aside at least 10% of its after-tax profits each year, if any, to fund a statutory reserve until such reserve reaches 50% of its registered capital. Each of such entities in mainland China is also required to further set aside a portion of its after-tax profits to fund the employee welfare fund, although the amount to be set aside, if any, is determined at the discretion of its board of directors. These reserves are not distributable as cash dividends. For more details, see “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Cash flows and working capital.”

We have established stringent controls and procedures for cash flows within our organization. Each transfer of cash between our Cayman Islands holding company and a subsidiary, the VIE or the subsidiaries of the VIE is subject to internal approval. The cash inflows of Niu Technologies were primarily generated from the proceeds received from Niu Technologies’ public offerings of ordinary shares, other financing activities and cash generated from our operating activities. For the years ended December 31, 2020, 2021 and 2022, Niu Technologies did not provide any capital contributions or loans to our mainland China subsidiaries. For the years ended December 31, 2020, 2021 and 2022, the VIE did not receive loans provided by Niu Technologies. For the years ended December 31, 2020, 2021 and 2022, no assets other than cash were transferred between Niu Technologies and a subsidiary, the VIE or its subsidiary, no subsidiaries paid dividends or made other distributions to Niu Technologies, and no dividends or distributions were paid or made to U.S. investors.

For the years ended December 31, 2020, 2021 and 2022, our subsidiaries did not provide capital contributions to the VIE. We currently intend to retain most, if not all, of our available funds and any future earnings to operate and expand our business.

Pursuant to the Amended and Restated Exclusive Business Cooperation Agreements between our WFOE and the VIE, the VIE agrees to pay our WFOE a monthly service fee at an amount that is equal to 100% of its net profits or an amount adjusted by our WFOE in its sole discretion for the relevant month, which should be paid within seven business days upon receipt of invoice from our WFOE. The VIE has paid RMB143.5 million, RMB203.4 million and RMB112.2 million (US\$16.3 million) of service fee to our WFOE for the years ended December 31, 2020, 2021 and 2022, respectively. We plan to continue to determine the amount of service fee and payment method with the VIE and its shareholders through bona fide negotiation, and settle fees under the contractual arrangements accordingly in the future.

As a Cayman Islands holding company, we may receive dividends from our mainland China subsidiaries. Under the Enterprise Income Tax Law of the PRC, or the EIT Law, and related regulations, dividends, interests, rent or royalties payable by a foreign-invested enterprise, such as our mainland China 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 mainland 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 Cayman Islands, where Niu Technologies, the direct parent company of our subsidiaries, is incorporated, does not have such a tax treaty with mainland China. Hong Kong has a tax arrangement with mainland 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 mainland China 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, Niu Technologies Group Limited, which directly owns our mainland China subsidiary, Niudian Information, is incorporated in Hong Kong. However, if Niu Technologies Group Limited is not considered to be the beneficial owner of the dividends paid to it by Niudian Information under the tax circulars promulgated in February and October 2009, such dividends would be subject to withholding tax at a rate of 10%. If our mainland China subsidiaries declare and distribute profits to us, such payments will be subject to withholding tax, which will increase our tax liability and reduce the amount of cash available to our company. See "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—We may rely on dividends and other distributions on equity paid by our mainland China subsidiaries to fund any cash and financing requirements we may have, and any limitation on the ability of our mainland China subsidiaries to make payments to us could have a material and adverse effect on our ability to conduct our business" for more details. If our holding company in the Cayman Islands or any of our subsidiaries outside of mainland China were deemed to be a "resident enterprise" under the PRC Enterprise Income Tax Law, it would be subject to enterprise income tax on its worldwide income at a rate of 25%. See "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—If we are classified as a mainland China resident enterprise for mainland China income tax purposes, such classification could result in unfavorable tax consequences to us and our non-mainland China shareholders or ADS holders."

For purposes of illustration, the following discussion reflects the hypothetical taxes that might be required to be paid within mainland China, assuming that: (i) we have taxable earnings, and (ii) we determine to pay dividends in the future.

	<u>Tax calculation ⁽¹⁾</u>
Hypothetical pre-tax earnings ⁽²⁾	100 %
Tax on earnings at statutory rate of 25% ⁽³⁾	(25)%
Net earnings available for distribution	75 %
Withholding tax at standard rate of 10% ⁽⁴⁾	(7.5)%
Net distribution to Parent/Shareholders	67.5 %

Notes:

- (1) For purposes of this example, the tax calculation has been simplified. The hypothetical book pre-tax earnings amount, not considering timing differences, is assumed to equal taxable income in mainland China.
- (2) Under the terms of VIE agreements, our mainland China subsidiaries may charge the VIE for services provided to VIE. These service fees shall be recognized as expenses of the VIE, with a corresponding amount as service income by our mainland China subsidiaries and eliminate in consolidation. For income tax purposes, our mainland China subsidiaries and the VIE file income tax returns on a separate company basis. The service fees paid are recognized as a tax deduction by the VIE and as income by our mainland China subsidiaries and are tax neutral.

- (3) Certain of our subsidiaries and the VIE qualifies for a 15% preferential income tax rate in mainland China. However, such rate is subject to qualification, is temporary in nature, and may not be available in a future period when distributions are paid. For purposes of this hypothetical example, the table above reflects a maximum tax scenario under which the full statutory rate would be effective.
- (4) The PRC Enterprise Income Tax Law imposes a withholding income tax of 10% on dividends distributed by a foreign invested enterprise, or FIE, to its immediate holding company outside of mainland China. A lower withholding income tax rate of 5% is applied if the FIE's immediate holding company is registered in Hong Kong or other jurisdictions that have a tax treaty arrangement with mainland China, subject to a qualification review at the time of the distribution. For purposes of this hypothetical example, the table above assumes a maximum tax scenario under which the full withholding tax would be applied.

The table above has been prepared under the assumption that all profits of the VIE will be distributed as fees to our mainland China subsidiaries under tax neutral contractual arrangements. If, in the future, the accumulated earnings of the VIE exceed the service fees paid to our mainland China subsidiaries (or if the current and contemplated fee structure between the intercompany entities is determined to be nonsubstantive and disallowed by Chinese tax authorities), the VIE could make a non-deductible transfer to our mainland China subsidiaries for the amounts of the stranded cash in the VIE. This would result in such transfer being non-deductible expenses for the VIE but still taxable income for the mainland China subsidiaries.

Under the laws and regulations of mainland China, we are subject to restrictions on foreign exchange and cross-border cash transfers, including to U.S. investors. Our ability to distribute earnings to the holding company and U.S. investors is also limited. We are a Cayman Islands holding company and we may rely on dividends and other distributions on equity paid by our mainland China subsidiaries, which in turn relies on consulting and other fees paid to us by the VIE, for our cash and financing requirements, including the funds necessary to pay dividends and other cash distributions to our shareholders and service any debt we may incur. When any of our mainland China subsidiaries incurs debt on its own behalf, the instruments governing the debt may restrict its ability to pay dividends or make other distributions to us.

In addition, our mainland China subsidiaries, the VIE and its subsidiaries generate their revenue primarily in Renminbi, which is not freely convertible into other currencies. As a result, any restriction on currency exchange may limit the ability of our mainland China subsidiaries to pay dividends to us. For more details, see “Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—We may rely on dividends and other distributions on equity paid by our mainland China subsidiaries to fund any cash and financing requirements we may have, and any limitation on the ability of our mainland China subsidiaries to make payments to us could have a material and adverse effect on our ability to conduct our business” and “—Mainland China’s regulation of loans to and direct investment in mainland China entities by offshore holding companies and governmental control of currency conversion may delay or prevent us from using the proceeds of our offshore offerings to make loans to or make additional capital contributions to our mainland China subsidiaries, which could materially and adversely affect our liquidity and our ability to fund and expand our business.”

Permissions Required from the PRC Government Authorities for Our Operations

We conduct our business primarily through our subsidiaries and the VIE in mainland China. Our operations in mainland China are governed by the laws and regulations of mainland China. As of the date of this annual report, our mainland China subsidiaries and the VIE have obtained the requisite licenses and permits from the PRC government authorities that are material for the business operations of our subsidiaries and the VIE in mainland China, including, among others, CCC certification and ICP License. Given the uncertainties of interpretation and implementation of relevant laws and regulations and the enforcement practice by relevant government authorities, we may be required to obtain additional licenses, permits, filings or approvals for the functions and services of our platform in the future. For more detailed information, see “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business and Industry—We may be adversely affected by the complexity, uncertainties and changes in the regulation on internet-related businesses and companies in mainland China.”

Meanwhile, the PRC government has recently sought to exert more oversight and control over capital raising activities of listed companies that are conducted overseas and/or foreign investment in China-based issuers. In December 2021, the Cyberspace Administration of China, or the CAC, together with other authorities, jointly promulgated the Cybersecurity Review Measures, which became effective on February 15, 2022 and replaced its predecessor regulation. Pursuant to the Cybersecurity Review Measures, critical information infrastructure operators that procure internet products and services and network platform operators that conduct data process activities must be subject to the cybersecurity review if their activities affect or may affect national security. The Cybersecurity Review Measures further stipulates that network platform operators that hold personal information of over one million users shall apply with the Cybersecurity Review Office for a cybersecurity review before any public offering at a foreign stock exchange. On February 17, 2023, China Securities Regulatory Commission, or the CSRC, released several regulations regarding the filing requirements for overseas offerings and listings by domestic companies, including the Trial Administrative Measures of Overseas Securities Offering and Listing by Domestic Companies and five supporting guidelines (collectively, the “Overseas Listing Trial Measures”), which took effect on March 31, 2023. According to the Overseas Listing Trial Measures, the overseas offering and listing by a mainland China domestic company, whether directly or indirectly, shall be filed with the CSRC. Any failure to obtain or delay in obtaining such approval or completing such procedures could subject us to restrictions and penalties imposed by the CSRC, the CAC or other PRC regulatory authorities, which could include fines and penalties on our operations in China, delays of or restrictions on the repatriation of the proceeds from our offshore offerings into China, or other actions that could materially and adversely affect our business, financial condition, results of operations, and prospects, as well as the trading price of our ADSs. For more detailed information, see “Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—The filing, approval or other administration requirements of the CSRC or other PRC government authorities may be required in connection with our offshore offerings under PRC law, and, if required, we cannot predict whether or for how long we will be able to complete such filing, obtain such approval or meet such requirements.”

Financial Information Related to Our Subsidiaries and the VIE

The following table presents the condensed consolidating schedule of results of operations for our subsidiaries and the VIE for the periods presented.

Selected Condensed Consolidating Statements of Income/(loss) Information

	For the Year Ended December 31, 2022					Consolidated Total
	Niu Technologies	Other Subsidiaries	WFOE	VIE and its Subsidiaries	Eliminations	
	RMB (In thousands)					
Revenues ⁽⁴⁾	—	43,448	105,328	3,187,990	(168,169)	3,168,597
Cost of revenues ⁽⁴⁾	—	(41,143)	(28,233)	(2,483,840)	54,300	(2,498,916)
Gross profit	—	2,305	77,095	704,150	(113,869)	669,681
Selling and marketing expenses ⁽⁴⁾	—	(15,480)	(44,789)	(446,149)	66,009	(440,409)
Research and development expenses ⁽⁴⁾	—	—	(19,770)	(202,940)	46,232	(176,478)
General and administrative expenses ⁽⁴⁾	(15,415)	(2,343)	(26,944)	(115,490)	1,731	(158,461)
Total operating expenses	(15,415)	(17,823)	(91,503)	(764,579)	113,972	(775,348)
Government grants	—	—	—	16,385	—	16,385
Share of income (loss) from subsidiaries, consolidated VIE and VIE's subsidiaries ⁽³⁾	(39,265)	—	—	—	39,265	—
Interest expenses	—	—	—	(5,716)	—	(5,716)
Interest income	5,217	13	2	7,628	—	12,860
Investment income	—	221	—	10,697	—	10,918
Income (loss) before income taxes	(49,463)	(15,284)	(14,406)	(31,435)	39,368	(71,220)
Income tax benefit (expense)	—	(166)	(164)	22,087	—	21,757
Net income (loss)	(49,463)	(15,450)	(14,570)	(9,348)	39,368	(49,463)

	For the Year Ended December 31, 2021					Consolidated Total
	Niu Technologies	Other Subsidiaries	WFOE	VIE and its Subsidiaries	Eliminations	
	RMB (In thousands)					
Revenues ⁽⁴⁾	—	44,397	192,901	3,768,134	(300,895)	3,704,537
Cost of revenues ⁽⁴⁾	—	(37,772)	(69,322)	(2,879,594)	94,930	(2,891,758)
Gross profit	—	6,625	123,579	888,540	(205,965)	812,779
Selling and marketing expenses ⁽⁴⁾	—	(11,035)	(44,394)	(358,394)	81,815	(332,008)
Research and development expenses ⁽⁴⁾	—	—	(23,920)	(200,603)	89,305	(135,218)
General and administrative expenses ⁽⁴⁾	(11,442)	(2,688)	(24,605)	(137,474)	34,410	(141,799)
Total operating expenses	(11,442)	(13,723)	(92,919)	(696,471)	205,530	(609,025)
Government grants	—	—	—	48,727	—	48,727
Share of income from subsidiaries, consolidated VIE and VIE's subsidiaries ⁽³⁾	235,265	—	—	—	(235,265)	—
Interest expenses	—	—	—	(6,168)	—	(6,168)
Interest income	1,998	52	2	3,324	—	5,376
Investment income	—	1,233	—	19,935	—	21,168
Income (loss) before income taxes	225,821	(5,813)	30,662	257,887	(235,700)	272,857
Income tax expense	—	(410)	(2,588)	(44,039)	—	(47,037)
Net income (loss)	225,821	(6,223)	28,074	213,848	(235,700)	225,820

	For the Year Ended December 31, 2020					Consolidated Total
	Niu Technologies	Other Subsidiaries	WFOE	VIE and its Subsidiaries	Eliminations	
	RMB (In thousands)					
Revenues ⁽⁴⁾	—	12,232	134,684	2,500,024	(202,611)	2,444,329
Cost of revenues ⁽⁴⁾	—	(9,436)	(55,084)	(1,877,070)	56,410	(1,885,180)
Gross profit	—	2,796	79,600	622,954	(146,201)	559,149
Selling and marketing expenses ⁽⁴⁾	—	(9,982)	(40,804)	(210,861)	60,886	(200,761)
Research and development expenses ⁽⁴⁾	—	—	(14,897)	(173,465)	83,027	(105,335)
General and administrative expenses ⁽⁴⁾	(7,308)	(3,124)	(20,804)	(75,581)	1,957	(104,860)
Total operating expenses	(7,308)	(13,106)	(76,505)	(459,907)	145,870	(410,956)
Government grants	—	—	—	22,441	—	22,441
Share of income from subsidiaries, consolidated VIE and VIE's subsidiaries ⁽³⁾	47,711	—	—	—	(47,711)	—
Interest expenses	—	—	—	(7,381)	—	(7,381)
Interest income	5,951	1,750	438	648	—	8,787
Investment income	—	296	201	17,201	—	17,698
Income (loss) before income taxes	46,354	(8,264)	3,734	195,956	(48,042)	189,738
Income tax expense	—	(199)	—	(20,887)	—	(21,086)
Net income (loss)	46,354	(8,463)	3,734	175,069	(48,042)	168,652

The following table presents the condensed consolidating schedule of financial position for our subsidiaries and the VIE as of the dates presented.

Selected Condensed Consolidating Balance Sheets Information

	As of December 31, 2022					Consolidated Total
	Niu Technologies	Other Subsidiaries	WFOE	VIE and its Subsidiaries	Eliminations	
	RMB (In thousands)					
Cash and cash equivalents	12,376	28,183	158	493,570	—	534,287
Term deposit—current	208,590	—	—	—	—	208,590
Restricted cash	176,204	3,906	—	6,230	—	186,340
Short-term investments	—	—	—	160,406	—	160,406
Accounts receivable, net	—	1,011	—	298,732	—	299,743
Inventories ⁽¹⁾	—	5,966	—	411,955	(912)	417,009
Amounts due from inter-companies ⁽²⁾	—	52,932	423,025	24,252	(500,209)	—
Prepayments and other current assets	12,486	5,242	391	187,577	—	205,696
Total current assets	409,656	97,240	423,574	1,582,722	(501,121)	2,012,071
Term deposits—non-current	—	—	—	20,000	—	20,000
Property, plant and equipment, net	—	128	2,607	394,622	—	397,357
Intangible assets, net	—	492	48	1,318	—	1,858
Operating lease right-of-use assets	—	—	—	86,597	—	86,597
Investment in and amount due from subsidiaries, consolidated VIE and VIE's subsidiaries ⁽²⁾⁽³⁾	906,299	219,317	—	—	(1,125,616)	—
Deferred income tax assets	—	—	—	6,132	—	6,132
Other non-current assets	1	5	7,000	5,677	—	12,683
Total non-current assets	906,300	219,942	9,655	514,346	(1,125,616)	524,627
Total assets	1,315,956	317,182	433,229	2,097,068	(1,626,737)	2,536,698
Short-term bank borrowings	—	—	—	160,000	—	160,000
Notes payable	—	—	—	316,832	—	316,832
Accounts payable	—	60	—	459,407	—	459,467
Income taxes payable	—	396	—	1,502	—	1,898
Advances from customers	—	1,410	—	23,522	—	24,932
Deferred revenue—current	—	—	—	37,540	—	37,540
Amounts due to inter-companies ⁽²⁾	4,262	18,259	1,730	476,121	(500,372)	—
Accrued expenses and other current liabilities	1,596	5,929	9,216	175,352	—	192,093
Total current liabilities	5,858	26,054	10,946	1,650,276	(500,372)	1,192,762
Deferred revenue—non-current	—	—	—	11,430	—	11,430
Deferred income tax liabilities	—	—	—	1,398	—	1,398
Operating lease liabilities	—	—	—	7,569	—	7,569
Other non-current liabilities	—	—	—	13,441	—	13,441
Amounts due to inter-companies ⁽²⁾	—	115,714	—	—	(115,714)	—
Total non-current liabilities	—	115,714	—	33,838	(115,714)	33,838
Total liabilities	5,858	141,768	10,946	1,684,114	(616,086)	1,226,600
Total shareholders' equity	1,310,098	175,414	422,283	412,954	(1,010,651)	1,310,098
Total liabilities and shareholders' equity	1,315,956	317,182	433,229	2,097,068	(1,626,737)	2,536,698

	As of December 31, 2021					Consolidated Total
	Niu Technologies	Other Subsidiaries	WFOE	VIE and its Subsidiaries	Eliminations	
	RMB (In thousands)					
Cash and cash equivalents	107,769	17,954	187	82,464	—	208,374
Term deposit—current	95,636	—	—	—	—	95,636
Restricted cash	176,141	—	—	47,830	—	223,971
Short-term investments	—	30,229	—	743,449	—	773,678
Accounts receivable, net	—	885	—	267,672	—	268,557
Inventories ⁽¹⁾	—	4,366	—	266,292	(1,021)	269,637
Amounts due from inter-companies ⁽²⁾	—	29,726	455,990	23,235	(508,951)	—
Prepayments and other current assets	8,394	5,113	3,840	38,715	—	56,062
Total current assets	387,940	88,273	460,017	1,469,657	(509,972)	1,895,915
Term deposits—non-current	15,939	—	—	20,000	—	35,939
Property, plant and equipment, net	—	80	3,022	394,114	—	397,216
Intangible assets, net	—	2,072	63	1,533	—	3,668
Operating lease right-of-use assets	—	—	—	94,201	—	94,201
Investment in and amount due from subsidiaries, consolidated VIE and VIE's subsidiaries ⁽²⁾⁽³⁾	865,698	219,317	—	—	(1,085,015)	—
Deferred income tax assets	—	—	—	11,907	—	11,907
Other non-current assets	—	—	—	2,367	—	2,367
Total non-current assets	881,637	221,469	3,085	524,122	(1,085,015)	545,298
Total assets	1,269,577	309,742	463,102	1,993,779	(1,594,987)	2,441,213
Short-term bank borrowings	—	—	—	180,000	—	180,000
Notes payable	—	—	—	143,623	—	143,623
Accounts payable	—	15,633	—	523,297	—	538,930
Income taxes payable	—	295	2,588	14,719	—	17,602
Advances from customers	—	2,241	—	15,026	—	17,267
Deferred revenue—current	—	—	—	32,758	—	32,758
Amounts due to inter-companies ⁽²⁾	4,262	7,431	11,541	485,717	(508,951)	—
Accrued expenses and other current liabilities	761	4,041	12,117	181,985	—	198,904
Total current liabilities	5,023	29,641	26,246	1,577,125	(508,951)	1,129,084
Deferred revenue—non-current	—	—	—	10,694	—	10,694
Deferred income tax liabilities	—	—	—	1,992	—	1,992
Operating lease liabilities	—	—	—	13,922	—	13,922
Other non-current liabilities	—	—	—	20,967	—	20,967
Amounts due to inter-companies ⁽²⁾	—	114,296	—	—	(114,296)	—
Total non-current liabilities	—	114,296	—	47,575	(114,296)	47,575
Total liabilities	5,023	143,937	26,246	1,624,700	(623,247)	1,176,659
Total shareholders' equity	1,264,554	165,805	436,856	369,079	(971,740)	1,264,554
Total liabilities and shareholders' equity	1,269,577	309,742	463,102	1,993,779	(1,594,987)	2,441,213

The following table presents condensed consolidating schedule of cash flow data for our subsidiaries and the VIE for the years ended presented.

Selected Condensed Consolidating Cash Flows Information

	For the Year Ended December 31, 2022					Consolidated Total
	Niu Technologies	Other Subsidiaries	WFOE	VIE and its Subsidiaries	Eliminations	
	RMB (In thousands)					
Net cash provided by (used in) operating activities	(23,565)	(29,111)	4,550	(74,417)	687	(121,856)
Cash flows from investing activities:						
Cash paid for purchase of property, plant and equipment	—	(98)	(579)	(134,672)	—	(135,349)
Investments in Other Subsidiaries (5)	(12,263)	—	—	—	12,263	—
Purchase of term deposits	(635,471)	—	—	—	—	(635,471)
Cash received from redemption of term deposits	551,794	—	—	—	—	551,794
Cash paid for purchase of short-term investments	—	(20,000)	—	(2,573,000)	—	(2,593,000)
Cash received from sale of short-term investments	—	50,317	—	3,163,601	—	3,213,918
Prepayment for an investment	—	—	(4,000)	—	—	(4,000)
Others	—	—	—	—	—	—
Net cash provided by (used in) investing activities	(95,940)	30,219	(4,579)	455,929	12,263	397,892
Cash flows from financing activities:						
Proceeds from the parent company (5)	—	12,263	—	—	(12,263)	—
Cash received from exercise of employee stock options	2,203	—	—	—	—	2,203
Proceeds from short-term bank borrowings	—	—	—	340,000	—	340,000
Repayment for short-term bank borrowings	—	—	—	(360,000)	—	(360,000)
Net cash provided by financing activities	2,203	12,263	—	(20,000)	(12,263)	(17,797)
Effect of foreign currency exchange rate changes on cash, cash equivalents and restricted cash	21,972	764	—	7,994	(687)	30,043
Net increase (decrease) in cash, cash equivalents and restricted cash	(95,330)	14,135	(29)	369,506	—	288,282
Cash, cash equivalents and restricted cash at the beginning of the year	283,910	17,954	187	130,294	—	432,345
Cash, cash equivalents and restricted cash at the end of the year	188,580	32,089	158	499,800	—	720,627

For the Year Ended December 31, 2021						
Niu Technologies	Other Subsidiaries	WFOE	VIE and its Subsidiaries	Eliminations	Consolidated Total	
RMB						
(In thousands)						
Net cash provided by (used in) operating activities	25,840	(47,540)	1,200	354,675	—	334,175
Cash flows from investing activities:						
Cash paid for purchase of property, plant and equipment	—	(93)	(1,523)	(284,129)	—	(285,745)
Purchase of term deposits	(287,163)	—	—	(70,000)	—	(357,163)
Cash received from redemption of term deposits	303,296	—	—	50,000	—	353,296
Cash paid for purchase of short-term investments	—	(205,000)	—	(5,827,000)	—	(6,032,000)
Cash received from sale of short-term investments	—	225,232	—	5,801,935	—	6,027,167
Prepayment for an investment	—	—	—	—	—	—
Others	—	—	—	(614)	—	(614)
Net cash provided by (used in) investing activities	16,133	20,139	(1,523)	(329,808)	—	(295,059)
Cash flows from financing activities:						
Cash received from exercise of employee stock options	6,246	—	—	—	—	6,246
Proceeds from short-term bank borrowings	—	—	—	340,000	—	340,000
Repayment for short-term bank borrowings	—	—	—	(340,000)	—	(340,000)
Net cash provided by financing activities	6,246	—	—	—	—	6,246
Effect of foreign currency exchange rate changes on cash, cash equivalents and restricted cash	(6,108)	(1,959)	—	(423)	—	(8,490)
Net increase (decrease) in cash, cash equivalents and restricted cash	42,111	(29,360)	(323)	24,444	—	36,872
Cash, cash equivalents and restricted cash at the beginning of the year	241,799	47,314	510	105,850	—	395,473
Cash, cash equivalents and restricted cash at the end of the year	283,910	17,954	187	130,294	—	432,345

For the Year Ended December 31, 2020						
Niu Technologies	Other Subsidiaries	WFOE	VIE and its Subsidiaries	Eliminations	Consolidated Total	
RMB						
(In thousands)						
Net cash provided by (used in) operating activities	(55,920)	53,903	(102,580)	570,196	—	465,599
Cash flows from investing activities:						
Cash paid for purchase of property, plant and equipment	—	(6)	(2,404)	(109,336)	—	(111,746)
Payment of land use rights	—	—	—	(39,750)	—	(39,750)
Purchase of intangible assets	—	—	(86)	—	—	(86)
Purchase of term deposits	(339,653)	(56,671)	(15,000)	—	—	(411,324)
Cash received from redemption of term deposits	374,156	56,671	15,000	—	—	445,827
Investments in WFOE ⁽⁵⁾	—	(66,350)	—	—	66,350	—
Cash paid for purchase of short-term investments	—	(147,000)	(41,940)	(2,537,560)	—	(2,726,500)
Cash received from sale of short-term investments	—	98,295	42,141	2,167,911	—	2,308,347
Prepayment for an investment	—	—	—	—	—	—
Others	—	—	—	—	—	—
Net cash provided by (used in) investing activities	34,503	(115,061)	(2,289)	(518,735)	66,350	(535,232)
Cash flows from financing activities:						
Cash received from exercise of employee stock options	24,230	—	—	—	—	24,230
Proceeds from other subsidiaries of our company ⁽⁵⁾	—	—	66,350	—	(66,350)	—
Proceeds from short-term bank borrowings	—	—	—	180,000	—	180,000
Repayment for short-term bank borrowings	—	—	—	(217,394)	—	(217,394)
Net cash provided by (used in) financing activities	24,230	—	66,350	(37,394)	(66,350)	(13,164)
Effect of foreign currency exchange rate changes on cash, cash equivalents and restricted cash	(16,693)	(4,874)	—	(1,765)	—	(23,332)
Net increase (decrease) in cash, cash equivalents and restricted cash	(13,880)	(66,032)	(38,519)	12,302	—	(106,129)
Cash, cash equivalents and restricted cash at the beginning of the year	255,679	113,346	39,029	93,548	—	501,602
Cash, cash equivalents and restricted cash at the end of the year	241,799	47,314	510	105,850	—	395,473

Notes:

- (1) It represents the elimination of the unrealized profit from inter-company sales.
- (2) It represents the elimination of inter-company balances among our company, our WFOE, other subsidiaries of our company and the VIE and its subsidiaries.
- (3) It represents the elimination of the investment in the VIE and our subsidiaries.
- (4) It represents the elimination of the inter-company technical services, marketing services, research and development services and inter-company sales.
- (5) It represents cash received as the investment in other subsidiaries from our company and our WFOE from other subsidiaries, which was eliminated as inter-company transaction upon consolidation.

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

Summary of Risk Factors

Investing in the ADSs involves significant risks. You should carefully consider all of the information in this annual report before making an investment in the ADSs. Below please find a summary of the principal risks we face, organized under relevant headings.

Risks Related to Our Business and Industry

Risks and uncertainties related to our business and industry include, but are not limited to, the following:

- Our success depends upon the continued strength of our brand. If we are not able to maintain and enhance our brand, our business and operating results may be adversely affected;
- Our success is dependent on the continued popularity of our existing products and services and our continued innovation and successful launches of new products and services, and we may not be able to anticipate or make timely responses to changes in the preferences of consumers;
- We rely heavily on city partners and franchised stores for sales and distribution of our products and our success depends on our offline distribution network;
- We rely substantially on external suppliers for certain components and raw materials used in our products;
- We may not be able to maintain profitability;
- Our products and services may experience quality problems from time to time, which could result in decreased sales, adversely affect our results of operations and harm our reputation;
- We may be compelled to undertake product recalls or take other actions, which could adversely affect our brand image and results of operations;
- We may face intense competition in the electric two-wheeled vehicles industry;
- Our marketing strategy of appealing to and growing sales to a more diversified group of users may not continue to be successful; and
- We may not be able to prevent others from unauthorized use of our intellectual property, which could harm our business and competitive position.

Risks Related to Our Corporate Structure

- If the PRC government finds that the agreements that establish the structure for operating some of our operations in mainland China do not comply with the regulations of mainland China relating to the relevant industries, or if these regulations or the interpretation of existing regulations change or are interpreted differently in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations;

- Uncertainties exist with respect to the interpretation and implementation of the newly enacted Foreign Investment Law of the PRC and how it may impact the viability of our current corporate structure, corporate governance and business operations; and
- We rely on contractual arrangements with the VIE and its shareholders for a large portion of our business operations, which may not be as effective as direct ownership.

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 results of operations;
- The filing, approval or other administration requirements of the CSRC or other PRC government authorities may be required in connection with our offshore offerings under PRC law, and, if required, we cannot predict whether or for how long we will be able to complete such filing, obtain such approval or meet such requirements;
- Uncertainties in the interpretation and enforcement of the laws and regulations of mainland China could limit the legal protections available to you and us;
- The PRC government's significant oversight over our business operation could result in a material adverse change in our operations and the value of our securities;
- We may be adversely affected by the complexity, uncertainties and changes in the regulation on internet-related businesses and companies in mainland China;
- The PCAOB had historically been unable to inspect our auditor in relation to their audit work performed for our financial statements and the inability of the PCAOB to conduct inspections of our auditor in the past has deprived our investors with the benefits of such inspections; and
- Our ADSs may be prohibited from trading in the United States under the HFCAA in the future if the PCAOB is unable to inspect or investigate completely auditors located in mainland China and Hong Kong. The delisting of the ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment.

Risks Related to Our ADSs

- The trading price of the ADSs is likely to be volatile, which could result in substantial losses to investors;
- If securities or industry analysts do not publish research or publishes inaccurate or unfavorable research about our business, or if they adversely change their recommendations regarding the ADSs, the market price for our ADSs and trading volume could decline;
- The sale or availability for sale of substantial amounts of the ADSs could adversely affect their market price;
- Our dual-class voting structure will limit your ability to influence corporate matters and could discourage others from pursuing any change of control transactions that holders of our Class A ordinary shares and the ADSs may view as beneficial; and
- The dual-class structure of our ordinary shares may adversely affect the trading market for the ADSs.

Risks Related to Our Business and Industry

Our success depends upon the continued strength of our brand. If we are not able to maintain and enhance our brand, our business and operating results may be adversely affected.

We believe that our brand has significantly contributed to the success of our business and that maintaining and enhancing the brand is critical to retaining and expanding our customer base. Our marketing, design, research and products are aimed at reinforcing consumer perceptions of our “NIU” brand as a premium smart e-scooter brand. Therefore, failure to protect our brand or to grow the value of the “NIU” brand may have a material adverse effect on our business and results of operations, including losing our customers.

We focus on promoting awareness of our “NIU” brand generally and in particular as a premium brand for high-quality smart e-scooters globally. We seek to maintain and strengthen our brand image through marketing initiatives, including advertising, consumer promotions and trade promotions. Maintaining and strengthening our brand image depends on our ability to adapt to a rapidly changing media environment and preferences of customers to receiving information, including our increasing reliance on social media and online dissemination of advertising campaigns. If we do not continue to improve, maintain and strengthen our brand, we may lose the opportunity to build a critical mass of customers. Additionally, promoting and positioning our brand will likely depend significantly on our ability to provide high-quality products and services and engage with our customers as intended. If we are unsuccessful in doing so, our business, financial condition, results of operations and prospects could be materially and adversely affected.

Our success is dependent on the continued popularity of our existing products and services and our continued innovation and successful launches of new products and services, and we may not be able to anticipate or make timely responses to changes in the preferences of consumers.

The success of our operations depends on our ability to introduce new or enhanced smart e-scooters, and other new products. Consumer preferences differ across and within each of the regions in which we operate or plan to operate and may shift over time in response to changes in demographic and social trends, economic circumstances and the marketing efforts of our competitors. There can be no assurance that our existing products will continue to be favored by consumers or that we will be able to anticipate or respond to changes in consumer preferences in a timely manner. Our failure to anticipate, identify or react to these particular preferences could adversely affect our sales performance and our profitability. In addition, demand for many of our products, including accessories, are closely linked to customers’ purchasing power and disposable income levels, which may be adversely affected by unfavorable economic developments in the countries in which we operate.

We devote significant resources to product development. However, we may not be successful in developing innovative new products, and our new products may not be commercially successful. To the extent that we are not able to effectively gauge the direction of our key markets and successfully identify, develop and manufacture new or improved products in these changing markets, our financial results and our competitive position may suffer. Moreover, there are inherent market risks associated with new product introductions, including uncertainties about marketing and consumer preference, and there can be no assurance that we will be successful in introducing new products. We may expend substantial resources developing and marketing new products that may not achieve expected sales levels.

Additionally, our competitive advantage also depends on the smart features and data services we provide to our users. Our smart e-scooters are connected to our NIU app. By using smart e-scooters’ built-in GPS, on-board computer, algorithms and cloud technology, our NIU app enables riders to seamlessly receive real-time data including, among others, anti-theft alerts, daily riding habits and power supply, real-time diagnostics and maintenance and service station directory. We cannot assure you that we will be able to continue to innovate and develop new smart features and data services, which may jeopardize customer experience and affect both our sales of scooters and provision of related services.

We rely heavily on city partners and franchised stores for sales and distribution of our products and our success depends on our offline distribution network.

We have established a distinct omnichannel retail network to sell our products and services to our customers. In China, our offline retail channels consist of city partners and franchised stores, whereas in European and other countries, we rely on overseas distributors. Our unique “city partner” system plays an important role in our offline sales strategy in China. City partners are our exclusive distributors who either open and operate franchised stores or sign up franchised stores. As of December 31, 2022, we had 338 city partners and 3,102 franchised stores in China. Our offline distribution network plays a crucial role in our omnichannel retail system. We rely on these city partners and franchised stores in China to directly interact with and serve our users, but the interest of city partners and franchised stores may not be entirely aligned with ours or with that of other city partners and franchised stores. As of December 31, 2022, one distributor accounted for greater than 10% of our net accounts receivable. There can be no assurance that we will be able to maintain our existing relationships with city partners and franchised stores. Additionally, our existing city partners and franchised stores may not be able to maintain past levels of sales or expand their sales. In addition, as we seek to expand into new regions in China, we cannot assure you that we will be able to successfully establish and maintain relationships with new city partners and franchised stores in these regions on favorable terms or at all.

Furthermore, we manage our franchised stores in a real-time and interactive manner. We closely monitor their sales performance, service levels and activities within the franchised stores through the store level management system that was implemented by us in early 2018. However, we cannot assure you that we will be successful in managing our city partners and franchised stores and detecting inconsistencies with our brand image or values or non-compliance with the provisions of our distribution agreements by them. Any non-compliance by our city partners or franchised stores could, among other things, negatively affect our brand reputation, demands for our products and our relationships with other city partners and franchised stores. Any of these could have a material and adverse effect on our business, financial condition, results of operations and prospects.

We rely substantially on external suppliers for certain components and raw materials used in our products.

We purchase certain key components and raw material, such as batteries, motors, tires, battery chargers and controllers from external suppliers for use in our operations and production of products, and a continuous and stable supply of these components and raw materials that meet our standards is crucial to our operations and production. We normally enter into one-year procurement agreements with our external suppliers. We expect to continue to rely on external suppliers for a substantial percentage of our production requirements in the future. We had nil, one and one supplier accounting for greater than 10% of our total purchases in 2020, 2021 and 2022, respectively. We cannot assure you that we will be able to maintain our existing relationships with these suppliers and continue to be able to source electric motors, batteries or other key components and raw materials we use in our products on a stable basis and at a reasonable price or at all. For example, our suppliers may increase the prices for the components or materials we purchase and/or experience disruptions in their production of the components or materials.

The supply chain also exposes us to multiple potential sources of delivery failure or component shortages. While we obtain components from multiple sources whenever possible, similar to other scooter manufacturers, some of the components used in our products are purchased by us from a single source. To date, we have not found qualified and cost-efficient alternative sources for most of the single sourced components used in our products and we generally do not maintain long-term agreements with our single source suppliers. We have integrated the suppliers’ technologies within our products such that having to change to an alternative supplier may cause significant disruption to our operations. In the event that the supply of key components is interrupted for whatever reason or there are significant increases in the prices of these key components, our business, financial condition, results of operations and prospects may be materially and adversely affected. Additionally, changes in business conditions, force majeure, governmental changes and other factors beyond our control or that we do not presently anticipate could also affect our suppliers’ ability to deliver components to us on a timely basis.

We incur significant costs related to procuring components and raw materials required to manufacture and assemble our products. The prices for the components and raw materials fluctuate depending on factors beyond our control including market conditions and demand for these components and materials. Substantial increases in the prices for the components or raw materials we use in producing our products would increase our costs and reduce our margins. Any of the foregoing could materially and adversely affect our results of operations, financial condition and prospects.

We may not be able to achieve or maintain profitability.

We have incurred net losses in the past. In 2018, we had a net loss of RMB349.0 million. In 2019, 2020 and 2021, we had a net profit of RMB190.1 million, RMB168.7 million, RMB225.8 million, respectively. In 2022, we had a net loss of RMB49.5 million (US\$7.2 million). We had net cash provided by operating activities of RMB178.7 million, RMB465.6 million, RMB334.2 million in 2019, 2020 and 2021, respectively. We had net cash used in operating activities of RMB121.9 million (US\$17.7 million) in 2022. We cannot assure you that we will be able to achieve profitability again and maintain net profits or positive cash flow from operating activities in the future. Our ability to maintain profitability depends in large part on our ability to increase sales of our products and services, increase cost efficiency and manage operating expenses. We intend to continue to increase our sales of products, improve gross margin, manage and further reduce our operating expenses as a proportion of our total revenues, but there can be no assurance that we will achieve this goal and maintain profitability in the future.

Our products and services may experience quality problems from time to time, which could result in decreased sales, adversely affect our results of operations and harm our reputation.

Our products and services can contain design and manufacturing defects. Sophisticated cloud electric central unit and software, such as those developed by us, often contain “bugs” that can unexpectedly interfere with the software’s intended operation. Defects may also occur in components and products that we purchase from third-party suppliers. There can be no assurance we will be able to detect and fix all defects in the hardware, software and services we offer. Failure to do so could result in lost in revenue, significant warranty and other expenses and harm to our reputation.

Additionally, we source and purchase key components or accessories in our operations and production of products from third-party suppliers, such as batteries, motors, tires, battery chargers, helmets and controllers. We cannot assure that the quality and functions of these key components or accessories supplied by third-party suppliers will be consistent with and maintained at our high standard. Any defects or quality issues in these key components or accessories or any non-compliance incidents associated with these third-party suppliers could result in quality issues with our products and hence compromise our brand image and results of operations.

We may be compelled to undertake product recalls or take other actions, which could adversely affect our brand image and results of operations.

Our products may not perform consistently with customers’ expectations or with other scooters currently available on the market. Any product defects or any other failure of our products to perform as expected could harm our reputation and result in adverse publicity, lost revenue, delivery delays, product recalls, product liability claims, harm to our brand and reputation, and significant warranty and other expenses, and could have a material adverse impact on our business, financial condition, operating results and prospects.

On November 21, 2019, the State Administration for Market Regulation issued the Interim Provisions on the Administration of Recall of Consumer Goods, or the Recall Provisions, which became effective on January 1, 2020. Pursuant to the Recall Provisions, if a manufacturer is aware of any potential defect in its products, or receive such notice from relevant government authorities, it must investigate in a timely manner and report the results of such investigation to the relevant authorities. Where any defect is found during the investigation, the manufacturer must immediately cease to manufacture, sell, or import the relevant products and recall such products. We have not received any such notice from authorities, or initiated, voluntarily or involuntarily, any product recalls in accordance with the Recall Provisions.

In the future, we may at various times, voluntarily or involuntarily, initiate a recall if any of our products, including any systems or parts sourced from our suppliers, prove to be defective or non-compliant with applicable laws and regulations. Such recalls, whether voluntary or involuntary or caused by systems or components engineered or manufactured by us or our suppliers, could involve significant expense and could adversely affect our brand image in our target markets, as well as our business, prospects, financial condition and results of operations.

We may face intense competition in the electric two-wheeled vehicles industry.

We operate in the electric two-wheeled vehicles industry and face competition. We expect additional competitors to enter this market. Our future competitors may enjoy competitive advantages, such as (i) greater capacity to leverage their sales efforts and marketing expenditures across a broader portfolio of products, (ii) more established relationships with a larger number of suppliers, contract manufacturers and channel partners, (iii) access to larger and broader user bases, (iv) greater brand recognition, (v) greater financial, research and development, marketing, distribution and other resources, (vi) more resources to make investments and acquisitions and (vii) larger intellectual property portfolios. We may face potential competition from both domestic players and established international electric scooter manufacturers.

Moreover, although we have developed our data analytics to our customers as a value-added service, some of the mass-market electric scooter manufacturers have been adopting lithium-ion battery and app connectivity technologies to enter the electric two-wheeled vehicles market, which further intensifies direct competition. We believe our exclusive focus on smart electric scooters and the benefits we receive by manufacturing in China are the basis on which we can compete in the electric two-wheeled vehicles market in spite of the challenges posed by market competition. We believe that we are strategically positioned in the electric two-wheeled vehicles market, given the quality, performance and unique design of our products. Nonetheless, increasing competition may lead to lower unit sales and the subsequent increase in inventory may result in a further downward price pressure and adversely affect our business, financial condition, operating results and prospects. Our ability to successfully compete in our industry will be fundamental to our future success in existing and new markets and our market share. There can be no assurance that we will be able to compete successfully in our markets. If our competitors introduce new products or services that compete with or surpass the quality, price or performance of our products or services, we may be unable to satisfy existing customers or attract new customers at the prices and levels that would allow us to generate attractive rates of return on our investment.

Our marketing strategy of appealing to and growing sales to a more diversified group of users may not continue to be successful.

We have been successful in marketing our smart e-scooters in large part by promoting the NIU brand experience and lifestyle. Our marketing, design, research and products are aimed to reinforcing customer perceptions of NIU as a premium smart e-scooter brand. We aim to provide users with a good user experience, including by providing our users with access to a full suite of services conveniently through our NIU app and services stores. In addition, we seek to engage with our users on an ongoing basis using online and offline channels, such as NIU community and clubs. We cannot assure you that our services, including NIU Care and NIU Cover, or our efforts to engage with our users using both our online and offline channels, will be successful, which could impact our revenues as well as our customer satisfaction and marketing.

To sustain and grow the business over the long term, we must continue to be successful in selling products and promoting the NIU brand experience and lifestyle to a broader and more diverse set of users. We must also execute its diversification strategy without adversely impacting the strength of the brand with core users. Failure to successfully drive demand for our smart e-scooters may have a material adverse effect on our business and results of operations.

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

We consider our copyrights, trademarks, trade names, internet domain names, patents and other intellectual property rights invaluable to our ability to continue to develop and enhance our brand recognition. We have invested significant resources to develop our own intellectual property. Failure to maintain or protect these rights could harm our business. We rely on a combination of patents, patent applications, trade secrets, including know-how, copyright laws, trademarks, intellectual property licenses, contractual rights and any other agreements to establish and protect our proprietary rights in our technology. In addition, we enter into confidentiality and nondisclosure agreements with our employees and business partners. See “Item 4. Information On the Company—B. Business Overview—Intellectual Property.” Statutory laws and regulations are subject to judicial interpretation and enforcement and may not be applied consistently due to the lack of clear guidance on statutory interpretation. Contractual rights may be breached by counterparties, and there may not be adequate remedies available to us for any such breach.

The measures we take to protect our intellectual property rights may not be sufficient or adequate to prevent infringement or misuse of our intellectual property. Any unauthorized use of our intellectual property by third parties may adversely affect our current and future revenues and our reputation. Preventing unauthorized uses of intellectual property rights could be difficult, costly and time-consuming, particularly in China. Litigation may be necessary to enforce our intellectual property rights. Initiating infringement proceedings against third parties can be expensive and time-consuming, and divert management's attention from other business concerns. We may not prevail in litigation to enforce our intellectual property rights against unauthorized use. Furthermore, the practice of intellectual property rights enforcement by the PRC regulatory authorities is subject to significant uncertainty. We may have to resort to litigation to protect our intellectual property rights. Failure to adequately protect our intellectual property could harm our brand name and materially affect our business and results of operations.

We may need to defend ourselves against patent, trademark or other proprietary rights infringement claims, which may be time-consuming and would cause us to incur substantial costs.

Companies, organizations or individuals, including our competitors, may hold or obtain patents, trademarks or other proprietary rights that would prevent, limit or interfere with our ability to make, use, develop, sell or market our products, which could make it more difficult for us to operate our business. From time to time, we may receive communications from holders of patents or trademarks regarding their proprietary rights. Companies holding patents or other intellectual property rights may bring suits alleging infringement of such rights or otherwise assert their rights and urge us to take licenses. Our applications and uses of trademarks relating to our design, software or artificial intelligence technologies could be found to infringe upon existing trademark ownership and rights.

Additionally, we may fail to own or apply for key trademarks in a timely fashion, or at all, which may damage our reputation and brand. Additionally, we receive from time to time letters alleging infringement of patents, trademarks or other intellectual property rights by us.

As our patents may expire and may not be extended, our patent applications may not be granted and our patent rights may be contested, circumvented, invalidated or limited in scope, our patent rights may not protect us effectively.

As of December 31, 2022, we owned 563 patents, 857 registered trademarks and 27 copyrights relating to various aspects of our operations and 2 registered domain names, including www.niu.com. Of the 857 registered trademarks, 155 are registered in mainland China and 702 in other countries and regions. As of the same date, we had 354 applications for patents and trademarks pending in mainland China, Europe and other jurisdictions. For our pending applications, we cannot assure you that we will be granted patents pursuant to our pending applications. Even if our patent applications succeed and we are issued patents in accordance with them, it is still uncertain whether these patents will be contested, circumvented or invalidated in the future.

In addition, the rights granted under any issued patents may not provide us with proprietary protection or competitive advantages. The claims under any patents that issue from our patent applications may not be broad enough to prevent others from developing technologies that are similar or that achieve results similar to ours. It is also possible that the intellectual property rights of others will bar us from licensing and from exploiting any patents that are issued from our pending applications. Numerous patents and pending patent applications owned by others exist in the fields in which we have developed and are developing our technology. These patents and patent applications might have priority over our patent applications and could subject our patent applications to invalidation. Finally, in addition to those who may claim priority, any of our existing or pending patents may also be challenged by others on the basis that they are otherwise invalid or unenforceable.

We may be materially and adversely affected by negative publicity.

We rely heavily on our brand image in selling our products. Negative publicity relating to our products and services, shareholders, management, employees, operations, distributors, business partners, industry or products similar to ours, could materially and adversely affect consumer perceptions of our brand and result in decreased demand for our products. There have been various negative reports regarding our products and us in the past, in both online and traditional media, and there can be no assurance that we will not experience negative publicity in the future or that such negative publicity will not have a material adverse effect on our business, results of operations, financial condition or prospects.

In particular, any actual or alleged illegal acts of our shareholders or management may undermine our brand image and materially and adversely affect our business and results of operations. In June 2015, in connection with the trading of stock of a public company listed on the Shenzhen Stock Exchange, Mr. Yi'nan Li, one of our beneficial owners at the time, as well as a shareholder of Beijing Niudian, was convicted of one count of insider trading by the Guangdong Shenzhen Municipal Intermediate People's Court in January 2017, and his prison sentence ended in December 2017. Mr. Li is not a member of the board of directors or management team of Niu Technologies, or otherwise involved in its operations in any capacity. Glory Achievement Fund Limited, one of our shareholders that holds 28.0% of our outstanding shares and 21.2% of our total voting power, as of February 28, 2023, is ultimately and wholly held by a trust, which has Mr. Li as the beneficiary and is administered by an independent trustee and initially by three individual protectors unrelated to Mr. Li. Any decision making with respect to the voting or disposal of the shares held by Glory Achievement Fund Limited in our company or other dealings in our securities is subject to approval by the protectors. Mr. Li will be able to replace the protectors with persons appointed by himself in August 2028 or when the trust beneficially owns, through Glory Achievement Fund Limited or otherwise, no more than 10% of our outstanding shares. Mr. Li has undertaken not to act as a member of our board of directors or the management team of our company or any of its subsidiaries or variable interest entities, or otherwise be involved in our operations in any capacity. Furthermore, we have adopted corporate governance measures to restrict his access to our non-public information. Any negative publicity incident associated with our shareholders and management could materially and adversely affect the trading price of the ADSs.

We may be subject to product liability or warranty claims that could result in significant direct or indirect costs, or we could experience greater returns from retailers than expected, which could harm our business and operating results.

We may become subject to product liability claims, which could harm our business, prospects, operating results and financial condition. The electric two-wheeled vehicles industry experiences significant product liability claims and we face inherent risk of exposure to claims in the event our products do not perform as expected or malfunction resulting in property damage, personal injury or death. A successful product liability claim against us could require us to pay a substantial monetary award. Moreover, a product liability claim could generate substantial negative publicity about our products and business and inhibit or prevent commercialization of our future products which would have material adverse effect on our brand, business, prospects and operating results. Any insurance coverage might not be sufficient to cover all potential product liability claims. Any lawsuit seeking significant monetary damages may have a material adverse effect on our reputation, business and financial condition.

We generally provide various warranties on different components and parts of our products and across different markets. In China, we provide extended quality warranty to our users for terms varying from six months to three years, subject to certain conditions, among others, including that warranty only applies to normal use and quality issues. The occurrence of any material defects in our products could make us liable for damages and warranty claims in excess of our current reserves. In addition, we could incur significant costs to correct any defects, warranty claims or other problems, including costs related to product recalls. Any negative publicity related to the perceived quality of our products could affect our brand image, decrease retailer, distributor and customer demand, and adversely affect our operating results and financial condition. While our warranty is limited to repairs and returns, warranty claims may result in litigation, the occurrence of which could adversely affect our business and operating results.

We may fail to comply with legal or regulatory requirements or to obtain or adhere to requirements under relevant licenses, permits, registrations or certificates.

Our manufacturing and other production facilities as well as the packaging, storage, distribution, advertising and labeling of our products, are subject to extensive legal and regulatory requirements. For example, pursuant to the Regulation on the Administration of Production Licenses for Industrial Products of the PRC and Measures for the Implementation of the Regulation on the Administration of Production Licenses for Industrial Products of the PRC, we must maintain the Production License for National Industrial Products for the production of our products. Loss of or failure to renew or obtain necessary permits, licenses, registrations or certificates could delay or prevent us from meeting product demand, introducing new products, building new facilities or acquiring new businesses and could materially and adversely affect our operating results. If we are found to be in violation of applicable laws and regulations, we could be subject to administrative punishment, including fines, injunctions, recalls or asset seizures, as well as potential criminal sanctions, any of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, future material changes in industry standards, laws and regulations, such as increased restrictions on manufacturers, could result in increased operating costs or affect our ordinary operations, which could also have a material adverse effect on our operations and our financial results. See “Item 4. Information on the Company—B. Business Overview—Regulation” for additional details regarding the permits, licenses, registrations and other requirements applicable to us, our subsidiaries and affiliates. We largely rely on our own standards concerning the production and quality control of such products. While we are committed to producing high-quality products, there can be no assurance that our current production or quality control standards will satisfy any applicable laws and regulations that may come into effect in the future.

Our products are subject to safety standards and failure to satisfy such mandated standards would have a material adverse effect on our business and operating results.

Our products must comply with the safety standards of the market where they are sold. In mainland China, electric bicycles and electric motorcycles must meet or exceed all mandated safety standards, including national level and local level standards. It is required under these standards to conduct rigorous testing and use approved materials and equipment.

Electric bicycles shall meet the safety requirements set out in the Safety Technical Specification for Electric Bicycle (GB17761-2018), or the Electric Bicycle Standard, which was jointly issued by the State Administration for Market Regulation and the National Standardization Administration of China on May 15, 2018 and came into effect on April 15, 2019. Besides, a technical resolution on the interpretation and implement of the Electric Bicycle Standard was promulgated jointly by an expert group on TC12 motorcycle and component technology of Certification and Accreditation Administration of the PRC and China National Motorcycle Testing Centre (Tianjin) on March 25, 2019, which set some more specific and stricter requirements for the design of the electric bicycles. Although this resolution has not been adopted by the PRC national government as a national regulation, such interpretations that may be promulgated by the government authorities from time to time may still cause uncertainty regarding the compliance of our business. See “Item 4. Information on the Company—B. Business Overview—Regulation” for further details.

Electric motorcycles, as one type of the power-driven vehicles, shall meet the safety requirements set out in the Technical Specifications for Safety of Power-Driven Vehicles Operating on Roads (GB7258-2017), which was jointly issued by the AQSIQ and National Standardization Administration of China on September 29, 2017 and took effect since January 1, 2018, and was amended on July 29, 2019 and February 20, 2021. The latest version took effect on January 1, 2022. Furthermore, the Safety Specifications for Electric Motorcycles and Electric Mopeds (GB24155-2020), which issued by the State Administration for Market Regulation and the National Standardization Administration of China in May 2020 and became effective on January 1, 2021, also stipulates some specific safety requirements for electric motorcycles.

There is no guarantee that our products will satisfy the relevant standard and requirements for electric bicycles or motorcycles, and we may be required to satisfy additional industry standards and face regulation changes relating to electric bicycle and motorcycle business in the future. If our models were found to be in non-compliance of relevant laws and regulations, the models in question would be prohibited from being sold in the Chinese market, which would in turn materially and adversely affect our sales and revenue, and cause damage to our brand and result in liabilities. See “Item 4. Information on the Company—B. Business Overview—Regulation—Regulations Relating to Production of E-Scooter—Regulations on Production of Electric Bicycle” and “—Regulations on Qualification of Production of Electric Motorcycle.”

Furthermore, the electric bicycles and motorcycles must pass various tests, undergo a certification process and finally be affixed with China Compulsory Certification, or CCC, prior to being delivered from the factory, being sold, or being used in any commercial case, and such certification is also subject to periodic renewal. On March 14, 2019, the Opinions of the State Administration for Market Regulation, the MTT and the Ministry of Public Security on Intensifying Supervision of the Execution of National Standards for Electric Bicycles, or the Opinions, was promulgated. The Opinions provides that the market supervision department should strengthen the management of CCC certification for electric bicycles, strengthen inspections of certification agencies and manufacture enterprises, and should only allow vehicles that meet the Electric Bicycle Standards and obtained CCC certification flowing into the market. We have obtained CCC certification for all of our current products, and will try to obtain CCC certification for our future products. There is no guarantee, however, all series of our products will always comply with the CCC standard and satisfy the requirements of CCC certification, or we will be able to renew our current certification or certify timely our new products in the future. If our products were found to be in non-compliance of the CCC standard, we would be prohibited from selling such e-scooters in the Chinese market, which would in turn materially and adversely affect our sales and revenue, and cause damage to our brand and result in liabilities. See “Item 4. Information on the Company—B. Business Overview—Regulations— Regulations Relating to Production of E-Scooter—Regulations on Product Quality.”

We retain certain personal information about our users and may be subject to various privacy and consumer protection laws.

We use our NIU Inspire system to log information about each smart e-scooter’s use in order to aid us in smart e-scooter diagnostics, repair and maintenance, as well as to help us collect data regarding the user’s charge time, battery usage, mileage, efficiency habits and location information. Our users may object to the use of these data, which may harm our business. Possession and use of users’ personal information in conducting our business may subject us to regulatory burdens in mainland China and other jurisdictions, such as the European Union, which would require us to obtain users’ consent, restrict our use of such personal information and hinder our ability to expand our user base. In the event of a data breach or other unauthorized access to our user data, we may have obligations to notify users about the incident and we may need to provide some form of remedy for the individuals affected by the incident. For example, in May 2018 the European Union’s new regulation governing data practices and privacy called the General Data Protection Regulation, or the GDPR, became effective and substantially replaced the data protection laws of the individual European Union member states. The law requires companies to meet more stringent requirements regarding the handling of personal data of individuals in the EU than were required under predecessor EU requirements. In the United Kingdom, a Data Protection Bill that substantially implements the GDPR also became law in May 2018. The law also increases the penalties for non-compliance, which may result in monetary penalties of up to 20.0 million Euros or 4% of a company’s worldwide turnover, whichever is higher. In the U.S., various federal, state and foreign legislative and regulatory bodies, or self-regulatory organizations, may expand current laws or regulations, enact new laws or regulations or issue revised rules or guidance regarding privacy, data protection, information security. For example, California enacted the California Consumer Privacy Act, which, among other things, requires new disclosures to California consumers and afford such consumers new abilities to opt out of certain sales of personal information. Outside of the European Union and the U.S., many countries and territories have laws, regulations, or other requirements relating to privacy, data protection, information security, and consumer protection, and new countries and territories are adopting such legislation or other obligations with increasing frequency.

If users allege that we have improperly used, released or disclosed their personal information, we could face legal claims and reputational damage. We may incur significant expenses to comply with privacy, consumer protection and security standards and protocols imposed by law, regulation, industry standards or contractual obligations. Additionally, we use third-party cloud services to store the data collected. If third parties improperly obtain and use the personal information of our users, we may be required to expend significant resources to resolve these problems. A major breach of our network security and systems could create serious negative consequences for our businesses and future prospects, including possible fines, penalties, reduced customer demand for our products, and harm to our reputation and brand. See “Item 4. Information on the Company—B. Business Overview—Regulation” for further details.

We are subject to a variety of costs and risks due to our continued expansion internationally that may not be successful and could adversely affect our profitability and operating results.

Our smart e-scooters have international models that are manufactured for sales and distribution in overseas markets. International expansion represents a large opportunity to further grow our business and enhance our competitive position, and is one of our core strategies.

We may enter into new geographic markets where we have limited or no experience in marketing, selling, and localizing and deploying our smart e-scooters. International expansion has required and will continue to require us to invest significant capital and other resources and our efforts may not be successful. International sales and operations may be subject to risks such as:

- limited brand recognition (compared with our home market in China);
- costs associated with establishing new distribution networks;
- difficulty to find qualified partners for overseas distribution;
- inability to anticipate foreign consumers' preferences and customs;
- difficulties in staffing and managing foreign operations;
- burdens of complying with a wide variety of local laws and regulations, including personal data protection, battery, motor, packaging and labeling;
- political and economic instability;
- trade restrictions;
- lesser degrees of intellectual property protection;
- tariffs and customs duties and the classifications of our goods by applicable governmental bodies; and
- a legal system subject to undue influence or corruption.

The occurrence of any of these risks could negatively affect our international business and consequently our business and operating results. In addition, the concern over these risks may also prevent us from entering into or releasing certain of our smart e-scooters in certain markets.

We rely on third-party logistic service providers to deliver our online direct sales orders and certain overseas orders.

We typically rely on third-party logistic service providers to deliver our online direct sales orders and certain overseas orders. Damage or disruption to our distribution logistics due to disputes, weather, natural disasters, fire, explosions, terrorism, pandemics, geopolitical turmoil or labor strikes could impair our ability to distribute or sell our products. Inadequate third-party logistics services could also potentially disrupt our distribution and sales and compromise our business reputation. Failure to take adequate steps to mitigate the likelihood or potential impact of such events, or to effectively manage such events if they occur, could adversely affect our business, financial condition and results of operations, as well as require additional resources to restore our supply chain.

Our operations may be interrupted by production difficulties due to mechanical failures, utility shortages or stoppages, fire, natural disaster or other calamities at or near our facilities.

We are reliant on equipment and technology in our facilities for the production and quality control of our products, and our operations are subject to production difficulties such as capacity constraints of our production facilities, mechanical and systems failures and the need for construction and equipment upgrades, any of which may cause the suspension of production or/and reduced output. There can be no assurance that we will not experience problems with our equipment or technology in the future or that we will be able to address any such problems in a timely manner. Problems with key equipment or technology in one or more of our production facilities may affect our ability to produce our products or cause us to incur significant expense to repair or replace such equipment or technology. Also, scheduled and unscheduled maintenance programs may affect our production output. Any of these could have a material adverse effect on our business, financial condition, results of operations and prospects.

Furthermore, we depend on a continuous supply of utilities, such as electricity and water, to operate our production facilities. Any disruption to the supply of electricity or other utilities to our production facilities may disrupt our production. This could adversely affect our ability to fulfill our sales orders and consequently may have an adverse effect on our business and results of operations. In addition, our operations are subject to operational risks. Fire, natural disasters, pandemics or extreme weather, including earthquakes, droughts, floods, typhoons or other storms, or excessive cold or heat could cause power outages, fuel shortages, water shortages, damage to our production facilities, any of which could impair or interfere with our operations. A fire accident happened at the warehouse in our rented plant facility in Jiangsu Province of the PRC in April 2018, and we suffered a RMB21.8 million loss for the inventories damaged and cost incurred to repair property and equipment in the second quarter of 2018. We cannot assure you that similar events will not happen again in the future or that we will be able to take adequate measures to mitigate the likelihood or potential impact of similar events, or to effectively respond to such events if they occur, which could materially and adversely affect our business, financial condition and results of operations.

Our financial and operating performance may be adversely affected by epidemics or other public health crises.

Our financial and operating performance may be materially and adversely affected by the outbreak of epidemics or other public health crises. For example, since late December 2019, an outbreak of a new type of severe pneumonia caused by novel coronavirus (COVID-19) spread globally. During such epidemic outbreak, government-imposed measures such as travel restriction, extended holidays and delay of business resumption, interrupted normal operation of businesses and adversely affected and slowed down the economic development during the period.

Many aspects of our operations were harmed as a result of the ongoing epidemic of the novel coronavirus. We prioritized the health and safety of our employees, and took various preventative and quarantine measures across our company soon after the outbreak. Due to the strict measures in response to the outbreak, we had to reduce work resumption rate in February and March of 2020 after the Chinese New Year holiday. Even after we resumed production activities, the efficiency was affected by the precautionary measures we took. Transportation and logistics services were significantly affected as well, which delayed or suspended the delivery of our products and the supply of our raw materials. As a result of the pandemic, we also suffered from shrinking market demand from China in the first quarter of 2020 and overseas markets on an ongoing basis. Due to the decreasing demand as a result of the outbreak, our revenues of the first quarter of 2020 saw a decrease of 34.4% year over year. In addition, we incurred fixed costs in operating expenses despite the decrease in sales and level of operations. As a result, our net results was adversely affected in the first quarter of 2020. For the same reason, our efforts on retail sales network expansion internationally was temporarily suspended. Our branding and marketing activities were affected, as marketing activities were limited to online only.

In China, business activities have largely resumed, government emergency measures have been significantly relaxed, and the general economy is gradually recovering. Beginning in the second quarter of 2020, we experienced recovery and growth in results of operations propelled by the strong recovery in sales in China. However, our sales in international markets have been continuously affected due to the ongoing pandemic in those markets. Given the uncertainty around the extent and timing of the potential future spread or mitigation of the COVID-19 and around the imposition or relaxation of protective measures, we cannot reasonably estimate the impact to our future results of operations, cash flows, or financial condition. We cannot assure you that the COVID-19 pandemic can be eliminated or contained in the near future, or at all, or a similar outbreak will not occur again.

In late 2021, there had been a resurgence of COVID-19 cases, including the COVID-19 Delta and Omicron variant cases, in multiple cities in China. The Chinese local authorities reinstated certain measures to keep COVID-19 in check, including travel restrictions and stay-at-home orders, and we had to adjust various aspects of our operations. Any prolonged occurrence or recurrence of these health epidemics or other adverse public health developments in China or any of the major markets in which we do business may have a material adverse effect on our business and operations. Our business could also experience a slowdown or temporary suspension in production in geographic locations impacted. Since December 2022, China began to modify restrictive measures associated with COVID-19 and had downgraded its management of COVID-19 to Class-B on January 8, 2023 in accordance with the Law of the People's Republic of China on Prevention and Treatment of Infectious Disease. The extent to which the pandemic impacts our results of operations going forward will depend on future developments which are highly uncertain and unpredictable, including the frequency, duration and extent of outbreaks of COVID-19, the appearance of new variants with different characteristics, the effectiveness of efforts to contain or treat cases, and future actions that may be taken in response to the developments. We, along with our customers, will need time to recover from the economic effectiveness of the pandemic even after business conditions begin to return to normal. To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this annual report.

If we fail to maintain an effective system of internal control over financial reporting, we may be unable to accurately report our financial results or prevent fraud.

We are subject to reporting obligations under the U.S. securities laws. Among other things, the Securities and Exchange Commission, or the SEC, as required by Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, adopted rules requiring every public company, including us, 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 the company's 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, 2022.

For the year end December 31, 2018, a material weakness was identified in our internal control over financial reporting. The material weakness identified related to our lack of sufficient financial reporting and accounting personnel with appropriate knowledge of U.S. GAAP and SEC reporting requirements to properly address complex U.S. GAAP accounting issues and to prepare and review our consolidated financial statements and related disclosures to fulfill U.S. GAAP and SEC financial reporting requirements. As defined in the standards established by the U.S. Public Company Accounting Oversight Board, a "material weakness" is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis.

In 2019, we took measures to address the material weakness identified above. We have implemented measures to improve our internal control over financial reporting, including: (i) hired an additional a reporting associate with appropriate knowledge and experience in U.S. GAAP accounting and SEC reporting and one more internal audit associate with experience in internal control, internal audit and SOX compliance; (ii) upgraded our financial system to enhance our effectiveness and enhance control of financial analysis; (iii) established effective oversight and clarifying reporting requirements for non-recurring and complex transactions to ensure consolidated financial statements and related disclosures are accurate, complete and in compliance with U.S. GAAP and SEC reporting requirements; (iv) established a regular training program for our accounting staffs, especially training related to U.S. GAAP and SEC reporting requirements; and (v) implemented and formalized comprehensive internal controls over financial reporting, including developing a comprehensive policy and procedure manual, to allow for prevention, early detection and resolution of potential compliance issues.

In connection with the preparation of our financial statements for the fiscal year ended December 31, 2022, we did not identify any material weakness in our internal controls and our financial reporting. Our management has concluded that our internal control over financial reporting was effective as of December 31, 2022. See "Item 15. Controls and Procedures." In the future, however, if we fail to maintain effective internal control over financial reporting, our management may not be able to conclude that we have effective internal control over financial reporting at a reasonable assurance level. A failure to maintain effective internal controls over financial reporting could result in inaccuracies in our financial statements and could also impair our ability to comply with applicable financial reporting requirements and related regulatory filings on a timely basis. As a result, our business, financial condition, results of operations and prospects, as well as the trading price of our ADSs, may be materially and adversely affected. Moreover, ineffective internal control over financial reporting could expose us to increased risk of fraud or misuse of corporate assets and subject us to potential delisting from the stock exchange on which we list, regulatory investigations and civil or criminal sanctions. We may also be required to restate our financial statements from prior periods.

Furthermore, even if our management concludes that our internal control over financial reporting is effective, our independent registered public accounting firm, after conducting its own independent testing, may issue a report that is qualified if it is not satisfied with our internal controls or the level at which our controls are documented, designed, operated or reviewed, or if it interprets the relevant requirements differently from us. In addition, since we have been a public company, our reporting obligations may place a significant strain on our management, operational and financial resources and systems for the foreseeable future. We may be unable to timely complete our evaluation testing and any required remediation. If we fail to maintain an effective internal control environment, we could suffer material misstatements in our consolidated financial statements and fail to meet our reporting obligations, which would likely cause investors to lose confidence in our reported financial information. This could in turn limit our access to capital markets, harm our results of operations, and lead to a decline in the trading price of the ADSs. Additionally, ineffective internal control over financial reporting could expose us to increased risk of fraud or misuse of corporate assets and subject us to potential delisting from the stock exchange on which we list, regulatory investigations and civil or criminal sanctions. We may also be required to restate our consolidated financial statements for prior periods.

If our suppliers or distributors fail to use ethical business practices and comply with applicable laws and regulations, our brand image could be harmed due to negative publicity.

Our core values, which include developing high-quality smart e-scooters while operating with integrity, are an important component of our brand image, which makes our reputation sensitive to allegations of unethical business practices. We do not control the business practices of our suppliers or distributors. Accordingly, we cannot guarantee their compliance with ethical business practices, such as environmental responsibilities, fair wage practices and compliance with child labor laws, among others. A lack of demonstrated compliance could lead us to seek alternative suppliers or distributors which could increase our costs and results in delayed delivery of our products or other disruptions of our operations.

Violation of labor or other laws by our suppliers or distributors or the divergence of their labor or other practices from those generally accepted as ethical in the markets in which we do business could also attract negative publicity for us and our brand. This could diminish the value of our brand image and reduce demand for our products if, as a result of such violation, we were to attract negative publicity. If we, or other players in our industry, encounter similar problems in the future, it could harm our brand image, business, prospects, results of operations and financial condition.

Any significant cybersecurity incident or disruption of our information technology systems or those of third-party partners could materially damage user relationships and subject us to significant reputational, financial, legal and operation consequences.

We depend on our information technology systems, as well as those of third parties, to develop new products and services, host and manage our services, store data, process transactions, respond to user inquiries, and manage inventory and our supply chain. Any material disruption or slowdown of our systems or those of third parties whom we depend upon could cause outages or delays in our services, particularly in the form of interruption of services delivered by our mobile app, which could harm our brand and adversely affect our operating results. We rely on cloud servers maintained by cloud service providers to store our data, and all of the data we collected are hosted at third-party cloud service providers.

Problems with our cloud service providers or the telecommunications network providers with whom they contract could adversely affect the user experience delivered by us. Our cloud service providers could decide to cease providing us services without adequate notice. Any change in service levels at our cloud servers or any errors, defects, disruptions or other performance problems with our information technology systems could harm our brand and may damage the data of our users. If changes in technology cause our information technology systems, or those of third parties whom we depend upon, to become obsolete, or if our or their information systems are inadequate to handle our growth, we could lose users, and our business and operating results could be adversely affected.

Our success depends on our ability to retain our core management team and other key personnel.

Our performance depends on the continued service and performance of our directors and senior management as they are expected to play an important role in guiding the implementation of our business strategies and future plans. If any of our directors or any members of our senior management were to terminate their service or employment, there can be no assurance that we would be able to find suitable replacements in a timely manner, at acceptable cost or at all. The loss of services of key personnel or the inability to identify, hire, train and retain other qualified and managerial personnel in the future may materially and adversely affect our business, financial condition, results of operations and prospects. Additionally, we rely on our research and development personnel for product development and technology innovation. If any of our key research and development personnel were to leave us, we cannot assure you that we can secure equally competent research and development personnel in a timely manner, or at all.

We are a relatively young company, and we may not be able to sustain our rapid growth, effectively manage our growth or implement our business strategies.

We have a limited operating history. We are formed in September 2014, and we launched our first product, the NQi Series scooter, in June 2015. Although we have experienced significant growth since our inception, our historical growth rate may not be indicative of our future performance due to our limited operating history.

You should consider our business and future prospects in light of the risks and challenges we face as a new entrant into our industry, including, among other things, with respect to our ability to:

- produce safe, reliable and quality smart e-scooters;

- build a well-recognized brand;
- establish and expand our customer base;
- successfully market our products and services;
- improve and maintain our operational efficiency;
- maintain a reliable, secure, high-performance and scalable technology infrastructure;
- attract, retain and motivate talented employees;
- anticipate and adapt to changing market conditions, including technological developments and changes in competitive landscape;
- navigate an evolving and complex regulatory environment; and
- identify suitable facilities to expand manufacturing capacity.

If we fail to address any or all of these risks and challenges, our business may be materially and adversely affected.

We have limited experience to date in high volume manufacturing of our smart e-scooters. We cannot assure you that we will be able to develop or ensure efficient, automated, low-cost manufacturing capability and processes, and reliable sources of component supply that will enable us to meet the quality, price, engineering, design and production standards, as well as the production volumes required to successfully mass-market our currently available products and future scooters. We may not be able to achieve similar results or grow at the same rate as we had in the past. As our business grows, we may adjust our product and service offerings. These adjustments may not achieve expected results and may have a material and adverse impact on our financial conditions and results of operations.

In addition, our rapid growth and expansion have placed, and continue to place, significant strain on our management and resources. This level of significant growth may not be sustainable or achievable at all in the future. We believe that our continued growth will depend on many factors, including continued launch of new products, effective marketing, successful entry into other overseas market and operating efficiency. We cannot assure you that we will achieve any of the above, and our failure to do so may materially and adversely affect our business and results of operations.

Higher employee costs and inflation may adversely affect our business and our ability to achieve or maintain profitability.

China's overall economy and the average wage in mainland China have increased in recent years and are expected to grow. The average wage level for our employees has also increased in recent years. We expect that our employee costs, including wages and employee benefits, will increase. Unless we are able to pass on these increased employee costs to those who pay for our products and services, our ability to achieve or maintain profitability and our results of operations may be materially and adversely affected.

We outsource our production labor needs to third-party labor service companies. Typically, we enter into agreements with labor service companies, pursuant to which labor service companies send their employees to work on our assembly and production lines. The labor service companies are responsible for entering into labor contracts with their employees and provide, among others, social benefits and bear costs relating to accidents or injuries happened at the work place in accordance with the laws and regulations of mainland China. We may be unable to enter into new agreements or extend existing agreements with them on terms and conditions acceptable to us, and therefore may need to contract with other third parties and incur additional labor costs. Despite our price resilience, the rising employee costs as a result of higher labor cost of our contract manufacturers and operation staff and increasing raw material price cannot be easily passed to end consumers in the form of higher retail prices due to competition in the electric two-wheeled vehicles market. Our ability to achieve or maintain profitability therefore may be adversely affected if labor cost and inflation continue to rise in the future.

We may need additional capital, and financing may not be available on terms acceptable to us, or at all.

We believe our cash on hand will be sufficient to meet our current and anticipated needs for general corporate purposes for at least the next 12 months. We may, however, need additional cash resources in the future if we experience changes in business conditions or other developments. We may also need additional cash resources in the future if we find and wish to pursue opportunities for investment, acquisition, capital expenditure or similar actions. If we determine in the future that our cash requirements exceed the amount of cash and cash equivalents we have on hand, we may seek to issue equity or equity linked securities or obtain debt financing. The issuance and sale of additional equity would result in further dilution to our shareholders. The incurrence of indebtedness would result in increased fixed obligations and could result in operating covenants that would restrict our operations. We cannot assure you that financing will be available in amounts or on terms acceptable to us, if at all.

Our business is subject to seasonal and quarterly fluctuations, and if our sales fall below our forecasts, our overall financial condition and results of operations could be adversely affected.

Our revenues and operating results have fluctuated in the past from quarter to quarter, due to, among others, seasonal factors. Our revenues have been higher in the third quarter each year primarily as a result of ideal weather conditions for riding e-scooters and have been lower in the first quarter each year primarily as a result of unideal weather condition. Accordingly, any shortfall in expected third-quarter revenues would adversely affect our annual operating results. Our advertising and promotion expenses tend to be event-driven. We typically conduct various advertising and promotional events when we launch new products. As a result, the costs relating to such marketing and promotional events may increase significantly in the relevant quarter, which may cause our results of operations and financial performance to fluctuate from quarter to quarter.

We note that, in general, scooter sales tend to decline over the winter season and we anticipate that our sales of currently available e-scooters and the upcoming new products may have similar seasonality. However, our rapid growth may obscure the extent to which seasonality trends have affected our business and our limited operating history makes it difficult for us to assess the exact nature or extent of the seasonality of our business. Our operating results could also suffer if we do not generate revenues consistent with our expectations for this seasonal demand because many of our procurement are based on anticipated levels of annual revenues and past years' pattern of reasonability. Accordingly, yearly or quarterly comparisons of our operating results may not be useful and our operating results in any particular period will not necessarily be indicative of the results to be expected for any future period.

An economic downturn or economic uncertainty may adversely affect consumer discretionary spending and demand for our products and services.

Our products and services may be considered discretionary items for some consumers. Factors affecting the level of consumer spending for such discretionary items include general economic conditions, and other factors, such as consumer confidence in future economic conditions, fears of recession, the availability and cost of consumer credit, levels of unemployment and tax rates. As global economic uncertainty remains, trends in consumer discretionary spending also remain unpredictable and subject to reductions. Unfavorable economic conditions may lead consumers to delay or reduce purchases of our products and services and consumer demand for our products and services may not grow as we expect. Our sensitivity to economic cycles and any related fluctuation in consumer demand for our products and services may have an adverse effect on our operating results and financial condition.

We have limited insurance coverage, which could expose us to significant costs.

We maintain certain insurance policies to safeguard against various risks associated with our business and operations, including mainly property insurance and product liability insurance for models in the overseas markets and public liability insurance for models in the China market. However, we cannot assure you that our insurance coverage is sufficient to prevent us from any loss or that we will be able to successfully claim our losses under our current insurance policy on a timely basis, or at all, which may adversely affect our financial condition and results of operations.

We have granted, and may continue to grant, options and other types of awards under our share incentive plan, which may result in increased share-based compensation expenses.

In January 2016 and September 2018, our shareholders and board of directors approved the 2016 Global Share Incentive Plan and the 2018 Share Incentive Plan, respectively, to attract and retain the best available personnel, provide additional incentives to employees, directors and consultants, and promote the success of our business. The maximum aggregate number of ordinary shares that may be issued under the 2016 Global Share Incentive Plan, as amended in March 2018, or the Amended and Restated 2016 Plan, is 5,861,480 Class A ordinary shares. Under the 2018 Share Incentive Plan, the maximum aggregate number of ordinary shares available for issuance is 6,733,703 Class A ordinary shares, subject to certain annual increases. As of December 31, 2022, options to purchase 1,801,680 Class A ordinary shares and 3,750 restricted share units had been granted and were outstanding under the Amended and Restated 2016 Plan, excluding options or restricted share units that were forfeited or canceled after the relevant grant dates. As of December 31, 2022, options to purchase 2,612,928 Class A ordinary shares and 3,886,908 restricted share units had been granted and were outstanding under the 2018 Share Incentive Plan. In 2020, 2021 and 2022, we recorded RMB39.6 million, RMB47.2 million and RMB58.2 million (US\$8.4 million) in share-based compensation expenses, respectively.

We believe the granting of share-based awards is of significant importance to our ability to attract and retain key personnel and employees, and we will continue to grant share-based compensation to employees in the future. As a result, our expenses associated with share-based compensation may increase, which may have an adverse effect on our results of operations.

Competition for highly skilled personnel is often intense and we may incur significant costs or be unsuccessful in attracting, integrating, or retaining qualified personnel to fulfill our current or future needs.

We have, from time to time, experienced, and we expect to continue to experience, difficulty in hiring and retaining highly skilled employees with appropriate qualifications. In addition, if any of our senior management or key personnel joins a competitor or engages in a competing business, we may lose business, knowhow, trade secrets, business partners and key personnel. Furthermore, prospective candidates and existing employees often consider the value of the equity awards they receive in connection with their employment. Thus, our ability to attract or retain highly skilled employees may be adversely affected by declines in the perceived value of our equity or equity awards. Furthermore, there are no assurances that the number of shares reserved for issuance under our share incentive plans will be sufficient to grant equity awards adequate to recruit new employees and to compensate existing employees.

We are or may be subject to risks associated with strategic alliances or acquisitions.

We have entered into and may in the future enter into joint research and development agreements, co-branding agreements and strategic alliances with various third parties to further our business purpose from time to time. These alliances could subject us to a number of risks, including risks associated with sharing proprietary information, non-performance by the third party and increased expenses in establishing new strategic alliances, any of which may materially and adversely affect our business. We may have limited ability to monitor or control the actions of these third parties and, to the extent any of these strategic third parties suffers negative publicity or harm to their reputation from events relating to their business, we may also suffer negative publicity or harm to our reputation by virtue of our association with any such third party.

In addition, although we have no current acquisition plans, if appropriate opportunities arise, we may acquire additional assets, products, technologies or businesses that are complementary to our existing business. In addition to possible shareholders' approval, we may also have to obtain approvals and licenses from relevant government authorities for the acquisitions and to comply with any applicable laws and regulations of mainland China, which could result in increased delay and costs, and may derail our business strategy if we fail to do so. Furthermore, past and future acquisitions and the subsequent integration of new assets and businesses into our own require significant attention from our management and could result in a diversion of resources from our existing business, which in turn could have an adverse effect on our business operations. Acquired assets or businesses may not generate the financial results we expect. Acquisitions could result in the use of substantial amounts of cash, potentially dilutive issuances of equity securities, the occurrence of significant goodwill impairment charges, amortization expenses for other intangible assets and exposure to potential unknown liabilities of the acquired business. Moreover, the costs of identifying and consummating acquisitions may be significant.

Our business could be adversely affected by trade tariffs or other trade barriers.

Our products are exported to a number of geographical markets, such as Europe, the U.S. and Southeast Asia, and we plan to further expand our overseas sales in the future. Our ability to sell our products to overseas markets may be affected by trade tariffs or other trade barriers. Moreover, a discord in international trade relations and the implementation of new tariff or trade barriers, particularly between the United States and China, but also as a result of the war in Ukraine and sanctions on Russia, could negatively affect our global sales. Starting from early 2018, the U.S. government imposed several rounds of tariffs on Chinese goods, the categories of which include our e-scooters and accessories. While the two parties signed a phase one agreement in January 2020, the tariffs on our products have yet been lifted. In addition, the European Union imposed tariffs on imports of e-bikes, which are defined as cycle with pedal assistance and an ancillary electric motor, originating in mainland China. Any of the existing tariffs and trade barriers and any future ones could have a material adverse effect on our business, financial condition and results of operations.

We are subject to changing laws and regulations regarding regulatory matters, corporate governance and public disclosure 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 Securities and Exchange Commission, 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.

We operate in the electric two-wheeled vehicles industry. We are subject to the laws of mainland China in addition to the laws of the foreign countries in which we operate and to which we sell our products. Changing laws and regulations regarding regulatory matters, corporate governance and public disclosure may result in continuing uncertainty regarding compliance matters and additional costs necessitated by ongoing revisions to our disclosure and governance practices. In addition, we may face operational issues that could have a material adverse effect on our reputation, business and results of operations, if we fail to address certain factors, including but not limited to the following:

- the need for increased resources to manage regulatory compliance across our international businesses;
- compliance with privacy laws and data security laws and compliance costs across different legal systems;
- heightened restrictions and barriers on the transfer of data between different jurisdictions; and
- differing, complex and potentially adverse customs, import/export laws, tax rules and regulations or other trade barriers or restrictions related compliance obligations and consequences of non-compliance, and any new developments in these areas.

If any of our overseas operations, or our associates or agents, violate such laws and regulations, we could become subject to sanctions or other penalties, which could have a material and adverse effect on our business, financial condition, results of operations and prospects.

Our business is subject to complex and evolving Chinese and international laws and regulations regarding data privacy and cybersecurity. Failure to protect confidential information of our customers and network against security breaches could damage our reputation and brand and substantially harm our business and results of operations.

Personally identifiable and other confidential information is increasingly subject to legislation and regulations in China and numerous foreign jurisdictions. The PRC governmental authorities have enacted a series of laws and regulations relating to the protection of personal information and/or the supervision over data processing activities, under which relevant information or data processors are required to comply with an array of personal information and data protection requirements, including for example, to clearly indicate the purposes, methods and scope of any information collection and usage, to obtain appropriate user consent and to establish user information protection systems with appropriate remedial measures. However, this regulatory framework for privacy issues in China and worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. For example, on June 10, 2021, the Standing Committee of the PRC National People’s Congress issued the Data Security Law to regulate data processing activities and security supervision in mainland China, which came into effect on September 1, 2021. The Data Security Law provides a national data security review system, under which data processing activities that affect or may affect national security shall be reviewed. Moreover, on August 20, 2021, the Standing Committee of the PRC National People’s Congress promulgated the Personal Information Protection Law, effective on November 1, 2021, which further detailed the general rules and principles on personal data processing and further increase the potential liability of personal data processor. Given that many of the laws and regulations of mainland China regarding data privacy and cybersecurity are constantly evolving, it is uncertain how they will be interpreted or enforced. For more information, see “Item 4. Information on the Company—B. Business Overview—Regulations.”

Furthermore, the PRC government has taken steps to limit the method and manner that the internet companies may apply when using the algorithms. For instance, the CAC, together with eight other government authorities, jointly issued the Guidelines on Strengthening the Comprehensive Regulation of Algorithms for Internet Information Services on September 17, 2021, which provides that daily monitoring of data use, application scenarios and effects of algorithms shall be carried out by the relevant regulators, and security assessments of algorithms shall be conducted by the relevant regulators. The guidelines also provide that an algorithm filing system shall be established, and classified security management of algorithms shall be promoted. In addition, on December 31, 2021, the CAC, the Ministry of Industry and Information Technology, the Ministry of Public Security, the Ministry of State Security promulgated the Administrative Provisions on Internet Information Service Algorithm Recommendation, which came into effect on March 1, 2022. The Administrative Provisions on Internet Information Service Algorithm Recommendation stipulates that algorithm recommendation service providers shall inform users of their provision of algorithm recommendation services in a conspicuous manner, and publicize the basic principles, purpose intentions, and main operating mechanisms of algorithm recommendation services in an appropriate manner. For more information, see “Item 4. Information on the Company—B. Business Overview—Regulations.”

In addition, on November 14, 2021, the CAC released the Regulations on the Network Data Security, or the Draft Regulations, for public comments, which stipulates, among others, that a prior cybersecurity review is required for listing abroad of data processors which process over one million users’ personal information, and the listing of data processors in Hong Kong which affects or may affect national security. On December 28, 2021, the CAC and other twelve PRC regulatory authorities jointly revised and promulgated the Measures for Cybersecurity Review, or the Cybersecurity Review Measures, which came into effect on February 15, 2022. Pursuant to the Cybersecurity Review Measures, besides the procurement of network products and services by critical information infrastructure operators, any data processing activities by network platform operators that affects or may affect national security shall be subject to the cybersecurity review as well. In accordance with the Cybersecurity Review Measures, operators mastering personal information of more than one million users must apply to the Cybersecurity Review Office for cybersecurity review when they seek for listing in a foreign country. However, the Cybersecurity Review Measures and the Draft Regulations remain unclear on whether the relevant requirements will be applicable to companies that have been listed in the United States. We cannot predict the impact of the Cybersecurity Review Measures and the Draft Regulations, if any, at this stage, and we will closely monitor and assess any development in the rule-making process. Furthermore, on July 7, 2022, the CAC promulgated the Measures on Security Assessment of Cross-border Data Transfer, or the Data Export Measures, which became effective on September 1, 2022. The Data Export Measures require that any data processor which processes or exports personal information exceeding certain volume threshold under such measures shall apply for security assessment by the CAC before transferring any personal information abroad. The security assessment requirement also applies to any transfer of important data outside of China. As of the date of this document, we have not been involved in any investigations, security assessment or cybersecurity reviews by the CAC, and we had not received any inquiry, notice, warning, or sanction in such respect. If a cybersecurity review for any of our activities is required, we will actively cooperate with the CAC to conduct such cybersecurity review.

Any failure, or perceived failure, by us, or by our employees or partners, to maintain the security of our user data or to comply with applicable PRC or foreign privacy, data security and personal information protection laws, regulations, policies, contractual provisions, industry requirements and other requirements may result in civil or regulatory liability, including governmental or data protection authority enforcement actions and investigations, fines, penalties, enforcement orders requiring us to cease operating in a certain way, revoking our business permits or business licenses, litigation or adverse publicity, and may require us to expend significant resources in responding to and defending allegations and claims. Furthermore, claims or allegations that we have failed to adequately protect our users' data, or otherwise violated applicable privacy and data security laws, regulations, policies, contractual provisions, industry standards or other requirements, may result in damage to our reputation and a loss of confidence in us by our users or our partners, potentially causing us to lose users, other business partners and revenues, which could have a material adverse effect on our business, financial condition and results of operations.

As we gradually expand into overseas markets, we may be subject to laws and regulations of other countries regarding cybersecurity, information security, privacy and data protection. We strive to comply with local laws and regulations in markets where we have operations. For example, the General Data Protection Regulation, or the GDPR, of the European Union imposes obligations on companies regarding the handling of personal data and provides certain individual privacy rights to persons whose data is stored. The GDPR requires companies to submit personal data breach notifications to designated European privacy regulator in each country they have business operations, and includes significant penalties for non-compliance with the notification obligation as well as other requirements of the regulation. For another instance, some countries are considering or have passed legislation implementing data protection requirements or requiring local storage and processing of data or similar requirements, which, if adopted and implemented, could increase the cost and complexity of delivering our services. In addition, wherever we operate, we could be subject to new laws or regulations or the interpretation and application of existing consumer and data protection laws or regulations. These new laws, regulations and interpretations are often uncertain and in flux and may be inconsistent with our practices. We cannot guarantee that we will be able to maintain compliance at all times, especially in light of the fact that laws and regulations on cybersecurity and data protection are evolving. Our launch of new products that we may take may also subject us to additional laws, regulations, or other government scrutiny. Complying with these new or additional laws, regulations and requirements could cause us to incur substantial costs or require us to change our business practices in a manner materially adverse to our business.

Risks Related to Our Corporate Structure

If the PRC government finds that the agreements that establish the structure for operating some of our operations in mainland China do not comply with the regulations of mainland China relating to the relevant industries, or if these regulations or the interpretation of existing regulations change or are interpreted differently in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations.

We are a Cayman Islands exempted company and our mainland China subsidiaries are considered foreign-invested enterprises. In May 2015, Niu Technologies Group Limited established a wholly owned subsidiary in mainland China, Beijing Niudian Information Technology Co., Ltd., our WFOE. In May 2015, we began to conduct the business operations of Beijing Niudian, through our WFOE by entering into a series of contractual arrangements with Beijing Niudian, the VIE, and its shareholders.

We entered into a series of contractual arrangements with the VIE and its shareholders, which enable us to (i) conduct the business operations of the VIE, (ii) receive substantially all of the economic benefits of the VIE, and (iii) have an exclusive option to or designate any third party to purchase all or part of the equity interests and assets in the VIE to the extent permitted by the laws of mainland China. As a result of these contractual arrangements, we conduct the business operations and are the primary beneficiary of the VIE and hence consolidate its financial results and its subsidiaries into our consolidated financial statements under U.S. GAAP. See “Item 4. Information on the Company—C. Organizational Structure” for further details.

Investors in our ADSs are not purchasing equity interest in the VIE in mainland China but instead are purchasing equity interest in a Cayman Islands holding company. If the PRC government deems that our contractual arrangements with the variable interest entity do not comply with the regulatory restrictions on foreign investment in the relevant industries in mainland China, or if these regulations or the interpretation of existing regulations change or are interpreted differently in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations, and our ADSs may decline in value or become worthless, if we are unable to assert contractual control over the assets of the VIE which contribute to all of our revenues in 2021. Our holding company in the Cayman Islands, the variable interest entity, and investors of our company face uncertainty about potential future actions by the PRC government that could affect the enforceability of the contractual arrangements with the variable interest entity and, consequently, significantly affect the financial performance of the variable interest entity and our company as a group.

In the opinion of our PRC legal counsel, (i) the ownership structures of the VIE in mainland China and our WFOE are not in violation of applicable laws and regulations of mainland China currently in effect; and (ii) the contractual arrangements between our WFOE, the VIE and its shareholders governed by the laws of mainland China are valid, binding and enforceable, and will not result in any violation of applicable laws and regulations of mainland China currently in effect. However, our PRC legal counsel has also advised us that there are substantial uncertainties regarding the interpretation and application of current and future laws, regulations and rules of mainland China. Accordingly, the PRC regulatory authorities may take a view that is contrary to the opinion of our PRC legal counsel. It is uncertain whether any new laws or regulations of mainland China relating to variable interest entity structures will be adopted or, if adopted, what they would provide. If we or the VIE are found to be in violation of any existing or future laws or regulations of mainland China, or fail to obtain or maintain any of the required permits or approvals, the relevant PRC regulatory authorities would have broad discretion to take action in dealing with such violations or failures, including:

- revoking the business license and/or operating licenses of such entities;
- discontinuing or placing restrictions or onerous conditions on our operations;
- imposing fines, confiscating the income from the VIE, or imposing other requirements with which we or the VIE may not be able to comply;
- requiring us to restructure our ownership structure or operations, including terminating the contractual arrangements with the VIE and deregistering the equity pledges of the VIE, which in turn would affect our ability to consolidate, derive economic interests from, or conduct the business operations of the VIE; or
- restricting or prohibiting our ability to finance our business and operations in mainland China.

The imposition of any of these penalties would result in a material and adverse effect on our ability to conduct our business. In addition, it is unclear what impact the PRC government actions would have on us and on our ability to consolidate the financial results of the VIE in our consolidated financial statements, if the PRC government authorities were to find our legal structure and contractual arrangements to be in violation of the laws and regulations of mainland China. If the imposition of any of these government actions causes us to lose our right to direct the activities of the VIE or our right to receive the economic benefits and residual returns from the VIE and we are not able to restructure our ownership structure and operations in a satisfactory manner, we would no longer be able to consolidate the financial results of the VIE in our consolidated financial statements. Either of these results, or any other significant penalties that might be imposed on us in this event, would have a material adverse effect on our financial condition and results of operations.

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

On March 15, 2019, the National People's Congress adopted the Foreign Investment Law of the PRC, or the FIL, which became effective on January 1, 2020 and replaced the Wholly Foreign-Invested Enterprise Law of the PRC, the Sino-Foreign Cooperative Joint Venture Enterprise Law of the PRC and the Sino-Foreign Equity Joint Venture Enterprise Law of the PRC, together with their implementation rules and ancillary regulations. On December 31, 2019, the State Council published the Implementation Rules of the Foreign Investment Law, or the FIL Implementation Rules, which took effect on January 1, 2020.

The FIL embodies an expected regulatory trend in mainland China 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 it is relatively new, uncertainties still exist in relation to its interpretation and implementation. For example, the FIL removes all references to the terms of “de facto control” or “contractual control” as defined in the draft published in 2015 by the Ministry of Commerce, or the MOFCOM, and adds a catch-all clause to the definition of “foreign investment” so that foreign investment, by its definition, includes “investments made by foreign investors in China through other means defined by other laws or administrative regulations or provisions promulgated by the State Council” without further elaboration on the meaning of “other means.” The FIL Implementation Rules also remain silent on contractual arrangements. It leaves leeway for the future legislations promulgated by the State Council to provide for contractual arrangements as a form of foreign investment. It is therefore uncertain whether our corporate structure will be seen as violating the foreign investment rules as we are currently leverage the contractual arrangement to operate certain businesses in which foreign investors are prohibited from or restricted to investing.

In addition, the FIL grants national treatment to foreign invested entities, except for those foreign invested entities that operate in industries deemed to be either “restricted” or “prohibited” in the “negative list.” The current Special Administrative Measures for Market Access of Foreign Investment (Negative List) (2021 Edition) was issued by the National Development and Reform Commission, or the NDRC, and the MOFCOM on December 27, 2021 and took effective on January 1, 2022. Furthermore, on December 19, 2020, the NDRC and the MOFCOM jointly issued the Measures for Security Review of Foreign Investment, effective on January 18, 2021, which provides detailed guidance regarding security review of foreign investment that has a potential impact on national security. However, there remain a number of unclear issues under the Measures, including but not limited to its view towards contractual arrangements. As the Measures was only recently issued, there are very few interpretations, implementation guidance or precedents to follow in practice. If future legislations prescribed by the State Council mandate further actions to be taken by companies with respect to existing contractual arrangement, 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 comply with any of these or similar regulatory compliance requirements could materially and adversely affect our current corporate structure, corporate governance and business operations.

We rely on contractual arrangements with the VIE and its shareholders for a large portion of our business operations, which may not be as effective as direct ownership.

The VIE contributed substantially all of our consolidated total revenues in 2020, 2021 and 2022. We have relied and expect to continue to rely on contractual arrangements with the VIE and its shareholders to conduct our business. These contractual arrangements may not be as effective as direct ownership in the VIE. For example, the VIE and its shareholders could breach their contractual arrangements with us by, among other things, failing to conduct their operations in an acceptable manner or taking other actions that are detrimental to our interests. The shareholders of the VIE have pledged all of their equity interests in the VIE to our WFOE pursuant to the equity pledge agreement under the contractual arrangements. An equity pledge agreement becomes effective between the parties upon execution. In February 2021, we completed the registration of the equity pledge under the second amended and restated equity pledge agreement with the relevant local office of the State Administration of Market Regulation in accordance with the PRC Property Rights Law.

If we had direct ownership of the VIE, we would be able to exercise our rights as a shareholder to effect changes in the board of directors of the VIE, which in turn could implement changes, subject to any applicable fiduciary obligations, at the management and operational level. However, under the current contractual arrangements, we rely on the performance by the VIE and its shareholders of their obligations under the contracts to conduct the business operations of the VIE. However, the shareholders of the VIE may not act in the best interests of our company or may not perform their obligations under these contracts. Such risks exist throughout the period in which we intend to operate certain portions of our business through the contractual arrangements with the VIE. If any disputes relating to these contracts remains unresolved, we will have to enforce our rights under these contracts through the operations of law and arbitration, litigation and other legal proceedings in mainland China and therefore will be subject to uncertainties in the PRC legal system. See “— Any failure by the VIE or its shareholders to perform their obligations under our contractual arrangements with them would have a material and adverse effect on our business.” Meanwhile, there are very few precedents and little formal guidance as to how contractual arrangements in the context of a VIE should be interpreted or enforced by the courts of mainland China. Should legal actions become necessary, we cannot guarantee that the court will rule in favor of the enforceability of the VIE contractual arrangements. In the event 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 conduct the business operations of the VIE, and our ability to conduct our business may be materially adversely affected. Therefore, our contractual arrangements with the VIE may not be as effective as direct ownership.

We may lose the ability to use and enjoy assets held by the VIE and its subsidiaries that are important to our business if the VIE and its subsidiaries declare bankruptcy or become subject to a dissolution or liquidation proceeding.

The VIE and its subsidiaries hold assets that are important to our operations, and they contributed substantially all of our consolidated total revenues in 2020, 2021 and 2022. Under our contractual arrangements, the shareholders of the VIE may not voluntarily liquidate the VIE or approve it to sell, transfer, mortgage or dispose of its assets or legal or beneficial interests exceeding certain threshold in the business in any manner without our prior consent. However, in the event that the shareholders breach this obligation and voluntarily liquidate the VIE, or the VIE declares bankruptcy, or all or part of its assets become subject to liens or rights of third-party creditors, we may be unable to continue some or all of our operations, which would materially and adversely affect our business, financial condition and results of operations. Furthermore, if the VIE or its subsidiaries undergo a voluntary or involuntary liquidation proceeding, their shareholders or unrelated third-party creditors may claim rights to some or all of its assets, hindering our ability to operate our business, which could materially and adversely affect our business, financial condition and results of operations.

Any failure by the VIE or its shareholders to perform their obligations under our contractual arrangements with them would have a material and adverse effect on our business.

We refer to the shareholders of the VIE as its nominee shareholders because although they remain the holders of equity interests on record in each of the VIE, pursuant to the terms of the relevant power of attorney, each of such shareholders has irrevocably authorized the Company to exercise his, her or its rights as a shareholder of the VIE. However, if the VIE or its shareholders fail to perform their respective obligations under the contractual arrangements, we may have to incur substantial costs and expend additional resources to enforce such arrangements. We may also have to rely on legal remedies under the laws of mainland China, including seeking specific performance or injunctive relief, and claiming damages, which may not be enforceable under the laws of mainland China. For example, if the shareholders of the VIE refuse to transfer their equity interest in the VIE to us or our designee if we exercise the purchase option pursuant to these contractual arrangements, or if they otherwise act in bad faith toward us, then we may have to take legal actions to compel them to perform their contractual obligations.

All of the agreements under our contractual arrangements are governed by the laws of mainland China and provide for the resolution of disputes through arbitration in China. Accordingly, these contracts would be interpreted in accordance with the laws of mainland China and any disputes would be resolved in accordance with the legal procedures of mainland China. The legal system in the PRC is not as developed as in some other jurisdictions, such as the United States. As a result, uncertainties in the PRC legal system could limit our ability to enforce these contractual arrangements. See “—Risks Related to Doing Business in China—Uncertainties in the interpretation and enforcement of the laws and regulations of mainland China could limit the legal protections available to you and us.” Meanwhile, there are very few precedents and little formal guidance as to how contractual arrangements in the context of a VIE should be interpreted or enforced under the laws of mainland China. There remain significant uncertainties regarding the ultimate outcome of such arbitration should legal action becomes necessary. In addition, under the laws of mainland China, rulings by arbitrators are final, parties cannot appeal the arbitration results in courts, and if the losing parties fail to carry out the arbitration awards within a prescribed time limit, the prevailing parties may only enforce the arbitration awards in the courts of mainland China through arbitration award recognition proceedings, which would require additional expenses and delay. In the event we are unable to enforce these contractual arrangements, or if we suffer significant delays or other obstacles in the process of enforcing these contractual arrangements, we may not be able to conduct the business operations of the VIE, and our ability to conduct our business may be negatively affected.

The shareholders of the VIE may have potential conflicts of interest with us, which may materially and adversely affect our business and financial condition.

Currently, Token Yilin Hu, Yi'nan Li, Yuqin Zhang and Changlong Sheng each hold 89.74%, 5.00%, 2.63% and 2.63% of the equity interest in the VIE, respectively. The shareholders of the VIE may have potential conflicts of interest with us. These shareholders may breach, or cause the VIE to breach, or refuse to renew, the existing contractual arrangements we have with them and the VIE, which would have a material and adverse effect on our ability to conduct the business operations of the VIE and receive economic benefits from them. For example, the shareholders may be able to cause our agreements with the VIE to be performed in a manner adverse to us by, among other things, failing to remit payments due under the contractual arrangements to us on a timely basis. We cannot assure you that when conflicts of interest arise any or all of these shareholders will act in the best interests of our company or such conflicts will be resolved in our favor.

Currently, we do not have any arrangements to address potential conflicts of interest between these shareholders and our company, except that we could exercise our purchase option under the second amended and restated exclusive option agreements with these shareholders to request them to transfer all of their equity interests in the VIE to a mainland China entity or individual designated by us, to the extent permitted by the laws of mainland China. For individuals who are also our directors and officers, we rely on them to abide by the laws of the Cayman Islands, which provide that directors and officers owe a fiduciary duty to the company that requires them to act in good faith and in what they believe to be the best interests of the company and not to use their position for personal gains. The shareholders of the VIE have executed powers of attorney to appoint the Company to vote on their behalf and exercise voting rights as shareholders of the VIE. If we cannot resolve any conflict of interest or dispute between us and the shareholders of the VIE, we would have to rely on legal proceedings, which could result in disruption of our business and subject us to substantial uncertainty as to the outcome of any such legal proceedings.

The shareholders of the VIE may be involved in personal disputes with third parties or other incidents that may have an adverse effect on their respective equity interests in the VIE and the validity or enforceability of our contractual arrangements with its shareholders. For example, in the event that any of the shareholders of the VIE divorces his or her spouse, the spouse may claim that the equity interest of the VIE held by such shareholder is part of their community property and should be divided between such shareholder and his or her spouse. If such claim is supported by the court, the relevant equity interest may be obtained by the shareholder's spouse or another third party who is not subject to obligations under our contractual arrangements, which could affect our ability to conduct the business operations of the VIE. Similarly, if any of the equity interests of the VIE is inherited by a third party with whom the current contractual arrangements are not binding, we could lose our ability to conduct the business operations of the VIE or have to maintain such ability by incurring unpredictable costs, which could cause significant disruption to our business and operations and harm our financial condition and results of operations.

Although under our current contractual arrangements, (i) the spouse of each of the shareholders of the VIE has executed a spousal consent letter, under which the spouse agrees that he or she will not raise any claims against the equity interest, and will take every action to ensure the performance of the contractual arrangements, and (ii) it is expressly provided that the rights and obligations under the contractual agreements shall be equally effective and binding on the heirs and successors of the parties thereto, and the VIE shall not assign or delegate its rights and obligations under the contractual agreements to third parties without our prior consent, we cannot assure you that these undertakings and arrangements will be complied with or effectively enforced. In the case any of them is breached or becomes unenforceable and leads to legal proceedings, it could disrupt our business, distract our management's attention and subject us to substantial uncertainties as to the outcome of any such legal proceedings.

Contractual arrangements in relation to the VIE may be subject to scrutiny by the PRC tax authorities and they may determine that we or the VIE owes additional taxes, which could negatively affect our financial condition and the value of your investment.

Under applicable laws and regulations of mainland China, arrangements and transactions among related parties may be subject to audit or challenge by the PRC tax authorities. We could face material and adverse tax consequences if the PRC tax authorities determine that the VIE contractual arrangements were not entered into on an arm's length basis in such a way as to result in an impermissible reduction in taxes under applicable laws, rules and regulations of mainland China, and adjust the income of the VIE in the form of a transfer pricing adjustment. A transfer pricing adjustment could, among other things, result in a reduction of expense deductions recorded by the VIE for mainland China tax purposes, which could increase our tax expenses. In addition, the PRC tax authorities may impose late payment fees and other penalties on the VIE for the adjusted but unpaid taxes according to the applicable regulations. Our financial position could be materially and adversely affected if the VIE's tax liabilities increase or if it is required to pay late payment fees and other penalties.

If the chops of our mainland China subsidiaries and the VIE are not kept safely, are stolen or are used by unauthorized persons or for unauthorized purposes, the corporate governance of these entities could be severely and adversely compromised.

In mainland China, a company chop or seal serves as the legal representation of the company towards third parties even when unaccompanied by a signature. Each legally registered company in mainland China is required to maintain a company chop, which must be registered with the local Public Security Bureau. In addition to this mandatory company chop, companies may have several other chops which can be used for specific purposes. The chops of our mainland China subsidiaries and the VIE are generally held securely by personnel designated or approved by us in accordance with our internal control procedures. To the extent those chops are not kept safely, are stolen or are used by unauthorized persons or for unauthorized purposes, the corporate governance of these entities could be severely and adversely compromised and those corporate entities may be bound to abide by the terms of any documents so chopped, even if they were chopped by an individual who lacked the requisite power and authority to do so. In addition, if the chops are misused by unauthorized persons, we could experience disruption to our normal business operations. We may have to take corporate or legal action, which could involve significant time and resources to resolve while distracting management from our operations.

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 results of operations.

Substantially all of our revenues are expected to be derived in mainland China in the near future and most of our operations, including all of our manufacturing, is conducted in mainland China. Accordingly, our results of operations, financial condition and prospects are influenced by economic, political and legal developments in China. China's economy differs from the economies of most developed countries in many respects, including with respect to the amount of government involvement, level of development, growth rate, control of foreign exchange and allocation of resources. The PRC government has significant authority to exert influence on the ability of a China-based company, such as us, to conduct its business. Therefore, investors of our company and our business face potential uncertainty from China.

The PRC government also exercises significant control over China's economic growth through strategically allocating resources, controlling the payment of foreign currency-denominated obligations, setting monetary policy and providing preferential treatment to particular industries or companies. While the PRC economy has experienced significant growth over the past decades, that growth has been uneven across different regions and between economic sectors and may not continue, as evidenced by the slowing of the growth of the Chinese economy since 2012. The growth rate of the Chinese economy has gradually slowed since 2010, and COVID-19 has had a severe and negative impact on the Chinese and global economy since early 2020. In addition, COVID-19 will likely have significant impact on the Chinese economy in 2023 as the PRC government began to modify restrictive measures associated with COVID-19 in December 2022 and downgraded its management of COVID-19 to Class-B on January 8, 2023 in accordance with the Law of the People's Republic of China on Prevention and Treatment of Infectious Disease. Even before the outbreak of COVID-19, the global macroeconomic environment was facing numerous challenges. The growth rate of the Chinese economy had already been slowing since 2010. There is considerable uncertainty over the long-term effects of the expansionary monetary and fiscal policies which had been adopted by the central banks and financial authorities of some of the world's leading economies, including the United States and China, even before 2021. The war in Ukraine and the imposition of broad economic sanctions on Russia could raise energy prices and disrupt global markets. Unrest, terrorist threats and the potential for war in the Middle East and elsewhere may increase market volatility across the globe. There have also been concerns about the relationship between China and other countries, including the surrounding Asian countries, which may potentially have 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 materially and adversely affect our business, results of operations and financial condition.

The filing, approval or other administration requirements of the CSRC or other PRC government authorities may be required in connection with our offshore offerings under PRC law, and, if required, we cannot predict whether or for how long we will be able to complete such filing, obtain such approval or meet such requirements.

The Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the M&A Rules, adopted by six PRC regulatory agencies in 2006 and amended in 2009, requires an overseas special purpose vehicle formed for listing purposes through acquisitions of mainland China domestic companies and controlled by mainland China persons or entities to obtain the approval of the CSRC prior to the listing and trading of such special purpose vehicle's securities on an overseas stock exchange. The interpretation and application of the regulations remain unclear, and our offshore offerings may ultimately require approval of the CSRC. If the CSRC approval is required, it is uncertain whether we can or how long it will take us to obtain the approval and, even if we obtain such CSRC approval, the approval could be rescinded. Any failure to obtain or delay in obtaining the CSRC approval for any of our offshore offerings, or a rescission of such approval if obtained by us, would subject us to sanctions imposed by the CSRC or other PRC regulatory authorities, which could include fines and penalties on our operations in mainland China, restrictions or limitations on our ability to pay dividends outside of mainland China, and other forms of sanctions that may materially and adversely affect our business, financial condition, and results of operations.

On July 6, 2021, the relevant PRC government authorities issued Opinions on Strictly Cracking Down Illegal Securities Activities in Accordance with the Law. These opinions emphasized the need to strengthen the administration over illegal securities activities and the supervision on overseas listings by China-based companies and proposed to take effective measures, such as promoting the construction of relevant regulatory systems to deal with the risks and incidents faced by China-based overseas-listed companies. As a follow-up, on December 24, 2021, the State Council issued a draft of the Provisions of the State Council on the Administration of Overseas Securities Offering and Listing by Domestic Companies, or the Draft Provisions, and the CSRC issued a draft of Administration Measures for the Filing of Overseas Securities Offering and Listing by Domestic Companies, or the Draft Administration Measures, for public comments.

On February 17, 2023, the CSRC promulgated Trial Administrative Measures of the Overseas Securities Offering and Listing by Domestic Companies and relevant five guidelines (collectively, the "Overseas Listing Trial Measures"), which became effective on March 31, 2023. The Overseas Listing Trial Measures comprehensively improve and reform the existing regulatory regime for overseas offering and listing of mainland China domestic companies' securities and regulates both direct and indirect overseas offering and listing of mainland China domestic companies' securities by adopting a filing-based regulatory regime.

According to the Overseas Listing Trial Measures, (i) mainland China domestic companies that seek to offer or list securities overseas, both directly and indirectly, should fulfill the filing procedure and report relevant information to the CSRC; if a mainland China domestic company fails to complete the filing procedure or conceals any material fact or falsifies any major content in its filing documents, such mainland China domestic company may be subject to administrative penalties, such as order to rectify, warnings, fines, and its controlling shareholders, actual controllers, the person directly in charge and other directly liable persons may also be subject to administrative penalties, such as warnings and fines; (ii) if the issuer meets both of the following conditions, the overseas offering and listing shall be determined as an indirect overseas offering and listing by a mainland China domestic company: (a) any of the total assets, net assets, revenues or profits of the domestic operating entities of the issuer in the most recent accounting year accounts for more than 50% of the corresponding figure in the issuer's audited consolidated financial statements for the same period; (b) its major operational activities are carried out in mainland China or its main places of business are located in mainland China, or the senior managers in charge of operation and management of the issuer are mostly PRC citizens or have their usual place(s) of residence located in mainland China. The Overseas Listing Trial Measures require subsequent reports to be filed with the CSRC on material events, such as change of control or voluntary or forced delisting of the issuers who have completed overseas offerings and listings.

On the same day, the CSRC also held a press conference for the release of the Overseas Listing Trial Measures and issued the Notice on Administration for the Filing of Overseas Offering and Listing by Domestic Companies, which, among others, clarifies that (i) prior to the effective date of the Overseas Listing Trial Measures, mainland China domestic companies that have already completed overseas listing shall be regarded as “existing companies”, which are not required to fulfill filing procedure immediately but shall be required to complete the filing if such existing companies conduct refinancing in the future; and (ii) the CSRC will solicit opinions from relevant regulatory authorities and complete the filing of the overseas listing of companies with contractual arrangements which duly meet the compliance requirements, and support the development and growth of these companies by enabling them to utilize two markets and two kinds of resources. However, since the Overseas Listing Trial Measures was newly promulgated, the interpretation, application and enforcement of Overseas Listing Trial Measures remain unclear.

Given the substantial uncertainties surrounding the latest CSRC filing requirements at this stage, we cannot assure you that we will be able to complete the filings and fully comply with the relevant new rules on a timely basis, if at all.

Relatedly, on December 27, 2021, the NDRC and the Ministry of Finance, or the MOC, jointly issued the Special Administrative Measures (Negative List) for Foreign Investment Access (2021 Version), or the 2021 Negative List, which will become effective on January 1, 2022. Pursuant to such Special Administrative Measures, if a domestic company engaging in the prohibited business stipulated in the 2021 Negative List seeks an overseas offering and listing, it shall obtain the approval from the competent government authorities. Besides, the foreign investors of the company shall not be involved in the company’s operation and management, and their shareholding percentage shall be subject, mutatis mutandis, to the relevant regulations on the domestic securities investments by foreign investors. As the 2021 Negative List is relatively new, there remain substantial uncertainties as to the interpretation and implementation of these new requirements, and it is unclear as to whether and to what extent listed companies like us will be subject to these new requirements. If we are required to comply with these requirements and fail to do so on a timely basis, if at all, our business operation, financial conditions and business prospect may be adversely and materially affected.

On February 24, 2023, the CSRC released the Provisions on Strengthening the Confidentiality and Archives Administration Related to the Overseas Securities Offering and Listing by Domestic Enterprises, or the Confidentiality and Archives Administration Provisions, which took effect on March 31, 2023. The Confidentiality and Archives Administration Provisions require, among others, that PRC domestic enterprises that seek to offer and list securities in overseas markets, either directly or indirectly, complete approval and filing procedures to competent authorities, if such PRC domestic enterprises or its overseas listing entities provide or publicly disclose documents or materials involving state secrets and work secrets of PRC government agencies to relevant securities companies, securities service institutions, overseas regulatory agencies and other entities and individuals. It further stipulates that providing or publicly disclosing documents and materials which may adversely affect national security or public interests, and accounting files or copies shall be subject to corresponding procedures in accordance with relevant laws and regulations. Under the Confidentiality and Archives Administration Provisions, we may be required to complete relevant approval or filing procedures, or expend additional resources to comply with the Confidentiality and Archives Administration Provisions if we are recognized to fall within any of the foregoing circumstances. In addition, if the CSRC or other regulatory authorities later promulgate new rules or explanations requiring that we obtain their approvals or accomplish the required filing or other regulatory procedures for future capital-raising activities, we may be unable to obtain a waiver of such approval requirements, if and when procedures are established to obtain such a waiver.

In addition, we cannot assure you that any new rules or regulations promulgated in the future will not impose additional requirements on us. If it is determined in the future that approval and filing from the CSRC or other regulatory authorities or other procedures, including the cybersecurity review under the enacted version of the revised Measures for Cybersecurity Review and the draft of Regulations on the Network Data Security, are required for our offshore offerings, it is uncertain whether we can or how long it will take us to obtain such approval or complete such filing procedures and any such approval or filing could be rescinded or rejected. Any failure to obtain or delay in obtaining such approval or completing such filing procedures for our offshore offerings, or a rescission of any such approval or filing if obtained by us, would subject us to sanctions by the CSRC or other PRC regulatory authorities for failure to seek CSRC approval or filing or other government authorization for our offshore offerings. These regulatory authorities may impose fines and penalties on our operations in mainland China, limit our ability to pay dividends outside of mainland China, limit our operating privileges in mainland China, delay or restrict the repatriation of the proceeds from our offshore offerings into mainland China or take other actions that could materially and adversely affect our business, financial condition, results of operations, and prospects, as well as the trading price of our listed securities. The CSRC or other PRC regulatory authorities also may take actions requiring us, or making it advisable for us, to halt our offshore offerings before settlement and delivery of the shares offered. Consequently, if investors engage in market trading or other activities in anticipation of and prior to settlement and delivery, they do so at the risk that settlement and delivery may not occur. In addition, if the CSRC or other regulatory authorities later promulgate new rules or explanations requiring that we obtain their approvals or accomplish the required filing or other regulatory procedures for our prior offshore offerings, we may be unable to obtain a waiver of such approval requirements, if and when procedures are established to obtain such a waiver. Any uncertainties or negative publicity regarding such approval requirement could materially and adversely affect our business, prospects, financial condition, reputation, and the trading price of our listed securities.

Uncertainties in the interpretation and enforcement of the laws and regulations of mainland China could limit the legal protections available to you and us.

The legal system of mainland China is a civil law system based on written statutes. Unlike the common law system, prior court decisions may be cited for reference but have limited precedential value.

Our mainland China subsidiaries are foreign-invested enterprises and are subject to laws and regulations applicable to foreign-invested enterprises as well as various laws and regulations of mainland China generally applicable to companies incorporated in mainland China. However, since these laws and regulations are relatively new and the legal system of mainland China continues to rapidly evolve, the interpretations of many laws, regulations and rules are not always uniform and enforcement of these laws, regulations and rules involves uncertainties.

From time to time, we may have to resort to administrative and court proceedings to enforce our legal rights. However, since administrative and court authorities of mainland China have significant discretion in interpreting and implementing statutory and contractual terms, it may be more difficult to evaluate the outcome of administrative and court proceedings and the level of protection we enjoy than in more developed legal systems. Furthermore, the legal system of mainland China is based in part on government policies and internal rules, some of which are not published on a timely basis or at all, and which may have a retroactive effect. As a result, we may not be aware of our violation of any of these policies and rules until sometime after the violation. Such uncertainties, including uncertainty over the scope and effect of our contractual, property (including intellectual property) and procedural rights, and any failure to respond to changes in the regulatory environment in mainland China could materially and adversely affect our business and impede our ability to continue our operations.

The PRC government's significant oversight over our business operation could result in a material adverse change in our operations and the value of our ADSs.

We conduct our business primarily in mainland China. Our operations in mainland China are governed by the laws and regulations of mainland China. The PRC government has significant oversight over the conduct of our business, and may intervene or influence our operations as the government deems appropriate to advance regulatory and societal goals and policy positions. The PRC government has recently published new policies that significantly affected certain industries and we cannot rule out the possibility that it will in the future release regulations or policies that directly or indirectly affect our industry or require us to seek additional permission to continue our operations, which could result in a material adverse change in our operation and/or the value of our ADSs. Therefore, investors of our company and our business face potential uncertainty from actions taken by the PRC government affecting our business.

We may be adversely affected by the complexity, uncertainties and changes in the regulation on internet-related businesses and companies in mainland China.

We design, manufacture and sell smart e-scooters. Certain aspects of our business operations may be deemed as provision of value-added telecommunication services, which is subject to regulation by the PRC government. For example, the PRC government imposes foreign ownership restriction and the licensing and permit requirements for companies in the Internet industry. See “Item 4. Information on the Company—B. Business Overview—Regulation—Regulations Relating to Foreign Investment” and “Item 4. Information on the Company—B. Business Overview—Regulation—Regulations Relating to Value-Added Telecommunication Services.” These laws and regulations are relatively new and evolving, and their interpretation and enforcement involve significant uncertainties. As a result, in certain circumstances it may be difficult to determine what actions or omissions may be deemed to be in violation of applicable laws and regulations.

In addition, our mobile app is also regulated by the Administrative Provisions on Mobile Internet Applications Information Services, or the App Provisions, promulgated by the Cyberspace Administration of China, the latest version of which became effective on August 1, 2022. According to the App Provisions, the providers of mobile apps shall not create, copy, publish or distribute information and content that is prohibited by laws and regulations. However, we cannot assure that all the information or content displayed on, retrieved from or linked to our mobile app complies with the requirements of the App Provisions at all times. If our mobile app were found to be violating the App Provisions, we may be subject to administrative penalties, including warning, service suspension or removal of our mobile app from the relevant mobile app store, which may materially and adversely affect our business and operating results.

The interpretation and application of the existing laws, regulations and policies of mainland China and possible new laws, regulations or policies of mainland China 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 mainland China, including our business. We cannot assure you that we have obtained all the permits or licenses required for conducting our business in mainland China or will be able to maintain or renew our existing licenses or obtain new ones.

The PCAOB had historically been unable to inspect our auditor in relation to their audit work performed for our financial statements and the inability of the PCAOB to conduct inspections of our auditor in the past has deprived our investors with the benefits of such inspections.

Our auditor, the independent registered public accounting firm that issues the audit report included elsewhere in this annual report, as an auditor of companies that are traded publicly in the United States and a firm registered with the PCAOB, is subject to laws in the United States pursuant to which the PCAOB conducts regular inspections to assess its compliance with the applicable professional standards. The auditor is located in mainland China, a jurisdiction where the PCAOB was historically unable to conduct inspections and investigations completely before 2022. As a result, we and investors in the ADSs were deprived of the benefits of such PCAOB inspections. The inability of the PCAOB to conduct inspections of auditors in mainland China and Hong Kong in the past has made it more difficult to evaluate the effectiveness of our independent registered public accounting firm’s audit procedures or quality control procedures as compared to auditors outside of mainland China and Hong Kong that are subject to the PCAOB inspections. On December 15, 2022, the PCAOB issued a report that vacated its December 16, 2021 determination and removed mainland China and Hong Kong from the list of jurisdictions where it is unable to inspect or investigate completely registered public accounting firms. However, if the PCAOB determines in the future that it no longer has full access to inspect and investigate completely accounting firms in mainland China and Hong Kong, and we use an accounting firm headquartered in one of these jurisdictions to issue an audit report on our financial statements filed with the Securities and Exchange Commission, we and investors in our ADSs would be deprived of the benefits of such PCAOB inspections again, which could cause investors and potential investors in the ADSs to lose confidence in our audit procedures and reported financial information and the quality of our financial statements.

Our ADSs may be prohibited from trading in the United States under the HFCAA in the future if the PCAOB is unable to inspect or investigate completely auditors located in mainland China and Hong Kong. The delisting of the ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment.

Pursuant to the HFCAA, if the SEC determines that we have filed audit reports issued by a registered public accounting firm that has not been subject to inspections by the PCAOB for two consecutive years, the SEC will prohibit our shares or ADSs from being traded on a national securities exchange or in the over-the-counter trading market in the United States.

On December 16, 2021, the PCAOB issued a report to notify the SEC of its determination that the PCAOB was unable to inspect or investigate completely registered public accounting firms headquartered in mainland China and Hong Kong and our auditor was subject to that determination. In May 2022, the SEC conclusively listed us as a Commission-Identified Issuer under the HFCAA following the filing of our annual report on Form 20-F for the fiscal year ended December 31, 2021. On December 15, 2022, the PCAOB removed mainland China and Hong Kong from the list of jurisdictions where it is unable to inspect or investigate completely registered public accounting firms. For this reason, we do not expect to be identified as a Commission-Identified Issuer under the HFCAA after we file this annual report on Form 20-F for the fiscal year ended December 31, 2022.

Each year, the PCAOB will determine whether it can inspect and investigate completely audit firms in mainland China and Hong Kong, among other jurisdictions. If the PCAOB determines in the future that it no longer has full access to inspect and investigate completely accounting firms in mainland China and Hong Kong and we use an accounting firm headquartered in one of these jurisdictions to issue an audit report on our financial statements filed with the Securities and Exchange Commission, we would be identified as a Commission-Identified Issuer following the filing of the annual report on Form 20-F for the relevant fiscal year. In accordance with the HFCAA, our securities would be prohibited from being traded on a national securities exchange or in the over-the-counter trading market in the United States if we are identified as a Commission-Identified Issuer for two consecutive years in the future. For U.S. single listing issuer: If our shares and ADSs are prohibited from trading in the United States, there is no certainty that we will be able to list on a non-U.S. exchange or that a market for our shares will develop outside of the United States. A prohibition of being able to trade in the United States would substantially impair your ability to sell or purchase our ADSs when you wish to do so, and the risk and uncertainty associated with delisting would have a negative impact on the price of our ADSs. Also, such a prohibition would significantly affect our ability to raise capital on terms acceptable to us, or at all, which would have a material adverse impact on our business, financial condition, and prospects.

We may rely on dividends and other distributions on equity paid by our mainland China subsidiaries to fund any cash and financing requirements we may have, and any limitation on the ability of our mainland China subsidiaries to make payments to us could have a material and adverse effect on our ability to conduct our business.

We are a holding company, and we may rely on dividends and other distributions on equity paid by our mainland China subsidiaries for our cash and financing requirements, including the funds necessary to pay dividends and other cash distributions to our shareholders and service any debt we may incur. Current regulations of mainland China permit our mainland China subsidiaries to pay dividends to us only out of their accumulated after-tax profits upon satisfaction of relevant statutory conditions and procedures, if any, determined in accordance with Chinese accounting standards and regulations. In addition, each of our mainland China subsidiaries is required to set aside at least 10% of its accumulated profits each year, if any, to fund certain reserve funds until the total amount set aside reaches 50% of its registered capital. For a detailed discussion of applicable regulations of mainland China governing distribution of dividends, see “Item 4. Information on the Company—B. Business Overview—Regulation—Regulations Relating to Dividend Distribution.” Additionally, if our mainland China subsidiaries incur debt on their own behalf in the future, the instruments governing their debt may restrict their ability to pay dividends or make other distributions to us. Furthermore, the PRC tax authorities may require our WFOE to adjust its taxable income under the contractual arrangements it currently has in place with the variable interest entity in a manner that would materially and adversely affect its ability to pay dividends and other distributions to us. See “—Risks Relating to Our Corporate Structure—Contractual arrangements in relation to the VIE may be subject to scrutiny by the PRC tax authorities and they may determine that we or the VIE owes additional taxes, which could negatively affect our financial condition and the value of your investment.”

Any limitation on the ability of our mainland China subsidiaries to pay dividends or make other distributions to us could materially and adversely limit our ability to grow, make investments or acquisitions that could be beneficial to our business, pay dividends, or otherwise fund and conduct our business. See “—If we are classified as a mainland China resident enterprise for mainland China income tax purposes, such classification could result in unfavorable tax consequences to us and our non-mainland China shareholders or ADS holders.”

Mainland China’s regulation of loans to and direct investment in entities in mainland China by offshore holding companies and governmental control of currency conversion may delay or prevent us from using the proceeds of our offshore offerings to make loans to or make additional capital contributions to our mainland China subsidiaries, which could materially and adversely affect our liquidity and our ability to fund and expand our business.

Under the laws and regulations of mainland China, we are permitted to utilize the proceeds of any financing outside of mainland China to fund our mainland China subsidiaries by making loans to or additional capital contributions to our mainland China subsidiaries, subject to applicable government registration, statutory limitations on amount and approval requirements. The amount of capital contributions that we may make to the WFOE is RMB220.0 million, without obtaining approvals from SAFE or other government authorities. Additionally, the WFOE may increase its registered capital to receive additional capital contributions from us and currently there is no statutory limit to increasing its registered capital, subject to satisfaction of applicable government registration and filing requirements. Pursuant to relevant regulations of mainland China, we may provide loans to the WFOE up to the larger amount of (i) the balance between the registered total investment amount and registered capital of the WFOE, or (ii) twice the amount of the net assets of the WFOE calculated in accordance with PRC GAAP, and we may provide loans to the VIE up to twice the amount of the net assets of the VIE calculated in accordance with PRC GAAP, each subject to satisfaction of applicable government registration or approval requirements. For any amount of loans that we may extend to the WFOE or the VIE, such loans must be registered with the local counterpart of SAFE. Medium- or long-term loans extended by the Company to the VIE must also be approved by the NDRC. For more details, see “Item 4. Information on the Company—B. Business Overview—Regulation—Regulations Relating to Foreign Exchange—Regulations on Foreign Currency Exchange.” These laws and regulations of mainland China may significantly limit our ability to use Renminbi converted from the net proceeds of any financing outside of mainland China to fund the establishment of new entities in mainland China by our mainland China subsidiaries, to invest in or acquire any other mainland China companies through our mainland China subsidiaries, or to establish new variable interest entities in mainland China. Moreover, we cannot assure you that we will be able to complete the necessary registrations or obtain the necessary government approvals on a timely basis, if at all, with respect to future loans to our mainland China subsidiaries or future capital contributions by us to our mainland China subsidiaries. If we fail to complete such registrations or obtain such approvals, our ability to use the proceeds we received or expect to receive from our offshore offerings and to capitalize or otherwise fund our operations in mainland China may be negatively affected, which could materially and adversely affect our liquidity and our ability to fund and expand our business.

On December 26, 2017, the NDRC issued the Management Rules for Overseas Investment by Enterprises, or the NDRC Order 11. On January 31, 2018, the Catalog on Overseas Investment in Sensitive Industries (2018 Edition), or the Sensitive Industries List, was promulgated. “Overseas investment” as defined in the NDRC Order 11 refers to the investment activities conducted by an enterprise located in the territory of mainland China either directly or through an overseas enterprise under its control by making investment with assets and equities or providing financing or guarantee in order to obtain overseas ownership, control, management rights and other related interests. Overseas investment by a Chinese individual through overseas enterprises under his/her control is also subject to the NDRC Order 11. According to the NDRC Order 11, (i) direct overseas investment by Chinese enterprises or indirect overseas investment by Chinese enterprises or individuals in sensitive industries or sensitive countries and regions requires prior approval by the NDRC; (ii) direct overseas investment by Chinese enterprises in non-sensitive industries and non-sensitive countries and regions requires prior filing with the NDRC; and (iii) indirect overseas investment of over US\$300 million by Chinese enterprises or individuals in non-sensitive industries and non-sensitive countries and regions requires reporting with the NDRC. Uncertainties remain with respect to the application of the NDRC Order 11. We are not sure if we were to use a portion of the proceeds raised from our financing activities to fund investments in and acquisitions of complementary business and assets outside of mainland China, such use of U.S. dollars funds held outside of mainland China would be subject to the NDRC Order 11. There are very few interpretations, implementation guidance or precedents regarding NDRC Order 11 to follow in practice. We will continue to monitor any new rules, interpretation and guidance promulgated by the NDRC and communicate with the NDRC and its local branches to seek their opinions, when necessary. If it turns out that the NDRC Order 11 applies to our use of proceeds from the offering mentioned above and we fail to obtain the approval, complete the filing or report our overseas investment using the offering proceeds, as the case may be, in a timely manner as provided under the NDRC Order 11, we may be forced to suspend or cease our investment, or be subject to penalties or other liabilities, which may materially and adversely affect our business, financial condition and prospects.

Governmental control of currency conversion may limit our ability to utilize our revenues effectively and affect the value of your investment.

The PRC government imposes controls on the convertibility of Renminbi into foreign currencies and, in certain cases, the remittance of currency out of mainland China. Under the existing foreign exchange regulations of mainland China, payments of current account items, such as profit distributions and trade and service-related foreign exchange 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 or registration with appropriate government authorities is required where Renminbi is to be converted into foreign currency and remitted out of mainland China to pay capital expenses such as the repayment of loans denominated in foreign currencies. See “Item 4. Information on the Company—B. Business Overview—Regulation—Regulations Relating to Foreign Exchange—Regulations on Foreign Currency Exchange.”

Since 2016, the PRC government has tightened its foreign exchange policies again and stepped up scrutiny of major outbound capital movement. More restrictions and a substantial vetting process have been put in place by SAFE to regulate cross-border transactions falling under the capital account. The PRC government may also restrict access in the future to foreign currencies for current account transactions, at its discretion. We receive substantially all of our revenues in RMB. If the foreign exchange control system prevents us from obtaining sufficient foreign currencies to satisfy our foreign currency demands, we may not be able to pay dividends in foreign currencies to our shareholders, including holders of the ADSs.

Regulations of mainland China relating to offshore investment activities by mainland China residents may limit our mainland China subsidiaries’ ability to increase their registered capital or distribute profits to us or otherwise expose us or our mainland China resident beneficial owners to liability and penalties under the laws of mainland China.

SAFE requires mainland China residents or entities to register with SAFE or its local branch in connection with their establishment or control of an offshore entity established for the purpose of overseas investment or financing. In addition, such mainland China residents or entities must update their SAFE registrations when the offshore special purpose vehicle undergoes certain material events. According to the Notice on Further Simplifying and Improving Policies for the Foreign Exchange Administration of Direct Investment released on February 13, 2015 by the SAFE, local banks will examine and handle foreign exchange registration for overseas direct investment, including the initial foreign exchange registration and amendment registration, under SAFE Circular 37 from June 1, 2015. See “Item 4. Information on the Company—B. Business Overview—Regulation—Regulations Relating to Foreign Exchange—Regulations on Foreign Currency Exchange.”

If our shareholders who are mainland China residents or entities do not complete their registration with the local SAFE branches, our mainland China subsidiaries may be prohibited from distributing their profits and any proceeds from any reduction in capital, share transfer or liquidation to us, and we may be restricted in our ability to contribute additional capital to our mainland China subsidiaries. Moreover, failure to comply with SAFE registration requirements could result in liability under the laws of mainland China for evasion of applicable foreign exchange restrictions. Mr. Yi’nan Li, Mr. Token Yilin Hu and Ms. Yuqin Zhang who directly or indirectly hold shares in our Cayman Islands holding company and who are known to us as being mainland China residents have completed the initial foreign exchange registrations and have updated their registrations required in connection with our corporate restructuring.

However, we may not be informed of the identities of all the mainland China residents or entities holding direct or indirect interests in our company, nor can we compel our beneficial owners to comply with SAFE registration requirements. As a result, we cannot assure you that all of our shareholders or beneficial owners who are mainland China residents or entities have complied with, and will in the future make or obtain any applicable registrations or approvals required by, SAFE regulations. Failure by such shareholders or beneficial owners to comply with SAFE regulations, or failure by us to amend the foreign exchange registrations of our mainland China subsidiaries, could subject us to fines or legal sanctions, restrict our overseas or cross-border investment activities, limit our mainland China subsidiaries’ ability to make distributions or pay dividends to us or affect our ownership structure, which could adversely affect our business and prospects.

Mainland China’s M&A Rules and certain other regulations of mainland China establish complex procedures for certain acquisitions of mainland China companies by foreign investors, which could make it more difficult for us to pursue growth through acquisitions in mainland China.

A number of laws and regulations in mainland China have established procedures and requirements that could make merger and acquisition activities in mainland China by foreign investors more time consuming and complex. In addition to the Anti-monopoly Law itself, these include the Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the M&A Rules, adopted by six PRC regulatory agencies in 2006, which was amended in 2009, and the Rules of the Ministry of Commerce on Implementation of Security Review System of Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the Security Review Rules, promulgated in 2011. These laws and regulations impose requirements in some instances that MOFCOM be notified in advance of any change-of-control transaction in which a foreign investor takes control of a mainland China domestic enterprise. In addition, the Anti-Monopoly Law requires that MOFCOM be notified in advance of any concentration of undertaking if certain thresholds are triggered. Moreover, the Security Review Rules specify that mergers and acquisitions by foreign investors that raise “national defense and security” concerns and mergers and acquisitions through which foreign investors may acquire de facto control over domestic enterprises that raise “national security” concerns are subject to strict review by MOFCOM, and prohibit any attempt to bypass a security review, including by structuring the transaction through a proxy or contractual control arrangement. In the future, we may grow our business by acquiring complementary businesses. Complying with the requirements of the relevant regulations to complete such transactions could be time consuming, and any required approval processes, including approval from MOFCOM, may delay or inhibit our ability to complete such transactions, which could affect our ability to expand our business or maintain our market share.

It may be difficult for overseas regulators to conduct investigation or collect evidence within mainland China.

Shareholder claims or regulatory investigation that are common in the United States generally are difficult to pursue as a matter of law or practicality in mainland China. For example, in mainland China, there are significant legal and other obstacles to providing information needed for regulatory investigations or litigation initiated outside of mainland China. Although the authorities in mainland China may establish a regulatory cooperation mechanism with the securities regulatory authorities of another country or region to implement cross-border supervision and administration, such cooperation with the securities regulatory authorities in the United States may not be efficient in the absence of mutual and practical cooperation mechanism. Furthermore, according to Article 177 of the PRC Securities Law, or Article 177, which became effective in March 2020, no overseas securities regulator is allowed to directly conduct investigation or evidence collection activities within the territory of mainland China and without the consent by the Chinese securities regulatory authorities and the other competent governmental agencies, no entity or individual may provide documents or materials related to securities business overseas. In addition, the Data Security Law and the PIPL provide that no entity or individual within the territory of mainland China shall provide any foreign judicial body and law enforcement body with any data or any personal information stored within the territory of mainland China without the approval of the competent government authority of the PRC. While detailed interpretation of or implementation rules under these laws have yet to be promulgated, the inability for an overseas securities regulator to directly conduct investigation or evidence collection activities within mainland China, and restrictions on the provision of documents, materials, data and personal information by mainland China entities and individuals to an overseas securities regulator, foreign judicial body or foreign law enforcement body may further increase difficulties faced by you in protecting your interests.

Any failure to comply with the regulations of mainland China regarding the registration requirements for employee stock incentive plans may subject the mainland China plan participants or us to fines and other legal or administrative sanctions.

Under SAFE regulations, mainland China residents who participate in a stock incentive plan in an overseas publicly listed company are required to register with SAFE or its local branches and complete certain other procedures. See “Item 4. Information on the Company—B. Business Overview—Regulation—Regulations Relating to Foreign Exchange—Regulations on Stock Incentive Plans.” We and our mainland China resident employees who participate in our share incentive plans will be subject to these regulations when our company becomes publicly listed in the United States. If we or any of these mainland China resident employees fail to comply with these regulations, we or such employees may be subject to fines and other legal or administrative sanctions. We also face regulatory uncertainties that could restrict our ability to adopt additional incentive plans for our directors, executive officers and employees under the laws of mainland China.

Failure to make adequate contributions to various employee benefit plans as required by the regulations of mainland China may subject us to penalties.

Companies operating in mainland China are required to participate in various government-sponsored employee benefit plans, including certain social insurance, housing funds and other welfare-oriented payment obligations, and contribute to the plans in amounts equal to certain percentages of salaries, including bonuses and allowances, of our employees up to a maximum amount specified by the local government from time to time at locations where we operate our businesses. The requirement of employee benefit plans has not been implemented consistently by the local governments in mainland China given the different levels of economic development in different locations. We have previously received payment notices from the relevant government authorities for inadequate contribution to employee benefit plans, and we have made the payments and penalty. We may be required to make up the contributions for these plans as well as to pay late fees and fines. If we are subject to late fees or fines in relation to the underpaid employee benefits, our financial condition and results of operations may be adversely affected. Going forward, we will comply with the regulations of mainland China and distribute the outstanding employee benefit payment accordingly.

Increases in labor costs and enforcement of stricter labor laws and regulations of mainland China may adversely affect our business and our profitability.

China's overall economy and the average wage in mainland China have increased in recent years and are expected to continue to grow. The average wage level for our employees has also increased in recent years. We expect that our labor costs, including wages and employee benefits, will continue to increase. Unless we are able to pass on these increased labor costs to those who pay for our services, our profitability and results of operations may be materially and adversely affected.

In addition, we have been subject to stricter regulatory requirements in terms of entering into labor contracts with our employees and paying various statutory employee benefits, including pensions, housing fund, medical insurance, work-related injury insurance, unemployment insurance and maternity insurance to designated government agencies for the benefit of our employees. Pursuant to the PRC Labor Contract Law and its implementation rules, employers are subject to stricter requirements in terms of signing labor contracts, minimum wages, paying remuneration, determining the term of employee's probation and unilaterally terminating labor contracts. In the event that we decide to terminate some of our employees or otherwise change our employment or labor practices, the PRC Labor Contract Law and its implementation rules may limit our ability to effect those changes in a desirable or cost-effective manner, which could adversely affect our business and results of operations.

In October 2010, the Standing Committee of the National People's Congress promulgated the PRC Social Insurance Law, effective on July 1, 2011 and amended on December 29, 2018. On April 3, 1999, the State Council promulgated the Regulations on the Administration of Housing Funds, which was amended on March 24, 2002 and March 24, 2019. Companies registered and operating in mainland China are required under the Social Insurance Law and the Regulations on the Administration of Housing Funds to apply for social insurance registration and housing fund deposit registration within 30 days of their establishment and to pay for their employees different social insurance including pension insurance, medical insurance, work-related injury insurance, unemployment insurance and maternity insurance to the extent required by law. We could be subject to orders by the competent labor authorities for rectification and failure to comply with the orders may further subject us to administrative fines.

As the interpretation and implementation of labor-related laws and regulations are still evolving, we cannot assure you that our employment practices do not and will not violate labor-related laws and regulations in mainland China, which may subject us to labor disputes or government investigations. We cannot assure you that we have complied or will be able to comply with all labor-related law and regulations including those relating to obligations to make social insurance payments and contribute to the housing provident funds. If we are deemed to have violated relevant labor laws and regulations, we could be required to provide additional compensation to our employees and our business, financial condition and results of operations will be adversely affected.

Fluctuations in exchange rates could have a material and adverse effect on our results of operations and the value of your investment.

Our operations are subject to risks arising from fluctuations in exchange rates with reference to countries in which we operate and to which we sell our products. We sell our products to various countries, and therefore, our revenues have significant exposure to the relative movements of currencies of those countries. Any significant appreciation or depreciation of Renminbi may materially and adversely affect our 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 we receive into Renminbi to make capital contributions or pay our operating expenses, appreciation of Renminbi against the U.S. dollar would have an adverse effect on the RMB amount we would receive from the conversion. Conversely, a significant depreciation of Renminbi against the U.S. dollar may significantly reduce the U.S. dollar equivalent of our earnings, which in turn could adversely affect the price of our ADSs.

The conversion of Renminbi into foreign currencies is based on rates set by the People's Bank of China. The value of Renminbi against foreign 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 you that Renminbi will not appreciate or depreciate significantly in value against foreign currencies in the future.

Very limited hedging options are available in mainland 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 the exchange control regulations of mainland China that restrict our ability to convert Renminbi into foreign currency. As a result, fluctuations in exchange rates may have a material adverse effect on your investment.

Discontinuation of any of the government subsidies or imposition of any additional taxes and surcharges could adversely affect our financial condition and results of operations.

Our mainland China subsidiaries have received various financial subsidies from PRC local government authorities. The financial subsidies result from discretionary incentives and policies adopted by PRC local government authorities. Local governments may decide to change or discontinue such financial subsidies at any time. The discontinuation of such financial subsidies or imposition of any additional taxes could adversely affect our financial condition and results of operations.

If we are classified as a mainland China resident enterprise for mainland China income tax purposes, such classification could result in unfavorable tax consequences to us and our non-mainland China shareholders or ADS holders.

Under the PRC Enterprise Income Tax Law and its implementation rules, an enterprise established outside of mainland China with a "de facto management body" within mainland China is considered a mainland China resident enterprise. The implementation rules define the term "de facto management body" as the body that exercises full and substantial control over and overall management of the business, productions, personnel, accounts and properties of an enterprise. In 2009, the State Administration of Taxation, or the SAT issued a circular, known as Circular 82, which provides certain specific criteria for determining whether the "de facto management body" of a PRC-controlled enterprise that is incorporated offshore is located in mainland China. Although Circular 82 only applies to offshore enterprises controlled by mainland China enterprises or mainland China enterprise groups, not those controlled by mainland China individuals or foreigners like us, the criteria set forth in the circular may reflect the SAT's general position on how the "de facto management body" test should be applied in determining the tax resident status of all offshore enterprises. According to Circular 82, an offshore incorporated enterprise controlled by a mainland China enterprise or a mainland China enterprise group will be regarded as a mainland China tax resident by virtue of having its "de facto management body" in mainland China and will be subject to mainland China enterprise income tax on its global income only if all of the following conditions are met: (i) the primary location of the day-to-day operational management is in mainland China; (ii) decisions relating to the enterprise's financial and human resource matters are made or are subject to approval by organizations or personnel in mainland China; (iii) the enterprise's primary assets, accounting books and records, company seals, and board and shareholder resolutions, are located or maintained in mainland China; and (iv) at least 50% of voting board members or senior executives habitually reside in mainland China.

We believe that none of our entities outside of mainland China is a mainland China resident enterprise for mainland China tax purposes. However, the tax resident status of an enterprise is subject to determination by the PRC tax authorities and uncertainties remain with respect to the interpretation of the term “de facto management body.” If the PRC tax authorities determine that we are a mainland China resident enterprise for enterprise income tax purposes, we will be subject to the enterprise income tax on our global income at the rate of 25% and we will be required to comply with mainland China enterprise income tax reporting obligations. In addition, gains realized on the sale or other disposition of the ADSs or our Class A ordinary shares may be subject to mainland China tax, at a rate of 10% in the case of non-mainland China enterprises or 20% in the case of non-mainland China individuals (in each case, subject to the provisions of any applicable tax treaty), if such gains are deemed to be from mainland China sources. It is unclear whether non-mainland China shareholders of our company would be able to claim the benefits of any tax treaties between their country of tax residence and mainland China in the event that we are treated as a mainland China resident enterprise. Any such tax may reduce the returns on your investment in the ADSs.

Any failure or perceived failure by us to comply with the anti-monopoly and anti-unfair competition laws and regulations may result in governmental investigations or enforcement actions, litigation, or claims or fines against us, and could have an adverse effect on our business, financial condition and results of operations.

The PRC government has adopted a series of anti-monopoly and anti-unfair competition laws and regulations and has recently enhanced its enforcement of such laws and regulations. The PRC Anti-monopoly Law (revised in 2022) and the relevant implementing rules (i) require that where the concentration of undertakings reaches the filing threshold stipulated by the State Council, a filing must be made with the anti-monopoly authority before the parties implement the concentration, but even if the concentration of undertakings fails to meet the filing threshold, if there is any evidence that the concentration of undertakings has or may have the effect of eliminating or restricting competition, the anti-monopoly authority may require the parties to file, (ii) prohibit a business operator with a dominant market position from abusing such position, such as by selling commodities at unfairly high prices or buying commodities at unfairly low prices, selling products at prices below cost without any justifiable cause, or refusing to trade with a trading party without any justifiable cause, and (iii) prohibit business operators from entering into monopoly agreements, which refer to agreements that eliminate or restrict competition with competing business operators or transaction counterparties, such as by boycotting transactions, fixing or changing the price of commodities, limiting the output of commodities or fixing the price of commodities for resale to third parties, unless the agreements satisfy certain exemptions under the PRC Anti-monopoly Law. Furthermore, in February 2021, the Anti-monopoly Commission of the State Council officially promulgated the Anti-Monopoly Guidelines for the Internet Platform Economy Sector, or the Anti-Monopoly Guidelines. The Anti-Monopoly Guidelines prohibit certain monopolistic acts of internet platforms so as to protect market competition and safeguard the interests of users and undertakings participating in the internet platform economy, including without limitation, prohibiting platforms with a dominant position from abusing their market dominance (such as discriminating against customers in terms of pricing and other transactional conditions using big data and analytics, coercing counterparties into exclusivity arrangements, using technology to block competitors’ interfaces, favorable positioning in search results of goods displays, using bundle services to sell services or products, compulsory collection of unnecessary user data). In addition, the Anti-Monopoly Guidelines also reinforce antitrust merger review for internet platform related transactions to safeguard market competition. Meanwhile, on March 10, 2023, the SAMR issued the Provisions on Prohibiting the Abuse of Administrative Power to Eliminate and Restrict Competition, the Provisions on Anti-Monopoly Agreements, the Provisions on Prohibition of Abuse of Dominant Market Position, and the Regulations on the Review of Concentration of Undertakings (collectively, the “Provisions on Anti-Monopoly”), all of which came into effect on April 15, 2023. These Provisions on Anti-Monopoly are promulgated to implement the Anti-Monopoly Law of the PRC, and further strengthen the anti-monopoly legal system. As these Provisions on Anti-Monopoly and the Anti-Monopoly Guidelines were newly promulgated, it is still uncertain how they will impact on our business, financial condition, results of operations and prospects.

According to the PRC Anti-unfair Competition Law, unfair competition, which refers to the production and operating activities where the operator disrupts the market competition order and damages the legitimate rights and interests of other operators or consumers in violation of the provisions of the PRC Anti-unfair Competition Law, shall be prohibited. Pursuant to the PRC Anti-unfair Competition Law, operators shall abide by the principle of voluntariness, equality, impartiality, integrity and adhere to laws and business ethics during market transactions. Operators in violation of the PRC Anti-unfair Competition Law may be subject to civil, administrative or criminal liabilities depending on the specific circumstances.

In March 2018, the SAMR was formed as a new governmental agency to take over, among other things, the anti-monopoly enforcement functions from the relevant departments under the MOFCOM, the NDRC, and the former State Administration for Industry and Commerce, respectively. Since its inception, the SAMR has continued to strengthen anti-monopoly enforcement. In December 2018, the SAMR issued the Notice on Anti-monopoly Enforcement Authorization, which grants authorities to its provincial branches to conduct anti-monopoly enforcement within their respective jurisdictions. In September 2020, the SAMR issued Anti-monopoly Compliance Guideline for Operators, which requires operators to establish anti-monopoly compliance management systems to prevent anti-monopoly compliance risks. In particular, the PRC regulators have been increasingly focused on inspection and regulation on potential noncompliance with anti-unfair competition and anti-monopoly related laws recently. For example, in April 2021, the SAMR, the Cyberspace Administration of China and the SAT, held an administrative guidance meeting for internet platform enterprises. During the meeting, it was pointed out that illegal activities including, among others, forcing the implementation of “choose one” among the enterprise and its competitors, abusing dominant market position, “cash burning” to seize the “community group buying” market, making use of big data analysis to the disadvantage of existing customers, etc., shall be prohibited and rectified. In addition, many platforms, including 34 enterprises which attended such administrative guidance meeting as representatives of internet platform enterprises, are required to conduct a comprehensive self-inspection and make necessary rectification accordingly. The competent administration for market regulation will organize and conduct inspections on the platforms’ rectification results. If the platforms are found to conduct illegal activities including forcing the implementation of “choose one” among them and their competitors, abusing dominant market position, infringing consumers rights and interests, etc., they will be imposed with more severe penalties in accordance with the laws. We have been conducting necessary self-inspection and rectifications in accordance with such guidance and are working on some of the rectification procedures, such as concentration notification for past deals. We cannot guarantee you that we will not be subject to more similar or even stricter rectification requests from the government authorities or that we will fully comply with all applicable rules and regulations at all times. As a result of the regulators’ focus on anti-monopoly and anti-unfair competition compliance and enhanced regulation of platform enterprises, our business practice and expansion strategy may be subject to heightened regulatory scrutiny. In order to comply with existing laws and regulations and new laws and regulations that may be enacted in the future, we may need to devote significant resources and efforts, including restructuring affected businesses and adjusting investment activities, which may adversely affect our business operation, growth prospects and reputation. In addition, we cannot assure you that our efforts are sufficient to comply with all the applicable laws and regulations on anti-monopoly and anti-unfair competition and the authorities’ requirements in all respects. Any anti-monopoly or anti-unfair competition related lawsuit, regulatory investigations or administrative proceedings initiated against us could also result in our being subject to regulatory actions and constraints on our investments and acquisitions, which could include forced termination of any agreements or transactions, required divestitures, limitations on certain pricing and business practices or significant fines. As a result, we may be subject to significant difficulties in operating our current business and pursuing our investment and acquisition strategy.

We may not be able to obtain certain benefits under relevant tax treaty, on dividends paid by our mainland China subsidiaries to us through our Hong Kong subsidiary.

We are a holding company incorporated under the laws of the Cayman Islands and as such rely on dividends and other distributions on equity from our mainland China subsidiaries to satisfy part of our liquidity requirements. Pursuant to the PRC Enterprise Income Tax Law, a withholding tax rate of 10% currently applies to dividends paid by a mainland China “resident enterprise” to a foreign enterprise investor, unless any such foreign investor’s jurisdiction of incorporation has a tax treaty with mainland China that provides for preferential tax treatment. Pursuant to the Arrangement between the Mainland China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and Tax Evasion on Income, or the Double Taxation Avoidance and the Tax Evasion Arrangement, effective from December 8, 2006, such withholding tax rate may be lowered to 5% if a Hong Kong resident enterprise owns no less than 25% of a mainland China enterprise. According to the Announcement of the State Administration of Taxation on Issues concerning the “Beneficial Owner” in Tax Treaties, which became effective in April 2018, whether a resident enterprise is a “beneficial owner” that can apply for a low tax rate under tax treaties depends on an overall assessment of several factors, which may bring uncertainties to the applicability of preferential tax treatment under the tax treaties. Furthermore, the Administrative Measures for Non-Resident Taxpayers to Enjoy Treatments under Tax Treaties, which became effective on January 1, 2020, requires non-resident taxpayers (including non-resident enterprises and individuals) to determine whether they are qualified to enjoy the preferential tax treatment under the tax treaties and file relevant report and materials with the tax authorities. Where a non-resident taxpayer self-assesses and concludes that it/he/she satisfies the criteria for claiming preferential tax treatment, it/he/she may enjoy treaty benefits at the time of tax declaration or at the time of withholding through the withholding agent, simultaneously gather and retain the relevant materials for future inspection, and accept follow-up administration by the tax authorities. There are also other conditions for enjoying the reduced withholding tax rate according to other relevant tax rules and regulations. See “Item 5. Operating and Financial Review and Prospects—Taxation.” In the future we intend to re-invest all earnings, if any, generated from our mainland China subsidiaries for the operation and expansion of our business in mainland China. Should our tax policy change to allow for offshore distribution of our earnings, we would be subject to a significant withholding tax. We cannot assure you that our determination regarding our qualification to enjoy the preferential tax treatment will not be challenged by the relevant tax authority or we will be able to complete the necessary filings with the relevant tax authority and enjoy the preferential withholding tax rate of 5% under the arrangement with respect to dividends to be paid by our mainland China subsidiaries to our Hong Kong subsidiary.

We face uncertainty with respect to indirect transfers of equity interests in mainland China resident enterprises by their non-mainland China holding companies.

In February 2015, SAT issued the Public Notice Regarding Certain Corporate Income Tax Matters on Indirect Transfer of Properties by Non-Resident Enterprises, or SAT Public Notice 7. SAT 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. In addition, SAT Public Notice 7 provides certain criteria on how to assess reasonable commercial purposes and has introduced safe harbors for internal group restructurings and the purchase and sale of equity through a public securities market. SAT 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 mainland China 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 disregard the existence of the overseas holding company if it lacks a reasonable commercial purpose and was established for the purpose of reducing, avoiding or deferring mainland China tax. As a result, gains derived from such indirect transfer may be subject to mainland China 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 10% for the transfer of equity interests in a mainland China resident enterprise. On October 17, 2017, SAT issued the Announcement of the State Administration of Taxation on Issues Concerning the Withholding of Nonresident Enterprise Income Tax at Source, or SAT Bulletin 37, which came into effect on December 1, 2017 and was amended on June 15, 2018. The SAT Bulletin 37 further clarifies the practice and procedure of the withholding of nonresident enterprise income tax.

We face uncertainties on the reporting and consequences of future private equity financing transactions, share exchanges or other transactions involving the transfer of shares in our company by investors that are non-mainland China resident enterprises. The PRC tax authorities may pursue such non-resident enterprises with respect to a filing or the transferees with respect to withholding obligation, and request our mainland China subsidiaries to assist in the filing. As a result, we and non-resident enterprises in such transactions may become at risk of being subject to filing obligations or being taxed under SAT Public Notice 7 and SAT Bulletin 37, and may be required to expend valuable resources to comply with them or to establish that we and our non-resident enterprises should not be taxed under these regulations, which may have a material adverse effect on our financial condition and results of operations.

If the custodians or authorized users of controlling non-tangible assets of our company, including our corporate chops and seals, fail to fulfill their responsibilities, or misappropriate or misuse these assets, our business and operations could be materially and adversely affected.

Under the laws of mainland China, legal documents for corporate transactions are executed using the chops or seal of the signing entity or with the signature of a legal representative whose designation is registered and filed with the relevant branch of the Administration of Industry and Commerce.

Although we usually utilize chops to enter into contracts, the designated legal representatives of each of our mainland China subsidiaries, the VIE and its subsidiaries have the apparent authority to enter into contracts on behalf of such entities without chops and bind such entities. All designated legal representatives of our mainland China subsidiaries, the VIE and its subsidiaries are members of our senior management team who have signed employment agreements with us or our mainland China subsidiaries, the VIE and its subsidiaries under which they agree to abide by various duties they owe to us. In order to maintain the physical security of our chops and chops of our mainland China entities, we generally store these items in secured locations accessible only by the authorized personnel in the legal or finance department of each of our subsidiaries, the VIE and its subsidiaries. Although we monitor such authorized personnel, there is no assurance such procedures will prevent all instances of abuse or negligence. Accordingly, if any of our authorized personnel misuse or misappropriate our corporate chops or seals, we could encounter difficulties in maintaining control over the relevant entities and experience significant disruption to our operations. If a designated legal representative obtains control of the chops in an effort to obtain control over any of our mainland China subsidiaries, the VIE or its subsidiaries, we or our mainland China subsidiaries, the VIE and its subsidiaries would need to pass a new shareholder or board resolution to designate a new legal representative and we would need to take legal action to seek the return of the chops, apply for new chops with the relevant authorities, or otherwise seek legal redress for the violation of the representative's fiduciary duties to us, which could involve significant time and resources and divert management attention away from our regular business. In addition, the affected entity may not be able to recover corporate assets that are sold or transferred out of our control in the event of such a misappropriation if a transferee relies on the apparent authority of the representative and acts in good faith.

Our leased property interest may be defective and our right to lease the properties may be affected by such defects challenged, which could cause significant disruption to our business.

Under the laws of mainland China, all lease agreements are required to be registered with the local housing authorities. We presently lease six premises in China, and the landlords of these premises have not completed the registration of their ownership rights or the registration of our leases with the relevant authorities. Failure to complete these required registrations may expose our landlords, lessors and us to potential monetary fines. If these registrations are not obtained in a timely manner or at all, we may be subject to monetary fines or may have to relocate our offices and incur the associated losses.

Risks Related to Our ADSs

The trading price of the ADSs is likely to be volatile, which could result in substantial losses to investors.

The trading price of the ADSs is likely to be volatile and could fluctuate widely due to factors beyond our control. This may happen because of broad market and industry factors, including the performance and fluctuation of the market prices of other companies with business operations located mainly in China that have listed their securities in the United States. The securities of some of these companies, including internet-based companies, have experienced significant volatility since their initial public offerings, including, in some cases, substantial price declines in their trading prices. The trading performances of other Chinese companies' securities after their offerings may affect the attitudes of investors toward Chinese companies listed in the United States in general and consequently may impact the trading performance of the ADSs, regardless of our actual operating performance.

In addition to market and industry factors, the price and trading volume for the ADSs may be highly volatile for factors specific to our own operations, including the following:

- variations in our revenues, earnings and cash flow;
- announcements of new investments, acquisitions, strategic partnerships or joint ventures by us or our competitors;
- announcements of new offerings, solutions and expansions by us or our competitors;
- changes in financial estimates by securities analysts;
- detrimental adverse publicity about us, our services or our industry;
- additions or departures of key personnel;
- release of lockup or other transfer restrictions on our outstanding equity securities or sales of additional equity securities; and
- potential litigation or regulatory investigations.

Any of these factors may result in large and sudden changes in the volume and price at which the ADSs will trade.

In the past, shareholders of public companies have often brought securities class action suits against those companies following periods of instability in the market price of their securities. If we were involved in a class action suit, it could divert a significant amount of our management's attention and other resources from our business and operations and require us to incur significant expenses to defend the suit, which could harm our results of operations. Any such class action suit, whether or not successful, could harm our reputation and restrict our ability to raise capital in the future. In addition, if a claim is successfully made against us, we may be required to pay significant damages, which could have a material adverse effect on our financial condition and results of operations.

If securities or industry analysts do not publish research or publishes inaccurate or unfavorable research about our business, or if they adversely change their recommendations regarding the ADSs, the market price for our ADSs and trading volume could decline.

The trading market for the ADSs will be influenced by research or reports that industry or securities analysts publish about our business. If one or more analysts who cover us downgrade the ADSs or publishes inaccurate or unfavorable research about our business, the market price for the ADSs would likely decline. If one or more of these analysts cease to cover us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause the market price or trading volume for the ADSs to fall.

The sale or availability for sale of substantial amounts of the ADSs could adversely affect their market price.

Sales of substantial amounts of the ADSs in the public market, or the perception that these sales could occur, could adversely affect the market price of the ADSs and could materially impair our ability to raise capital through equity offerings in the future. We cannot predict what effect, if any, market sales of securities held by our significant shareholders or any other shareholder or the availability of these securities for future sale will have on the market price of the ADSs. As of February 28, 2023, we had 154,277,834 ordinary shares issued and outstanding, comprising of (i) 137,735,814 Class A ordinary shares, and (ii) 16,542,020 Class B ordinary shares, among which 94,553,872 Class A ordinary shares are in the form of ADSs, which are freely transferable without restriction or additional registration under the Securities Act. The remaining Class A ordinary shares outstanding and the Class B ordinary shares will be available for sale, subject to volume and other restrictions as applicable under Rules 144 and 701 under the Securities Act. Certain holders of our ordinary shares may cause us to register under the Securities Act the sale of their shares, subject to the applicable lock-up period. Registration of these shares under the Securities Act would result in ADSs representing these shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. Sales of these registered shares in the form of ADSs in the public market could cause the price of our ADSs to decline.

Our dual-class voting structure will limit your ability to influence corporate matters and could discourage others from pursuing any change of control transactions that holders of our Class A ordinary shares and the ADSs may view as beneficial.

We have a dual-class ordinary share structure. 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 will be entitled to four votes per share. 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 direct or indirect sale, transfer, assignment or disposition of Class B ordinary shares by a holder thereof or the direct or indirect transfer or assignment of the voting power attached to such number of Class B ordinary shares through voting proxy or otherwise to any person or entity that is not an affiliate of such holder, such Class B ordinary shares shall be automatically and immediately converted into an equal number of Class A ordinary shares.

All of the 6,615,000 ordinary shares held by ELLY Holdings Limited, an entity wholly owned by Dr. Yan Li, the chairman of our board of directors and our chief executive officer, and the 9,927,020 ordinary shares held by Niu Holding Inc., an entity 82.7% owned by Mr. Token Yilin Hu, our director, and 17.3% owned by Mr. Carl Chuankai Liu, are Class B ordinary shares. Messrs. Yan Li, Token Yilin Hu and Carl Chuankai Liu collectively beneficially own an aggregate of 16,542,020 Class B ordinary shares, which represented 32.5% of our total voting power as of February 28, 2023. Therefore, Messrs. Yan Li, Token Yilin Hu and Carl Chuankai Liu have significant influence over matters requiring shareholders' approval, including election of directors and significant corporate transactions, such as a merger or sale of our company or our assets. This concentration in voting power will limit your ability to influence corporate matters and could discourage others from pursuing any potential merger, takeover or other change of control transactions that holders of our Class A ordinary shares and the ADSs may view as beneficial.

The dual-class structure of our ordinary shares may adversely affect the trading market for the ADSs.

S&P Dow Jones and FTSE Russell have changed their eligibility criteria for inclusion of shares of public companies on certain indices, including the S&P 500, to exclude companies with multiple classes of shares and companies whose public shareholders hold no more than 5% of total voting power from being added to such indices. In addition, several shareholder advisory firms have announced their opposition to the use of multiple class structures. As a result, the dual-class structure of our ordinary shares may prevent the inclusion of the ADSs representing our Class A ordinary shares in such indices and may cause shareholder advisory firms to publish negative commentary about our corporate governance practices or otherwise seek to cause us to change our capital structure. Any such exclusion from indices could result in a less active trading market for the ADSs representing our Class A ordinary shares. Any actions or publications by shareholder advisory firms critical of our corporate governance practices or capital structure could also adversely affect the value of the ADSs.

Because we do not expect to pay dividends in the foreseeable future, you must rely on a price appreciation of the ADSs for a return on your investment.

We currently intend to retain most, if not all, of our available funds and any future earnings to fund the development and growth of our business. As a result, we do not expect to pay any cash dividends in the foreseeable future. Therefore, you should not rely on an investment in the ADSs as a source for any future dividend income.

Our board of directors has discretion as to whether to distribute dividends, subject to certain requirements of Cayman Islands law. In addition, our shareholders may by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our directors. Under Cayman Islands law, a Cayman Islands company may pay a dividend out of either profit or share premium account *provided* that in no circumstances may a dividend be paid if this would result in the company being unable to pay its debts as they fall due in the ordinary course of business. Even if our board of directors decides to declare and pay dividends, the timing, amount and form of future dividends, if any, will depend on our future results of operations and cash flow, our capital requirements and surplus, the amount of distributions, if any, received by us from our subsidiaries, our financial condition, contractual restrictions and other factors deemed relevant by our board of directors. Accordingly, the return on your investment in the ADSs will likely depend entirely upon any future price appreciation of our ADSs. There is no guarantee that the ADSs will appreciate in value or even maintain the price at which you purchased the ADSs. You may not realize a return on your investment in the ADSs, and you may even lose your entire investment in the ADSs.

There can be no assurance that we will not be classified as a passive foreign investment company, or PFIC, for U.S. federal income tax purposes for any taxable year, which could result in adverse U.S. federal income tax consequences to U.S. holders of the ADSs or our Class A ordinary shares.

A non-U.S. corporation will be classified as a passive foreign investment company, or PFIC, for any taxable year if either (i) at least 75% of its gross income for such year consists of certain types of “passive” income; or (ii) at least 50% of the value of its assets (generally determined on the basis of a quarterly average) during such year is attributable to assets that produce passive income or are held for the production of passive income. Although the law in this regard is unclear, we intend to treat the VIE (and its subsidiaries) as being owned by us for United States federal income tax purposes, not only because we conduct the business operations of such entity but also because we are entitled to substantially all of its economic benefits, and, as a result, we consolidate its result of operations in our consolidated financial statements. Assuming that we are the owner of the VIE (including its respective subsidiaries, if any) for United States federal income tax purposes, we do not believe we were a PFIC for the taxable year ended December 31, 2022 and we do not presently expect to be a PFIC for the current taxable year or the foreseeable future.

While we do not expect to become a PFIC, because the value of our assets for purposes of the asset test may be determined by reference to the market price of the ADSs, fluctuations in the market price of the ADSs may cause us to become a PFIC for the current or subsequent taxable years. In addition, the composition of our income and assets will also be affected by how, and how quickly, we use our liquid assets. If we determine not to deploy significant amounts of cash for active purposes or if it were determined that we do not own the stock of the VIE for United States federal income tax purposes, our risk of being a PFIC may substantially increase. Because PFIC status is a factual determination made annually after the close of each 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 are a PFIC in any taxable year during which a U.S. Holder (as defined in “Item 10. Additional Information—E. Taxation—United States Federal Income Tax Considerations”) holds the ADSs or our Class A ordinary shares, certain adverse U.S. federal income tax consequences could apply to such U.S. Holder. See “Item 10. Additional Information—E. Taxation—Passive Foreign Investment Company Considerations.”

Our sixth amended and restated memorandum and articles of association contain anti-takeover provisions that could have a material adverse effect on the rights of holders of our Class A ordinary shares and ADSs.

Our sixth amended and restated memorandum and articles of association contain certain provisions to limit the ability of others to acquire control of our company or cause us to engage in change-of-control transactions, including a provision that grants authority to our board of directors to establish and issue from time to time one or more series of preferred shares without action by our shareholders and to determine, with respect to any series of preferred shares, the terms and rights of that series, any or all of which may be greater than the rights associated with our Class A ordinary shares in the form of ADSs. These provisions could have the effect of depriving our shareholders of the opportunity to sell their shares 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.

You may face difficulties in protecting your interests, and your ability to protect your rights through U.S. courts may be limited, because we are incorporated under Cayman Islands law.

We are an exempted company incorporated under the laws of the Cayman Islands. Our corporate affairs are governed by our sixth amended and restated memorandum and articles of association, the Companies Act (As Revised) of the Cayman Islands and the common law of the Cayman Islands. The rights of shareholders to take action against our directors, actions by our minority shareholders and the fiduciary duties 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 the common law of England, the decisions of whose courts are of persuasive authority, but are not binding, 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 precedent in some jurisdictions in the United States. In particular, the Cayman Islands have a less developed body of securities laws than the United States. In addition, Cayman Islands companies may not have standing to initiate a shareholder derivative action in a federal court of the United States.

Shareholders of Cayman Islands exempted companies like us have no general rights under Cayman Islands law to inspect corporate records (other than the memorandum and articles of association and any special resolutions passed by such companies, and the registers of mortgages and charges of such companies) or to obtain copies of lists of shareholders of these companies. Our directors have discretion under our articles of association, to determine whether or not, and under what conditions, our corporate records may be inspected by our shareholders, but our directors are not obliged to make them available to our shareholders. This may make it more difficult for you to obtain the information needed to establish any facts necessary for a shareholder motion or to solicit proxies from other shareholders in connection with a proxy contest.

Certain corporate governance practices in the Cayman Islands, which is our home country, differ significantly from requirements for companies incorporated in other jurisdictions such as the United States. As a result of all of the above, our public shareholders may have more difficulty in protecting their interests in the face of actions taken by our management, members of our board of directors or our controlling shareholders than they would as public shareholders of a company incorporated in the United States.

Certain judgments obtained against us by our shareholders may not be enforceable.

We are a Cayman Islands exempted company and all of our assets are located outside of the United States. All of our current operations are conducted in mainland China. In addition, all of our current directors and officers are nationals and residents of countries other than the United States. Substantially all of the assets of these persons are located outside the United States. As a result, it may be difficult or impossible for you to bring an action against us or against these individuals in the United States in the event that you believe that your rights have been infringed under the U.S. federal securities laws or otherwise. Even if you are successful in bringing an action of this kind, the laws of the Cayman Islands and of mainland China may render you unable to enforce a judgment against our assets or the assets of our directors and officers.

You may experience dilution of your holdings due to inability to participate in rights offerings.

We may, from time to time, distribute rights to our shareholders, including rights to acquire securities. Under the deposit agreement, the depositary will not distribute rights to holders of ADSs unless the distribution and sale of rights and the securities to which these rights relate are either exempt from registration under the Securities Act with respect to all holders of ADSs or are registered under the provisions of the Securities Act. The depositary may, but is not required to, attempt to sell these undistributed rights to third parties, and may allow the rights to lapse. We may be unable to establish an exemption from registration under the Securities Act, and we are under no obligation to file a registration statement with respect to these rights or underlying securities or to endeavor to have a registration statement declared effective. Accordingly, holders of ADSs may be unable to participate in our rights offerings and may experience dilution of 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 books at any time or from time to time when it deems expedient in connection with the performance of its duties. The depositary may close its books from time to time for a number of reasons, including in connection with corporate events such as a rights offering, during which time the depositary needs to maintain an exact number of ADS holders on its books for a specified period. The depositary may also close its books in emergencies, and on weekends and public holidays. The depositary may refuse to deliver, transfer or register transfers of the ADSs generally when our share register or the books of the depositary are closed, or at any time if we or the depositary thinks it is 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.

We incur increased costs as a result of being a public company.

As a public company, we incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act of 2002, as well as rules subsequently implemented by the SEC and Nasdaq, impose various requirements on the corporate governance practices of public companies.

These rules and regulations increase our legal and financial compliance costs and make some corporate activities more time-consuming and costly. We have also incurred additional costs in obtaining director and officer liability insurance. In addition, we will incur additional costs associated with our public company reporting requirements. It may also be more difficult for us to find qualified persons to serve on our board of directors or as executive officers. We regularly evaluate and monitor developments with respect to these rules and regulations, and we cannot predict or estimate with any degree of certainty the amount of additional costs we may incur or the timing of such costs.

We are a foreign private issuer within the meaning of the rules under the Exchange Act, and as such we are exempt from certain provisions applicable to United States domestic public companies.

Because we are a foreign private issuer under the Exchange Act, we are exempt from certain provisions of the securities rules and regulations in the United States that are applicable to U.S. domestic issuers, including:

- the rules under the Exchange Act requiring the filing of quarterly reports on Form 10-Q or current reports on Form 8-K with the SEC;
- the sections of the Exchange Act regulating the solicitation of proxies, consents or authorizations in respect of a security registered under the Exchange Act;
- the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and
- the selective disclosure rules by issuers of material nonpublic information under Regulation FD.

We are required to file an annual report on Form 20-F within four months of the end of each fiscal year. In addition, we intend to publish our results on a quarterly basis through press releases, distributed pursuant to the rules and regulations of the SEC. Press releases relating to financial results and material events will also be furnished to the SEC on Form 6-K. However, the information we are required to file with or furnish to the SEC is less extensive and less timely than that required to be filed with the SEC by U.S. domestic issuers. As a result, you may not be afforded the same protections or information that would be made available to you were you investing in a U.S. domestic issuer.

As an exempted company incorporated in the Cayman Islands, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from the Nasdaq listing standards; these practices may afford less protection to shareholders than they would enjoy if we complied fully with such corporate governance listing standards.

As a Cayman Islands exempted company listed on the Nasdaq Stock Market, we are subject to the Nasdaq listing standards. Rule 5620(a) requires that each company listing common stock or voting preferred stock, and their equivalents, must hold an annual meeting of shareholders no later than one year after the end of the company's fiscal year-end. However, the Nasdaq Stock Market Rules permit a foreign private issuer like us to follow the corporate governance practices of its home country. We have informed Nasdaq that we will follow home country practice, that is, the provisions of our Sixth Amended and Restated Memorandum and Articles of Association, with respect to the annual meeting of shareholders, which provides that our company may (but shall not be obliged to) in each calendar year hold a general meeting as our annual general meeting. Our shareholders may be afforded less protection than they would otherwise enjoy under the Nasdaq listing standards applicable to U.S. domestic issuers given our reliance on the home country practice exception.

The voting rights of holders of ADSs are limited by the terms of the deposit agreement, and you may not be able to exercise your right to direct how the Class A ordinary shares which are represented by your ADSs are voted.

Holders of ADSs do not have the same rights as our registered shareholders. As a holder of the ADSs, you will not have any direct right to attend general meetings of our shareholders or to cast any votes at such meetings. You will only be able to exercise the voting rights that are carried by the underlying Class A ordinary shares represented by your ADSs indirectly in accordance with the provisions of the deposit agreement. Under the deposit agreement, you may vote only by giving voting instructions to the depository. Upon receipt of your voting instructions, the depository will try, as far as is practicable, to vote the underlying Class A ordinary shares represented by your ADSs in accordance with your instructions. You will not be able to directly exercise your right to vote with respect to the underlying Class A ordinary shares unless you withdraw the shares and become the registered holder of such shares prior to the record date for the general meeting.

Under our articles of association, the minimum notice period required to convene a general meeting is seven calendar days. When a general meeting is convened, you may not receive sufficient advance notice of the meeting to withdraw the underlying Class A ordinary shares represented by your ADSs and become the registered holder of such shares to allow you to attend the general meeting and to vote directly with respect to any specific matter or resolution to be considered and voted upon at the general meeting. In addition, under our articles of association, for the purposes of determining those shareholders who are entitled to attend and vote at any general meeting, our directors may close our register of members and/or fix in advance a record date for such meeting, and such closure of our register of members or the setting of such a record date may prevent you from withdrawing the underlying Class A ordinary shares represented by your ADSs and becoming the registered holder of such shares prior to the record date, so that you would not be able to attend the general meeting or to vote directly. If we ask for your instructions, the depository will notify you of the upcoming vote and will arrange to deliver voting materials to you. We have agreed to give the depository at least 30 days' prior notice of shareholder meetings. Nevertheless, we cannot assure you that you will receive the voting materials in time to ensure that you can instruct the depository to vote the underlying Class A ordinary shares represented by your ADSs. In addition, the depository and its agents are not responsible for failing to carry out voting instructions or for their manner of carrying out your voting instructions. This means that you may not be able to exercise your right to direct how the underlying Class A ordinary shares represented by your ADSs are voted, and you may have no legal remedy if the underlying Class A ordinary shares represented by your ADSs are not voted as you requested.

We are entitled to amend the deposit agreement and to change the rights of ADS holders under the terms of such agreement, or to terminate the deposit agreement, without the prior consent of the ADS holders.

We are entitled to amend the deposit agreement and to change the rights of the ADS holders under the terms of such agreement, without the prior consent of the ADS holders. We and the depository may agree to amend the deposit agreement in any way we decide is necessary or advantageous to us. Amendments may reflect, among other things, operational changes in the ADS program, legal developments affecting ADSs or changes in the terms of our business relationship with the depository. In the event that the terms of an amendment impose or increase fees or charges (other than in connection with foreign exchange control regulations, and taxes and other governmental charges, delivery and other such expenses) or materially prejudice an existing substantial right of the ADS holders, ADS holders will only receive 30 days' advance notice of the amendment, and no prior consent of the ADS holders is required under the deposit agreement. Furthermore, we may decide to terminate the ADS facility at any time for any reason. For example, terminations may occur when we decide to list our shares on a non-U.S. securities exchange and determine not to continue to sponsor an ADS facility or when we become the subject of a takeover or a going-private transaction. If the ADS facility will terminate, ADS holders will receive at least 30 days' prior notice, but no prior consent is required from them. Under the circumstances that we decide to make an amendment to the deposit agreement that is disadvantageous to ADS holders or terminate the deposit agreement, the ADS holders may choose to sell their ADSs or surrender their ADSs and become direct holders of the underlying common shares, but will have no right to any compensation whatsoever.

ADS holders may not be entitled to a jury trial with respect to claims arising under the deposit agreement, which could result in less favorable outcomes to the plaintiff(s) in any such action.

The deposit agreement governing the ADSs representing our Class A ordinary shares provides that, the federal or state courts in the City of New York have non-exclusive jurisdiction to hear and determine claims arising under the deposit agreement and in that regard, to the fullest extent permitted by law, ADS holders waive the right to a jury trial of any claim they may have against us or the depository arising out of or relating to our Class A ordinary shares, the ADSs or the deposit agreement, including any claim under the U.S. federal securities laws.

If we or the depositary opposed a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable based on the facts and circumstances of that case in accordance with the applicable state and federal law. To our knowledge, the enforceability of a contractual pre-dispute jury trial waiver in connection with claims arising under the federal securities laws has not been finally adjudicated by the United States Supreme Court. However, we believe that a contractual pre-dispute jury trial waiver provision is generally enforceable, including under the laws of the State of New York, which govern the deposit agreement. In determining whether to enforce a contractual pre-dispute jury trial waiver provision, courts will generally consider whether a party knowingly, intelligently and voluntarily waived the right to a jury trial. We believe that this is the case with respect to the deposit agreement and the ADSs. It is advisable that you consult legal counsel regarding the jury waiver provision before investing in the ADSs.

If you or any other holders or beneficial owners of ADSs bring a claim against us or the depositary in connection with matters arising under the deposit agreement or the ADSs, including claims under federal securities laws, you or such other holder or beneficial owner may not be entitled to a jury trial with respect to such claims, which may have the effect of limiting and discouraging lawsuits against us and / or the depositary. If a lawsuit is brought against us and/or the depositary under the deposit agreement, it may be heard only by a judge or justice of the applicable trial court, which would be conducted according to different civil procedures and may result in different outcomes than a trial by jury would have had, including results that could be less favorable to the plaintiff(s) in any such action.

Nevertheless, if this jury trial waiver provision is not enforced, to the extent a court action proceeds, it would proceed under the terms of the deposit agreement with a jury trial. No condition, stipulation or provision of the deposit agreement or ADSs serves as a waiver by any holder or beneficial owner of ADSs or by us or the depositary of compliance with any substantive provision of the U.S. federal securities laws and the rules and regulations promulgated thereunder.

The depositary for the ADSs will give us a discretionary proxy to vote our Class A ordinary shares underlying your ADSs if you do not vote at shareholders' meetings, except in limited circumstances, which could adversely affect your interests.

Under the deposit agreement for the ADSs, if you do not vote, the depositary will give us a discretionary proxy to vote our Class A ordinary shares underlying your ADSs at shareholders' meetings unless:

- we have instructed the depositary that we do not wish a discretionary proxy to be given;
- we have informed the depositary that there is substantial opposition as to a matter to be voted on at the meeting;
- a matter to be voted on at the meeting may have a material adverse impact on shareholders; or
- the voting at the meeting is to be made on a show of hands.

The effect of this discretionary proxy is that if you do not vote at shareholders' meetings, you cannot prevent our ordinary shares underlying your ADSs from being voted, except under the circumstances described above. This may make it more difficult for shareholders to influence the management of our company. Holders of our ordinary shares are not subject to this discretionary proxy.

Item 4. Information on the Company

A. History and Development of the Company

We commenced operations in September 2014 through Beijing Niudian, and launched our NQi-series smart e-scooters in June 2015.

In November 2014, we incorporated Niu Technologies in the Cayman Islands as our offshore holding company to facilitate financing and offshore listing. Shortly following its incorporation, Niu Technologies established a wholly-owned subsidiary in Hong Kong, Niu Technologies Group Limited.

In May 2015, Niu Technologies Group Limited established a wholly-owned subsidiary in mainland China, Niudian Information.

Due to the legal restrictions on foreign ownership in companies in mainland China that provide value-added telecommunications services in mainland China, we operate our NIU app, our website www.niu.com and other related business through Beijing Niudian, a mainland China company in which the equity interests are held by mainland China citizens. In May 2015, we began to conduct the business operations of Beijing Niudian and its subsidiaries through Niudian Information by entering into a series of contractual arrangements with Beijing Niudian and its shareholders.

We refer to Niudian Information as our WFOE, and to Beijing Niudian as the VIE in this annual report. Our contractual arrangements with the VIE and its shareholders allow us to (i) conduct the business operations of the VIE, (ii) receive substantially all of the economic benefits of the VIE, and (iii) have an exclusive option to purchase or designate any third party to purchase all or part of the equity interests in and assets of the VIE when and to the extent permitted by the laws of mainland China.

As a result of our direct ownership in our WFOE and the contractual arrangements with the VIE, we are regarded as the primary beneficiary of the VIE, and we treat the VIE as the consolidated variable interest entity under U.S. GAAP, which generally refers to an entity in which we do not have any equity interests but whose financial results are consolidated into our consolidated financial statements in accordance with U.S. GAAP because we have a controlling financial interest in, and thus are the primary beneficiary of, that entity. We have consolidated the financial results of the VIE and its subsidiaries in our consolidated financial statements in accordance with U.S. GAAP.

On October 19, 2018, the ADSs representing our Class A ordinary shares commenced trading on Nasdaq under the symbol “NIU.” We raised from our initial public offering approximately US\$55.2 million in net proceeds after deducting underwriting commissions and discounts and the offering expenses payable by us.

B. Business Overview

Our mission is to redefine urban mobility and make life better.

We are the world’s leading provider of smart urban mobility solutions. We have created a new market category—smart electric two-wheeled vehicles—to redefine urban mobility. Before NIU, smart electric two-wheeled vehicles did not exist in mainland China, and two-wheeled vehicles were perceived low-end. We have changed that perception with our smart e-scooters and premium brand “NIU.”

We currently design, manufacture and sell high-performance motorcycles, scooters, kick-scooters and e-bikes. We have a diversified product portfolio that caters to the various demands of our users and addresses different urban travel scenarios. Currently, we offer eight product series across a number of different vehicle types. Our product portfolio comprises our (i) six electric scooter and motorcycle series, RQi, NQi, MQi, SQi, UQi, and Gova, (ii) one kick-scooter series, KQi, (iii) one e-bike series, BQi. We have adopted an omnichannel retail model, integrating the offline and online channels, to sell our products and provide services. We sold 831,593 units, including our e-motorcycles, e-scooters, kick-scooters and e-bikes, in 2022. The number of units sold in China market and international markets were 710,540 and 121,053, respectively. We sell and service our products through a unique “city partner” system in China, which consisted of 338 city partners with 3,102 franchised stores in 239 cities in China, and 53 distributors in 52 countries overseas as of December 31, 2022, as well as on our own online store and third-party e-commerce platforms.

Our award-winning products represent style, freedom and technology. Our brand “NIU” has inspired many followers and has enabled us to build a loyal user base. We offer the NIU app as an integral part of the user experience and will continue to develop new features within the app to enhance user loyalty. NIU fan clubs are established in over 30 cities in China, where fans actively organize NIU scooter-related events. Capitalizing on our premium brand, we have also been able to sell lifestyle accessories, which are well received by customers.

We have adopted a user-centric philosophy to design our products. We collect user feedback and product performance data to develop new products or functionalities to satisfy the unmet demand. All of our products are designed to embody the themes of style, freedom and technology through their unique design languages. Our smart e-scooters have amassed strong international recognition for innovation and design. We have built our smart e-scooters based on our advanced and innovative technologies, including smart technologies, powertrain and battery technologies and automotive inspired functionalities. We integrate cutting-edge technologies from industry leaders and our own technologies into a proprietary system that delivers an excellent user experience and optimal performance. Our smart e-scooters are the first in the industry to provide updates to firmware regularly over-the-air (OTA) to fine-tune the performance, and such OTA function has only been seen in high-end electric cars.

To meet the diversified market demand, in 2021 we entered the category of micro-mobility through kick-scooter and e-bike products in the International markets. Our kick-scooters and e-bikes product portfolio are designed to cover a wide range of urban mobility needs from last-mile commuting to entertainment purposes. Since the launch of the first kick-scooter product, we have strategically rolled out micro-mobility products to cover a wide range of market needs.

We provide connectivity solutions and value-added services to our users. Our NIU app synchronizes with the smart e-scooters and communicates with our cloud system. Through the app, our users receive real-time information relating to their smart e-scooters. We use the data collected to provide smart maintenance and services, and guide the users on when and how to properly maintain our products to extend their service life and achieve better performance. We also analyze this data to help us improve our products and create new services. In addition, we collect and analyze user behavioral data from our NIU app and our website, from which we derive insights to further engage our customers and strengthen brand loyalty.

Our Products

We have a diversified product portfolio that caters to the various demands of our users and addresses different urban travel scenarios. Currently, we offer eight product series across a number of different vehicle types. Our product portfolio comprises our (i) six electric scooter and motorcycle series, RQi, NQi, MQi, SQi, UQi, and Gova, (ii) one kick-scooter series, KQi, (iii) one e-bike series, BQi. We plan to launch two or more product series or models each year in the near and medium term, aiming to cover the full spectrum of the urban mobility solutions. We will keep introducing upgrades and mid-cycle refreshes to our existing models on an ongoing basis.

RQi Series

Our RQi series is a line of high-performance straddle motorcycles designed for city-oriented riding with enough speed to be safely ridden on major roads in urban areas. The RQi model is equipped with several features that enhance its performance, safety, and convenience, including removable batteries, front and rear recording cameras, a 5kW mid-mounted motor to provide acceleration, and a TFT dash containing a GPS tracker for real-time location information. With its focus on urban riding and its advanced features, the NIU RQi series stands out as a technologically advanced option for riders who value riding experiences.

NQi Series

Our NQi series smart e-scooters consists of the NQi, NQi-GT and NQi-GTS models. The NQi series is built to be high-performance, well balanced, and with a minimalistic aesthetic. Its design language is modern and minimalistic. The NQi series is equipped with advanced powertrain consisting of the removable lithium-ion battery pack with our proprietary battery management system, the BOSCH motor or NIU motor, and our proprietary Field Oriented Control, or the FOC, system that controls the electric motors. The NQi series utilizes a state-of-the-art lithium-ion battery pack that achieves extended range with light weight.

MQi Series

Our MQi series smart e-scooters consists of the MQiS, MQi2, MQi+, MQi-GT and MQi-GT EVO models. The MQi series is a cool and fresh-looking smart e-scooter designed for young urban users. Most of the MQi series models are smaller, lighter and more agile when cruising through urban traffic than that of the NQi series. The MQi series carries the NIU design language that puts a modern twist on the classic e-scooter design. The MQi series is designed to be ergonomic, bolstering natural and comfortable sitting posture and intuitive dashboard and switches layout.

SQi Series

Our SQi series was positioned as our most high-end product series in China electric bicycle product category with its innovative design and cutting-edge technologies in materials. The SQi has a futuristic straddle motorcycle-like look. With a clear-cut geometric body frame and large 17-inch wheels, it presents an unconventional design for electric bicycles yet still meeting the Chinese New National Standards. The body frame of the SQi has adopted a high performing aerospace magnesium alloys material in order to meet the weight requirements.

UQi Series

Our UQi series smart e-scooters consists of the UQi, UQiM, UQi+, UQiS and UQi-GT models. The UQi series is smaller and lighter than the NQi-Series and MQi-Series and carries the same NIU design language. The UQi series is designed to be ultra-light and ultra-compact.

Gova Series

While our root is deeply planted in the premium smart e-scooter segment, the Gova series is our line of products targeted at the mid-level e-scooter market, representing good value for money and high quality. The design language is differentiated from our main e-scooter lines. Selective models in the Gova series do not have smart functions as standard but instead offer them as options to achieve the compelling price range. In addition to the optional advanced technologies such as Cloud ECU, most Gova models will be equipped with blue-tooth unlock features that make riding experience even more convenient. The Gova series currently consist of G0, G1,G2, G3, G5, G6, G6t, B0, B2, C0, C3, F0, F2, and F4.

BQi Series

The BQi e-bike series is our most recent addition to our product portfolio. These e-bikes feature a stylish and practical lightweight frame design, combined with pedal assist and throttle control, making them easy and comfortable for city commutes. The BQi e-bike was exhibited during CES in 2022, where it was well received by audiences.

Accessories and spare parts

In addition to our e-scooters, urban commuter electric motorcycles, and performance bicycle series, we also offer a comprehensive line of NIU-branded accessories and spare parts.

Scooter Accessories. Our scooter accessories include riding gears, such as raincoats, gloves, and knee pads and accessories to be installed on our e-scooters to expand functionalities, such as storage baskets and tail boxes, smart phone holders, backrests and locks.

Lifestyle accessories. Our NIU POWER line of lifestyle accessories includes branding apparel, such as t-shirts, coats, jeans, hats, bags, and jewelry, and souvenirs such as notebook, badges, key chain and mugs. In November 2019, we promoted the new autumn collection of NIU POWER lifestyle apparels including sweaters and hoodies.

Performance Upgrades. Our NIU POWER Performance line of high-performance upgrade components include upgraded wheels, shock absorbers, and brake calipers, and carbon fiber body panels.

Our NIU App

Our NIU app serves as an integrated platform and supplemental tool to our smart e-scooters. The app includes a suite of functions that primarily focus on the connection with our smart e-scooters as well as other services and value propositions. Depending on vehicle models and geographical areas, the App includes:

NIU Dashboard

Through communications with the Cloud ECU, multiple sensors, positioning module and communication modules onboard each smart e-scooter, the NIU app presents various key information about the smart e-scooter on the dashboard, including:

- scooter status, such as the location of the scooter and anti-theft alerts;
- historical riding data such as past routes and riding statistics; and
- key diagnostics, such as the real-time status of the battery and the battery health score.

The dashboard features a card-based interface to present the most useful and relevant information to the users based on users' preferences, which is both intuitive and has great potential for customization and expandability.

NIU Services

Through the NIU app, users can access a variety of services.

- Online repair request. Users can request repair services with one click, after which the app will intelligently recommend the nearest service station for the services.
- Smart check. The function checks common failures which may occur in various components. Users can directly seek solution through the fault tags.
- Service station locator. Users can access comprehensive information about nearby service stations.
- NIU Cover. Users can query and activate NIU Cover insurance services within the app.
- Smart service. Users can check the status of the smart connection services and can renew the service.
- Theft reporting. Users can report theft of the smart e-scooter and battery within the app.

NIU Store

We have established a built-in e-commerce platform in our NIU app, where our users can purchase our e-scooters and NIU-branded accessories.

NIU Social

The social tab is the forum for NIU users to post photos, chat, set up a gathering, and share fun in riding and daily life.

NIU Points

It is a user loyalty program designed to enhance user engagement and activity. The NIU Points are earned through joining special events, purchasing specific accessories, publishing original content, interacting with other users, among others. NIU users can redeem the earned points for exclusive NIU badges, NIU accessories, and coupons.

Our NIU Brand

Our brand represents style, freedom and technology. We design and market our products purposefully to reinforce consumer perception of “NIU” as a premium smart e-scooter brand.

We conduct various marketing and branding activities to establish NIU as a premium brand. For example, in April 2022, we launched the global “Green Riding” cycling campaign online and offline in 12 cities worldwide on the Earth Day, promoting environmentally friendly travel and encouraging more people to join the green cycling movement and contributing towards sustainable development to fulfill our social responsibility as a leading provider of smart urban mobility solutions. In August 2022, our SQi series collaborated with Razer, the world’s top gaming hardware brand, on a joint product event that received widespread recognition and praise in the gaming community and on social media, especially among the young people. During the Lunar New Year of the Ox, we collaborated with Tengger, a renowned Chinese artist, to launch a Lunar New Year holiday special song titled “A Little Bit of Niu in the Year of the Ox” (牛年牛一点), which echoes the brand spirit of “Little Pursuit” (小追求). In October 2021, in order to celebrate our important milestone in becoming the first electric two-wheel brand in the world to have covered 10 billion kilometers of riding distance by its global users, we launched a large-scale communication campaign “Make Life Electric” (你有点小牛), which gained popularity on Weibo, TikTok and WeChat, achieving over 1.4 billion views. During 2020 Singles’ Day shopping festival, we conducted an online campaign to sell a limited edition of smart e-scooter with special painting of a popular anime series. In September 2020, we sponsored an online dance competition show called “Street Dance of China” and featured distinct advertisement to enhance the brand image as a cool lifestyle brand.

Capitalizing on our premium NIU brand, we have also been able to sell lifestyle accessories, such as apparel, which are well received by customers.

NIU Community

We have cultivated a highly dedicated and growing base of NIU fans. Our users are proud owners of NIU smart e-scooters with high engagement. Based on the e-scooter activity data we collected, more than 75% of our users rode their e-scooters on a monthly basis in the twelve months ended December 31, 2022.

We endeavor to build an interactive and dynamic social community to further convey and brand image as a fashionable urban lifestyle. NIU clubs are one of the core components of NIU community, and there were over 30 of NIU clubs as of December 31, 2022. Formed and run by the enthusiastic NIU fans, these NIU clubs organize various events, such as new product test drives, riding for good causes, and scooter parades. We support the NIU clubs with products, designs and announcement channels. To further expand the NIU community and increase brand loyalty, we have facilitated our users to create virtual NIU communities via social media, such as WeChat, to bring together our users from all walks of life. We have a dedicated user interaction team, which closely monitors and actively participates in different interest groups such as photography group, accessories group, social responsibility group, etc. and interacts with users online.

In these groups, our users share user-generated content, such as video clips or pictures. To boost the content contribution from our users, our city partners through their distribution network reward them with discounts from local businesses such as restaurants. Owning a NIU scooter thus opens up opportunities for users to participate in more local interest groups and local businesses discounts, leading to a truly better urban life. Our virtual community and NIU clubs create a beneficial network effect for the brand.

Data Analytics—NIU Big Data

We have developed our user and scooter data analytics capabilities, which enable us to collect and analyze massive relevant data to deepen our understanding of the smart e-scooter performance, user behavior and operational insights.

We have accumulated massive amount of data from multiple sources. We currently collect 462 types of data points covering 72 dimensions such as humidity, lighting and temperature, from our Cloud ECU and up to 32 sensors installed on each smart e-scooter. As of December 31, 2022, our NIU app had been connected with approximately 1,843,000 smart e-scooters, which had accumulated approximately 15 billion kilometers of riding distance of data. We also collect data from our NIU app, company's websites, e-commerce platforms, as well as through providing repair and maintenance services. In particular, we collect the following three types of data to improve our smart e-scooters' performance and customer experience: (i) riding behavior, including, among others, riding speed, average distance, acceleration, use of brakes to improve the battery management system and balance control of our e-scooters, (ii) operational and functional performance of various parts of the smart e-scooter to examine the status of the smart e-scooters and suggest maintenance or repair services, (iii) NIU app user behaviors to fine tune our app functions to improve their experience with our services.

Our cloud system utilizes a robust, multilayer database structure that can handle over a million persistent connections concurrently. Our parallel database servers to support quick multiple queries in a TB level database. Our cloud system monitors the servers and automatically regenerates a new virtual server if any server goes offline. The above features ensure that our smart e-scooters maintain constant, reliable, and responsive connections with our cloud. In addition, our cloud's open API platform allows connection with third parties to support functions such as fleet management and smart e-scooter sharing program.

Our data analytics team leverages our proprietary big data platform and analytical tools, NIU Inspire to analyze the collected data to deepen our understanding of user behavior and product performance and gain operational insights, enabling us to: (i) guide the upgrade of the existing models and development of new ones; (ii) fine tune the firmware in our existing scooters to improve performance, such as the self-adaptive state of charge algorithms for better battery utilization or the FOC controller software for better electric motor efficiency; (iii) achieve more intelligent retail and service shop planning; (iv) generate scooter diagnosis reports and provide smart maintenance suggestions; and (v) conduct accurate targeted marketing.

We collect user-related data after receiving users' consent. Users in Europe have the option to choose whether or not to send the GPS related data to us due to different data privacy regulations in these regions.

After-Sales Services

We offer comprehensive after-sale services including value-added services. Our warranty is complemented by value-added services such as NIU Care and NIU Cover, which can be conveniently ordered through NIU app, service hotline, or at our franchised stores. In addition, we provide various value-added services through our NIU app, including DIY repairs and location of our service centers, and theft reporting. We believe all these services together will create a satisfying user experience throughout the e-scooter life cycle. Through these services, we aim to make ownership “worry free” and allow our users to truly enjoy riding and owning our e-scooters.

Warranty Policy

We provide limited warranty to our users for terms varying from six months to three years, subject to certain conditions, such as normal use. For the electric motor, we provide a 24-month or 30,000-kilometer warranty. For lithium-ion battery packs we provide a 24-month or 20,000-kilometer warranty or a 36-month or 30,000-kilometer warranty.

For other parts of our e-scooters, we provide quality warranty varying from six months to 24 months depending on the parts. We are responsible for replacing or repairing the faulty products during their respective warranty terms. The warranty on certain parts of our e-scooters is covered by our suppliers’ back-to-back warranty and thus we are entitled to have the suppliers replace or repair the faulty parts.

NIU Care

Our e-scooters are primarily serviced through our franchised stores and our authorized service centers, which provide repair, maintenance and bodywork services.

We launched our NIU Care program in August 2018 to provide regular after-sales maintenance service to our e-scooters. Our regular maintenance services include scooter exterior check, mechanical structure service, motor system check, electrification service, battery maintenance service, tire pressure check and cleaning services. Based on user’s driving behavior and mileage.

NIU Cover

In November 2015, we launched NIU Cover to facilitate the sale of insurance coverage provided by third-party insurance companies relating to accident injury, loss of scooters and third-party liability.

Technologies

Behind our lineup of smart, efficient and high-performance smart e-scooters are the suite of advanced technologies we have developed or adopted, such as NIU Energy smart power technology, the Cloud ECU, electric motors, FOC, advanced braking systems, driver assistance and system integration, among others.

NIU Energy Smart Power Technology

Our NIU Energy smart power technology, currently in its seventh generation, combines reliable and proven cell components, innovative hardware system design and an intelligent battery management system, or the BMS. We adapted the technology to create a portable, lightweight, safe and reliable battery pack that is suitable for e-scooters. We analyze the riding data from our smart e-scooters to locate and refine the critical point of discharge within the safe range of the battery, develop our proprietary energy efficiency matrix PACK, dynamically calibrate the intelligent BMS chips, optimize the charging dynamic balance algorithms, and integrate our EBS kinetic energy recovery system, motor, and power control unit.

Hardware Component and Design

We use the Lithium-ion battery cells as the building blocks of our battery pack. A matrix of battery cells is connected in parallel to produce a robust battery pack.

Our battery packs incorporate PACK technology, which is adopted by global automakers globally. The PACK technology protects the battery cells from impact and regulates battery temperature, and use voltage, temperature, current, or PTC, technology to compartmentalize each cell, thereby ensuring the integrity of the battery pack.

Our battery packs can be charged either standalone or when installed on the e-scooter, both of which can be through a home wall plug. They use proprietary charging connectors and ports for simultaneous safe charging and BMS data communications. We have also developed our proprietary NIU Flash Charger that effectively doubles the charging speed of our battery pack as compared to regular chargers.

BMS

In addition to robust hardware, our battery packs feature an intelligent battery management system, or BMS. The BMS monitors the voltage, current and temperature of the battery in real-time, and regulates power consumption.

The core of our proprietary BMS is the self-adaptive SoC algorithms that optimizes the balance between performance and battery life and provides accurate range predictions based on the data and analysis of the riding behavior of the users and the discharging characteristics of the battery cells.

Cloud Electronic Control Unit

At the core of each NIU smart e-scooter lies the Cloud Electronic Control Unit, or the Cloud ECU. The Cloud ECU serves as both a control center and communications center for the smart e-scooter. In particular, the Cloud ECU serves a wide range of functions including, among others, scooter control, motion monitoring, positioning, connectivity and data transmission from the smart e-scooter to our cloud server.

Scooter Control. The Cloud ECU serves as the smart e-scooter's master control center, coordinating the smart e-scooter's complex systems. The Cloud ECU controls, among others, the smart e-scooter battery, electric motor, Field Oriented Control system, electronic lock and light systems.

Motion Monitoring. The Cloud ECU monitors various physical aspects of our smart e-scooters with its built-in triaxial gyro sensor. The gyro sensor detects acceleration and changes in rotational motion or orientation. Thus, the Cloud ECU is able to monitor the posture and dynamics of the smart e-scooter in real-time and accordingly adjust the motor's power output, ensuring the smart e-scooter's performance and efficiency.

Positioning. The Cloud ECU currently supports two major global satellite geolocation systems: (1) the American Global Positioning System, or the GPS, (2) the Chinese COMPASS, also known as the BeiDou Navigation Satellite System. Together, these systems constitute the technical backbone of our position-based anti-theft systems as well as functions such as riding map and smart e-scooter sharing, which are capable of detecting unauthorized movements of our smart e-scooters.

Connectivity and Data Transmission. The Cloud ECU facilitates the connectivity of our smart e-scooters, which are able to access the complete spectrum of mobile network standards. Via these mobile networks, the Cloud ECU upload data about a smart e-scooter's position and its condition every 3 to 15 seconds, depending on the smart e-scooter's start up conditions. The transmittance of this data also serves as the foundation of our Assisted Global Positioning System, or the AGPS, that, when coupled with our GPS systems, allows for precise geolocation of our smart e-scooters. In addition, our smart e-scooters are also equipped with dual-mode Bluetooth chips, which allow owners of our smart e-scooters to use their smartphones to directly communicate with our e-scooters. Owners can, among others, query the smart e-scooter's status and change certain settings such as adjusting the sensitivity level of the anti-theft alert.

OM Updates. Our smart e-scooters are the first in the industry with OTA update capability, which is normally only seen on high-end electric cars. The OTA update is supported by the Cloud ECU and rewriteable firmware of various electronic components. The OTA allows users to effortlessly update the e-scooters to the most recent firmware updates, so the users can benefit from all future performance improvements and feature enhancements on a regular basis.

In addition to constantly improving and upgrading our Cloud ECU, we have developed our own System-on-Chip module, which to our knowledge is the first chip module specially designed and customized for smart urban mobility products. We have applied the C35 System-on-Chip module to the latest V35 version of Cloud ECU to replace the current version of Cloud ECU since August 2019, which provides higher performance and better reliability with lower power consumption and more compact packaging. In addition, the customized chip module will make it more difficult for competitors to replicate our Cloud ECU. In the meantime, we are adopting Long-Term Evolution Category 1 (LTE Cat-1) data connection technology and applying to mass production since July 2021. Compared with Narrowband IoT (NB-IoT), LTE Cat-1 supports higher bandwidth needs since it offers better performance and much lower latency than its counterpart.

Motors

We purchase motors from various suppliers and we have also designed our NIU motors, which are energy efficient and cost-efficient. We have been constantly increasing the conversion ratio and refining the calibration of the FOC of the motors.

Field Oriented Control

Using big data analytics, we have developed the proprietary FOC system that controls the electric motors. The FOC is the intelligence behind the powertrains of our entire lineup of smart e-scooters, and helps our smart e-scooters strike the balance between performance and power consumption.

The FOC controls the motor in real-time by recognizing riding conditions and continuously adjusting the torque of the motor for optimal performance. The FOC taps into the performance of a vector controller, which is superior to the square-wave controllers common on the market because a vector controller controls the power and torque output of the motor as opposed to simply adjusting the revolutions per minute, achieving a much smoother ride.

Braking System

Our smart e-scooters are equipped with hydraulic disc brakes made from special alloys. The brake discs are slotted to extend the life of the system. The hardware of the brakes is complemented by the Electronic Braking System, or the EBS, which provides for intelligent braking and recycling kinetic energy. Certain of our models also employ the combined braking system, or CBS, which intelligently splits braking force between the front and rear discs to shorten the braking distance at higher speeds.

Driver Assistance

We have developed various driver assistance technologies to enhance the rider experience of our smart e-scooters such as automatic headlight, automatic return indicators, cruise control and smart self-diagnosis systems.

We continue to look for ways to enhance the user experience. We have developed adaptive responses to road conditions, active safety systems, and applied them to our latest version of Cloud ECU. We are currently working on the development of, among others, active safety systems, self-balancing systems and L2 autonomous driving systems. These advanced systems are developed in tandem with the new product series.

System Integration

The NIU systems draw from a diverse range of industries and technologies. For example, we use gyroscope, satellite navigation and mobile communication chipsets that originate from the mobile phone industry; temperature sensors, humidity sensors and communication protocols that originate from the industrial control systems; and cloud and big data technologies that originate from internet industry. These diverse technologies and components operate under diverse conditions, such as different working electrical currents and temperatures. We have developed a system that uses a single master control with multi-channel protocols to ensure that all components in the vehicle can be upgraded to the latest version.

Design and Engineering

We have significant in-house design and engineering capabilities, which cover all areas of scooter engineering from concept to completion.

User-Centric Philosophy

We adopt a user-centric approach in our product design and development. All of our products are designed based on the quantitative data and qualitative feedback we collect from the smart e-scooters and users. We have developed an instant user feedback loop based on our continuous connection with smart e-scooters and proactive interaction with users and achieved an agile product development process. We collect and analyze large amounts of product performance data and user behavioral data generated by the smart e-scooters running on the road and collected from our NIU app and website. We also conduct comprehensive surveys and collect feedback and comments from online virtual communities to understand the drawbacks of existing scooters and aim to develop new products and functionalities to satisfy the user demand. Utilizing the insights gained from the data and feedback collected, we have developed various new products and functionalities, such as cruise control and automatic headlight. We also utilize the data and feedback to provide updates to our firmware regularly over-the-air (OTA) to fine-tune the performance of our smart e-scooters and improve overall user experience.

Our research and development team comprises motorbike enthusiasts with years of motor biking experience. Their enthusiasm, experience and expertise, together with our user-centric product development philosophy, have allowed us to design and deliver high-performance smart e-scooters and made us the pioneer in urban mobility solutions we are today.

Platform-based Engineering System

We have developed a platform-based engineering system. The system is based on the same in-scooter control and data connection systems. Accordingly, we can develop different product lines with the same voltage requirement. As a result, our existing production lines can be easily adapted to new products. For example, our MQi and UQi series, which are all based on the 48V platform, adopt the same battery pack solution, battery management system, and FOC, BOSCH motor and EBS. By doing so, we can shorten our design timeline, accelerate time-to-market and lower manufacturing costs.

Industrial Design

Industrial design plays a crucial role at NIU. Utilizing the power of design and design thinking, the team is able to identify critical pain points from users and then to provide the best solutions to daily urban commute. For example, we chose lithium-ion battery over lead-acid battery because lithium-ion battery is not only more ecofriendly, but also safer, lighter and more compact so that the users can easily bring the batteries home for charging.

Our well-designed product lines speak a distinctive and consistent family design language. Our industrial design philosophy combines minimalist aesthetics with thoughtful functionality. Under that philosophy, we desire to create an exceptional riding experience while maintaining a smart and simple design. For example, the iconic “Halo” headlamp, equipped on all of our smart e-scooters integrates a daytime running light with our LED head lamps, providing an ultra-wide arc of light for improved vision and safety at night. Another example is the MQi Series—a cool and fresh-looking smart e-scooter designed for young urban users. Slim, modern, chic and intuitive are the core design attributes of MQi Series from inside out. We believe a good design should bring people joyful experience. Therefore, the team has done intensive testing and mock-ups for ergonomics study, as a result of which the MQi Series features a comfortable and ergonomic seating posture as well as intuitive and easy-to-use control layout. The hidden shock absorber and the high strength aluminum alloy swing arm not only speak the same minimalistic design language, but also ensure excellent riding experience as well as safety and comfort.

NIU Innovation Lab

Our NIU Innovation Lab hosts our research and development teams of 224 members, which include, among others, our user experience design team, smart electronic research team, powertrain design team and industrial design team.

The Lab focuses on industrial design, structural design, smart electronics research, power electronics research, user data analysis, business intelligence system development and user experience research. The Lab and our research and development team played a crucial role in the creation of the 563 patents we held as of December 31, 2022. We also entered into a definitive Development Collaboration Agreement in March 2019 with one of the world’s leading automobile manufacturers regarding joint development of Micro-mobility solutions, which was carried out by the Lab.

Global R&D and Manufacturing Base

Our new global R&D and manufacturing base commenced operation in December 2019. Located in Changzhou, China, the new facility hosts, among others, our proprietary R&D laboratories for our BMS intelligent battery management system, FOC magnetic field-oriented control system, EBS electronic brake system, Cloud ECU intelligent central controller and NIU Inspire big data analysis system, as well as a quality laboratory for comprehensive and standardized testing of the raw materials and vehicles.

Manufacturing and Fulfillment

We design, manufacture and sell high-performance electric bicycles and motorcycles. We view the manufacturers and suppliers we work with as key partners through our product development process and leverages their industry expertise to ensure that each product that we produce meets our strict quality standards.

Production facility

We keep the majority of the assembly of our electric bicycles, electric motorcycles and electric kick-scooters in our own production facility, while cooperating with a motorcycle manufacturer with required qualifications to manufacture the certain electric motorcycles models. We operate two manufacturing facilities in Changzhou, China. Our global R&D and manufacturing base includes two phases of construction. Phase I facility commenced operation in December 2019, and covers around 50,000 square meters. Phase I layout includes four semi-automatic assembly lines, a highly efficient double-decker logistics facility, a products showroom, and a dedicated quality control laboratory. The designed production capacity under Phase I is 700,000 units per annum, which increased our total production capacity to over 1,000,000 units per annum. Phase II facility covers around 61,000 square meters and started production from September 2021, which increased our total production capacity to over 2,000,000 units per annum.

Supply Chain Management

We purchase key components from our suppliers, such as batteries, motors, tires, battery chargers and controllers. We strategically select our suppliers to avoid over-concentration, control our cost and maintain a good relationship with our suppliers.

To avoid over-concentration of supply and manage costs and product quality, we generally engage more than two suppliers for each of our key components. For example, we source motors from other suppliers in addition to BOSCH, and source battery cells from multiple suppliers. We select our suppliers based on a variety of criteria, including, among others, production capacity, technological sophistication, quality assurance, professional certification, manpower adequacy, financial position and environmental compliance. In addition, we review the performance of our suppliers quarterly, and make necessary adjustments to our supply chain, including termination of under-performing suppliers. We have been able to maintain good and long-lasting relationships with our suppliers.

We also have strong bargaining power on procuring raw materials, which enables us to effectively defend ourselves against price increases and fluctuations. We diversify our source of each type of raw material from at least two suppliers. Typically, we enter into a supply framework agreement with each of our raw material suppliers, under which our procurement price is generally set as the predefined standard cost of the supplier plus a specified mark-up, subject to quarterly or semi-annual renegotiation.

We have been able to effectively manage our inventory level. We formulate holistic plans for our production, warehousing and logistics, by tracking a variety of factors, including, among others, historical sales data, sales forecasts and customization requests. With smooth turnover between production and logistics, we are able to maintain an optimal inventory level, to fulfill our orders and avoid over-stock at the same time. Our inventory turnover days were 31, 26 and 50 for 2020, 2021 and 2022, respectively. For the calculation of inventory turnover days, see “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Cash flows and working capital.”

Quality Control

We believe that the quality of our products is crucial to our continued growth. We place great emphasis on quality control, set up dedicated team and implemented stringent monitoring and quality control systems to manage our operations.

Our quality control system starts from procurement. Before entering our production flow, the raw materials must be certified for quality. We also perform quality reexaminations and unannounced inspections on raw materials in the mass production flow. We review the performance of our suppliers based on the defective percentage of their supplies, and adjust the amount of procurement from them accordingly. We typically enter into a quality control agreement with each of our suppliers, under which we may seek remedies against our suppliers, such as damages and rectification, in the event the supplies fall below the quality standard or exceed minimum defective percentage.

Our quality control system covers each stage of our production process. When we establish or adapt an assembly line for a new product or model, we trial-run the assembly line to produce a sample for quality examination. The assembly line can start mass production only if the produced sample is of adequate quality. When the in-progress product moves from one section to another along the assembly line, it must be checked for quality by the responsible assembly specialists in both sections. After completion of assembly, our quality control personnel will perform overall quality inspection and road-test on the products in accordance with relevant protocols. A product may be shipped out of manufacturing facility only after it passes all quality control examinations and is properly documented as such. We also track the acceptance status of our products when they reach our distributors or customers. By logging and breaking down the pass rates along our products in the production process, we are able to identify our quality control weak spots, and improve our operation accordingly.

Our new global R&D and manufacturing base includes a dedicated quality control laboratory equipped with full-automatic and semi-automatic instruments for components testing, and self-developed inspection systems for battery cell quality testing.

We have not experienced any massive product recall, massive refunds or other quality control outbreak since we started to sell e-scooters.

Fulfilment

Leveraging our excellent production and big data capabilities, we are able to achieve fast turnaround time fulfilling orders placements. We ship our products generally 7 to 15 days following placement of order and receipt of payment from our city partners in China. For overseas distributors, it generally takes 30 to 60 days following the receipt of down payment. Orders from niu.com or other e-commerce platforms are faster to fulfill, usually within two days.

Through proactive planning, we are able to estimate the distribution of orders in a certain period of time and improve the predictability of our order fulfillment. For example, our franchised stores must timely submit their revolving order plans for the period of the following two weeks and following three months. We incorporate such order plans, in addition to other information, into our holistic planning of production, warehousing and logistics, which in turn helps us achieve fast turnaround to fulfill order placements. Similarly, in a one-year time span, we take into consideration of the capacity constraint of the factories and frontload the productions ahead of the peak sales season.

We have different shipping methods for our finished products depending on the type of the distribution channel: (i) for our offline domestic distribution channels, our city partners and franchised stores are responsible for logistics from the moment products are rolled out of the factory; (ii) for local distributors in overseas markets, we ship our products mainly under FOB terms; and (iii) for online shopping platforms such as our official website and third-party platforms such as JD.com and Tmall, we ship our products through third-party delivery services.

Omnichannel Retail Model

We have established a distinct omnichannel retail model network to sell our products and provide service to our customers. As of December 31, 2022, we sold our products through 3,102 franchised stores in 239 cities in China and 53 distributors in 52 countries overseas, as well as on our own online store and third-party leading e-commerce platforms. We also leverage our omnichannel retail network to deliver peripheral services such as maintenance and repair, and to collect data for business insights.

Offline Distribution Network

City partners and franchised stores

In China, our offline retail channels consist of city partners and franchised stores. Our unique “city partner” system plays an important role in our offline sales strategy. City partners are our exclusive distributors who either open and operate franchised stores or sign up franchised stores. Leveraging our data analytics and their local knowledge, the city partners select store location and manage the franchised stores. The city partner system allows us to optimize store location selection, manage stores efficiently, and maintain our inventory at a low level.

To become our city partner and run our franchised stores, a potential business partner must meet certain qualifications and possess the prerequisite capabilities specified in the standard franchise agreement, including, among others, adequate and relevant experience, minimum working capital and sound knowledge of local business environment. The stores also have to meet certain requirements that we formulate and adjust from time to time, such as being in a location reasonably accessible and convenient for our targeted users, having adequate square footage, having at least two years of lease term if under leasehold, and having a layout and decorative style that conform to the architectural specifications.

Our city partners and franchised stores are an extension of our brand. Our franchised stores adopt a consistent design and layout and provide consistent shopping experience. We enter into a standard distribution agreement with each of our city partners. Each city partner may only offer such products and services, in the specified region and manner, as provided under its respective distribution agreement. The city partners also have to comply with our internal policies regarding performance review, branding and confidentiality. To ensure orderly allocation of customer resources between the city partners, we maintain a zoning segregation system, under which all the city partners must sell at or above the guidance retail price we set, and may not cross-sell to other regions allocated to other city partners. The city partners purchase the products from us, and are responsible for the logistics, warehousing, and distribution to franchised stores. We do not charge any initial fees or continuing fees to our city partners or franchised stores.

We closely monitor the sales performance, service level and activities within the franchised stores through the store level management system that was implemented in early 2018. We will continue to upgrade such system to collect more store operation data such as consumer traffic flow and traffic flow sources, test drive frequencies and sales conversion rate. We also use data collected by other means to improve the performance of our stores. This information helps us adjust store-specific retailing and marketing strategies, thereby increasing per store sales.

In addition to offering smart e-scooters, our stores also serve as our service stations to provide after-sales services such as inspection, maintenance and repair services. Under our standard franchise agreement with the city partners and franchised stores, if a customer requests a franchised store to repair one of our products within the term of the warranty, we will reimburse the franchised store for all reasonable labor cost incurred from the repair and also provide them with the necessary spare parts. By offering after-sales services, we aim to establish one-stop solution experience for our customers, continue to increase traffic flow to our stores and enhance user loyalty.

The majority of our city partners make full payments upfront for their orders, which helps us improve cash flow management.

Overseas Distribution

We export our products to distributors in over 50 countries overseas, with Europe being our largest export market. We manufacture and customize our products based on the requirements of our international customers and we ensure our exported products are in compliance with the standards of the local markets.

For overseas markets, we cooperate with local distributors, who serve as our exclusive distributors in their respective regions. To be eligible for our local distributor in an overseas market, a potential business partner must meet certain qualifications and possess certain prerequisite capabilities, including, among others, preexisting business presence in motorcycles or consumer electronics and comprehensive sales and service network. In addition, our local distributors must share our vision in the promising future of smart and eco-friendly transportation products, and embrace our innovative marketing models.

Typically, we enter into a distribution agreement with each of our local distributors, under which the local distributor will commit to a minimum annual purchase amount from us, for a period of one to three years. Our shipping arrangements with local distributors mainly under FOB terms.

We position smart e-scooters as a fashionable, premium urban transportation in overseas markets. Our distributors sell our products primarily in the following three types of stores in overseas markets:

- branded flagship stores, which are located in the core business areas in major cities, have a space of over 100 square meters, and carry our smart e-scooters exclusively.
- shop-in-shop stores, which are located in downtowns in major cities, where the entire store has a space of over 100 square meters, and have a designated section for our smart e-scooters with a space of over 30 square meters.
- other point of sales, which are licensed to carry our smart e-scooters on a non-exclusive basis.

Scooter Sharing Program. We have supported local operators in certain overseas markets to implement dockless scooter sharing programs powered by our internet-of-things, or IoT, technology. These scooter sharing programs were officially launched in more than 20 major cities across the world, such as New York, Washington DC, San Francisco, Miami, Amsterdam, Rotterdam, Berlin, Frankfurt, Hamburg, Madrid, Barcelona, Brussels, Milano, Mexico City and more.

Online Distribution Network

We sell smart e-scooters and accessories online through third-party e-commerce platforms and on our own online store.

We have adopted the online to offline model, seamlessly integrating the online and offline networks to provide a seamless, consistent experience for our customers. These online platforms act as conduits for influencing customers and directing sales to physical stores. Our customers can conveniently place orders online and pick up their scooters at the franchised stores.

We entered into standard cooperation agreements with third-party e-commerce platforms, pursuant to which the e-commerce platforms provide us sales and price settlement services, and charge us commission fees and technical support annual fees. We are responsible for the logistics, customer services and after-sale services for the products sold on these platforms.

Marketing

We focus on promoting awareness of our brand generally and in particular as a lifestyle brand with high-quality smart e-scooters globally. Our brand and our e-scooters are marketed to retail customers through digital and experiential activities as well as through more traditional promotional and advertising activities. We aim to engage in cost-effective marketing activities by taking advantage of social media and to build an online and offline ecosystem of users that will promote awareness of our brand. To a lesser extent, we engage out-of-home advertising, such as through billboard advertising in cities and advertising on buses. Our marketing efforts include the following:

Profile-based online marketing

Leveraging our sophisticated data analytics capabilities, we are able to gain a deep understanding of our target customer profiles, such as demographics and interests. With this knowledge, we precisely direct our marketing efforts through targeted online channels to efficiently reach new customers with matching profiles or existing customers for repeat purchases. We conduct online marketing through channels such as search portals, social media, online video platforms, and e-commerce platforms. We also leverage the key major media popular with our target groups to regularly publish news and updates about our company, such as our product launch events. We conduct joint marketing activities with other brands. We also utilize our official bulletin board system (BBS), the NIU app and our social media accounts to distribute original content to, and interact with, our followers and existing users. Through the right channels, we deliver the right key messages and original contents to achieve effective marketing.

Location-based offline marketing

We conduct offline marketing and advertising through LCD billboard ads, elevators ads, bus ads, product roadshows, exhibitions in music festivals, among others. To achieve higher efficiency on offline marketing, we leverage riding data collected from our smart e-scooters. For example, in each city, we have a heat map showing anonymously where NIU users ride and park our e-scooters, a good indicator of locations of where potential users concentrate. The heat map allows us to select the optimal offline ads locations (such as LCD billboard, or bus routes or residential buildings) to reach our targeted consumer groups, or organize product roadshows in the most relevant venue.

Viral marketing via NIU community

Leveraging our excellent product quality, fashionable brand image and strong customer loyalty, we are able to utilize viral marketing strategies to achieve the word-of-mouth marketing. For example, in April 2022, we launched the global “Green Riding” cycling campaign online and offline in 12 cities worldwide on the Earth Day, promoting environmentally friendly travel and encouraging more people to join the green cycling movement and contributing towards sustainable development to fulfill our social responsibility as a leading provider of smart urban mobility solutions. In August 2022, our SQi series collaborated with Razer, the world’s top gaming hardware brand, on a joint product event that received widespread recognition and praise in the gaming community and on social media, especially among the young people. In October 2021, to celebrate the milestone in covering 10 billion kilometers of riding distance by our global users, we invited 16 of our domestic and global users to share their “Make Life Electric” (你有点小牛) stories and paid tribute to those who had been a role model and inspired more people to pursue a better life. In August 2021, we launched the “Your Life, A Little Niu” (你的生活, 有点小牛) bus stop billboard in 23 cities across China, accumulating 620 million exposures and drawing more potential customers’ attention to our products. In the third quarter of 2021, we started a “NIU clubs” campaign across 10 cities in China, where users initiated wishes and we helped make them come true, such as riding in the desert, helping elderly users with their weddings and island hopping, to deepen the link between our brand and our users. In 2021, we also created NIU’s exclusive song list “NIU Tunes” on Spotify to provide users with more music resources while riding. In July 2020, to promote safe riding, we launched the “No Helmet, No Ride” campaign together with traffic administrative agency across different provinces and cities. In the third quarter of 2020, we kicked off the “Back to Street, This is NIU” campaign, partnering with “Street Dance of China”, a hot online dance competition show. We promoted two featured advertisings in the semi-final and final of the competition show as well as an offline advertising campaign. In March 2020, we launched the NIU Forest campaign to further reinforce our image as a socially responsible brand. Our users posted their mileage and NIU story on social media, such as Douyin and Weibo to obtain the opportunity to claim one pine tree planted in Inner-Mongolia sponsored by NIU.

Event-driven marketing

In addition to our day-to-day marketing operation, we organize event-driven marketing activities, such as new product launches, company key milestone media events and monthly offline marketing events.

New product launches are typically our largest events of the year. Starting in 2015, we have organized product launch events every year, joined by a large group of live audience including our users and partners, with extensive media coverage. In June 2018, we launched our NGT and MQi+ smart e-scooters at Carrousel de Louvre, Paris, with nearly 300 media covering the launch. In August 2018, we launched our UM model in Shanghai during the co-branding event with McLaren GT Customer Racing. In April 2019, we launched our UQi+ and US models and new lifestyle category, NIU AERO Sports Bicycles, in Beijing, and organized a two-day NIU Brand event for our fans. In November 2019, we launched our expanded GT line led by newly designed MQi-GT with upgraded NQi-GT and UQi-GT on the EICMA show in Milan, Italy, and we also released our first power-assisted electric bicycle, NIU Aero EUB-01. Due to the impact of COVID-19, our new product launch was switched to online and we released MQi2, MQiS and G0 in the second quarter of 2020. In November 2021, we released an electric scooter, the MQi-GT EVO, two kick scooters, the KQi2 and KQi3 Max, and an upcoming e-bike, BQi, on the 2021 EICMA show. The year of 2022 was marked by a series of new product releases, starting with the Gova C3 in March. We released the jungle green special edition of UQi, which became the color of the season. In August, we released the SQi, followed by the new UQi+, Gova B2, BQi-C3, and KQi1. We organize product roadshows and marketing events across many cities in China, typically after we announce new products. Users riding distance reached 100 million kilometers in October 2016, 1 billion kilometers in April 2018, and 10 billion kilometers in October 2021, respectively. We organized media events for these milestones.

We have participated in festivals or product exhibitions popular among our targeted groups, such as Strawberry Music Festival and Innersect Show. Through participation in such events, we not only interact with our users and enhance our connections with our users, but also reinforce our users' perception of "NIU" brand as a premium lifestyle brand.

We sponsor and participate in non-profit social activities such as marathons, through which we exemplify green and lifestyle, and it has been positively received by runners and spectators nationwide.

Overseas marketing

We invest in overseas marketing with a view to raise our brand awareness in the international markets. We adopted a dynamic marketing strategy that combines traditional public relations, tactical digital marketing, and strategic retail and event marketing.

We have engaged leading consumer technology public relations firms to assist us in building trust, awareness and thought leadership in the e-mobility space.

Competition

We operate in the lithium-ion battery-powered electric two-wheeled vehicles market, which is a segment of the electric two-wheeled vehicles market. The segment is growing rapidly, and we believe we maintain competitive advantages in a number of areas, including brand, product design and quality, smart features, omnichannel retail model, customer satisfaction, and a loyal customer base.

See "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—We may face intense competition in the electric two-wheeled vehicles industry."

Intellectual Property

Our success depends, at least in part, on our ability to protect our core technology and intellectual property. We rely on a combination of patents, patent applications, trade secrets, including know-how, copyright laws, trademarks, intellectual property licenses and other contractual rights to establish and protect our proprietary rights in our technology. In addition, we enter into confidentiality and non-disclosure agreements with our employees and business partners. The agreements we entered into with our employees also provide that all software, inventions, developments, works of authorship and trade secrets created by them during the course of their employment are our property.

Our intellectual property rights are critical to our business. As of December 31, 2022, we owned 563 patents, 857 registered trademarks and 27 copyrights relating to various aspects of our operations and 2 registered domain names, including www.niu.com. Of the 857 registered trademarks, 155 are registered in mainland China and 702 in other countries and regions. As of the same date, we had 354 applications for patents and trademarks pending in mainland China, Europe and other jurisdictions.

Regulations

This section sets forth a summary of the most significant laws, regulations and rules that affect our business activities in mainland China and our shareholders' rights to receive dividends and other distributions from us.

Regulations on Production of Electric Bicycles

On July 9, 2005, the State Council of the PRC promulgated the Regulation of the PRC on the Administration of Production License for Industrial Products, or the Production License Regulations. On April 21, 2014, the General Administration of Quality Supervision, Inspection and Quarantine, or the AQSIQ, issued the Measures for the Implementation of the Regulations of the PRC Administration of Production Licenses for Industrial Products, or the Measures, which was revised by the State Administration for Market Regulation on September 29, 2022. The latest version took effect on November 1, 2022. According to the Production License Regulations and the Measures, any enterprise that has not obtained a production license for a product listed in the Announcement of the Product Catalog Implementing the Production Licensing System, or the Production Catalog, which was issued by the General Administration of Quality Supervision, Inspection and Quarantine (abolished), or the AQSIQ on November 20, 2012, must not produce the relevant product. An enterprise must file an application to the provincial administration of quality and technology supervision for the license of producing the products listed in the Production Catalog. Otherwise, relevant authorities can impose fines and other administrative sanctions, and serious violations may result in criminal liabilities. According to the Production Catalog, most of our products are classified as electric bicycles, which are industrial products that fall within the scope of Production License Regulations and Measures. Thus, we have obtained the appropriate production license thereof. On June 24, 2017, the State Council issued the Decision on Adjusting the Catalog for the Administration of Production Permits for Industrial Products and on Trying out the Simplification of Approval Procedures, or the Decision. Pursuant to the Decision, the production license for electric bicycle was canceled and was changed to implement mandatory product certification management. However, on October 11, 2017, AQSIQ announced that the production of the electric bicycles is still under the production licensing system. According to this announcement, the production license regulatory regime is implemented pursuant to the new electric bicycle technical standard, which is the Safety and Technical Specification for Electric Bicycle (GB 17761-2018), or the Electric Bicycle Standard, promulgated by the State Administration for Market Regulation and the National Standardization Management Committee on May 15, 2018 and became effective on April 15, 2019. The Electric Bicycle Standard replaced the General Technical Requirements for Electric Bicycles (GB 17761-1999), or the Old Standard, which were issued by the Quality and Technology Supervision Bureau on May 28, 1999 and became effective from October 1, 1999. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—Our products are subject to safety standards and failure to satisfy such mandated standards would have a material adverse effect on our business and operating results.”

Regulations on Qualification of Production of Electric Motorcycles

Pursuant to the Administration Measures for Access of Motorcycle Manufacturing, or the Motorcycle Manufacturing Measures, issued on November 30, 2002 and the Implementing Rules of the Administration Measures for Access of Motorcycle Manufacturing, or the Motorcycle Manufacturing Rules, issued on December 31, 2002, enterprises must pass the production access examination and obtain the Motorcycle Production Access Certificate before manufacturing motorcycles in mainland China, and if an enterprise conducts a motorcycle manufacturing consignment, both the consignee and the consignor are required to obtain the Motorcycle Production Access Certificate. Pursuant to the General Specifications for Electric Motorcycles and Electric Mopeds, or the General Specifications, which was issued on June 25, 2009 and effective on January 1, 2010, the General Specifications applies to electric motorcycles and electric mopeds. On January 14, 2010, the Ministry of Industry and Information Technology, or the MITT, issued the Circular on Matters Related to Electric Motorcycle Production Enterprises and Product Access Management, or the Circular, which imposes production restrictions on enterprises who currently produce or intend to produce electric motorcycles. Such enterprises must satisfy the MITT’s access requirements and be on the list of the Announcement on Vehicle Manufacturers and Products before continuing or commencing production. On November 27, 2018, the MITT promulgated the Administration Measures for Access of the Road Motor Vehicle Manufacturing Enterprises and Products, which became effective on June 1, 2019 and replaced the Motorcycle Manufacturing Measures and the Motorcycle Manufacturing Rules. According to the Administration Measures for Access of the Road Motor Vehicle Manufacturing Enterprises and Products, the authorities will continue to implement a classified access administration of enterprises engaged in the manufacturing of road motor vehicles and road motor vehicle products, and road motor vehicle design enterprises are encouraged to cooperate with or consign to licensed road motor vehicle manufacturing enterprises in manufacturing process. We entered into a manufacturing cooperation agreement with a motorcycle manufacturer with required qualifications to manufacture certain models classified as electric motorcycles. Besides, Jiangsu Xiaoniu has been listed in the Road Motor Vehicle Manufacturers and Products List (batch 327) issued by MITT on January 13, 2020 as an enterprise permitted to manufacture motorcycles and we have obtained the World Manufacturer Identifier (WMI) and Vehicle Identification Number (VIN). See “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—Our products are subject to safety standards and failure to satisfy such mandated standards would have a material adverse effect on our business and operating results.”

Regulations on Registration of Electric Bicycles

Pursuant to the Road Traffic Safety Law of the PRC (Revised in 2021), a non-motorized vehicle which ought to be lawfully registered shall be deemed street-illegal until it has been registered with the local traffic administrative department. In addition, the categories of such non-motorized vehicles shall be determined by provincial governments in light of their respective actual local situation and shall consist of technical standards in terms of overall weight, braking performance, overall size and reflectors, which all non-motorized vehicles should abide by. We have obtained the production license for electric bicycles according to relevant regulations. We will adjust the technical standards of our e-scooters to be sold at local markets until the technical standards meet local requirements and our e-scooter is listed on the local catalog which indicates the e-scooters on it are permitted to be lawfully registered.

Pursuant to the Circular on Strengthening the Management of Electric Bicycles, jointly promulgated by the State Administration for Industry and Commerce, the AQSIQ, the Ministry of Public Security, or the MPS, and the MIIT on March 18, 2011, any non-compliant vehicle may not be registered as a non-motorized vehicle, which in turn means it shall be deemed street-illegal.

Therefore, some PRC local governments issued restrictive provisions on electric bicycles. Some local governments (such as Beijing, Shanghai, Anhui province, Jiangsu province, Guangxi province, Zhejiang province and Gansu province) implemented a catalog management system requiring (i) restricting and prohibiting sales and/or use of electric two-wheeled vehicles that do not meet the required standards; and/or (ii) end users to register electric two-wheeled vehicles. For example, on October 20, 2013, the Shanghai Municipal People's Congress promulgated the Measures for the Management of Non-motorized Vehicles in Shanghai, which stipulates that any non-motorized vehicle that is sold in Shanghai must be registered with relevant department. Most of our products have obtained sales approval in Beijing, Shanghai, Anhui province, Jiangsu province, Guangxi province, Zhejiang province, Gansu province and other major provinces and cities. In addition, we will cooperate with local governments that require us to obtain approval of sales. On the other hand, several local municipal governments (such as Xiamen, Shenzhen and Dongguan) have promulgated rules and regulations prohibiting the riding of electric bicycles/electric scooters in specific districts, and also restricting the use of registered electric two-wheeled vehicles. Due to the limited number of such districts, which are not our major source of revenue, the regulations of prohibiting and restricting do not have substantial effect on our revenue.

Regulations on Registration of Motorcycles

Pursuant to the Provisions on the Registration of Motor Vehicles of the PRC promulgated on May 27, 2008, amended on December 17, 2021 and will come into effect on May 1, 2022, the owner of a motor vehicle, including motorcycles, shall apply for registration of such motor vehicle after obtaining the certificate of qualified motor vehicle safety technical inspection from a local motor vehicle safety technical inspection institution. On October 18, 2014, the Circular of the Ministry of Industry and Information Technology and the Ministry of Public Security on Strengthening the Production and Registration Management of Minibuses and Motorcycles was issued, which reiterates that motorcycles must be registered, and in order to simplify the motorcycle registration procedures in rural areas, motorcycles may gradually be sold with license, and motorcycle sales enterprises may be entrusted to register motorcycles before motorcycles are sold.

In recent years, in order to control the number of motor vehicles on the road, certain local governments have issued restrictions on the issuance of vehicle license plates, but these restrictions generally do not apply to the issuance of license plates for new energy vehicles, which makes it easier for purchasers of new energy vehicles to obtain automobile license plates. For example, pursuant to the Implementation Measures on Encouraging Purchase and Use of New Energy Vehicles in Shanghai, local authorities will issue new automobile license plates to qualified purchasers of new energy vehicles without requiring such qualified purchasers to go through certain license-plate bidding processes and to pay license-plate purchase fees.

Regulations on Production Safety

Pursuant to the Production Safety Law of the PRC, or the Production Safety Law, which took effect on November 1, 2002 and was amended on August 31, 2014, the entities that are engaged in production and business operation activities must implement national industrial standards which guarantee the production safety and comply with production safety requirements provided by the laws, administrative regulations and national or industrial standards. An entity must take effective measures for safety production, maintain safety facilities, examine the safety production procedures, educate and train employees and take any other measures to ensure the safety of its employees and the public. An entity or its relevant persons-in-charge which has failed to perform such safety production liabilities will be required to make amends within a time limit or face administrative penalties. If it fails to amend within the prescribed time limit, the production and business operation entity may be ordered to suspend business for rectification, and serious violations may result in criminal liabilities. Our production behaviors are compliant with the Production Safety Law so far.

Regulations on Product Quality

The Product Quality Law of the PRC, or the Product Quality Law, was adopted on February 22, 1993 and amended on July 8, 2000, August 27, 2009 and December 29, 2018. The Product Quality Law applies to anyone who manufactures or sells any product within the territory of mainland China. It is prohibited from producing or selling counterfeit products in any form, including counterfeit brands, or providing false information about the product manufacturers. Violation of national or industrial standards may result in civil liability and administrative penalties such as compensation, fines, suspension of business and confiscation of illegal income, and serious violations may result in criminal liabilities. We are in compliance with any of provisions of the Product Quality Law.

Under the Application Scope of the First Batch of Products Implementing Mandatory Product Certification Catalogue effective on July 1, 2002, motorcycles and bicycles with gasoline and other engines were within the product catalogue that must apply the compulsory product certification. The Administrative Regulations for Compulsory Product Certification was promulgated on July 3, 2009, amended on September 29, 2022, and took effect on November 1, 2022, pursuant to which that several specified products must not be delivered, sold, imported or used in other business activities until they complete the compulsory product certification and be labeled with certification mark. According to the Announcement on the Transition Period Arrangement for the Management of Mandatory Product Certification of Motorcycle Crew Helmets, Electric Blankets and Motorcycle Products, promulgated by the AQSIQ and the Certification and Accreditation Administration of the PRC on October 11, 2017, motorcycle and bicycle productions must still be under a license administration. On March 14, 2019, the Opinions of the State Administration for Market Regulation, the MIIT and the Ministry of Public Security on Intensifying Supervision of the Execution of National Standards for Electric Bicycles, or the Opinions, was promulgated. The Opinions provides that the market supervision department shall strengthen the management of CCC certification for electric bicycles, strengthen inspections of certification agencies and manufacture enterprises, and shall only allow vehicles that meet the Electric Bicycle Standard and obtained CCC certification flowing into the market. We have obtained CCC certification for all of our current for-sale products, and will try to obtain CCC certification for our future products. See “Item 3. Key Information— D. Risk Factors—Risks Relating to Our Business— Our products are subject to safety standards and failure to satisfy such mandated standards would have a material adverse effect on our business and operating results.”

Pursuant to the Civil Code of the PRC, promulgated by the National People’s Congress on May 28, 2020 and became effective on January 1, 2021, in the event of damages caused to other party due to product defect, the infringed party may seek compensation from the manufacturer of the products or from the seller of the products and shall have the right to request the manufacturer and the seller to bear tortious liability such as cessation of infringement, removal of obstruction, elimination of danger, etc.

Regulations Relating to Product Recall

The State Administration for Market Regulation issued the Interim Provisions on the Administration of Recall of Consumer Goods on November 21, 2019, which took effect on January 1, 2020. Our products, accordingly, as one kind of customer goods, are subject to the requirements set out thereunder. Pursuant to the Recall Provisions, if a manufacturer is aware of any potential defect in its products, or receive such notice from relevant government authorities, it must investigate in a timely manner and report the results of such investigation to the relevant authorities. Where any defect is found during the investigation, the manufacturer must immediately cease to manufacture, sell, or import the relevant products and recall such products. We have not received any such notice from authorities, or initiated, voluntarily or involuntarily, any product recalls in accordance with the Recall Provisions. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—We may be compelled to undertake product recalls or take other actions, which could adversely affect our brand image and results of operations.”

Regulations Relating to Foreign Trade

Pursuant to the Foreign Trade Law of the PRC, promulgated on May 12, 1994 and amended on April 6, 2004, November 7, 2016, and December 30, 2022, respectively, and the Measures for the Record Filing and Registration of Foreign Trade Business Operators promulgated by MOFCOM on June 25, 2004, effective on July 1, 2004, and amended on August 18, 2016, November 30, 2019 and May 10, 2021, respectively, foreign trade operators engaged in the import and export of goods or the import and export of technology must register with MOFCOM or its authorized institution. In addition, if an entity imports or exports goods as consignee or consignor, it shall file with customs according to the Provisions of the People’s Republic of China on the Administration of Recordation of Customs Declaration Entities, promulgated on November 19, 2021 and came into effect on January 1, 2022. We have made filings with authorities pursuant to the applicable provisions.

Regulations Relating to Foreign Investment

Pursuant to the Special Administrative Measures for Market Access of Foreign Investment (Negative List) (2021 Edition), or the 2021 Negative List, jointly issued by the NDRC and the MOFCOM on December 27, 2021 and enforced on January 1, 2022, the foreign investment related to design, manufacture and sale of electricity bicycles does not fall within the category of industries in which foreign investment is restricted or prohibited. The 2021 Negative List enumerates the restricted industries and the prohibited industries in relation to foreign investment, and the industries which do not fall within the 2021 Negative List, shall be administered under the principle of equal treatment to domestic and foreign investment. On March 15, 2019, the Foreign Investment Law of PRC, or the FIL, was issued by the National People’s Congress and took effect on January 1, 2020, which also provides that the industries in which foreign investment is not restricted and prohibited shall be administered under the principle of equal treatment to domestic investment. On December 26, 2019, the State Council published the FIL Implementation Rules, which took effect on January 1, 2020. Furthermore, on December 19, 2020, the NDRC and the MOFCOM jointly issued the Measures for Security Review of Foreign Investment, effective on January 18, 2021, which provides detailed guidance regarding security review of foreign investment that has a potential impact on national security.

Foreign investment in telecommunications companies in mainland China is governed by the Provisions on Administration of Foreign-Invested Telecommunications Enterprises, or the Foreign-Invested Telecommunications Enterprises Provisions, which were promulgated by the State Council on December 11, 2001, and amended on September 10, 2008 and February 6, 2016. The Foreign-Invested Telecommunications Enterprises Provisions prohibits a foreign investor from holding over 50% of the total equity interest in any value-added telecommunications service business in mainland China. On March 29, 2022, the State Council published the Decision of the State Council to Amend and Repeal Certain Administrative Regulations, among which the Foreign-Invested Telecommunications Enterprises Provisions is further amended. The latest version removes certain requirements for foreign-invested telecommunications enterprises and came into effect on May 1, 2022. We operate our website www.niu.com and our NIU app through Beijing Niudian and sell our e-scooters and peripheral products on the website.

Regulations Relating to Overseas Investment

On December 26, 2017, the NDRC issued the Management Rules for Overseas Investment by Enterprises, or the NDRC Order 11. As defined in the NDRC Order 11, “overseas investment” refers to the investment activities conducted by an enterprise located in the territory of mainland China, either directly or through an offshore enterprise under its control, by making investment with assets and equities or providing financing or a guarantee in order to acquire overseas ownership, control, management rights and other related interests. Furthermore, overseas investment by a Chinese individual through overseas enterprises under his/her control is also subject to the NDRC Order 11. According to the NDRC Order 11, (i) direct overseas investment by Chinese enterprises or indirect overseas investment by Chinese enterprises or individuals in sensitive industries or sensitive countries and regions requires prior approval by the NDRC; (ii) direct overseas investment by Chinese enterprises in non-sensitive industries and non-sensitive countries and regions requires prior filing with the NDRC; and (iii) indirect overseas investment of over US\$300 million by Chinese enterprises or individuals in non-sensitive industries and non-sensitive countries and regions requires reporting with the NDRC. Uncertainties remain with respect to the application of the NDRC Order 11. We are not sure if we were to use a portion of the proceeds raised from our financing activities to fund investments in and acquisitions of complementary business and assets outside of mainland China, such use of U.S. dollars funds held outside of mainland China would be subject to the NDRC Order 11. There are very few interpretations, implementation guidance or precedents to follow in practice. We will continue to monitor any new rules, interpretation and guidance promulgated by the NDRC and communicate with the NDRC and its local branches to seek their opinions, when necessary.

Regulations Relating to Foreign Debt

On January 8, 2003, the NDRC, Ministry of Finance and SAFE promulgated the Interim Provisions on the Management of Foreign Debts, which was amended on July 26, 2022 and became effective on September 1, 2022, pursuant to which the summation of the accumulated medium-term and long-term debts borrowed by foreign-invested entities and the balance of short-term debts shall not exceed the surplus between the total investment in projects approved by the verifying departments and the registered capital, or the Surplus Limit. Within the range of the Surplus Limit foreign-invested entities may borrow foreign loans at their own will. If the loans exceed the Surplus Limit, the total investment in projects shall be reexamined by the original examination and approval departments. In addition, on January 11, 2017, PBOC promulgated the Notice of the People’s Bank of China on Full-coverage Macro-prudent Management of Cross-border Financing, or PBOC Circular 9, which sets out an upper limit for mainland China entities, including foreign-invested entities and domestic-invested entities, regarding their foreign debts, or the Financing Limit. Pursuant to PBOC Circular 9, the Financing Limit for entities shall be calculated based on the following formula: the Financing Limit = net assets * cross-border financing leverage ratio * macro-prudent regulation parameter. As to net assets, entities shall take the net assets value stated in their respective latest audited financial statement in calculation; the cross-border financing leverage ratio for enterprises is two (2); the macro-prudent regulation parameter is one (1). The PBOC Circular 9 does not supersede the Interim Provisions on the Management of Foreign Debts. PBOC Circular 9 stipulates a one-year transitional period, or Transitional Period, from its promulgation date for foreign-invested entities, during which they could choose the calculation method of foreign debt upper limit based on either (i) the Surplus Limit, or (ii) the Financing Limit. After the Transition Period, the method applicable to foreign-invested entities shall be determined by the PBOC and the SAFE separately. On March 11, 2020, the PBOC and the SAFE issued the Notice of Adjusting the Macro-prudent Regulation Parameter for Full-covered Cross-border Financing, which adjusted the macro-prudent regulation parameter as set forth in the Circular 9 from 1 to 1.25. However, although the Transitional Period ended on January 10, 2018, as of December 31, 2022, PBOC or SAFE has not issued any new regulations regarding the application calculation method of foreign debt upper limit for foreign-invested entities. As to domestic-invested entities, they are only subject to the Financing Limit from the date of promulgation of PBOC Circular 9 regardless of the Transitional Period. On January 5, 2023, the NDRC issued the Administrative Measures for the Examination and Registration of Medium and Long-term Foreign Debts of Enterprises, which took effect on February 10, 2023, setting out regulatory standards and procedures for enterprises when issuing foreign debts that over one year.

Regulations Relating to Internet Information Security and Privacy Protection

Internet information in mainland China is heavily regulated and restricted as a national security issue. The SCNPC enacted the Decisions on Maintaining Internet Security in December 2000, as further amended in August 2009, which impose criminal liabilities on persons or entities that: (i) gain improper entry into a computer or system of strategic importance; (ii) disseminate politically disruptive information; (iii) leak state secrets; (iv) spread false commercial information; or (v) infringe intellectual property rights. The MPS has promulgated measures that prohibit the use of the internet in ways that would result in the leakage of state secrets or dissemination of socially destabilizing content. If an internet information service provider violates these measures, the MPS and the local security bureaus may revoke its operating license and shut down its websites.

Under the Several Provisions on Regulating the Market Order of Internet Information Services issued by the MIIT in December 2011, an Internet information service provider may not collect any user's personal information or provide any such information to third parties without that user's consent. It must also expressly inform that user of the method, content and purpose of the collection and processing of such user's personal information and may only collect such information as necessary for the provision of its services. In addition, pursuant to the Decision on Strengthening the Protection of Online Information issued by the SCNPC in December 2012 and the Order for the Protection of Telecommunication and Internet User's Personal Information issued by the MIIT in July 2013, any collection and use of a user's personal information must be subject to the consent of the user, abide by the principles of legality, rationality and necessity and be within the specified purposes, methods and scopes.

In November 2016, the SCNPC promulgated the Network Security Law of the PRC, or the Network Security Law, which took effect on June 1, 2017. Pursuant to the Network Security Law, a network operator, including, without limitation, Internet information service providers, must take technical measures and other necessary measures in accordance with the provisions of applicable laws and regulations as well as the compulsory requirements of the national and industrial standards to safeguard the safe and stable operation of networks, effectively respond to network security incidents, prevent illegal and criminal activities and maintain the integrity, confidentiality and availability of network data. Any violation of the provisions and requirements under the Network Security Law may subject an Internet service provider to warnings, fines, confiscation of illegal gains, revocation of licenses, cancellation of filings, closedown of websites or even criminal liabilities. On December 28, 2021, the Cyberspace Administration of China, together with other twelve government authorities, jointly released the Cybersecurity Review Measures, which came into effect on February 15, 2022. The Measures require operators of critical information infrastructure to go through cybersecurity review when purchasing any network products and services with a potential impact on national security.

In November 2019, the Secretariat of the Cyberspace Administration of China, the General Office of the MIIT, the General Office of the Ministry of Public Security and the State Administration for Market Regulation jointly promulgated the Circular on Issuing the Methods for Identifying Unlawful Collection and Use of Personal Information of Applications ("App(s)"), which defines actions that may be regarded as violating the Network Security Law and other personal information protection related regulations, including, among other things, failure to publicize the rules for collection and use of 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, provision of personal information to others without consent, and failure to provide the function of deleting or correcting personal information as required by law. Furthermore, on August 20, 2021, the SCNPC promulgated the Personal Information Protection Law, which came into effect on November 1, 2021. The Personal Information Protection Law integrates the scattered rules with respect to personal information rights and privacy protection and aims at protecting the personal information rights and interests, regulating the processing of personal information and promoting the reasonable use of personal information. Personal information, as defined in the Personal Information Protection Law, refers to information related to identified or identifiable natural persons and recorded by electronic or other means, but excluding the anonymized information. The Personal Information Protection law provides the circumstances under which a personal information processor could process personal information, which include but not limited to, where the consent of the individual concerned is obtained and where it is necessary for the conclusion or performance of a contract to which the individual is a contractual party. It also stipulates certain specific rules with respect to the obligations of a personal information processor, such as to inform the purpose and method of processing to the individuals, and the obligation of the third party who has access to the personal information by way of co-processing or delegation.

The Data Security Law of the People's Republic of China, or the Data Security Law, was passed on June 10, 2021 and came into effect on September 1, 2021. The Data Security Law requires the data processor to establish and improve a whole-process data security management system, organize data security education and training, and take corresponding technical measures and other necessary measures to safeguard data security. In conducting data processing activities by using the Internet or any other information network, the data processor shall perform the above data security protection obligations on the basis of the hierarchical cybersecurity protection system. Any violation of the provisions and requirements under the Data Security Law may subject a data processor to rectifications, warnings, fines, suspension of the related business, revocation of licenses or even criminal liabilities.

In addition, on November 14, 2021, the CAC released the Regulations on the Network Data Security, or the Draft Regulations, for public comments, which stipulates, among others, that a prior cybersecurity review is required for listing abroad of data processors which process over one million users' personal information, and the listing of data processors in Hong Kong which affects or may affect national security. On December 28, 2021, the CAC and other twelve PRC regulatory authorities jointly revised and promulgated the Measures for Cybersecurity Review, or the Cybersecurity Review Measures, which came into effect on February 15, 2022. Pursuant to the Cybersecurity Review Measures, besides the procurement of network products and services by critical information infrastructure operators, any data processing activities by network platform operators that affects or may affect national security shall be subject to the cybersecurity review as well. In accordance with the Cybersecurity Review Measures, operators mastering personal information of more than one million users must apply to the Cybersecurity Review Office for cybersecurity review when they seek for listing in a foreign country. However, the Cybersecurity Review Measures and the Draft Regulations remain unclear on whether the relevant requirements will be applicable to companies that have been listed in the United States.

Furthermore, the Data Export Measures were released by the CAC on July 7, 2022 and came into effect on September 1, 2022. The Data Export Measures require that any data processor which processes or exports personal information exceeding certain volume threshold under such measures shall apply for security assessment by the CAC before transferring any personal information abroad. The security assessment requirement also applies to any transfer of important data outside of China.

In December 2022, the MIIT released the Administrative Measures for Data Security in the Field of Industry and Information Technology (for Trial Implementation), which came into effect on January 1, 2023. The Administrative Measures for Data Security in the Field of Industry and Information Technology (for Trial Implementation) requires the data processor in the field of industry and information technology to review data on a periodical basis, identify important data and core data in accordance with the relevant standards and specifications, and form its specific catalogue.

On February 22, 2023, the CAC issued the Measures for the Standard Contract for the Outbound Transfer of Personal Information, or the Standard Contract Measures, which will take effect on June 1, 2023. The Standard Contract Measures apply to the provision of personal information to overseas recipients through standard contract and set out detailed criteria relating to the formality and terms of such contracts. The Standard Contract Measures also requires the personal information processor to file such contract with relevant authorities within 10 business days after the contract is effective.

Regulations Relating to Value-Added Telecommunication Services

Pursuant to the Telecommunications Regulations of the PRC, or the Telecommunications Regulations, promulgated by the State Council on September 25, 2000 and amended on July 29, 2014 and February 6, 2016, telecommunication service providers must obtain an operating license prior to the commencement operations. The Telecommunications Regulations categorize telecommunication services into basic telecommunication services and value-added telecommunication services. According to the Catalog of Telecommunications Business, attached to the Telecommunications Regulations, information services provided via fixed network, mobile network and Internet fall within value-added telecommunication services.

In July 2017, the MIIT promulgated the Administrative Measures on Telecommunications Business Operating Licenses. Under these regulations, a commercial operator of value-added telecommunication services must first obtain a license for value-added telecommunications business, or ICP License, from the MIIT or its provincial level counterparts. The VIE, Beijing Niudian, the main operating entity which sells our products to third-parties, has obtained an ICP License for information service business.

Regulations Relating to Mobile Internet Applications Information Services

In addition to the Telecommunications Regulations and other regulations above, mobile app information service providers are especially regulated by the Administrative Provisions on Mobile Internet Applications Information Services, or the App Provisions, which were promulgated by the Cyberspace Administration of China on June 28, 2016 and amended in 2022. The latest version became effective on August 1, 2022.

Under the App Provisions, mobile app information service providers are required to obtain relevant qualifications prescribed by laws and regulations, take responsibility for the supervision and administration of mobile app information as required by laws and regulations and implement the information security management responsibilities.

We have implemented the necessary programs in our mobile app, including programs for data collection notification and for preventing data breach, damage and loss, to make sure the collection, protection and preservation of user information are in compliance with the App Provisions in all material aspects. See “Item 3. Key Information— D. Risk Factors—Risks Relating to Our Business—We retain certain personal information about our users and may be subject to various privacy and consumer protection laws.”

Regulations Relating to Intellectual Property Rights

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

Regulations on Copyright

Pursuant to the Copyright Law of the PRC revised by the Standing Committee of the National People’s Congress on November 11, 2020 and came into effect on June 1, 2021, copyrights include personal rights such as the right of publication and that of attribution as well as property rights such as the right of production and that of distribution. Reproducing, distributing, performing, projecting, broadcasting or compiling a work or communicating the same to the public via an information network without permission from the owner of the copyright therein, unless otherwise provided in the Copyright Law of the PRC, constitutes an infringement of copyright. The infringer shall, among others, according to the circumstances of the case, undertake to cease the infringement, take remedial action, offer an apology and pay damages. We have registered our copyright on 27 sets of software codes regarding our BMS and other control or management systems.

Regulations on Patent

The Patent Law of the PRC promulgated by the Standing Committee of the National People’s Congress and revised on October 17, 2020 which took effect on June 1, 2021, the Detailed Rules for the Implementation of the Patent Law of the PRC (revised in 2010) promulgated by the State Council provide 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. The duration of a patent right is respectively 10 years for utility model, 15 years for design, and 20 years for invention, all of which shall commence from the date of application.

Regulations on Trademark

Pursuant to the Trademark Law of the PRC promulgated by the Standing Committee of the National People’s Congress on August 23, 1982 and respectively revised on February 22, 1993, October 27, 2001, August 30, 2013 and April 23, 2019, and the Regulation on the Implementation of the Trademark Law of the PRC (revised in 2014) promulgated by the State Council on August 3, 2002 and revised on April 29, 2014, the right to the exclusive use of a registered trademark is limited to trademarks which have been approved for registration and to goods for which the use of such trademark has been approved. The period of validity of a registered trademark is ten years, counted from the day that the registration is approved. According to this law, using a trademark that is identical to or similar to a registered trademark in connection with the same or similar goods without the authorization of the owner of the registered trademark constitutes an infringement of the exclusive right to use a registered trademark. The infringer shall, in accordance with the regulations, undertake to cease the infringement, remedial action, or pay damages. We have submitted several trademark invalidation applications against certain third-party infringers, which are still under administrative or legal proceedings. See “Item 3. Key Information — D. Risk Factors—Risks Relating to Our Business—We may need to defend ourselves against patent, trademark or other intellectual property rights infringement claims, which may be time-consuming and would cause us to incur substantial costs.”

Regulations on Domain Name

Internet domain name registration and related matters are primarily regulated by the Measures on Administration of Internet Domain Names promulgated by the MIIT on August 24, 2017 and came into effect on November 1, 2017, and the Implementing Rules of China ccTLD Registration issued by China Internet Network Information Center on June 18, 2019. Domain name registrations are handled through domain name service agencies established under the relevant regulations, and the applicants become domain name holders upon successful registration.

Regulations Relating to Employment

Pursuant to the Labor Law of the PRC, the Labor Contract Law of the PRC, or the Labor Contract Law, and the Implementing Regulations of the PRC Labor Contract Law, labor relationships between employers and employees must be executed in written form. Wages may not be lower than the local minimum wage. Employers must establish a system for labor safety and sanitation, strictly abide by state standards and provide relevant education to their employees. Employees are also required to be able to work in safe and sanitary conditions.

According to the Social Insurance Law of the PRC, promulgated by the SCNPC and effective from July 1, 2011 and amended on December 29, 2018, the Regulation of Insurance for Work-Related Injury, the Provisional Measures on Insurance for Maternity of Employees, the Regulation of Unemployment Insurance, and the Interim Regulation on the Collection and Payment of Social Insurance Premiums, an employer is required to contribute social insurance for its employees in mainland China, including basic pension insurance, basic medical insurance, unemployment insurance, maternity insurance and injury insurance. Under the Regulations on the Administration of Housing Funds, promulgated by the State Council on April 3, 1999 and as amended on March 24, 2002 and March 24, 2019, an employer is required to make contributions to a housing fund for its employees. See “Item 3. Key Information— D. Risk Factors—Risks Related to Doing Business in China—Increases in labor costs and enforcement of stricter labor laws and regulations of mainland China may adversely affect our business and our profitability.”

Regulations Relating to Foreign Exchange

Regulations on Foreign Currency Exchange

The SAFE promulgated the Circular on Issues Relating to the Administration of Foreign Exchange of Offshore Investment and Financing through Special Purpose Vehicles and Round-Tripping Investment by mainland China Resident, or SAFE Circular 37, on July 4, 2014, which replaced the former circular commonly known as “SAFE Circular 75.” SAFE Circular 37 requires mainland China residents to register with local branches of the SAFE in connection with their direct establishment or indirect control of an offshore entity, for the purpose of offshore investment and financing, with such mainland China residents’ legally owned assets or equity interests in domestic enterprises or offshore assets or interests, referred to in SAFE Circular 37 as a “special purpose vehicle.” SAFE Circular 37 further requires amendment to the registration in the event of any significant changes with respect to the special purpose vehicle, such as increase or decrease of capital contributed by mainland China residents, share transfer or exchange, merger, division or other material event. In the event that a mainland China shareholder holding interests in a special purpose vehicle fails to fulfill the required SAFE registration, the mainland China subsidiaries of that special purpose vehicle may be prohibited from making profit distributions to the offshore parent and from carrying out subsequent cross-border foreign exchange activities, and the special purpose vehicle may be restricted in its ability to contribute additional capital into its mainland China subsidiaries. Furthermore, failure to comply with the various SAFE registration requirements described above could result in liability under the laws of mainland China for evasion of foreign exchange controls.

Regulations on Stock Incentive Plans

In February 2012, SAFE promulgated the Circular on Foreign Exchange Administration of PRC Residents Participating in Share Incentive Plans of Offshore Listed Companies, or the Stock Option Rules, replacing the previous rules issued by SAFE in March 2007. Under the Stock Option Rules and other relevant rules and regulations, mainland China residents who participate in a stock incentive plan in an overseas publicly-listed company are required to register with SAFE or its local branches and complete certain other procedures. Participants of a stock incentive plan who are mainland China residents must retain a qualified mainland China agent, which could be a mainland China subsidiary of the overseas publicly-listed company or another qualified institution selected by the mainland China subsidiary, to conduct the SAFE registration and other procedures with respect to the stock incentive plan on behalf of its participants. The participants must also retain an overseas entrusted institution to handle matters in connection with their exercise of stock options, the purchase and sale of corresponding stocks or interests and fund transfers. In addition, the mainland China agent is required to amend the SAFE registration with respect to the stock incentive plan if there is any material change to the stock incentive plan, the mainland China agent or the overseas entrusted institution or other material changes. The mainland China agents must, on behalf of the mainland China residents who have the right to exercise the employee share options, apply to SAFE or its local branches for an annual quota for the payment of foreign currencies in connection with the mainland China residents' exercise of the employee share options. The foreign exchange proceeds received by mainland China residents from the sale of shares under the stock incentive plans granted and dividends distributed by overseas listed companies must be remitted into the bank accounts in mainland China opened by mainland China agents before distribution to such mainland China residents. In addition, the Circular of the State Administration of Foreign Exchange on Issues concerning Foreign Exchange Administration over the Overseas Investment and Financing and Round-trip Investment by Domestic Residents via Special Purpose Vehicles promulgated on July 4, 2014 provides that mainland China residents who participate in a share incentive plan of an overseas unlisted special purpose company must register with SAFE or its local branches before exercising such rights.

Regulations Relating to Dividend Distribution

The principal regulations governing distribution of dividends of foreign-invested enterprises include the PRC Company Law, the FIL, and the FIL Implementation Rules. Under these laws and regulations, foreign-invested enterprises in mainland China may pay dividends only out of their accumulated after-tax profits, if any, determined in accordance with PRC accounting standards and regulations. In addition, foreign-invested enterprises in mainland China are required to allocate 10% of their respective after-tax profits as the statutory common reserve when it distributes its after-tax profit for the current fiscal year, if any, to fund certain reserve funds until these reserves have reached 50% of the registered capital of the enterprises.

Regulations Relating to Taxation

Regulations on Enterprise Income Tax

Under the Enterprise Income Tax Law of the PRC, or the EIT Law, which was promulgated on March 16, 2007, amended on February 24, 2017 and December 29, 2018, and its implementing rules, enterprises are classified as resident enterprises and non-resident enterprises. Mainland China resident enterprises typically pay enterprise income tax at the rate of 25%, while non-mainland China resident enterprises without any branches in mainland China pay an enterprise income tax in connection with their income from mainland China at the tax rate of 10%. An enterprise established outside of mainland China but with its “de facto management body” located within mainland China is considered a “resident enterprise,” which means that it is treated in a manner similar to a mainland China domestic enterprise for enterprise income tax purposes. The implementing rules of the EIT Law define “de facto management body” as a managing body that in practice exercises “substantial and overall management and control over the production and operations, personnel, accounting and properties” of the enterprise.

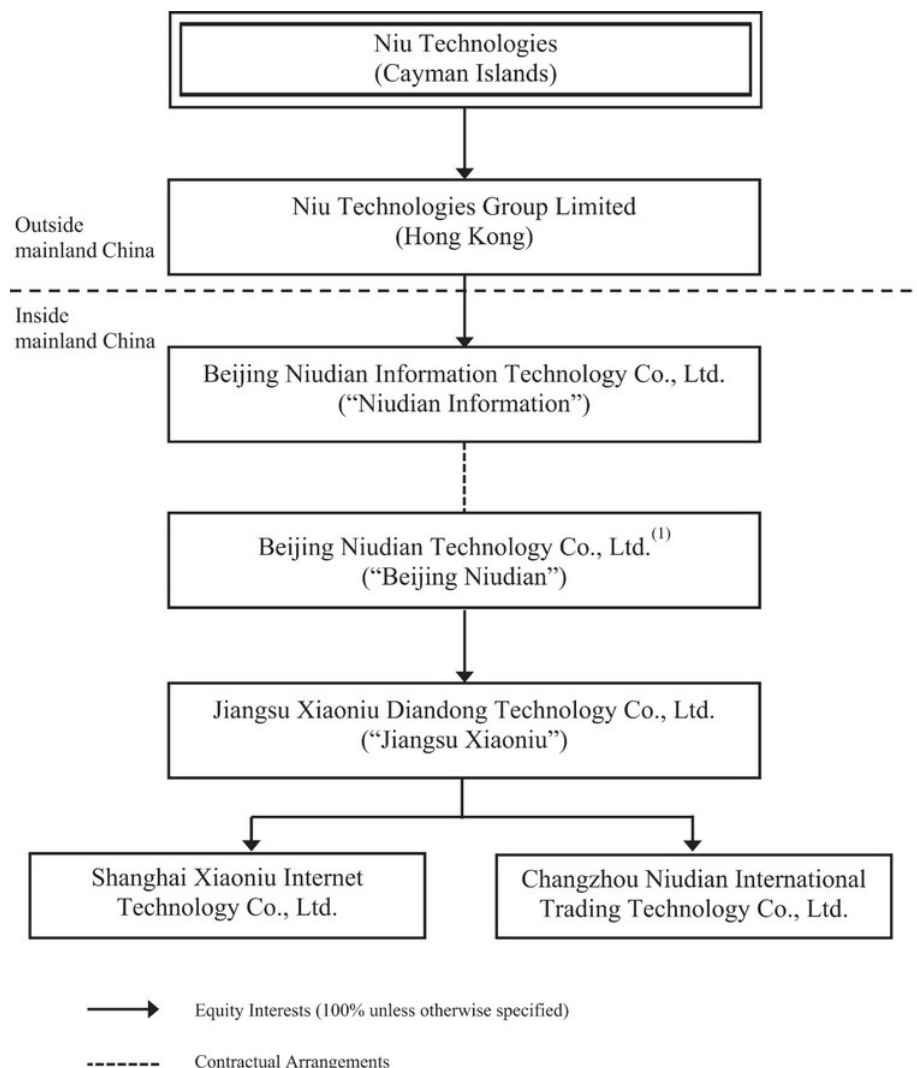
The EIT Law and the implementation rules provide that an income tax rate of 10% will normally be applicable to dividends payable to investors that are “non-resident enterprises,” and gains derived by such investors, which (i) do not have an establishment or place of business in mainland China or (ii) have an establishment or place of business in mainland China, but the relevant income is not effectively connected with the establishment or place of business to the extent that such dividends and gains are derived from sources within mainland China. Such income tax on the dividends may be reduced pursuant to a tax treaty between mainland China and other jurisdictions. Pursuant to the Double Taxation Avoidance and the Tax Evasion Arrangement, and other applicable laws of mainland China, if a Hong Kong resident enterprise is determined by the competent PRC tax authority to have satisfied the relevant conditions and requirements under the Double Taxation Avoidance Arrangement and other applicable laws, the 10% withholding tax on the dividends the Hong Kong resident enterprise receives from a mainland China resident enterprise may be reduced to 5% upon receiving approval from in-charge tax authority. However, based on the Circular on Certain Issues with Respect to the Enforcement of Dividend Provisions in Tax Treaties issued on February 20, 2009 by SAT, if the relevant PRC tax authorities determine, in their discretion, that a company benefits from such reduced income tax rate due to a structure or arrangement that is primarily tax-driven, such PRC tax authorities may adjust the preferential tax treatment. According to Announcement of the State Administration of Taxation on Issues Concerning the Recognition of Beneficial Owners in Entrusted Investments, effective on June 1, 2014, non-residents may be recognized as “beneficial owners” and enjoy the treaty benefits for the income derived from mainland China from certain investments. According to the Announcement of the State Administration of Taxation on Issues concerning the “Beneficial Owner” in Tax Treaties, which became effective in April 2018, a resident enterprise is determined as a “beneficial owner” that can apply for a low tax rate under tax treaties based on an overall assessment of several factors. Furthermore, the Administrative Measures for Non-Resident Taxpayers to Enjoy Treatments under Tax Treaties, which became effective on January 1, 2020, requires non-resident enterprises to determine whether they are qualified to enjoy the preferential tax treatment under the tax treaties and file relevant report and materials with the tax authorities. We may be classified as mainland China resident tax payers. See “Item 3. Key Information— D. Risk Factors—Risks Related to Doing Business in China—If we are classified as a mainland China resident enterprise for mainland China income tax purposes, such classification could result in unfavorable tax consequences to us and our non-mainland China shareholders or ADS holders.”

Regulations on Value-Added Tax

Pursuant to the Provisional Regulation of the PRC on Value-Added Tax issued by the State Council, effective on January 1, 1994, which was amended on November 10, 2008, February 6, 2016 and on November 19, 2017, or the Provisional Regulation, and its Implementing Rules, all entities and individuals that are engaged in the sale of goods, the provision of processing, repairs and installation services and the importation of goods in mainland China are required to pay a value-added tax, or VAT. According to the Provisional Regulation, gross proceeds from sales and importation of goods and provision of services are generally subject to a VAT rate of 17% with exceptions for certain categories of goods that are taxed at a VAT rate of 11%. On April 4, 2018, the Circular of the Ministry of Finance and the SAT on Adjusting Value-Added Tax Rates was promulgated, which provides that effective from the date of May 1, 2018, gross proceeds from sales and importation of goods and provision of services are generally subject to a VAT rate of 16%, with exceptions for certain categories of goods that are taxed at a VAT rate of 10%. On March 20, 2019, the Announcement on Relevant Policies for Deepening Value-Added Tax Reform was jointly promulgated by the Ministry of Finance, the SAT and the General Administration of Customs, which further provides that effective from the date of April 1, 2019, the VAT rate of gross proceeds from sales and importation of goods and provision of services shall be adjusted from 16% to 13%, with the VAT rate of certain categories of goods shall be adjusted from 10% to 9%. In addition, under the Provisional Regulation, the input VAT for the purchase of fixed assets is deductible from the output VAT, except for goods or services that are used in non-VAT taxable items, VAT exempted items and welfare activities, or for personal consumption.

C. Organizational Structure

The following diagram illustrates our corporate structure, including our principal subsidiaries, the VIE and its principal subsidiaries, as of the date of this annual report:



(1) Token Yilin Hu, Yi' nan Li, Yuqin Zhang and Changlong Sheng each holds 89.74%, 5.00%, 2.63% and 2.63% of the equity interest in Beijing Niudian, respectively. All of the shareholders of Beijing Niudian are beneficial owners of the shares of our company. Mr. Token Yilin Hu is also a director of our company.

Contractual Arrangements with the VIE

The following is a summary of the currently effective contractual arrangements relating to Beijing Niudian.

Agreements that allow us to conduct the business operations of the VIE

Powers of Attorney. Each of the shareholders of Beijing Niudian has executed a power of attorney to irrevocably authorize our company to act as his or her attorney-in-fact to exercise all of his or her rights as a shareholder of Beijing Niudian, including, but not limited to, the right to convene and attend shareholders' meetings, vote on any resolution that requires a shareholder vote, such as the appointment and removal of directors, supervisors and officers, as well as the sale, transfer and disposal of all or part of the equity interests owned by such shareholder. The powers of attorney will remain effective, as long as the shareholders of Beijing Niudian remain as registered shareholders of Beijing Niudian, unless otherwise instructed by our company.

Second Amended and Restated Equity Pledge Agreement. Pursuant to the second amended and restated equity pledge agreement, dated February 27, 2020, among our WFOE, Beijing Niudian and each of the shareholders of Beijing Niudian, the shareholders of Beijing Niudian have pledged the 100% equity interests in Beijing Niudian to our WFOE to guarantee performance by the shareholders of their obligations under the second amended and restated exclusive option agreement and powers of attorney, as well as the performance by Beijing Niudian of its obligations under the amended and restated exclusive business cooperation agreement and the second amended and restated exclusive option agreement. In the event of a breach by Beijing Niudian or any of its shareholders of contractual obligations under the second amended and restated equity pledge agreement, our WFOE, as pledgee, will have the right to dispose of the pledged equity interests in Beijing Niudian and will have priority in receiving the proceeds from such disposal. The shareholders of Beijing Niudian also undertake that, without the prior written consent of our WFOE, they will not dispose of, create or allow any encumbrance on the pledged equity interests. Beijing Niudian undertakes that, without the prior written consent of our WFOE, it will not assist or allow any encumbrance to be created on the pledged equity interests. In February 2021, we completed the registration of the equity pledge under the second amended and restated equity pledge agreement with the relevant local office of the State Administration of Market Regulation in accordance with the PRC Property Rights Law.

Spousal Consent Letters. The spouses of the shareholders of Beijing Niudian have each signed a spousal consent letter agreeing that the equity interests in Beijing Niudian held by and registered under the name of the respective shareholders will be disposed of pursuant to the VIE Agreements. These spouses agreed not to assert any rights over the equity interest in Beijing Niudian held by their spouses.

Agreements that allow us to receive economic benefits from the VIE

Amended and Restated Exclusive Business Cooperation Agreements. Pursuant to the amended and restated exclusive business cooperation agreement, dated July 20, 2018, between our WFOE and Beijing Niudian, our WFOE has the exclusive right to provide Beijing Niudian with operational supports as well as consulting and technical services required by Beijing Niudian's business. Without our WFOE's prior written consent, Beijing Niudian may not accept any services subject to this agreement from any third party. Beijing Niudian agrees to pay our WFOE a monthly service fee at an amount that is equal to 100% of its net profits or an amount adjusted by our WFOE in its sole discretion for the relevant month, which should be paid within seven business days upon receipt of invoice from our WFOE. Our WFOE has the exclusive ownership of all the intellectual property rights created as a result of the performance of the amended and restated exclusive business cooperation agreement to the extent permitted by applicable laws of mainland China. To guarantee Beijing Niudian's performance of its obligations thereunder, the shareholders of Beijing Niudian shall pledge all of their equity interests in Beijing Niudian to our WFOE pursuant to the second amended and restated equity pledge agreement. The amended and restated exclusive business cooperation agreement will remain effective for a term equal to Beijing Niudian's operating period, unless otherwise terminated by our WFOE in writing or in accordance with applicable laws of mainland China.

In June 2018, our WFOE and Jiangsu Xiaoni entered into the amended and restated exclusive business cooperation agreement, which contains terms substantially similar to the amended and restated exclusive business cooperation agreement between our WFOE and Beijing Niudian described above.

Agreements that provide us with the option to purchase the equity interests in and assets of the VIE

Second Amended and Restated Exclusive Option Agreements. Pursuant to the second amended and restated exclusive option agreement, dated February 27, 2020, among our company, our WFOE, Beijing Niudian and each of the shareholders of Beijing Niudian has irrevocably granted our company an exclusive option to purchase all or part of his or her equity interests in Beijing Niudian. Our company or our designated person may exercise such options at the price of RMB100 or the lowest price permitted under applicable laws of mainland China. The shareholders of Beijing Niudian undertake that, without our company’s prior written consent, they will not, among other things, (i) create any pledge or encumbrance on their equity interests in Beijing Niudian, (ii) transfer or otherwise dispose of their equity interests in Beijing Niudian, (iii) change Beijing Niudian’s registered capital, (iv) amend Beijing Niudian’s articles of association, (v) dispose of Beijing Niudian’s material assets or enter into any material contract with a value of over RMB100,000 (except in the ordinary course of business), or (vi) merge Beijing Niudian with any other entity. In addition, Beijing Niudian undertakes that, without our company’s prior written consent, it will not, among other things, create any pledge or encumbrance on any of its assets, or transfer or otherwise dispose of its material assets (except in the ordinary course of business). The second amended and restated exclusive option agreement will remain effective until all equity interests in and all the assets of Beijing Niudian have been transferred to our company or our designated person.

In the opinion of DaHui Lawyers, our PRC legal counsel:

- the ownership structures of the VIE in mainland China and our WFOE, are not in violation of applicable laws and regulations of mainland China currently in effect; and
- the contractual arrangements between our company, our WFOE, the VIE and its shareholders governed by the laws of mainland China are valid, binding and enforceable, and will not result in any violation of applicable laws and regulations of mainland China currently in effect.

However, our PRC legal counsel has also advised us that there are substantial uncertainties regarding the interpretation and application of current and future laws, regulations and rules of mainland China. Accordingly, the PRC regulatory authorities may take a view that is contrary to the opinion of our PRC legal counsel. It is uncertain whether any new laws or regulations of mainland China relating to variable interest entity structures will be adopted or if adopted, what they would provide. If we or any of the VIE are found to be in violation of any existing or future laws or regulations of mainland China, or fail to obtain or maintain any of the required permits or approvals, the relevant PRC regulatory authorities would have broad discretion to take action in dealing with such violations or failures. We have been further advised by our PRC legal counsel that if the PRC government finds that the agreements in connection with the VIE structure do not comply with the laws of mainland China, we could be subject to severe penalties, including being prohibited from continuing operations. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Corporate Structure—If the PRC government finds that the agreements that establish the structure for operating some of our operations in mainland China do not comply with the regulations of mainland China relating to the relevant industries, or if these regulations or the interpretation of existing regulations change or are interpreted differently in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations” and “Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—Uncertainties in the interpretation and enforcement of the laws and regulations of mainland China could limit the legal protections available to you and us.”

D. Property, Plants and Equipment

Our headquarters is located in Beijing, China, where we lease and occupy our office space with an aggregate floor area of approximately 1,400 square meters. Our Niu Innovation Lab is located in Shanghai, China, where we lease and occupy our office space with an aggregate floor area of approximately 1,700 square meters. Our manufacturing facility and after sales services facilities are in Changzhou, China, where we have both owned and leased facilities with a combined building area of approximately 123,500 square meters. In May 2020, we made prepayment of RMB39.4 million in addition to prepayment of RMB2 million in 2019 to acquire land use rights of a piece of land with total area of 61,148 square meters. In January 2021, we obtained the land use rights certificate. We built a new manufacturing facility on this piece of land to expand the production capacity in order to meet the expected increasing demand of our e-scooters. Construction of the new facility was completed in August 2021 and we have commenced production from September 2021.

The following table sets forth the location, approximate size and primary use of facilities that we own or we lease, as of December 31, 2022:

Our Own Facility			
Location	Approximate Size (Building) in Square Meters	Primary Use	
Changzhou	111,467	Manufacturing and Maintenance Facility	

Location	Approximate Size (Building) in Square Meters	Primary Use	Lease Expiration Date
Beijing	1,394	Office	December 31, 2024
Shanghai	1,720	Office	April 30, 2026
Changzhou	12,000	Manufacturing Facility	December 31, 2024

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. Key Information— D. 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

We currently design, manufacture and sell high-performance motorcycles, scooters, kick-scooters and e-bikes. We have a diversified product portfolio that caters to the various demands of our users and addresses different urban travel scenarios. Currently, we offer eight product series across a number of different vehicle types. Our product portfolio comprises our (i) six electric scooter and motorcycle series, RQi, NQi, MQi, SQi, UQi, and Gova, (ii) one kick-scooter series, KQi, (iii) one e-bike series, BQi. We have adopted an omnichannel retail model, integrating the offline and online channels, to sell our products and provide services. We sold 831,593 units, including our e-motorcycles, e-scooters, kick-scooters and e-bikes, in 2022. The number of units sold in China market and international markets were 710,540 and 121,053, respectively. We sell and service our products through a unique “city partner” system in China, which consisted of 338 city partners with 3,102 franchised stores in 239 cities in China, and 53 distributors in 52 countries overseas as of December 31, 2022, as well as on our own online store and third-party e-commerce platforms.

Our brand “NIU,” representing style, freedom and technology, has inspired many followers and also enabled us to build a loyal user base. We also offer the NIU app as an integral part of the user experience. Capitalizing on our premium brand, we have also been able to sell lifestyle accessories, which are well received by customers.

We currently generate a majority of our revenues from sales of e-scooters to our distributors offline or to individual consumers online. We also generate revenues by selling accessories and spare parts and providing mobile app and other services.

Our revenues were RMB3,168.6 million (US\$459.4 million) in 2022, representing a decrease of 14.5% from RMB3,704.5 million in 2021.

Key Factors Affecting Our Results of Operations

Our results of operations and financial condition are affected by the general factors driving China’s electric two-wheeled vehicles industry, including, among others, China’s overall economic growth, the increase in per capita disposable income, the expansion of urbanization, the growth in consumer spending and consumption upgrades, the competitive environment, governmental policies and initiatives towards electric two-wheeled vehicles, as well as the general factors affecting the electric two-wheeled vehicles industry in overseas markets. Unfavorable changes in any of these general industry conditions could negatively affect demand for our products and materially and adversely affect our results of operations.

Our results of operations and financial condition have been affected by the spread of COVID-19 since the first quarter of 2020. The COVID-19 pandemic has impact on electric two-wheeled vehicles in general and the production and delivery of vehicles of our company. Our operations experienced disruptions in 2020, 2021 and 2022, such as temporary closure of our offline stores and/or those of our distributors and suspension of our operations, resulting in a reduction of sales volume, which affected our business, financial condition, results of operations and cash flow.

There has been an easing of the travel restrictions and quarantine requirements related to COVID-19 in China since December 2022. However, there remains uncertainty as to the future impact of the virus. The extent to which the pandemic impacts our results of operations going forward will depend on future developments which are highly uncertain and unpredictable, including the frequency, duration and extent of outbreaks of COVID-19, the appearance of new variants with different characteristics, the success or failure of efforts to contain or treat cases, and future actions we or the authorities may take in response to these developments. In addition, our financial position, results of operations and cash flows could be adversely affected to the extent that the pandemic harms the Chinese economy in general. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business—Our financial and operating performance may be adversely affected by epidemics or other public health crises.”

While our business is influenced by these general factors, our results of operations are more directly affected by company specific factors, including the following major factors:

- our ability to increase e-scooter sales volume;
- our ability to develop and sell more accessories and spare parts and services;
- our ability to manage our supply chain and manufacturing;
- our ability to enhance our operational efficiency; and
- our ability to expand into international markets.

Our ability to increase e-scooter sales volume

Our results of operations depend significantly on our ability to increase sales volume of our e-scooter. Our revenues increased by 51.6% from RMB2,444.3 million in 2020 to RMB3,704.5 million in 2021, but decreased by 14.5% to RMB3,168.6 million (US\$459.4 million) in 2022. The number of e-scooters sold increased by 72.5% from 601,652 in 2020 to 1,037,914 in 2021, but decreased by 19.9% to 831,593 in 2022. We experienced external challenges from COVID-19-related lockdowns and higher lithium-ion battery costs in 2022, which affected the retail traffic and our results of operations, COVID-19 resurgence across the country also disrupted manufacturing, logistics and offline store operations. In light of the volatile environment, we have been committed to the strategy of focusing on premium and mid-end segments since mid-2022. Although we still face uncertainties and pressures, we are confident that our domestic sales will return to the growth track in 2023 with the launches of our new products. The following table shows the number of e-scooters we sold in the years presented:

	For the Year ended December 31,					
	2020		2021		2022	
	Units	%	Units	%	Units	%
NQi Series ¹	103,345	17.2	100,111	9.7	55,161	6.7
MQi Series	136,032	22.6	106,914	10.3	41,906	5.0
UQi Series	193,718	32.2	180,491	17.4	208,360	25.1
Gova Series	168,537	28.0	634,853	61.1	423,582	50.9
KQi Series	—	—	15,413	1.5	102,466	12.3
Others ²	20	0.0	132	0.0	118	0.0
Total	601,652	100.0	1,037,914	100.0	831,593	100.0

Note:

1. Number of e-scooters sold including SQi series.
2. Others include BQi series, Niu Aero Sports Bicycles and power-assist e-bike EUB-01 launched in previous years. As of the date of this annual report, we have not officially commenced the delivery of ROi series.

Our ability to increase e-scooters sales volume depends on our ability to innovate in design and technology and offer e-scooter products that meet our users' demand. We have a diversified product portfolio that caters to the various demands of our users and addresses different urban travel scenarios. Currently, we offer eight product series across a number of different vehicle types. Our product portfolio comprises our (i) six electric scooter and motorcycle series, RQi, NQi, MQi, SQi, UQi, and Gova, (ii) one kick-scooter series, KQi, (iii) one e-bike series, BQi. We have launched two or more series or models each year since 2018 and plan to continue the practice in the near and medium term, aiming to cover the full spectrum of the urban mobility solutions. Moreover, our ability to increase the sales volume also depends on our ability to continually enhance our brand to attract users and purchases, as well as our ability to successfully execute our omnichannel retail model and expand our sales network both domestically and globally.

Our ability to develop and sell more accessories and spare parts and services

Our results of operations are affected by our ability to develop and sell more accessories and spare parts. Leveraging our strong lifestyle brand, we have been able to generate revenues from selling accessories and spare parts. Revenues generated from selling accessories and spare parts represented 10.6%, 10.7% and 7.6% of our net revenues in 2020, 2021 and 2022, respectively. We will continue to enhance our brand and capitalize on our premium brand to develop and sell more accessories to capture more business opportunities.

Our results of operations are also affected by our ability to sell more services. We generate revenue from the NIU app by providing subscription-based mobile app services. Users will need to subscribe for the mobile app service by paying a fee after an initial period of one or two years. Revenues generated from providing services 1.7%, 1.5% and 2.3% of our revenues in 2020, 2021 and 2022, respectively. We will continue to further enhance the connectivity and other smart functionalities of our e-scooters and the NIU app and improve the user experience. This not only provides us with additional revenue streams but also improves our gross margin.

Our ability to manage our supply chain and manufacturing

Material and manufacturing costs of our e-scooters have historically accounted for a majority of our cost of revenues. Our future profitability is significantly dependent on our ability to control those costs as a percentage of our revenues, which in turn depends on our ability to effectively manage our supply chain and manufacturing process. Raw materials and components used in the production of our e-scooters are sourced from domestic suppliers as well as international suppliers, and their prices are dependent on various factors in addition to supply and demand. We generally engage multiple suppliers for the key components to minimize the dependency on any single supplier. We will continue to collaborate with our suppliers to manage the cost, capacity and quality of the raw materials and components. As our business grows in scale, we have obtained more bargaining power and hence more favorable terms from suppliers, including pricing terms. Our gross margin remained stable at 22.9%, 21.9% and 21.1% in 2020, 2021 and 2022, respectively, despite the impact from COVID-19, mainly due to the change in product mix as a result of the launch of various new products. Our ability to control cost of products sold also depends on our successful adoption of automatic and intelligent manufacturing equipment and procedures, and effective utilization of our platform-based engineering system, through which designs of new models may be easily adaptable to our existing production lines.

Our ability to enhance our operational efficiency

Our ability to achieve profitability is dependent on our ability to further improve our operational efficiency and reduce the total operating expenses as a percentage of our revenues. Excluding share-based compensation expense, selling and marketing expenses have historically represented the largest portion of our total operating expenses. The advertising and promotion expenses, consisting primarily of online and offline advertisements, are event-driven, and tend to be higher when we launch new products. Our selling and marketing expenses as a percentage of our revenues was 8.2%, 9.0% and 13.9% in 2020, 2021 and 2022, respectively. The increase of our selling and marketing expenses as a percentage of our revenues in 2022 was mainly due to the growth of international sales, especially kick-scooters, and the increase in depreciation and amortization expense as a result of opening new franchised stores.

Our ability to lower our selling and marketing expenses as a percentage of revenues depends on our ability to manage our branding and promotion efforts, and improve selling and marketing efficiency. We have adopted an omnichannel retail model, integrating the offline and online channels, to sell our products and provide services. In addition to online channels, we sell and service our products through distribution channels, which consisted of 338 city partners with 3,102 franchised stores in 239 cities in China and 53 distributors in 52 countries overseas as of December 31, 2022. These distributors promote our brand and market our products and services at their own cost. We will continue to expand and leverage our sales network to enhance our brand and improve sales efficiency. In addition, as our business grows, we expect to achieve greater operating leverage, increase the productivity of our personnel, and obtain more favorable terms from our suppliers.

Our ability to expand to international markets

We have experienced significant growth in our sales in international markets. As of December 31, 2022, we sold our smart e-scooters through 53 distributors in 52 countries overseas. In 2020, 2021 and 2022, 16.6%, 14.7% and 18.5% of our revenues were derived from sales in overseas markets. We believe that our well-recognized NIU brand, together with our innovative design and continual expansion of product offerings, position us favorably to capture the enormous growth potential in the global market, and we will enter into selected overseas markets that offer identified growth opportunities and favorable government policies. In Europe, the U.S. and Southeast Asia, we will continue to expand our distribution network, launch new products suitable for local markets, partner with global leading companies to co-brand premium smart e-scooter models, and are exploring additional business opportunities to drive the growth beyond retail. We will pursue differentiated international strategies for different overseas markets, such as South America and India. We believe that our expansion into selected international markets will not only drive our revenue growth but also enhance our brand awareness.

Key Components of Results of Operations

Revenues

We generate revenues from sales of e-scooters, sales of accessories and spare parts, and provision of mobile app and other services. The following table sets forth the break-down of our revenues, in amounts and as percentages of revenues for the years presented:

	For the Year Ended December 31,						
	2020		2021		2022		
	RMB	%	RMB	%	RMB	US\$	
	(in thousands, except percentage data)						
Revenues:							
E-scooter sales	2,143,292	87.7	3,252,989	87.8	2,853,895	413,776	90.1
Accessories and spare parts sales	258,929	10.6	397,088	10.7	242,297	35,130	7.6
Service revenues	42,108	1.7	54,460	1.5	72,405	10,498	2.3
Total	2,444,329	100.0	3,704,537	100.0	3,168,597	459,404	100.0

We recognize revenues upon the satisfaction of our performance obligation (upon transfer of control of promised goods or services to customers) in an amount that reflects the consideration to which we expect to be entitled to in exchange for those goods or services, excluding amounts collected on behalf of third parties (for example, value added taxes), sales volume rebates provided to qualified distributors based on the volume sold to such distributors in a certain period and sales return estimated based on historical experiences.

E-scooter sales. We generate a majority of our revenues from sales of e-scooters to our distributors offline or directly to individual consumers online.

We have adopted an omnichannel retail model, integrating the offline and online channels, to sell our e-scooters. In China, we have a unique “city partner” system, and sell e-scooters to the city partners. City partners are our distributors, who either open and operate franchised stores or sign up franchised stores, and the franchised stores sell our products and provide services to individual consumers. In overseas markets, we sell to distributors. We generate revenues by selling e-scooters to our city partners in China and overseas distributors at a discount to the retail price. In addition, we incentivize them by providing sales volume rebate. We also sell directly to individual consumers through third-party e-commerce platforms, as well as on our own online store. We treat distributors offline and individual consumers online as our customers.

Accessories and spare parts sales. We sell proprietary accessories and spare parts to be installed on or used with our e-scooters, such as rear storage boxes and front baskets. We also offer NIU-branded accessories and general merchandise, such as decorative car plates, key chains, bicycles and apparel.

Service revenues. Our service revenues primarily relate to our services associated with NIU app, NIU Cover and R&D services to strategic partner.

- *NIU app.* We generate revenues from the NIU app by providing subscription-based mobile app services. The subscription fee for the initial one to two years is included in the retail price of our smart e-scooters, and after the initial period, users will need to pay a fee to renew the subscription.
- *NIU Cover.* We facilitate the sale of insurance policies for our e-scooters to individual customers, which are provided by third-party insurance companies.
- *R&D services.* We collaborate with a strategic partner for a joint R&D project and we earn revenues from the R&D services we provided.

In 2020, 2021 and 2022, we generated 83.4%, 85.3% and 81.5% of our revenues from PRC market, respectively, and the rest from overseas markets.

We expect our revenues will continue to increase in the foreseeable future as we launch more products, expand sales network and retail channels, and further expand our business. While sales of e-scooters will continue to contribute a majority of our revenues, we expect that the revenues generated from selling accessories and spare parts and providing services will increase in absolute amounts in the foreseeable future.

Cost of revenues

Cost of products sold represents a majority of our cost of revenues, and the other components of cost of revenues include write-downs of inventory, logistics costs and warranty costs.

Cost of products sold mainly consists of the cost for purchasing raw materials and components, the labor cost and other costs for manufacturing e-scooters. We purchase raw materials and main components, such as batteries, motors, tires, battery chargers and controllers, from suppliers and assemble e-scooters in our own production facility.

We expect that our cost of revenues will increase in the foreseeable future as we increase our e-scooter and other products sales volume and further expand our business.

Gross margin

Our gross margin is mainly affected by the retail price, product mix change, sales volume rebate and the cost of revenue per e-scooter. The following table shows our gross profit and gross margin for each of the years presented:

	For the Year Ended December 31,			
	2020	2021	2022	
	(in thousands, except for percentage data)			
	RMB	RMB	RMB	US\$
Gross profit	559,149	812,779	669,681	97,095
Gross margin	22.9 %	21.9 %	21.1 %	21.1 %

Operating expenses

Our operating expenses consist of selling and marketing expenses, research and development expenses, and general and administrative expenses. The following table sets forth the break-down of our total operating expenses, in amounts and as percentages of total operating expenses for each of the years presented:

	For the Year Ended December 31,						
	2020		2021		2022		
	RMB	%	RMB	%	RMB	US\$	
	(in thousands except for percentage data)						
Operating expenses:							
Selling and marketing expenses	200,761	48.9	332,008	54.5	440,409	63,853	56.8
Research and development expenses	105,335	25.6	135,218	22.2	176,478	25,587	22.8
General and administrative expenses	104,860	25.5	141,799	23.3	158,461	22,975	20.4
Total	410,956	100.0	609,025	100.0	775,348	112,415	100.0

Selling and marketing expenses. Our selling and marketing expenses primarily consist of advertising and promotion expenses, payroll and related expenses for personnel engaged in selling and marketing activities.

The advertising and promotion expenses, consisting primarily of online and offline advertisements. Our advertising and promotions spending is event-driven, we tend to incur more advertising and promotion expenses when we launch new products.

We expect that our selling and marketing expenses will continue to increase in absolute amounts in the foreseeable future, as we remain committed to becoming a global urban mobility provider. We will further expand our new e-scooter product portfolio and sales network and retail channels, and engage in more selling and marketing activities to enhance our brand awareness and attract more purchases from new and existing customers in different geographic markets.

Research and development expenses. Our research and development expenses mainly consist of payroll and related costs for employees involved in researching and developing new products and technologies, expenses associated with the use by these functions of our facilities and equipment, such as depreciation and rental expenses, and expenses for outsourced engineering. We expect that our research and development expenses (excluding share-based compensation expenses) will continue to increase in absolute amounts in the foreseeable future, as we continue our innovation in design and technology and further grow our product portfolio.

General and administrative expenses. Our general and administrative expenses mainly consist of payroll and related costs for employees engaging in general corporate functions, professional fees, current expected credit losses, foreign currency exchange gains (losses) and other general corporate expenses, as well as expenses associated with the use by these functions of facilities and equipment, such as depreciation and rental expenses. As we continue to scale up our business, we expect that our general and administrative expenses (excluding share-based compensation expenses) will increase in absolute amounts in the foreseeable future, in line with our global business growth.

Taxation

Cayman Islands

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 or estate duty. In addition, the Cayman Islands does not impose withholding tax on dividend payments.

Hong Kong

Our subsidiary incorporated in Hong Kong, Niu Technologies Group Limited, is subject to 16.5% Hong Kong profit tax on its taxable income generated from operations in Hong Kong for the years of assessment 2017/2018 and 2019/2020. Commencing from the year of assessment 2018/2019, the first HK\$2 million of profits earned by Niu Technologies Group Limited is taxed at half the current tax rate (i.e. 8.25)% while the remaining profits continues to be taxed at the existing 16.5% tax rate. Niu Technologies Group Limited is exempted from the Hong Kong income tax on its foreign-derived income. In addition, payments of dividends from Niu Technologies Group Limited to our company are not subject to any withholding tax in Hong Kong. No provision for Hong Kong profits tax was made as we had no estimated assessable profit that was subject to Hong Kong profits tax during 2020, 2021 or 2022.

Mainland China

Our mainland China subsidiaries, the VIE, and VIE's subsidiaries are subject to the PRC Enterprise Income Tax Law, or the EIT Law, and are generally subject to a statutory income tax rate of 25%. Under the PRC Corporate Income Tax Law, preferential tax treatments will be granted to entities which conduct businesses in certain encouraged sectors and to entities otherwise classified as "High and New Technology Enterprises" ("HNTE"). Jiangsu Xiaoniu qualified as a HNTE and enjoyed a preferential income tax rate of 15% for the fiscal year ended December 31, 2021 and 2022. Jiangsu Xiaoniu's HNTE qualification has been renewed in December 2022 and set to expire by December 2023.

The EIT law also imposes a withholding income tax of 10% on dividends distributed by a foreign investment enterprise, or FIE, to its immediate holding company outside of mainland China, if such immediate holding company is considered as a non-resident enterprise without any establishment or place within mainland China or if the received dividends have no connection with the establishment or place of such immediate holding company within mainland China, unless such immediate holding company's jurisdiction of incorporation has a tax treaty with mainland China that provides for a different withholding arrangement. The Cayman Islands, where Niu Technologies is incorporated, does not have such tax treaty with mainland China. According to the Double Taxation Avoidance and the Tax Evasion Arrangement, dividends paid by an FIE in mainland China to its immediate holding company in Hong Kong will be subject to withholding tax at a rate of no more than 5%, if the immediate holding company owns at least 25% of the equity interest of the FIE and satisfies all other requirements under the tax arrangement and receives approval from the relevant tax authority. We did not record any dividend withholding tax, as our mainland China entities have no retained earnings in the periods presented. See "Item 3. Key Information— D. Risk Factors—Risks Related to Doing Business in China—We may not be able to obtain certain benefits under relevant tax treaty on dividends paid by our mainland China subsidiaries to us through our Hong Kong subsidiary."

The EIT Law also provides that an enterprise established under the laws of a foreign country or region but whose “de facto management body” is located in mainland China be treated as a resident enterprise for mainland China tax purposes and consequently be subject to the mainland China income tax at the rate of 25% for its global income. The implementing rules of the EIT Law define the location of the “de facto management body” as “the place where the exercising, in substance, of the overall management and control of the production and business operation, personnel, accounting, property, etc., of a non-mainland China company is located.” Based on a review of surrounding facts and circumstances, we do not believe that it is likely that our operations outside of mainland China should be considered a resident enterprise for mainland China tax purposes. If our holding company in the Cayman Islands or any of our subsidiaries outside of mainland China were deemed to be a “resident enterprise” under the PRC EIT Law, it would be subject to enterprise income tax on its worldwide income at a rate of 25%. See “Item 3. Key Information— D. Risk Factors—Risks Related to Doing Business in China—If we are classified as a mainland China resident enterprise for mainland China income tax purposes, such classification could result in unfavorable tax consequences to us and our non-mainland China shareholders or ADS holders.”

Results of Operations

The following table sets forth a summary of our consolidated results of operations for the years presented, both in absolute amount and as a percentage of our net revenues for the years presented. Our business has grown rapidly in recent years. Year-to-year comparisons of historical results of operations should not be relied upon as indicative of future performance.

	For the Year Ended December 31,						
	2020		2021		2022		
	RMB	%	RMB	%	RMB	US\$	
	(in thousands except for percentage data)						
Revenues	2,444,329	100.0	3,704,537	100.0	3,168,597	459,404	100.0
Cost of revenues ⁽¹⁾	(1,885,180)	(77.1)	(2,891,758)	(78.1)	(2,498,916)	(362,309)	(78.9)
Gross profit	559,149	22.9	812,779	21.9	669,681	97,095	21.1
Operating expenses⁽¹⁾							
Selling and marketing expenses	(200,761)	(8.2)	(332,008)	(9.0)	(440,409)	(63,853)	(13.9)
Research and development expenses	(105,335)	(4.3)	(135,218)	(3.7)	(176,478)	(25,587)	(5.6)
General and administrative expenses	(104,860)	(4.3)	(141,799)	(3.8)	(158,461)	(22,975)	(5.0)
Total operating expenses	(410,956)	(16.8)	(609,025)	(16.4)	(775,348)	(112,415)	(24.5)
Government grants	22,441	0.9	48,727	1.3	16,385	2,376	0.5
Operating income (loss)	170,634	7.0	252,481	6.8	(89,282)	(12,944)	(2.8)
Interest expenses	(7,381)	(0.3)	(6,168)	(0.2)	(5,716)	(829)	(0.2)
Interest income	8,787	0.4	5,376	0.1	12,860	1,865	0.4
Investment income	17,698	0.7	21,168	0.6	10,918	1,583	0.3
Income (loss) before income taxes	189,738	7.8	272,857	7.4	(71,220)	(10,325)	(2.2)
Income tax benefit (expense)	(21,086)	(0.9)	(47,037)	(1.3)	21,757	3,154	0.7
Net income (loss)	168,652	6.9	225,820	6.1	(49,463)	(7,171)	(1.6)

(1) Share-based compensation expenses are allocated in cost of revenues and operating expenses items as follows:

	For the Year Ended December 31,			
	2020	2021	2022	
	RMB	RMB	RMB	US\$
	(in thousands)			
Cost of revenues	644	847	1,225	178
Selling and marketing expenses	9,945	13,293	15,433	2,237
Research and development expenses	10,918	17,061	22,362	3,242
General and administrative expenses	18,102	16,017	19,199	2,784
Total	39,609	47,218	58,219	8,441

Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

Revenues

Our revenues decreased by 14.5% from RMB3,704.5 million in 2021 to RMB3,168.6 million (US\$459.4 million) in 2022, which was primarily due to a decrease in e-scooter sales volume.

The revenues from e-scooter sales decreased by 12.3% from RMB3,253.0 million in 2021 to RMB2,853.9 million (US\$413.8 million) in 2022, which was mainly due to a decrease in the sales volume of e-scooters by 19.9% from 1,037,914 in 2021 to 831,593 in 2022. The decrease in the sales volume of e-scooters was driven by the increase in raw materials and the impact of the COVID-19, which resulted in a decrease in sales in the domestic market.

The revenues per e-scooter increased from RMB3,569.2 in 2021 to RMB3,810.3 (US\$552.4) in 2022, mainly due to better premium product mix and price increase. The respective impact from the change in sales volume of e-scooters and revenues per e-scooter on our revenues in 2022, as compared to 2021, was RMB736.4 million (calculated by assuming the revenues per e-scooter in 2022 was the same as that in 2021) and RMB250.2 million (calculated by assuming the sales volume of e-scooters in 2022 was the same as that in 2021).

The revenues from accessory and spare parts sales decreased from RMB397.1 million in 2021 to RMB242.3 million (US\$35.1 million) in 2022, mainly due to the battery pack sales reduction from overseas shared mobility operators, and the decrease in the sales volume of e-scooters in China, with which purchases of accessories and spare parts usually correlate. The service revenues increased from RMB54.5 million in 2021 to RMB72.4 million (US\$10.5 million) in 2022, mainly attributable to the continued growth of our user base.

Cost of revenues

Our cost of revenues decreased by 13.6% from RMB2,891.8 million in 2021 to RMB2,498.9 million (US\$362.3 million) in 2022. The decrease was primarily attributable to a decrease in cost of products from RMB2,826.6 million in 2021 to RMB2,376.8 million (US\$344.6 million) in 2022, which was primarily due to a decrease in e-scooter sales volume.

The cost per e-scooter, defined as cost of revenues divided by the number of e-scooters sold in a specified period, increased from RMB2,786.1 in 2021 to RMB3005.0 (US\$435.7) in 2022, which was primarily due to higher raw material costs and product mix change.

Gross profit

We generated a gross profit of RMB669.7 million (US\$97.1 million) in 2022, as compared to a gross profit of RMB812.8 million in 2021. Our gross margin slightly decreased from 21.9% in 2021 to 21.1% in 2022, which was mainly due to higher raw material cost and change in product mix as a result of the launch of various new products.

Selling and marketing expenses

Our selling and marketing expenses increased by 32.7% from RMB332.0 million in 2021 to RMB440.4 million (US\$63.9 million) in 2022. The increase was primarily due to an increase of RMB31.4 million in advertising and promotion expenses, an increase of RMB41.8 million in depreciation and amortization, an increase of RMB10.2 million in staff cost, an increase of RMB2.1 million in share-based compensation, an increase of RMB6.3 million in rental expenses and an increase of RMB14.7 million in other selling expenses. The increase in advertising and promotion expenses was mainly due to increased advertising and marketing activities especially in international markets. The increase in depreciation and amortization was due to higher depreciation of furniture and decoration expenditures of the franchised stores as a result of the increased number of stores in China. The increase in staff cost and share-based compensation was due to an increase in the number of sales staff and additional share incentive grants. The increase in rental expenses and other selling expenses was due to the growth of kick-scooters sales in overseas market. Excluding advertising and promotion expenses, our selling and marketing expenses as a percentage of our revenues was 7.8% in 2022, as compared to 4.6% in 2021.

Research and development expenses

Our research and development expenses increased by 30.5% from RMB135.2 million in 2021 to RMB176.5 million (US\$25.6 million) in 2022. The increase was mainly attributable to an increase of RMB22.4 million in staff cost, an increase of RMB5.3 million in share-based compensation, and an increase of RMB21.0 million in design and testing expenses. The increase in staff cost and share-based compensation was mainly due to an increase in the number of staff and additional share incentive grants. The increase of design and testing expenses was due to the research and development of new products, especially in micro-mobility sector. Our research and development expenses as a percentage of our revenues increased from 3.7% in 2021 to 5.6% in 2022.

General and administrative expenses

Our general and administrative expenses increased by 11.8% from RMB141.8 million in 2021 to RMB158.5 million (US\$23.0 million) in 2022. The increase was primarily due to an increase of RMB14.7 million in staff cost, an increase of RMB3.2 million in share-based compensation, an increase of RMB23.8 million in provision for credit losses and a decrease of RMB24.6 million in foreign currency exchange gain. The increase in staff cost and share-based compensation was mainly due to an increase in the number of staff and additional share incentive grants. The increase in provision for credit losses was mainly due to overseas accounts receivable. The decrease in foreign currency exchange gain was mainly because of the appreciation of US dollar. Our general and administrative expenses as a percentage of our revenues increased from 3.8% in 2021 to 5.0% in 2022.

Government grants

Our government grants decreased from RMB48.7 million in 2021 to RMB16.4 million (US\$2.4 million) in 2022, mainly consisting of various incentives from local government authorities. Those grants were for the purpose of giving immediate financial support from local government authorities with no future related costs or obligations.

Net loss

As a result of the foregoing, we generated a net loss of RMB49.5 million (US\$7.2 million) in 2022, compared to a net income of RMB225.8 million in 2021.

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Revenues

Our revenues increased by 51.6% from RMB2,444.3 million in 2020 to RMB3,704.5 million (US\$581.3 million) in 2021, which was primarily due to an increase in e-scooter sales volume.

The revenues from e-scooter sales increased by 51.8% from RMB2,143.3 million in 2020 to RMB3,253.0 million (US\$510.5 million) in 2021, which was mainly due to an increase in the sales volume of e-scooters by 72.5% from 601,652 in 2020 to 1,037,914 in 2021. The increase in the sales volume of e-scooters was driven by the expansion of our sales network in China from 1,616 franchised stores as of December 31, 2020 to 3,108 franchised stores as of December 31, 2021 and an increase in the number of distributors in the overseas markets from 36 as of December 31, 2020 to 42 as of December 31, 2021.

The revenues per e-scooter decreased from RMB4,062.7 in 2020 to RMB3,569.2 (US\$560.1) in 2021, mainly due to a change in product mix. The respective impact from the change in sales volume of e-scooters and revenues per e-scooter on our revenues in 2021, as compared to 2020, was RMB1,772.4 million (calculated by assuming the revenues per e-scooter in 2021 was the same as that in 2020) and RMB296.9 million (calculated by assuming the sales volume of e-scooters in 2021 was the same as that in 2020).

The growth of accessories and spare parts sales and service revenues also contributed, to a lesser extent, to the increase in our revenues. The revenues from accessory and spare parts sales increased from RMB258.9 million in 2020 to RMB397.1 million (US\$62.3 million) in 2021, mainly due to an increase in the sales volume of e-scooters in China, with which purchases of accessories and spare parts usually correlate. The service revenues increased from RMB42.1 million in 2020 to RMB54.5 million (US\$8.5 million) in 2021, mainly attributable to the continued growth of our user base.

Cost of revenues

Our cost of revenues increased by 53.4% from RMB1,885.2 million in 2020 to RMB2,891.8 million (US\$453.8 million) in 2021, along with the growth of our business. The increase was primarily attributable to an increase in cost of products from RMB1,817.1 million in 2020 to RMB2,826.6 million (US\$443.6 million) in 2021, which was primarily due to an increase in e-scooter sales volume.

The cost per e-scooter, defined as cost of revenues divided by the number of e-scooters sold in a specified period, decreased from RMB3,133.3 in 2020 to RMB2,786.1 (US\$437.2) in 2021, which was primarily due to a change in product mix.

Gross profit

We generated a gross profit of RMB812.8 million (US\$127.5 million) in 2021, as compared to a gross profit of RMB559.1 million in 2020. Our gross margin slightly decreased from 22.9% in 2020 to 21.9% in 2021, which was mainly due to higher raw material cost and change in product mix as a result of the launch of various new products.

Selling and marketing expenses

Our selling and marketing expenses increased by 65.4% from RMB200.8 million in 2020 to RMB332.0 million (US\$52.1 million) in 2021. The increase was primarily due to an increase of RMB73.7 million in advertising and promotion expenses, an increase of RMB35.3 million in depreciation and amortization, an increase of RMB25.7 million in staff cost, an increase of RMB3.3 million in share-based compensation, and a decrease of RMB2.4 million in travel expenses. The increase in advertising and promotion expenses was due to enhanced advertising and promotional events and branding and marketing activities. The increase in depreciation and amortization was due to higher depreciation of furniture and decoration expenditures of the franchised stores as a result of the increased number of stores. The increase in staff cost and share-based compensation was due to an increase in the number of sales staff and additional share incentive grants. The decrease in travel expenses was due to reduced travel frequency during COVID-19. Excluding advertising and promotion expenses, our selling and marketing expenses as a percentage of our revenues was 4.6% in 2021, as compared to 4.7% in 2020.

Research and development expenses

Our research and development expenses increased by 28.4% from RMB105.3 million in 2020 to RMB135.2 million (US\$21.2 million) in 2021. The increase was mainly attributable to an increase of RMB20.4 million in staff cost, an increase of RMB6.1 million in share-based compensation, and an increase of RMB1.3 million in depreciation and amortization and rental expenses. The increase in staff cost and share-based compensation was mainly due to an increase in the number of staff and additional share incentive grants. The increase of depreciation and amortization and rental expenses was due to our efforts to expand our product portfolio. Our research and development expenses as a percentage of our revenues decreased from 4.3% in 2020 to 3.7% in 2021.

General and administrative expenses

Our general and administrative expenses increased by 35.2% from RMB104.9 million in 2020 to RMB141.8 million (US\$22.3 million) in 2021. The increase was primarily due to an increase of RMB11.9 million in staff cost, an increase of RMB9.7 million in financial service fee, an increase of RMB4.1 million in foreign currency exchange loss, an increase of RMB3.2 million in depreciation and amortization, an increase of RMB3.1 million in professional fee and an increase of RMB3.0 million in tax and surcharge. The increase in staff cost was mainly due to an increase in the number of staff. The increase in financial service fee was mainly because of the increase in sales from online channels. The increase in foreign currency exchange loss was mainly because of the depreciation of US dollar. The increase in professional fee was mainly due to the increase of audit fee. The increase in tax and surcharges is mainly due to higher revenues. Our general and administrative expenses as a percentage of our revenues decreased from 4.3% in 2020 to 3.8% in 2021.

Government grants

Our government grants increased from RMB22.4 million in 2020 to RMB48.7 million (US\$7.6 million) in 2021, mainly consisting of various incentives from local government authorities. Those grants were for the purpose of giving immediate financial support from local government authorities with no future related costs or obligations.

Net income

As a result of the foregoing, our net income was RMB225.8 million (US\$35.4 million) in 2021, compared to RMB168.7 million in 2020.

B. Liquidity and Capital Resources

Cash flows and working capital

We had net cash provided by operating activities of RMB465.6 million, RMB334.2 million and net cash used in operating activities of RMB121.9 million (US\$17.7 million) in 2020, 2021 and 2022, respectively.

Our primary sources of liquidity have been cash provided by operating activities and financing activities. As of December 31, 2022, we had RMB720.6 million (US\$104.5 million) in cash, cash equivalents and restricted cash, of which approximately 39.6% were held in Renminbi and the remainder was mainly held in U.S. dollars.

After considering all facts available to us as of the date of this annual report, we believe our cash on hand will be sufficient to meet our current and anticipated needs for general corporate purposes for at least the next 12 months. We may, however, need additional cash resources in the future if we experience changes in business conditions or other developments. We may also need additional cash resources in the future if we find and wish to pursue opportunities for investment, acquisition, capital expenditure or similar actions. If we determine that our cash requirements exceed the amount of cash we have on hand, we may seek to issue equity or equity linked securities or obtain debt financing. The issuance and sale of additional equity would result in further dilution to our shareholders. The incurrence of indebtedness would result in increased fixed obligations and could result in operating covenants that would restrict our operations. We cannot assure you that financing will be available in amounts or on terms acceptable to us, if at all.

Our accounts receivable represent primarily accounts receivable from the distributors that purchased our e-scooters and accessories and spare parts. As of December 31, 2021 and 2022, our accounts receivable, net of allowance for doubtful accounts, were RMB268.6 million and RMB299.7 million (US\$43.5 million), respectively. Our accounts receivable turnover days increased from 16 days in 2020 to 18 days in 2021, and further to 33 days in 2022 mainly due to our change of credit policies for distributors where selected qualified distributors enjoy credit terms. Accounts receivable turnover days for a given period are equal to average balances of accounts receivable, net of allowance for doubtful accounts, at the beginning and the end of the period divided by revenues during the period and multiplied by the number of days during the period.

Our accounts payable and notes payable represent primarily payable to suppliers from whom we purchased raw materials and components for our products. As of December 31, 2021 and 2022, our accounts payable were RMB538.9 million and RMB459.5 million (US\$66.6 million), respectively. Our notes payable were RMB143.6 million and RMB316.8 million (US\$45.9 million), respectively. The increase was primarily due to our choice to use payable notes with longer payment terms. Our accounts payable turnover days increased from 63 days in 2020 to 68 days in 2021 and further to 107 days in 2022, which was primarily due to the change in our supplier mix and longer payment terms from selected suppliers. Accounts payable turnover days for a given period are equal to average accounts payable balances at the beginning and the end of the period divided by total cost of revenues during the period and multiplied by the number of days during the period.

Our advances from customers represent primarily the pre-paid sales price from the distributors that purchased our e-scooters and accessories and spare parts. As of December 31, 2021 and 2022, our advances from customers were RMB17.3 million and RMB24.9 million (US\$3.6 million), respectively. Our advances from customer turnover days decreased from 3.5 days in 2020 to 2.8 days in 2021 and further to 2.4 days in 2022. The changes in our advances from customers and the turnover days were primarily due to the fluctuations in pre-sales orders received from distributors. Advance from customers turnover days for a given period are equal to average advances from customers balances at the beginning and the end of the period divided by revenues during the period and multiplied by the number of days during the period.

Our inventories primarily include our raw materials, work in progress and finished goods for our e-scooters and accessories and spare parts. As of December 31, 2021 and 2022, our inventories were RMB269.6 million and RMB417.0 million (US\$60.5 million), respectively. The increase was primarily due to the advance stockpiling of finished goods in international markets in anticipation of higher demand. Our inventory turnover days decreased from 31 days in 2020 to 26 days in 2021 and increase to 50 days in 2022, which was primarily due to the fluctuations in fulfilment and sales order forecast. Inventory turnover days for a given period are equal to average of the balances of inventories, at the beginning and the end of the period divided by cost of revenues during the period and multiplied by the number of days during the period.

We have the following short-term bank borrowings:

- In June 2019, Jiangsu Xiaoniu, Beijing Niudian and Changzhou Niudian jointly entered into a facility agreement with SPD Silicon Valley Bank that provided a credit facility of up to RMB120.0 million with tenor period of twelve months. The interest rate for each drawdown was at base interest rate of People’s Bank of China. In June 2020, Jiangsu Xiaoniu entered into an amendment agreement to (i) change the credit facility to RMB160.0 million, and (ii) change the collateral to deposit US Dollar in equivalent to RMB176.0 million at the time of drawdown. In June 2020, Jiangsu Xiaoniu and Changzhou Niudian fully repaid the loans of RMB60.0 million and RMB60.0 million borrowed in June 2019, respectively. Also in June 2020, Jiangsu Xiaoniu and Changzhou Niudian obtained new loans from SPD Silicon Valley Bank under the amendment agreement in amounts of RMB80.0 million and RMB80.0 million, respectively. In June 2021, Jiangsu Xiaoniu and Changzhou Niudian fully repaid the loans. Also In June 2021, Jiangsu Xiaoniu entered into an amendment agreement to (i) extend the maturity date, which was June 12, 2023, (ii) change the interest rate to a fixed rate of 3.5% per annum, which was further changed to 3.2% per annum in December 2021. Also in June 2021, Jiangsu Xiaoniu and Changzhou Niudian obtained new loans from SPD Silicon Valley Bank under the new amended facility agreement in amounts of RMB120.0 million and RMB40.0 million, respectively. In September and December 2021, Changzhou Niudian and Jiangsu Xiaoniu repaid loans of RMB40.0 million and RMB120.0 million, respectively. In December 2021, Jiangsu Xiaoniu obtained new loans from SPD Silicon Valley Bank of RMB160.0 million. In June 2022, Jiangsu Xiaoniu fully repaid the loans. In June 2022, Jiangsu Xiaoniu entered into an amendment agreement to change the fixed interest rate to 3.0% per annum and obtained a loan from SPD Silicon Valley Bank in amount of RMB160.0 million with the maturity date in December 2022. In December 2022, Jiangsu Xiaoniu repaid the loan of RMB160.0 million and obtained a new loan from SPD Silicon Valley Bank in amount of RMB160.0 million with the maturity date in January 2023. As of December 31, 2022, the outstanding balance under this facility was RMB160.0 million bearing interest at 3.0% per annum.
- In December 2019, Jiangsu Xiaoniu obtained a one-year short-term bank borrowing of RMB20.0 million, which bears interest at a rate of 4.5675% per annum, from Bank of China, which are jointly guaranteed by Beijing Niudian Technology Co., Ltd. and Changzhou Niudian International Trading Technology Co., Ltd. In July 2020, the loan was fully repaid and Jiangsu Xiaoniu obtained a new one-year short-term bank borrowing of RMB20.0 million, which bears interest at a rate of 3.85% per annum, from Bank of China. In July 2021, the loan was fully repaid. In April 2022, Jiangsu Xiaoniu entered into a facility agreement with Bank of China that provides credit facility of up to RMB300.0 million with a one-year term.
- In November 2020, Jiangsu Xiaoniu entered into a line-of-credit agreement with China Merchants Bank that provide revolving credit facility, in aggregate, for up to RMB100.0 million with a one-year term. In July 2021, Jiangsu Xiaoniu obtained a ten-month short-term borrowing of RMB20.0 million which bears interest at a rate of 3.5% per annum, from China Merchants Bank, to refinance the loan with Bank of China. In December 2021, Jiangsu Xiaoniu entered into a line-of-credit agreement with China Merchants Bank that provide revolving credit facility, in aggregate, for up to RMB200.0 million with a one-year term. In May 2022, Jiangsu Xiaoniu fully repaid the loan of RMB20.0 million borrowed in July 2021, and obtained a new one-year short-term borrowing of RMB20.0 million which bears interest at a rate of 3.3% per annum, from China Merchants Bank. In November 2022, the loan was fully repaid. As of December 31, 2022, the outstanding balance of this loan was nil.

Although we consolidate the results of the VIE, we only have access to the assets or earnings of the VIE through our contractual arrangements with the VIE and its shareholders. See “Item 4. Information on the Company—C. Organizational Structure” For restrictions and limitations on liquidity and capital resources as a result of our corporate structure, see “—Holding Company Structure.”

A substantial majority of our revenues have been, and we expect they are likely to continue to be, in the form of Renminbi. Under existing foreign exchange regulations of mainland China, payments of current account items, including profit distributions, interest payments and trade and service-related foreign exchange transactions, can be made in foreign currencies without prior SAFE approval as long as certain routine procedural requirements are fulfilled. Therefore, our mainland China subsidiaries are allowed to pay dividends in foreign currencies to us without prior SAFE approval by following certain routine procedural requirements. However, current regulations of mainland China permit our mainland China subsidiaries to pay dividends to us only out of its accumulated profits, if any, determined in accordance with Chinese accounting standards and regulations. Our mainland China subsidiaries are required to set aside at least 10% of its after-tax profits after making up previous years' accumulated losses each year, if any, to fund certain reserve funds until the total amount set aside reaches 50% of its registered capital. These reserves are not distributable as cash dividends. Historically, our mainland China subsidiaries have not paid dividends to us. Furthermore, capital account transactions, which include foreign direct investment and loans, must be approved by and/or registered with SAFE, its local branches and certain local banks.

The following table sets forth the movements of our cash flows for the years presented:

	For the Year Ended December 31,			
	2020	2021	2022	
	RMB	RMB	RMB	US\$
	(in thousands)			
Selected Consolidated Cash Flow Data:				
Net cash provided by (used in) operating activities	465,599	334,175	(121,856)	(17,668)
Net cash provided by (used in) investing activities	(535,232)	(295,059)	397,892	57,689
Net cash provided by (used in) financing activities	(13,164)	6,246	(17,797)	(2,580)
Effect of foreign currency exchange rate changes on cash, cash equivalents and restricted cash	(23,332)	(8,490)	30,043	4,356
Net increase (decrease) in cash, cash equivalents and restricted cash	(106,129)	36,872	288,282	41,797
Cash, cash equivalents and restricted cash at the beginning of the year	501,602	395,473	432,345	62,684
Cash, cash equivalents and restricted cash at the end of the year	395,473	432,345	720,627	104,481

Operating activities

Net cash used in operating activities in 2022 was RMB121.9 million (US\$17.7 million). This amount was primarily attributable to net loss of RMB49.5 million (US\$7.2 million), adjusted for certain non-cash expenses, principally depreciation and amortization expenses of RMB142.7 million (US\$20.7 million) and share-based compensation expenses of RMB58.2 million (US\$8.4 million), and changes in certain working capital accounts that affected operating cash flow, primarily (i) a RMB156.1 million (US\$22.6 million) increase in inventories and (ii) a RMB125.9 million (US\$18.3 million) increase in prepayments and other current assets. The increase in inventories and prepayments and other current assets was primarily due to the growth of our business and operation.

Net cash provided by operating activities in 2021 was RMB334.2 million (US\$52.4 million). This amount was primarily attributable to net income of RMB225.8 million (US\$35.4 million), adjusted for certain non-cash expenses, principally depreciation and amortization expenses of RMB95.5 million (US\$15.0 million) and share-based compensation expenses of RMB47.2 million (US\$7.4 million), and changes in certain working capital accounts that affected operating cash flow, primarily (i) a RMB286.7 million (US\$45.0 million) increase in accounts payable and notes payable, (ii) a RMB168.5 million (US\$26.4 million) increase in accounts receivable and (iii) a RMB131.2 million (US\$20.6 million) increase in inventories. The increase in accounts payable and notes payable, accounts receivable and inventories was primarily due to the growth of our business and operation.

Net cash provided by operating activities in 2020 was RMB465.6 million (US\$71.4 million). This amount was primarily attributable to net income of RMB168.7 million (US\$25.8 million), adjusted for certain non-cash expenses, principally depreciation and amortization expenses of RMB50.2 million (US\$7.7 million) and share-based compensation expenses of RMB39.6 million (US\$6.1 million), and changes in certain working capital accounts that affected operating cash flow, primarily (i) a RMB136.8 million (US\$21.0 million) increase in accounts payable, (ii) a RMB30.6 million (US\$4.7 million) decrease in inventories and (iii) a RMB32.7 million (US\$5.0 million) increase in advance from customers. The increase in accounts payable was primarily due to the growth of our business and operation. The increase in advance from customers was mainly due to the fluctuations in pre-sale orders received from distributors. The decrease in inventories is primarily due to higher efficiency and faster fulfillment.

Investing activities

Net cash provided by investing activities in 2022 was RMB397.9 million (US\$57.7 million), consisting primarily of cash received from sale of short-term investments and withdrawal from term deposits, partially offset by cash paid for purchases of term deposits, short-term investments, and property, plant and equipment.

Net cash used in investing activities in 2021 was RMB295.1 million (US\$46.3 million), consisting primarily of cash paid for purchases of term deposits, short-term investments, and property, plant and equipment, partially offset by cash received from sale of short-term investments and withdrawal from term deposits.

Net cash used in investing activities in 2020 was RMB535.2 million (US\$82.0 million), consisting primarily of cash paid for purchases of term deposits, short-term investments, land use right, and property, plant and equipment, partially offset by cash received from sale of short-term investments and withdrawal from term deposits.

Financing activities

Net cash used in financing activities in 2022 was RMB17.8 million (US\$2.6 million), consisting primarily of repayments for short-term bank borrowings, partially offset by the proceeds from short-term bank borrowings and exercise of employee stock option.

Net cash provided by financing activities in 2021 was RMB6.2 million (US\$1.0 million), consisting primarily of proceeds from short-term bank borrowings and exercise of employee stock option, partially offset by repayments for short-term bank borrowings.

Net cash used in financing activities in 2020 was RMB13.2 million (US\$2.0 million), consisting primarily of repayments of short-term bank borrowings, partially offset by the proceeds from exercise of employee stock option.

Material Cash requirements

Our material cash requirements as of December 31, 2022 and any subsequent interim period primarily include our capital expenditures, operating lease obligations and purchase obligations.

We made capital expenditures of RMB151.6 million, RMB285.7 million and RMB135.3 million (US\$19.6 million) in 2020, 2021 and 2022, respectively. Capital expenditures represent cash paid for purchase of property, plant and equipment, intangible assets and land use right. We will continue to make such capital expenditures to support the expected growth of our business.

We intend to fund our existing and future material cash requirements primarily with anticipated cash flows from operations, our existing cash balance and other financing alternatives.

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.

We did not have any significant capital and other commitments, long-term obligations or guarantees as of December 31, 2022.

Holding Company Structure

Our company, Niu Technologies, is a holding company with no material operations of its own. We conduct our operations primarily through our WFOE and the VIE. As a result, Niu Technologies' ability to pay dividends depends upon dividends paid by our WFOE.

If our WFOE or any newly formed mainland China subsidiaries incur debt on their own behalf in the future, the instruments governing their debt may restrict their ability to pay dividends to us. In addition, our WFOE is permitted to pay dividends to us only out of its retained earnings, if any, as determined in accordance with PRC accounting standards and regulations. Under the laws of mainland China, each of our WFOE and the VIE is required to set aside at least 10% of its after-tax profits each year, if any, to fund certain statutory reserve funds until such reserve funds reach 50% of its registered capital. In addition, our WFOE may allocate a portion of its after-tax profits based on PRC accounting standards to enterprise expansion funds and staff bonus and welfare funds at its discretion, and the VIE may allocate a portion of their after-tax profits based on PRC accounting standards to a discretionary surplus fund at its discretion. The statutory reserve funds and the discretionary funds are not distributable as cash dividends. Remittance of dividends by a wholly foreign-owned company out of mainland China is subject to examination by the banks designated by SAFE. As of December 31, 2022, as our WFOE, Beijing Niudian, Shanghai Xiaoniu Internet Technology Co., Ltd. and Changzhou Niudian International Trading Technology Co., Ltd. are in an accumulated loss position, no statutory reserve was appropriated. Our WFOE has not paid dividends and will not be able to pay dividends until it generates accumulated profits and meets the requirements for statutory reserve funds.

C. Research and Development

See “Item 4. Information On the Company—B. Business Overview— NIU Innovation Lab” and “—Intellectual Property.”

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, 2022 that are reasonably likely to have a material and adverse effect on our 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. Critical Accounting Policies and Estimates

We prepare our financial statements in conformity with U.S. GAAP, which requires us to make judgments, estimates and assumptions. We continually evaluate these estimates and assumptions based on the most recently available information, our own historical experiences and various other assumptions that we believe to be reasonable under the circumstances. Since the use of estimates is an integral component of the financial reporting process, actual results could differ from our expectations as a result of changes in our estimates. Some of our accounting policies require a higher degree of judgment than others in their application and require us to make significant accounting estimates.

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. We believe the following accounting policies involve the most significant judgments and estimates used in the preparation of our financial statements. You should read the following descriptions of critical accounting policies, judgments and estimates should be read in conjunction with our consolidated financial statements and other disclosures included in this annual report.

Consolidation of variable interest entity (“VIE”)

We account for entities qualifying as VIE in accordance with Financial Accounting Standards Boards, or FASB, Accounting Standards Codification Topic 810, Consolidation, or ASC 810. We operate our online e-commerce platform in mainland China through the VIE, Beijing Niudian, to ensure that our internet operations comply with applicable laws and regulations of mainland China. Beijing Niudian holds the necessary mainland China operating licenses for the online business. Individuals acting as nominee equity holders hold the legal equity interests of Beijing Niudian on our behalf. A series of contractual arrangements were entered into among the Company, Niudian Information, Beijing Niudian, and the nominee equity holders of Beijing Niudian in May 2015 and were subsequently amended in June 2018 and February 2020. As a result of the contractual agreements, which include Powers of Attorney, an Exclusive Business Cooperation Agreement, an Equity Pledge Agreement, an Exclusive Option to Agreement and Spousal Consent Letters, we have the ability to conduct the business operations of Beijing Niudian, direct its activities, receive substantially all of its economic benefits and have an option to purchase all of the equity interests and assets in Beijing Niudian when and to the extent permitted by the laws of mainland China at RMB100 or a lowest price. In accordance with ASC 810, we consider that Niu Technologies is the primary beneficiary of Beijing Niudian, and accordingly, Beijing Niudian is the VIE under U.S. GAAP. As such, we consolidate the financial results and position of Beijing Niudian in our consolidated financial statements.

Any changes in the laws and regulations of mainland China that affect our ability to conduct the business operations of Beijing Niudian might preclude us from consolidating the entities in the future. We will continually evaluate whether we are the primary beneficiary of the VIE as facts and circumstances change.

Revenue recognition

We generate substantially all of our revenues from sales of electric scooters, accessories and spare parts to our mainland China domestic offline distributors and overseas offline distributors or directly to individual customers online. We also generate our revenues from our subscription-based mobile app services, as well as insurance service as an agent.

We recognize revenues upon the satisfaction of our performance obligation (upon transfer of control of promised goods or services to customers) in an amount that reflects the consideration to which we expect to be entitled to in exchange for those goods or services, excluding amounts collected on behalf of third parties (for example, value added taxes). For each performance obligation satisfied over time, we recognize revenue over time by measuring the progress toward complete satisfaction of that performance obligation. If a performance obligation is not satisfied over time, it is satisfied at a point in time.

To achieve that core principle, we perform the five steps defined under Topic 606: (i) identify the contract(s) with a customer, (ii) identify the performance obligations in the contract, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations in the contract, and (v) recognize revenue when (or as) the entity satisfies a performance obligation. We assess our revenue arrangements against specific criteria in order to determine whether we act as principal or agent. Revenue arrangements with multiple performance obligations are divided into separate distinct goods or services. A performance obligation is considered distinct from other obligations in a contract when it (a) provides a benefit to the customer either on its own or together with other resources that are readily available to the customer and (b) is separately identified in the contract. We allocate the transaction price to each performance obligation based on the relative SSP of the goods or services provided. Revenue is recognized upon the transfer of control of promised goods or services to a customer.

We identify one performance obligation which is to sell products, such as smart electric scooters, accessories and spare parts, to our mainland China domestic offline distributors and overseas offline distributors or directly to individual customers online. For all sales of products, we require a signed contract or purchase order, which specifies pricing, quantity and product specifications. Revenue of product sales is recognized on a gross basis upon the satisfaction of its performance obligation, which is to transfer the control of the promised products to customers.

The transfer of control of the products is satisfied at a point in time, which occurs when the products are accepted by the domestic offline distributors, overseas offline distributors or individual customers. When we sell products to our domestic offline distributors for domestic sales, acceptance of the products by the domestic offline distributors is evidenced by goods receipt notes signed by the domestic offline distributors, which is generally at our warehouse. When we sell products to our overseas offline distributors for overseas sales, acceptance of the products by overseas offline distributors is evidenced by shipping documents dependent upon the terms of the underlying contract. When we sell products to individual customers through its own online store and third-party e-commerce platform, we are responsible for the delivery to individual customers. Acceptance of the products is evidenced by goods receipt notes signed by individual customers.

We provide sales volume rebate to qualified distributors based on the volume sold to such distributors in a certain period and grant online individual customers unconditional right to return the products within 7 days after their acceptance.

Revenues are measured as the amount of consideration we expect to receive in exchange for transferring products to domestic offline distributors, overseas offline distributors or individual customers. Consideration is recorded net of sales volume rebate, sales returns and VAT. Sales returns is estimated based on historical experiences, which were insignificant for the years ended December 31, 2020, 2021 and 2022.

We utilize delivery service providers to deliver products to overseas offline distributors and individual customers (the “shipping activities”), but the delivery service is not considered as a separate obligation as the shipping activities are performed before the overseas offline distributors and individual customers obtain control of the products. Therefore, shipping activities are not considered a separate promised service to them but rather are activities to fulfill our promise to transfer the products. Outbound shipping charges to overseas offline distributors and individual customers are included as a part of the revenues, and outbound shipping-related costs are recorded as cost of revenues.

Income taxes

Our current income taxes are provided on the basis of net income (loss) for financial reporting purposes, and adjusted for income and expense items which are not assessable or deductible for income tax purposes, in accordance with the regulations of the relevant tax jurisdictions. Our deferred income taxes are provided using the liability method. Under this method, deferred income tax assets and liabilities are recognized for the tax effects of temporary differences and are determined by applying enacted statutory tax rates that will be in effect in the period in which the temporary differences are expected to reverse to the temporary differences between the financial statements' carrying amounts and the tax bases of assets and liabilities. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset deferred tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle deferred tax liabilities and assets on a net basis or their deferred tax assets and liabilities will be realized simultaneously.

A valuation allowance is provided to reduce the amount of deferred income tax assets if based on the weight of available evidence, it is more likely than not that some portion, or all, of the deferred income tax assets will not be realized. The effect on deferred income taxes arising from a change in tax rates is recognized in the consolidated statements of comprehensive income in the period of change.

We apply a "more likely than not" recognition threshold in the evaluation of uncertain tax positions. We recognize the benefit of a tax position in our consolidated financial statements if the tax position is "more likely than not" to prevail based on the facts and technical merits of the position. Tax positions that meet the "more likely than not" recognition threshold are measured at the largest amount of tax benefit that has a greater than fifty percent likelihood of being realized upon settlement. Unrecognized tax benefits may be affected by changes in interpretation of laws, rulings of tax authorities, tax audits, and expiry of statutory limitations. In addition, changes in facts, circumstances and new information may require us to adjust the recognition and measurement estimates with regard to individual tax positions. Accordingly, unrecognized tax benefits are periodically reviewed and re-assessed. Adjustments, if required, are recorded in our consolidated financial statements in the period in which the change that necessitates the adjustments occurs. The ultimate outcome for a particular tax position may not be determined with certainty prior to the conclusion of a tax audit and, in certain circumstances, a tax appeal or litigation process. We records interest and penalties related to unrecognized tax benefits (if any) in interest expenses and general and administrative expenses, respectively. As of December 31, 2021 and 2022, the Group did not have any significant unrecognized uncertain tax positions.

Recent Accounting Pronouncements

We discuss recently adopted and issued accounting standards in Note 2, "Summary of Significant Accounting Policies—Recent Accounting Pronouncements" of the notes to our consolidated financial statements included elsewhere in this annual report.

Item 6. Directors, Senior Management and Employees

A. Directors and Senior Management

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

Directors and Executive Officers	Age	Position/Title
Yan Li	44	Chairman of the Board of Directors and Chief Executive Officer
Token Yilin Hu	38	Director
Changqing Ye	52	Independent Director
Mei-Wei Cheng	73	Independent Director
Julian Juul Wolhardt	49	Independent Director
John Jinshu Zhang	63	Independent Director
Fion Wenjuan Zhou	39	Chief Financial Officer

Dr. Yan Li has served as the chairman of our board of directors since March 2018, our chief executive officer since December 2017 and our chief operating officer since January 2016. Prior to joining our company in 2016, Dr. Li was a principal at KKR Capstone Limited from 2009 to 2015 and he oversaw KKR Capstone Limited's portfolio operation in China, including Qingdao Haier Group, a home appliance manufacturer listed on the Shanghai Stock Exchange, China Modern Dairy, a milk producer listed on the Hong Kong Stock Exchange, China Cord Blood Corporation, a provider of cord blood banking services in China listed on the New York Stock Exchange and United Envirotech, an environmental engineering and consulting solutions provider listed on the Singapore Stock Exchange. Dr. Li was awarded the Operational Excellence Award by Private Equity International in 2012. Prior to KKR Capstone Limited, Dr. Li worked for McKinsey & Company from 2008 to 2009, where he advised various companies in high-tech, industrial goods and retail sectors. Prior to McKinsey, Dr. Li worked as a senior research engineer at Qualcomm Inc. in San Diego, CA from 2006 to 2008, focusing on the development of 3G and 4G communications technology. Dr. Li holds three patents on 3G communications. Dr. Li received a bachelor's degree from the University of California at Berkeley in 2001 and a Ph.D. from Stanford University in 2005, both in electronics and electrical engineering.

Mr. Token Yilin Hu has served as our director since our inception. Mr. Hu has served as our vice president of research and development from September 2014 to October 2022. Mr. Hu has over 15 years of experience in design spanning a variety of products and industries, such as consumer electronics, fashion, autos and smart hardware. Mr. Hu co-founded UTLAB in November 2011, whose use of high-tech materials in the aerospace and auto sectors to create ultimate wearing experience in America and Europe. Prior to UTLAB, Mr. Hu was with Frog Design, a globally renowned design firm, from March 2009 to October 2011, where he led a team of designers to help multinational clients create innovative products and experiences. Prior to that, Mr. Hu worked at Microsoft China from March 2008 to January 2009.

Mr. Changqing Ye has served as our director since October 2018. He currently also serves as an independent director of Baozun Inc., a company listed on Nasdaq, Ascentage Pharma Group International, a company listed on the Hong Kong Stock Exchange, Jinxin Fertility Group Limited, a company listed on the Hong Kong Stock Exchange, Hygeia Healthcare Holdings Limited, a company listed on the Hong Kong Stock Exchange, VNET Group Inc., a company listed on Nasdaq, and NWTN Inc., a company listed on Nasdaq. From October 2018 to September 2022, he served as an independent director of Luzhou Bank, a company listed on the Hong Kong Stock Exchange. From February 2011 to December 2015, Mr. Ye served as an investment committee member and then group chief financial officer and managing director of CITIC PE Group. Prior to that, Mr. Ye worked at PricewaterhouseCoopers' China and UK offices from July 1992 to January 2011. Mr. Ye received his bachelor's degree in journalism from Huazhong University of Science and Technology in China in 1992 and an MBA from Warwick University in 1999. Mr. Ye is a certified public accountant in China.

Mr. Mei-Wei Cheng has served as our director since October 2018. Mr. Cheng currently serves as a director of LEAR Corporation, and serves as non-executive chairman of the board of directors of HCP Packaging and INTERPLEX Holdings, both portfolio companies of Baring Private Equity Asia. Mr. Cheng served as a member of the audit committee and finance committee of the board of directors of Seagate Technology, a company listed on Nasdaq, from 2013 to 2018. From 2010 to 2014, Mr. Cheng served as board member and audit committee member of Diebold Nixdorf, a company listed on NYSE. From February 2015 to January 2017, Mr. Cheng served as the chairman of the board of directors of Pactera Technology International Ltd., a portfolio company of Blackstone Group. From July 2010 to April 2014, Mr. Cheng was the chief executive officer of Siemens Northeast Asia and president and chief executive officer of Siemens China. Prior to joining Siemens, Mr. Cheng served as the chairman and chief executive officer of Ford Motor (China) Ltd. And as a corporate vice president of Ford Motor Company from 1998 to 2008 and as the executive chairman at Ford Motor Company (China) Ltd. And as a group vice president of Ford Motor Company from 2009 to 2010. Prior to joining Ford, Mr. Cheng held several executive positions at General Electric Corporation and AT&T. Mr. Cheng received a bachelor's degree in industrial engineering/operations research from Cornell University in 1972 and an MBA from Rutgers University in 1999.

Mr. Julian Juul Wolhardt has served as our director since October 2018. Mr. Wolhardt is currently chief executive officer of DCP Advisors Limited. From August 2006 to December 2016, Mr. Wolhardt was a partner focused on Greater China at KKR Asia Limited. Prior to joining KKR Asia Limited, Mr. Wolhardt served as executive director at Morgan Stanley Private Equity Asia from 1998 to 2006. Mr. Wolhardt was an analyst at Lazard Freres & Co from 1996 to 1997 and worked at Coopers & Lybrand from 1995 to 1996. Mr. Wolhardt received his bachelor's degree in accounting from the University of Illinois (Urbana-Champaign) in 1995. Mr. Wolhardt is a certified public accountant and certified management accountant in the U.S.

Mr. John Jinshu Zhang has served as our director since October 2018. Mr. Zhang is currently general counsel of Blue California. From October 2000 to May 2021, Mr. Zhang was a partner at Dentons LLP, Edwards Wildman LLP, Reed Smith LLP, and Greenberg Traurig, LLP successively. Mr. Zhang worked as an associate of Jones Day LLP and Graham & James, LLP from November 1993 to November 1999. Mr. Zhang received his bachelor's degree in literature from Peking University in 1982, master's degree in Asian studies from University of Hawaii at Manoa in 1989, master's degree in intellectual history from University of California, Los Angeles in 1990 and Juris doctor degree from University of California, Berkeley in 1993.

Ms. Fion Wenjuan Zhou has served as our chief financial officer since November 2021. She is responsible for overseeing investor relations, strategic investment, finance, legal, internal controls and ESG compliance of our company. Prior to joining us, Ms. Zhou served as the chief financial officer of Sogou Inc. (NYSE: SOGO) from July 2020 to October 2021. Between 2015 and 2019, Ms. Zhou served as a finance director of Alibaba Group (NYSE: BABA) and as chief financial officer of Yidian Zixun, a leading mobile news aggregator in China. Prior to that, Ms. Zhou also held senior finance roles at Viadeo S.A. and Concord Medical Services Holdings Limited (NYSE: CCM). Ms. Zhou started her career as an auditor at PricewaterhouseCoopers Zhong Tian in 2006. Ms. Zhou received a bachelor's degree in Financial Management from the University of International Business and Economics in 2006 and an Executive MBA from HEC Paris in 2016. Ms. Zhou is a member of the American Institute of Certified Public Accountants and a Chartered Global Management Accountant.

B. Compensation

In 2022, we paid an aggregate of approximately RMB4.46 million (US\$0.65 million) in cash to our executive officers, and approximately RMB1.03 million (US\$0.15 million) in cash to our non-executive directors. We have not set aside or accrued any amount to provide pension, retirement or other similar benefits to our directors and executive officers.

Share Incentive Plans

In January 2016, our shareholders and board of directors approved the 2016 Global Share Incentive Plan to attract and retain the best available personnel, provide additional incentives to employees, directors and consultants, and promote the success of our business. In March 2018, we amended the 2016 Global Share Incentive Plan, or the Amended and Restated 2016 Plan, so that the maximum aggregate number of ordinary shares that may be issued under the Amended and Restated 2016 Plan is 5,861,480 ordinary shares. As of December 31, 2022, options to purchase 1,801,680 ordinary shares and 3,750 restricted share units had been granted and were outstanding, excluding options or restricted share units that were forfeited or canceled after the relevant grant dates.

In September 2018, our shareholders and board of directors approved the 2018 Share Incentive Plan to promote the success and enhance the value of our company, which became effective immediately prior to the completion of our initial public offering. Under the 2018 Share Incentive Plan, or the 2018 Plan, the maximum aggregate number of ordinary shares available for issuance is 6,733,703 ordinary shares, which shall be increased by a number equal to 1.5% of the total number of ordinary shares issued and outstanding on the last day of the immediately preceding fiscal year, each fiscal year during the term of the 2018 Plan commencing with the fiscal year ended December 31, 2019, if determined and approved by the board of directors for the relevant fiscal year. Our board of directors has approved annual increases of 2,241,253, 2,285,407, and 2,305,212 ordinary shares for the years ended December 31, 2020, 2021 and 2022, representing 1.5% of total issued and outstanding shares as of December 31, 2019, 2020 and 2021, respectively, pursuant to the 2018 Share Incentive Plan. As of December 31, 2022, options to purchase 2,612,928 ordinary shares and 3,886,908 restricted share units had been granted and were outstanding, excluding options or restricted share units that were forfeited or canceled after the relevant grant dates. The following paragraphs describe the principal terms of the Amended and Restated 2016 Plan and 2018 Plan:

Type of Awards. The Amended and Restated 2016 plan permits the awards of options, restricted share units, restricted shares, share appreciation rights, dividend equivalents and share payments. The 2018 plan permits the awards of options, restricted shares, restricted share units or other types of awards approved by the board of directors or a committee of one or more members of the board of directors.

Plan Administration. Our board of directors or a committee appointed by the board of directors will administer the plan. The committee or the board of directors, as applicable, will determine the participants to receive awards, the type and number of awards to be granted to each participant, and the terms and conditions of each grant.

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

Eligibility. We may grant awards to our employees, consultants and directors.

Vesting Schedule. In general, the plan administrator determines the vesting schedule, which is specified in the relevant award agreement.

Exercise of Options. The plan administrator determines the exercise price for each award, which is stated in the relevant award agreement. Options that are vested and exercisable will terminate if they are not exercised prior to the time as the plan administrator determines at the time of grant. However, the maximum exercisable term is ten years from the date of grant.

Transfer Restrictions. Awards may not be transferred in any manner by the participant other than in accordance with the exceptions provided in the plan or the relevant award agreement or otherwise determined by the plan administrator, such as transfers by will or the laws of descent and distribution.

Termination and Amendment of the Plan. Unless terminated earlier, the plan has a term of ten years. Our board of directors has the authority to terminate, amend, suspend or modify the plan in accordance with our articles of association. However, without the prior written consent of the participant, no such action may adversely affect in any material way any award previously granted pursuant to the plan.

The following table summarizes, as of December 31, 2022, the options granted and outstanding under the Amended and Restated 2016 Plan and Amended and Restated 2018 Plan to our directors and executive officers and our other employees, excluding options that were forfeited or canceled after the relevant grant dates.

Name	Ordinary Shares Underlying Options	Exercise Price (US\$/Share)	Date of Grant	Date of Expiration
Yan Li	*	3.425	August 1, 2019	July 31, 2029
Token Yilin Hu	*	3.425	August 1, 2019	July 31, 2029
Other employees	2,929,808	0.2 and 3.425	February 1, 2018~ August 1, 2019	January 31, 2028~ July 31, 2029

(1) * Less than 1% of our total ordinary shares outstanding as of December 31, 2022.

The following table summarizes, as of December 31, 2022, the restricted share units granted and outstanding under the Amended and Restated 2016 Plan and the Amended and Restated 2018 Plan to our directors and executive officers and our other employees, excluding restricted share units that were forfeited or canceled after the relevant grant dates.

Name	Ordinary Shares Underlying Restricted Share Units	Date of Grant	Date of Expiration
Changqing Ye	*	October 19, 2022	October 18, 2032
Mei-Wei Cheng	*	October 19, 2022	October 18, 2032
Julian Juul Wolhardt	*	October 19, 2022	October 18, 2032
John Jinshu Zhang	*	October 19, 2022	October 18, 2032
Fion Wenjuan Zhou	*	March 15, 2022	March 14, 2032
Yan Li	*	August 1, 2019	July 31, 2029
Token Yilin Hu	*	August 1, 2019	July 31, 2029
Other employees	3,290,158	February 1, 2019~October 1, 2022	January 31, 2029 ~ September 30, 2032

* Less than 1% of our total ordinary shares outstanding as of December 31, 2022.

C. Board Practices

Board of Directors

Our board of directors consists of six directors. A director is not required to hold any shares in our company by way of qualification. A director who is in any way, whether directly or indirectly, interested in a contract or transaction or proposed contract or transaction with our company is required to declare the nature of his interest at a meeting of our directors. Subject to the Nasdaq Global Market rules and disqualification by the chairman of the relevant board meeting, a director may vote in respect of any contract or transaction or proposed contract or transaction notwithstanding that he may be interested therein, and if he does so his vote shall be counted and he shall be counted in the quorum at any meeting of our directors at which any such contract or transaction or proposed contract or transaction is considered. Our directors may exercise all the powers of our company to raise or borrow money and to mortgage or charge its undertaking, property and assets (present and future) and uncalled capital or any part thereof, to issue debentures, debenture stock, bonds and other securities, whether outright or as collateral security for any debt, liability or obligation of our company or of any third party. None of our non-executive directors has a service contract with us that provides for benefits upon termination of service.

Committees of the Board of Directors

We have established three committees under the board of directors: an audit committee, a compensation committee and a nominating and corporate governance committee. We have adopted a charter for each of the three committees. Each committee's members and functions are described below.

Audit Committee. Our audit committee consists of Mr. Changqing Ye, Mr. John Jinshu Zhang and Mr. Mei-Wei Cheng. Mr. Changqing Ye is the chairman of our audit committee. We have determined that Mr. Changqing Ye, Mr. John Jinshu Zhang and Mr. Mei-Wei Cheng satisfy the "independence" requirements of Rule 5605 of the Nasdaq Stock Market Rules and Rule 10A-3 under the Exchange Act. We have determined that Mr. Changqing Ye qualifies as an "audit committee financial expert." 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 the independent auditors and pre-approving all auditing and non-auditing services permitted to be performed by the independent auditors;
- reviewing with the independent auditors any audit problems or difficulties and management's response;
- discussing the annual audited financial statements with management and the independent auditors;
- reviewing the adequacy and effectiveness of our accounting and internal control policies and procedures and any steps taken to monitor and control major financial risk exposures;
- reviewing and approving all proposed related party transactions;
- meeting separately and periodically with management and the independent auditors; and
- monitoring compliance with our code of business conduct and ethics, including reviewing the adequacy and effectiveness of our procedures to ensure proper compliance.

Compensation Committee. Our compensation committee consists of Mr. John Jinshu Zhang and Mr. Julian Juul Wolhardt. Mr. John Jinshu Zhang is the chairman of our compensation committee. We have determined that Mr. John Jinshu Zhang and Mr. Julian Juul Wolhardt satisfy the "independence" requirements of Rule 5605 of the Nasdaq Stock Market Rules. The compensation committee assists the board in reviewing and approving the 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 during which 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;

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- 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.

Nominating and Corporate Governance Committee. Our nominating and corporate governance committee consists of Mr. John Jinshu Zhang, Mr. Changqing Ye and Mr. Mei-Wei Cheng. Mr. John Jinshu Zhang is the chairperson of our nominating and corporate governance committee. We have determined that Mr. John Jinshu Zhang, Mr. Changqing Ye and Mr. Mei-Wei Cheng satisfy the "independence" requirements of Rule 5605 of the Nasdaq Stock Market Rules. The nominating and corporate governance 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 nominating and corporate governance committee will be responsible for, among other things:

- selecting and recommending to the board nominees for election by the shareholders or appointment by the board;
- reviewing annually with the board the current composition of the board with regards to characteristics such as independence, knowledge, skills, experience and diversity;
- making recommendations on the frequency and structure of board meetings and monitoring the functioning of the committees of the board; and
- advising the board periodically with regards to significant developments in the law and practice of corporate governance as well as our compliance with applicable laws and regulations, and making recommendations to the board on all matters of corporate governance and on any remedial action to be taken.

Duties of Directors

Under Cayman Islands law, our directors owe fiduciary duties to our company, including a duty of loyalty, a duty to act honestly and a duty to act in what they consider in good faith to be in our best interests. Our directors must also exercise their powers only for a proper purpose. Our directors also have a duty to exercise skills they actually possess and such care and diligence that a reasonably prudent person would exercise in comparable circumstances. It was previously considered that a director need not exhibit in the performance of his duties a greater degree of skill than may reasonably be expected from a person of his knowledge and experience. However, English and Commonwealth Courts have moved toward an objective standard with regard to the required skill and care and these authorities are likely to be followed in the Cayman Islands. In fulfilling their duty of care to us, our directors must ensure compliance with our sixth amended and restated memorandum and articles of association, as amended and restated from time to time, and the class rights vested thereunder in the holders of the shares. In certain limited exceptional circumstances, a shareholder may have the right to seek damages in our name if a duty owed by our directors is breached.

Our board of directors has all the powers necessary for managing, and for directing and supervising, our business affairs. The functions and powers of our board of directors include, among others:

- convening shareholders' annual and extraordinary general meetings and reporting its work to shareholders at such meetings;
- declaring dividends and distributions;
- appointing officers and determining the term of office of the officers;
- exercising the borrowing powers of our company and mortgaging the property of our company; and
- approving the transfer of shares in our company, including the registration of such shares in our share register.

Terms of Directors and Officers

Our directors may be appointed by an ordinary resolution of our shareholders. Alternatively, our board of directors may, by the affirmative vote of a simple majority of the directors present and voting at a board meeting appoint any person as a director to fill a casual vacancy on our board or as an addition to the existing board. Our directors may be appointed on terms that the Director shall automatically retire from office (unless he has sooner vacated office) at the next or a subsequent annual general meeting or upon any specified event or after any specified period in a written agreement between our company and the Director, if any; but no such term shall be implied in the absence of express provision and our Directors hold office until such time as they are removed from office by an ordinary resolution of our shareholders (or where they have sooner vacated office). In addition, a director will cease to be a director if he (i) becomes bankrupt or makes any arrangement or composition with his creditors; (ii) dies or is found to be or becomes of unsound mind; (iii) resigns his office by notice in writing; (iv) without special leave of absence from our board, is absent from meetings of our board for three consecutive meetings and our board resolves that his office be vacated; or (v) is removed from office pursuant to any other provision of our articles of association.

Our officers are appointed by and serve at the discretion of the board of directors, and may be removed by our board of directors.

Employment Agreements and Indemnification Agreements

We have entered into employment agreements with each of our executive officers. Under these agreements, each of our executive officers is employed for a specified time period. We may terminate employment for cause, at any time, for certain acts of the executive officer, such as continued failure to satisfactorily perform, willful misconduct or gross negligence in the performance of agreed duties, conviction or entry of a guilty or nolo contendere plea of any felony or any misdemeanor involving moral turpitude, or dishonest act that results in material to our detriment or material of the employment agreement. We may also terminate an executive officer's employment without cause upon 60-day advance written notice. In such case of termination by us, we will provide severance payments to the executive officer as may be agreed between the executive officer and us. The executive officer may resign at any time with a 60-day advance written notice.

Each executive officer has agreed to hold, both during and after the termination or expiry of his or her employment agreement, in strict confidence and not to use, except as required in the performance of his or her duties in connection with the employment or pursuant to applicable law, any of our confidential information or trade secrets, any confidential information or trade secrets of our clients or prospective clients, or the confidential or proprietary information of any third party received by us and for which we have confidential obligations. The executive officers have also agreed to disclose in confidence to us all inventions, designs and trade secrets which they conceive, develop or reduce to practice during the executive officer's employment with us and to assign all right, title and interest in them to us, and assist us in obtaining and enforcing patents, copyrights and other legal rights for these inventions, designs and trade secrets.

In addition, each executive officer has agreed to be bound by non-competition and non-solicitation restrictions during the term of his or her employment and typically for one year following the last date of employment. Specifically, each executive officer has agreed not to (i) solicit from any customer doing business with us during the effective term of the employment agreement business of the same or of a similar nature to our business; (ii) solicit from any of our known potential customer business of the same or of a similar nature to that which has been the subject of our known written or oral bid, offer or proposal, or of substantial preparation with a view to making such a bid, proposal or offer; (iii) solicit the employment or services of, or hire or engage, any person who is known to be employed or engaged by us; or (iv) otherwise interfere with our business or accounts, including, but not limited to, with respect to any relationship or agreement between any vendor or supplier and us.

We have also entered into indemnification agreements with each of our directors and executive officers. Under these agreements, we agree to indemnify our directors and executive officers against certain liabilities and expenses incurred by such persons in connection with claims made by reason of their being a director or officer of our company.

Board Diversity Matrix

Board Diversity Matrix (As of February 28, 2023)

Country of Principal Executive Offices	PRC
Foreign Private Issuer	Yes
Disclosure Prohibited Under Home Country Law	No
Total Number of Directors	6

	Female	Male	Non-Binary	Did Not Disclose Gender
Part I: Gender Identity				
Directors	0	6	N/A	N/A
Part II: Demographic Background				
Underrepresented Individual in Home Country Jurisdiction			0	
LGBTQ+			0	
Did Not Disclose Demographic Background			0	

D. Employees

As of December 31, 2022, we had 641 full-time employees. We had a total of 623 employees as of December 31, 2021 and 702 employees as of December 31, 2022. The following table sets forth the numbers of our employees categorized by function as of December 31, 2022.

Function	Number	% of Total Employees
Sales and marketing	262	40.9
Research and Development	192	29.9
Supply chain management and general administration	187	29.2
Total number of employees	641	100.0

A substantial majority of the personnel in our manufacturing facility, mainly the personnel working on the assembly and production lines, are outsourced from third parties, and are not our employees.

Our success depends on our ability to attract, retain and motivate qualified employees that share our values and vision. We offer employees competitive salaries, which are potentially adjusted twice a year based on the employee’s performance. We believe that we maintain a good working relationship with our employees.

Under the regulations of mainland China, we are required to participate in and make contributions to housing funds and various employee social security plans that are organized by applicable local municipal and provincial governments, including pension, medical, work-related injury and unemployment benefit plans. See “Item 3. Key Information— D. Risks Related to Doing Business in China— Failure to make adequate contributions to various employee benefit plans as required by the regulations of mainland China may subject us to penalties.”

E. Share Ownership

Except as specifically noted, the following table sets forth information with respect to the beneficial ownership of our ordinary shares as of February 28, 2023 by:

- each of our directors and executive officers; and
- each of our principal shareholders who beneficially own more than 5% of our total outstanding shares on an as-converted basis.

The calculations in the table below are based on 154,277,834 ordinary shares, consisting of 137,735,814 Class A ordinary shares and 16,542,020 Class B ordinary shares, as of February 28, 2023.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, we have included shares that the person has the right to acquire within 60 days, including through the exercise of any option, warrant or other right or the conversion of any other security. These shares, however, are not included in the computation of the percentage ownership of any other person.

	Ordinary Shares Beneficially Owned			
	Class A ordinary shares	Class B ordinary shares	% of total ordinary shares	% of aggregate voting power ^{***}
Directors and Executive Officers^{**}:				
Yan Li ⁽¹⁾	767,500	6,615,000	4.8	13.4
Token Yilin Hu ⁽²⁾	—	8,207,020	5.3	16.1
Changqing Ye	—	—	—	—
Mei-Wei Cheng	*	—	*	*
Julian Juul Wolhardt	*	—	*	*
John Jinshu Zhang	*	—	*	*
Fion Wenjuan Zhou	*	—	*	*
All Directors and Executive Officers as a Group	860,300	14,822,020	10.2	29.5
Principal Shareholders:				
Glory Achievement Fund Limited ⁽³⁾	43,181,935	—	28.0	21.2
Niu Holding Inc. ⁽⁴⁾	—	9,927,020	6.4	19.5

* Less than 1% of our total ordinary shares outstanding as of February 28, 2023.

** The business address of Messrs. Yan Li, Token Yilin Hu, and Fion Wenjuan Zhou is No.1 Building, No. 195 Huilongguan East Road, Changqing District, Beijing 102208, People’s Republic of China. The business address of Mr. Changqing Ye is Flat B, 36/F, Harbour Green, 8 Sham Mong Road, Tai Kok Tsui, Kowloon, Hong Kong. The business address of Mr. Mei-Wei Cheng is 1202 Building 10, Green Court, 777 Biyun Road, Pudong, Shanghai, 201206, People’s Republic of China. The business address of Mr. Julian Juul Wolhardt is 21F, York House, The Landmark, 15 Queen’s Road Central, Hong Kong. The business address of Mr. John Jinshu Zhang is 749 Via del Monte, Palos Verdes Estates, California 90274, the United States of America.

*** For each person or group included in this column, percentage of total voting power represents voting power based on both Class A and Class B ordinary shares held by such person or group with respect to all outstanding shares of our Class A and Class B ordinary shares as a single class. Each holder of our Class A ordinary shares is entitled to one vote per share. Each holder of our Class B ordinary shares is entitled to four votes per share. Our Class B ordinary shares are convertible at any time by the holder into Class A ordinary shares on a one-for-one basis.

(1) Represents 6,615,000 Class B ordinary shares held by ELLY Holdings Limited, a BVI business company. ELLY Holdings Limited is wholly owned by Dr. Yan Li. The registered address of ELLY Holdings Limited is Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, British Virgin Islands VG1110.

(2) Represents 8,207,020 Class B ordinary shares out of the 9,927,020 Class B ordinary shares held by Niu Holding Inc., a BVI business company, which is 82.7% owned by LUCK GENIE HOLDINGS LIMITED, a BVI business company, and 17.3% owned by WEALTH ERUPT HOLDINGS LIMITED, a BVI business company. LUCK GENIE HOLDINGS LIMITED is wholly owned by Legend Champ Investment Limited, a BVI business company. Legend Champ Investment Limited is wholly owned by Token Who Cares Trust. The settlor and beneficiary of Token Who Cares Trust is Mr. Token Yilin Hu, our director. WEALTH ERUPT HOLDINGS LIMITED is beneficially owned by Mr. Carl Chuankai Liu. According to the arrangement between two shareholders of Niu Holding Inc., Mr. Token Yilin Hu beneficially owned 8,207,020 Class B ordinary shares out of the 9,927,020 Class B ordinary shares held by Niu Holding Inc., and Mr. Carl Chuankai Liu beneficially owned the remaining Class B ordinary shares out of those held by Niu Holding Inc. The registered address of Niu Holding Inc. is Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, British Virgin Islands VG1110.

- (3) Represents 43,181,935 Class A ordinary shares held by Glory Achievement Fund Limited, a Cayman Islands company, and its affiliated parties. Glory Achievement Fund Limited is ultimately and wholly held by a trust, which has Mr. Yi'nan Li as the beneficiary and is administered by an independent trustee and initially by three individual protectors unrelated to Mr. Yi'nan Li. The registered address of Glory Achievement Fund Limited is P.O. Box 2075, George Town, Grand Cayman KY1-1105, Cayman Islands.
- (4) Represents 9,927,020 Class B ordinary shares held by Niu Holding Inc., a BVI business company, which is 82.7% owned by LUCK GENIE HOLDINGS LIMITED, a BVI business company, and 17.3% owned by WEALTH ERUPT HOLDINGS LIMITED, a BVI business company. LUCK GENIE HOLDINGS LIMITED is wholly owned by Legend Champ Investment Limited, a BVI business company. Legend Champ Investment Limited is wholly owned by Token Who Cares Trust. The settlor and beneficiary of Token Who Cares Trust is Mr. Token Yilin Hu, our director and vice president. WEALTH ERUPT HOLDINGS LIMITED is beneficially owned by Mr. Carl Chuankai Liu. The registered address of Niu Holding Inc. is Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, British Virgin Islands VG1110.

To our knowledge, as of February 28, 2023, a total of 101,545,278 Class A ordinary shares were held by one record holder in the United States, representing approximately 65.8% of our total outstanding shares on an as-converted basis. The record holder is Citibank, N.A., the depository of our ADS program. None of our outstanding Class B ordinary shares were held by record holders in the United States as of February 28 2023. 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. We are not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

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 four votes per share. Holders of Class A and Class B ordinary shares vote together as one class on all matters subject to a shareholders' vote. 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 circumstance. See "Item 10.B. Additional Information—Memorandum and Articles of Association" for a more detailed description of our Class A ordinary shares and Class B ordinary shares.

F. Disclosure of Registrant's Action to Recover Erroneously Awarded Compensation

Not applicable.

Item 7. Major Shareholders and Related Party Transactions

A. Major Shareholders

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

B. Related Party Transactions

Contractual Arrangements with the VIE and Its Shareholders

See "Item 4. Information on the Company—C. Organizational Structure—Contractual Arrangements with the VIE."

Shareholders Agreement

We entered into our fourth amended and restated shareholders agreement on August 22, 2018 with our shareholders, which consist of holders of ordinary shares and preferred shares. The shareholders agreement provides for certain shareholders' rights, including right of participation, right of first refusal and co-sale rights, and contains provisions governing the board of directors and other corporate governance matters. The special rights, as well as the corporate governance provisions, have automatically terminated upon the completion of our initial public offering.

Registration Rights

We have granted certain registration rights to our shareholders. Set forth below is a description of the registration rights granted under the shareholders agreement.

Demand Registration Rights. Holders of at least 10% of the registrable securities (including preferred shares and ordinary shares issued upon conversion of preferred shares) then outstanding have the right to demand that we file a registration statement of all registrable securities that the holders request to be registered and included in such registration by written notice. Other than required by the underwriter(s) in connection with our initial public offering, at least fifty percent (50)% of the registrable securities requested by the holders to be included in such underwriting and registration shall be so included. We have the right to defer filing of a registration statement for a period of not more than 90 days after the receipt of the request of the initiating holders if we furnish to the holders requesting registration a certificate signed by our president or chief executive officer stating that in the good faith judgment of our board of directors, it would be materially detrimental to us and our shareholders for such registration statement to be filed at such time. However, we cannot exercise the deferral right more than once in any twelve-month period. We are obligated to effect no more than three demand registrations, other than demand registration to be effected pursuant to registration statement on Form F-3, for which an unlimited number of demand registrations shall be permitted.

Piggyback Registration Rights. If we propose to file a registration statement for a public offering of our securities, we must offer shareholders an opportunity to include in the registration all or any part of the registrable securities held by such holders. If the managing underwriters of any underwritten offering determine in good faith that marketing factors require a limitation of the number of shares to be underwritten, and the number of shares that may be included in the registration and the underwriting shall be allocated (i) first, to us, (ii) second, to each holder requesting inclusion of its registrable securities in such registration statement on a pro rata basis based on the total number of registrable securities then held by each such holder, (iii) third, to holders of other securities of us.

Form F-3 Registration Rights. Our shareholders may request us in writing to file an unlimited number of registration statements on Form F-3. We shall effect the registration of the securities on Form F-3 as soon as practicable, except in certain circumstances.

Expenses of Registration. We will bear all registration expenses, other than underwriting discounts and selling commissions.

Termination of Registration Rights. Our shareholders' registration rights will terminate upon the earlier of (i) the fifth anniversary of the completion of our initial public offering, (ii) as to any shareholder when the shareholder together with its affiliates can sell all of its shares subject to registration rights in reliance on Rule 144 promulgated under the Securities Act without transfer restrictions, and (iii) the consummation of a liquidation event.

Employment Agreements and Indemnification Agreements

See "Item 6—Directors, Senior Management and Employees—B. Compensation."

Share Options and Restricted Shares Grants

Please refer to "Item 6. Directors, Senior Management and Employees— B. 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

We are currently not a party to any material legal or administrative proceedings. We may from time to time be subject to various legal or administrative claims and proceedings arising in the ordinary course of business. Litigation or any other legal or administrative proceeding, regardless of the outcome, is likely to result in substantial cost and diversion of our resources, including our management's time and attention.

Dividend Policy

Our board of directors has discretion on whether to distribute dividends, subject to certain requirements of Cayman Islands law. In addition, our shareholders may by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our board of directors. In either case, all dividends are subject to certain restrictions under Cayman Islands law, namely that our company may only pay dividends out of profits or share premium, and always that in no circumstances may a dividend be paid if this would result in our company being unable to pay its debts as they fall due in the ordinary course of business. Even if we decide to pay dividends, the form, frequency and amount will depend upon our future operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors that the board of directors may deem relevant.

We do not 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.

We are a holding company incorporated in the Cayman Islands. We may rely on dividends from our subsidiaries in mainland China for our cash requirements, including any payment of dividends to our shareholders. Regulations of mainland China may restrict the ability of our mainland China subsidiaries to pay dividends to us. See “Item 4. Information on the Company—B. Business Overview—Regulation—Regulations Relating to Dividend Distribution.”

If we pay any dividends on our ordinary shares, we will pay those dividends which are payable in respect of the Class A ordinary shares underlying the ADSs to the depositary, as the registered holder of such Class A ordinary shares, and the depositary then will pay such amounts to the ADS holders in proportion to the Class A ordinary shares underlying the ADSs held by such ADS holders, 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, each representing two Class A ordinary shares, have been listed on The Nasdaq Global Market since October 19, 2018 under the symbol “NIU.”

B. Plan of Distribution

Not applicable.

C. Markets

The ADSs have been listed on Nasdaq since October 19, 2018 under the symbol “NIU”.

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 current (sixth amended and restated) memorandum and articles of association, as well as the Companies Act (As Revised) insofar as they relate to the material terms of our ordinary shares. The information set forth in Exhibits 2.5 and 2.6 to this Annual Report on Form 20-F is incorporated herein by reference.

Registered Office and Objects

Our registered office in the Cayman Islands is located at the offices of Maples Corporate Services Limited at PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands. The objects for which our company is established are unrestricted and we have the full power and authority to carry out any object not prohibited by the laws of the Cayman Islands.

Board of Directors

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

Ordinary Shares

Ordinary Shares. Our ordinary shares are divided into Class A ordinary shares and Class B ordinary shares. Holders of our Class A ordinary shares and Class B ordinary shares will have the same rights except for voting and conversion rights. Each Class A ordinary share shall entitle the holder thereof to one vote on all matters subject to vote at our general meetings, and each Class B ordinary share shall entitle the holder thereof to four votes on all matters subject to vote at our general meetings. Our ordinary shares are issued in registered form and are issued when registered in our register of members. We may not issue shares to bearer. Our shareholders who are non-residents of the Cayman Islands may freely hold and vote their shares.

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. Any number of Class B ordinary shares held by a holder thereof will be automatically and immediately converted into an equal number of Class A ordinary shares upon the occurrence of (i) any direct or indirect sale, transfer, assignment or disposition of such number of Class B ordinary shares by the holder thereof or the direct or indirect transfer or assignment of the voting power attached to such number of Class B ordinary shares through voting proxy or otherwise to any person that is not an affiliate of such holder or (ii) the direct or indirect sale, transfer, assignment or disposition of a majority of the issued and outstanding voting securities of, or the direct or indirect transfer or assignment of the voting power attached to such voting securities through voting proxy or otherwise, or the direct or indirect sale, transfer, assignment or disposition of all or substantially all of the assets of, a holder of Class B ordinary shares that is an entity to any person that is not an affiliate of such holder.

Dividends. Our directors may from time to time declare dividends (including interim dividends) and other distributions on our shares in issue and authorize payment of the same out of the funds of our company lawfully available therefor. In addition, our shareholders may declare dividends by ordinary resolution, but no dividend shall exceed the amount recommended by our directors. Our memorandum and articles of association provide that dividends may be declared and paid out of the funds of our company lawfully available therefor. Under the laws of the Cayman Islands, our company may pay a dividend out of either profits or share premium account; provided that in no circumstances may a dividend be paid if this would result in our company being unable to pay its debts as they fall due in the ordinary course of business.

Voting Rights. Holders of our Class A ordinary shares and our Class B ordinary shares shall, at all times, vote together as one class on all matters submitted to a vote by our shareholders at any general meeting of our company. Each Class A ordinary share shall be entitled to one vote, and each Class B ordinary share shall be entitled to four votes, on all matters subject to a vote at general meetings of our company. Voting at any meeting of shareholders is by show of hands unless a poll (before or on the declaration of the result of the show of hands) is demanded. A poll may be demanded by the chairman of such meeting or any one shareholder holding not less than 10% of the votes attaching to the shares present in person or by proxy.

An ordinary resolution to be passed at a meeting by the shareholders requires the affirmative vote of a simple majority of the votes attaching to the ordinary shares cast at a meeting, while a special resolution requires the affirmative vote of no less than two-thirds of the votes cast attaching to the issued and outstanding ordinary shares at a meeting. A special resolution will be required for important matters such as a change of name or making changes to our memorandum and articles of association. Our shareholders may, among other things, divide or combine their shares by ordinary resolution.

General Meetings of Shareholders. As a Cayman Islands exempted company, we are not obliged by the Companies Act to call shareholders' annual general meetings. Our memorandum and articles of association provide that we may (but are not obliged to) in each year hold a general meeting as our annual general meeting in which case we shall specify the meeting as such in the notices calling it, and the annual general meeting shall be held at such time and place as may be determined by our directors.

Shareholders' general meetings may be convened by the chairman of our board of directors or by our directors (acting by a resolution of our board). Advance notice of at least seven calendar days is required for the convening of our annual general shareholders' meeting (if any) and any other general meeting of our shareholders. A quorum required for any general meeting of shareholders consists of, at the time when the meeting proceeds to business, one or more of our shareholders holding shares which carry in aggregate (or representing by proxy) not less than one-third of all votes attaching to all of our shares in issue and entitled to vote at such general meeting.

The Companies Act provides shareholders with only limited rights to requisition a general meeting, and does not provide shareholders with any right to put any proposal before a general meeting. However, these rights may be provided in a company's articles of association. Our memorandum and articles of association provide that upon the requisition of any one or more of our shareholders holding shares which carry in aggregate not less than one-third of all votes attaching to all issued and outstanding shares of our company entitled to vote at general meetings, our board will convene an extraordinary general meeting and put the resolutions so requisitioned to a vote at such meeting. However, our memorandum and articles of association do not provide our shareholders with any right to put any proposals before annual general meetings or extraordinary general meetings not called by such shareholders.

Transfer of Ordinary Shares. Subject to the restrictions set out below, any of our shareholders may transfer all or any 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 its absolute discretion, decline to register any transfer of any ordinary share which is not fully paid up or on which we have a lien. Our board of directors may also decline to register any transfer of any ordinary share unless:

- the instrument of transfer is lodged with us, accompanied by the certificate for the ordinary shares to which it relates and such other evidence as our board of directors may reasonably require to show the right of the transferor to make the transfer;
- the instrument of transfer is in respect of only one class of ordinary shares;
- the instrument of transfer is properly stamped, if required;
- in the case of a transfer to joint holders, the number of joint holders to whom the ordinary share is to be transferred does not exceed four; and
- a fee of such maximum sum as the Nasdaq Global Market may determine to be payable or such lesser sum as our directors may from time to time require is paid to us in respect thereof.

If our directors refuse to register a transfer they shall, within three months after the date on which the instrument of transfer was lodged, send to each of the transferor and the transferee notice of such refusal.

The registration of transfers may, on ten calendar days' notice being given by advertisement in such one or more newspapers, by electronic means or by any other means in accordance with the rules of the Nasdaq Global Market be suspended and the register closed at such times 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 nor the register closed for more than 30 days in any year as our board may determine.

Liquidation. On the winding up of our company, if the assets available for distribution amongst our shareholders shall be more than sufficient to repay the whole of the share capital at the commencement of the winding up, the surplus shall be distributed amongst our shareholders in proportion to the par value of the shares held by them at the commencement of the winding up, subject to a deduction from those shares in respect of which there are monies due, of all monies payable to our company for unpaid calls or otherwise. If our assets available for distribution are insufficient to repay all of the paid-up capital, such the assets will be distributed so that, as nearly as may be, the losses are borne by our shareholders in proportion to the par value of the shares held by them.

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 are subject to forfeiture.

Redemption, Repurchase and Surrender of Shares. We may issue shares on terms that such shares are subject to redemption, at our option or at the option of the holders of these shares, on such terms and in such manner as may be determined, before the issue of such shares, by our board of directors or by our shareholders by special resolution. Our company may also repurchase any of our shares on such terms and in such manner as have been approved by our board of directors or by an ordinary resolution of our shareholders. Under the Companies Act, the redemption or repurchase of any share may be paid out of our company's profits or out of the proceeds of a new issue of shares made for the purpose of such redemption or repurchase, or out of capital (including share premium account and capital redemption reserve) if our company can, immediately following such payment, pay its debts as they fall due in the ordinary course of business. In addition, under the Companies Act no such share may be redeemed or repurchased (a) unless it is fully paid up, (b) if such redemption or repurchase would result in there being no shares outstanding or (c) if the company has commenced liquidation. In addition, our company may accept the surrender of any fully paid share for no consideration.

Variations of Rights of Shares. Whenever the capital of our company is divided into different classes the rights attached to any such class may, subject to any rights or restrictions for the time being attached to any class, only be materially adversely varied with the consent in writing of the holders of all of the issued shares of that class or with the sanction of an ordinary resolution passed at a separate meeting of the holders of the shares of that class. The rights conferred upon the holders of the shares of any class issued with preferred or other rights shall not, subject to any rights or restrictions for the time being attached to the shares of that class, be deemed to be materially adversely varied by the creation, allotment or issue of further shares ranking *pari passu* with or subsequent to them or the redemption or purchase of any shares of any class by our company. The rights of the holders of shares shall not be deemed to be materially adversely varied by the creation or issue of shares with preferred or other rights including, without limitation, the creation of shares with enhanced or weighted voting rights.

Issuance of Additional Shares. Our memorandum of association authorizes our board of directors to issue additional ordinary shares from time to time as our board of directors shall determine, to the extent of available authorized but unissued shares.

Our memorandum of association also authorizes our board of directors to establish from time to time one or more series of preference shares and to determine, with respect to any series of preference shares, the terms and rights of that series, including:

- the designation of the series;
- the number of shares of the series;
- the dividend rights, dividend rates, conversion rights, voting rights; and
- the rights and terms of redemption and liquidation preferences.

Our board of directors may issue preference shares without action by our shareholders to the extent authorized but unissued. Issuance of these shares may dilute the voting power of holders of ordinary shares.

Inspection of Books and Records. Holders of our ordinary shares will have no general right under Cayman Islands law to inspect or obtain copies of our list of shareholders or our corporate records (save for our memorandum and articles of association, our register of mortgages and charges and special resolutions of our shareholders). However, we intend to provide our shareholders with our annual audited financial statements.

Anti-Takeover Provisions. Some provisions of our memorandum and articles of association may discourage, delay or prevent a change of control of our company or management that shareholders may consider favorable, including provisions that:

- authorize our board of directors to issue preference shares in one or more series and to designate the price, rights, preferences, privileges and restrictions of such preference shares without any further vote or action by our shareholders; and
- limit the ability of shareholders to requisition and convene general meetings of shareholders.

However, under Cayman Islands law, our directors may only exercise the rights and powers granted to them under our memorandum and articles of association for a proper purpose and for what they believe in good faith to be in the best interests of our company.

Exempted Company. We are an exempted company with limited liability under the Companies Act. The Companies Act distinguishes between ordinary resident companies and exempted companies. Any company that is registered in the Cayman Islands but conducts business mainly outside of the Cayman Islands may apply to be registered as an exempted company. The requirements for an exempted company are essentially the same as for an ordinary company except that an exempted company:

- does not have to file an annual return of its shareholders with the Registrar of Companies;
- is not required to open its register of members for inspection;
- does not have to hold an annual general meeting;
- may issue shares with no par value;
- may obtain an undertaking against the imposition of any future taxation (such undertakings are usually given for 20 years in the first instance);
- may register by way of continuation in another jurisdiction and be deregistered in the Cayman Islands;
- may register as a limited duration company; and
- may register as a segregated portfolio company.

“Limited liability” means that the liability of each shareholder is limited to the amount unpaid by the shareholder on the shares of the company (except in exceptional circumstances, such as involving fraud, the establishment of an agency relationship or an illegal or improper purpose or other circumstances in which a court may be prepared to pierce or lift the corporate veil).

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,” “Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions,” or elsewhere in this annual report on Form 20-F.

D. Exchange Controls

See “Item 4.B. Information on the Company—Business Overview—Regulations—Regulations Relating to Foreign Exchange.”

E. Taxation

The following summary of the material Cayman Islands, mainland China and U.S. federal income tax consequences of an investment in the ADSs or ordinary shares is based upon laws and relevant interpretations thereof in effect as of the date of this registration statement, all of which are subject to change. This summary does not deal with all possible tax consequences relating to an investment in the ADSs or ordinary shares, such as the tax consequences under U.S. state and local tax laws or under the tax laws of jurisdictions other than the Cayman Islands, mainland China and the United States.

Cayman Islands Taxation

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, after execution, 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.

Payments of dividends and capital in respect of our ordinary shares and ADSs will not be subject to taxation in the Cayman Islands and no withholding will be required on the payment of a dividend or capital to any holder of our ordinary shares or the ADSs, nor will gains derived from the disposal of our ordinary shares or the ADSs be subject to Cayman Islands income or corporation tax.

Mainland China Taxation

Under the PRC Enterprise Income Tax Law and its implementation rules, an enterprise established outside of mainland China with a “de facto management body” within mainland China is considered a resident enterprise and will be subject to the enterprise income tax at the rate of 25% on its global income. The implementation rules define the term “de facto management body” as the body that exercises full and substantial control over and overall management of the business, production, personnel, accounts and properties of an enterprise. In April 2009, the State Administration of Taxation issued a circular, known as Circular 82, which provides certain specific criteria for determining whether the “de facto management body” of a mainland China-controlled enterprise that is incorporated offshore is located in mainland China. Although this circular only applies to offshore enterprises controlled by mainland China enterprises or mainland China enterprise groups, not those controlled by mainland China individuals or foreigners, the 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 all offshore enterprises. According to Circular 82, an offshore incorporated enterprise controlled by a mainland China enterprise or a mainland China enterprise group will be regarded as a mainland China tax resident by virtue of having its “de facto management body” in mainland China only if all of the following conditions are met: (i) the primary location of the day-to-day operational management is in mainland China; (ii) decisions relating to the enterprise’s financial and human resource matters are made or are subject to approval by organizations or personnel in mainland China; (iii) the enterprise’s primary assets, accounting books and records, company seals and board and shareholder resolutions are located or maintained in mainland China; and (iv) at least 50% of voting board members or senior executives habitually reside in mainland China.

We believe that Niu Technologies is not a mainland China resident enterprise for mainland China tax purposes. Niu Technologies is not controlled by a mainland China enterprise or mainland China enterprise group and we do not believe that Niu Technologies meets all of the conditions above. Niu Technologies is a company incorporated outside of mainland China. As a holding company, its key assets are its ownership interests in its subsidiaries, and its key assets are located, and its records (including the resolutions of its board of directors and the resolutions of its shareholders) are maintained, outside of mainland China. For the same reasons, we believe our other entities outside of mainland China are not mainland China resident enterprises either. However, the tax resident status of an enterprise is subject to determination by the PRC tax authorities and uncertainties remain with respect to the interpretation of the term “de facto management body.” There can be no assurance that the PRC government will ultimately take a view that is consistent with us.

If the PRC tax authorities determine that Niu Technologies is a mainland China resident enterprise for enterprise income tax purposes, we may be required to withhold a 10% withholding tax from dividends we pay to our shareholders that are non-resident enterprises, including the holders of the ADSs. In addition, non-resident enterprise shareholders (including the ADS holders) may be subject to a 10% mainland China tax on gains realized on the sale or other disposition of ADSs or ordinary shares, if such income is treated as sourced from within mainland China. It is unclear whether our non-mainland China individual shareholders (including the ADS holders) would be subject to any mainland China tax on dividends or gains obtained by such non-mainland China individual shareholders in the event we are determined to be a mainland China resident enterprise. If any mainland China tax were to apply to such dividends or gains, it would generally apply at a rate of 20% unless a reduced rate is available under an applicable tax treaty. It is also unclear whether non-mainland China shareholders of Niu Technologies would be able to claim the benefits of any tax treaties between their country of tax residence and mainland China in the event that Niu Technologies is treated as a mainland China resident enterprise.

Provided that our Cayman Islands holding company, Niu Technologies, is not deemed to be a mainland China resident enterprise, holders of the ADSs and ordinary shares who are not mainland China residents will not be subject to mainland China income tax on dividends distributed by us or gains realized from the sale or other disposition of our shares or ADSs. However, under SAT Public Notice 7 and SAT Bulletin 37, where a non-resident enterprise conducts an “indirect transfer” by transferring taxable assets, including, in particular, equity interests in a mainland China resident enterprise, indirectly by disposing of the equity interests of an overseas holding company, the non-resident enterprise, being the transferor, or the transferee or the mainland China entity which directly owned such taxable assets may report to the relevant tax authority such indirect transfer. Using a “substance over form” principle, the PRC tax authority may disregard the existence of the overseas holding company if it lacks a reasonable commercial purpose and was established for the purpose of reducing, avoiding or deferring mainland China tax. As a result, gains derived from such indirect transfer may be subject to mainland China 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 10% for the transfer of equity interests in a mainland China resident enterprise. We and our non-mainland China resident investors may be at risk of being required to file a return and being taxed under SAT Public Notice 7 and SAT Bulletin 37, and we may be required to expend valuable resources to comply with SAT Public Notice 7 and SAT Bulletin 37, or to establish that we should not be taxed under these circulars. See “Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—We face uncertainty with respect to indirect transfers of equity interests in mainland China resident enterprises by their non-mainland China holding companies.”

United States Federal Income Tax Considerations

The following discussion is a summary of U.S. federal income tax considerations generally applicable to the ownership and disposition of the ADSs or ordinary shares by a U.S. Holder (as defined below) that holds the ADSs or ordinary shares as “capital assets”(generally, property held for investment) under the U.S. Internal Revenue Code of 1986, as amended, or the Code. This discussion is based upon existing U.S. federal tax law, which is subject to differing interpretations or change, possibly with retroactive effect. There can be no assurance that the IRS or a court will not take a contrary position. This discussion, moreover, does not address the U.S. federal estate, gift, Medicare and alternative minimum tax considerations, or any state, local and non-U.S. tax considerations, relating to the ownership or disposition of the ADSs or ordinary shares. The following summary does not address all aspects of U.S. federal income taxation that may be important to particular investors in light of their individual circumstances or to persons in special tax situations such as:

- banks and other financial institutions;
- insurance companies;
- pension plans;
- cooperatives;
- regulated investment companies;
- real estate investment trusts;
- broker-dealers;

- traders that elect to use a mark-to-market method of accounting;
- certain former U.S. citizens or long-term residents;
- tax-exempt entities (including private foundations);
- holders who acquire their ADSs or ordinary shares pursuant to any employee share option or otherwise as compensation;
- investors that will hold their ADSs or ordinary shares as part of a straddle, hedge, conversion, constructive sale or other integrated transaction for U.S. federal income tax purposes;
- investors that have a functional currency other than the U.S. dollar;
- persons that actually or constructively own 10% or more of our stock (by vote or value); or
- partnerships or other entities taxable as partnerships for U.S. federal income tax purposes, or persons holding the ADSs or ordinary shares through such entities.

all of whom may be subject to tax rules that differ significantly from those discussed below.

Each U.S. Holder is urged to consult its tax advisor regarding the application of U.S. federal taxation to its particular circumstances, and the state, local, non-U.S. and other tax considerations of the ownership and disposition of the ADSs or ordinary shares.

General

For purposes of this discussion, a “U.S. Holder” is a beneficial owner of the ADSs or ordinary shares that is, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created in or organized under the law of the United States or any state thereof or the District of Columbia;
- an estate the income of which is includible in gross income for U.S. federal income tax purposes regardless of its source; or
- a trust (A) the administration of which is subject to the primary supervision of a U.S. court and which has one or more U.S. persons who have the authority to control all substantial decisions of the trust or (B) that has otherwise validly elected to be treated as a U.S. person under the Code.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) is a beneficial owner of the ADSs or ordinary shares, the tax treatment of a partner in the partnership will generally depend upon the status of the partner and the activities of the partnership. Partnerships holding the ADSs or ordinary shares and their partners are urged to consult their tax advisors regarding an investment in the ADSs or ordinary shares.

For U.S. federal income tax purposes, a U.S. Holder of ADSs will generally be treated as the beneficial owner of the underlying shares represented by the ADSs. The remainder of this discussion assumes that a U.S. Holder of the ADSs will be treated in this manner. Accordingly, deposits or withdrawals of ordinary shares for ADSs will generally not be subject to U.S. federal income tax.

Passive Foreign Investment Company Considerations

A non-U.S. corporation, such as our company, will be classified as a PFIC, for U.S. federal income tax purposes for any taxable year, if either (i) 75% or more of its gross income for such year consists of certain types of “passive” income or (ii) 50% or more of the value of its assets (generally determined on the basis of a quarterly average) during such year is attributable to assets that produce or are held for the production of passive income. For this purpose, cash and assets readily convertible into cash are categorized as a passive asset and the company’s goodwill and other unbooked intangibles are taken into account. Passive income generally includes, among other things, dividends, interest, rents, royalties and gains from the disposition of passive assets. We will be treated as owning a proportionate share of the assets and earning a proportionate share of the income of any other corporation in which we own, directly or indirectly, 25% or more (by value) of the stock.

Although the law in this regard is not entirely clear, we treat the VIE and its subsidiaries as being owned by us for U.S. federal income tax purposes because we conduct the business operations of the VIE and are entitled to substantially all of the economic benefits associated with it. As a result, we consolidate its result of operations in our consolidated U.S. GAAP financial statements. If it were determined, however, that we are not the owner of the VIE for U.S. federal income tax purposes, we may be treated as a PFIC for the current taxable year and any subsequent taxable year.

Assuming that we are the owner of the VIE and its subsidiaries for U.S. federal income tax purposes, and based upon our current and projected income and assets, we do not believe we were a PFIC for the taxable year ended December 31, 2022 and we do not presently expect to be a PFIC for the current taxable year or the foreseeable future. While we do not expect to be or become a PFIC, no assurance can be given in this regard because the determination of whether we are or will become a PFIC for any taxable year is a fact-intensive determination made annually that will depend, in part, upon the composition of our income and assets. Fluctuations in the market price of the ADSs may cause us to be or become a PFIC for the current or future taxable years because the value of our assets for purposes of the asset test, including the value of our goodwill and unbooked intangibles, may be determined by reference to the market price of the ADSs from time to time (which may be volatile). In estimating the value of our goodwill and other unbooked intangibles, we have taken into account our current market capitalization. If our market capitalization subsequently declines, we may be or become classified as a PFIC for the current taxable year or future taxable years. Furthermore, the composition of our income and assets may also be affected by how, and how quickly, we use our liquid assets. Under circumstances where our revenue from activities that produce passive income significantly increases relative to our revenue from activities that produce non-passive income, or where we determine not to deploy significant amounts of cash for active purposes, our risk of becoming classified as a PFIC may substantially increase.

If we are a PFIC for any year during which a U.S. Holder holds the ADSs or ordinary shares, we will generally continue to be treated as a PFIC for all succeeding years during which such U.S. Holder holds the ADSs or ordinary shares.

The discussion below under “—Dividends” and “—Sale or Other Disposition” is written on the basis that we will not be or become classified as a PFIC for U.S. federal income tax purposes. The U.S. federal income tax rules that apply generally if we are treated as a PFIC are discussed below under “—Passive Foreign Investment Company Rules.”

Dividends

Any cash distributions paid on the ADSs or ordinary shares (including the amount of any mainland China tax withheld) out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles, will generally be includible in the gross income of a U.S. Holder as dividend income on the day actually or constructively received by the U.S. Holder, in the case of ordinary shares, or by the depository, in the case of ADSs. Because we do not intend to determine our earnings and profits on the basis of U.S. federal income tax principles, any distribution we pay will generally be treated as a “dividend” for U.S. federal income tax purposes. Dividends received on the ADSs or ordinary shares will not be eligible for the dividends-received deduction allowed to corporations in respect of dividends received from U.S. corporations.

Individuals and other non-corporate U.S. Holders will be subject to tax at the lower capital gain tax rate applicable to “qualified dividend income”; *provided* that certain conditions are satisfied, including that (i) the ADSs or ordinary shares on which the dividends are paid are readily tradable on an established securities market in the United States, or, in the event that we are deemed to be a mainland China resident enterprise under the mainland China tax law, we are eligible for the benefit of the United States-mainland China income tax treaty (the “Treaty”), (ii) we are neither a PFIC nor treated as such with respect to a U.S. Holder (as discussed below) for the taxable year in which the dividend is paid and the preceding taxable year, and (iii) certain holding period requirements are met. Our ADSs are considered to be readily tradable on the Nasdaq Global Market, which is an established securities market in the United States. There can be no assurance that the ADSs will continue to be considered readily tradable on an established securities market in later years. Because the ordinary shares will not be listed on a U.S. exchange, we do not believe that dividends received with respect to ordinary shares that are not represented by ADSs will be treated as qualified dividends. U.S. Holders are urged to consult their tax advisors regarding the availability of the lower rate for dividends paid with respect to the ADSs or ordinary shares.

In the event that we are deemed to be a mainland China resident enterprise under the PRC Enterprise Income Tax Law (see “—Mainland China Taxation”), we may be eligible for the benefits of the Treaty. If we are eligible for such benefits, dividends we pay on our ordinary shares, regardless of whether such shares are represented by the ADSs, and regardless of whether the ADSs are readily tradable on an established securities market in the United States, would be eligible for the reduced rates of taxation described in the preceding paragraph.

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. In the event that we are deemed to be a mainland China resident enterprise under the PRC Enterprise Income Tax Law, a U.S. Holder may be subject to mainland China withholding taxes on dividends paid on the ADSs or ordinary shares (see “—Mainland China Taxation”). Depending on the U.S. Holder’s particular facts and circumstances and subject to a number of complex conditions and limitations, mainland China withholding taxes on dividends that are non-refundable under the Treaty may be treated as foreign taxes eligible for credit against a U.S. Holder’s U.S. federal income tax liability. A U.S. Holder who does not elect to claim a foreign tax credit for foreign tax withheld may instead claim a deduction for U.S. federal income tax purposes, in respect of such withholding, but only for a year in which such holder elects to do so for all creditable foreign income taxes. The rules governing the foreign tax credit are complex and U.S. Holders are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

Sale or Other Disposition

A U.S. Holder will generally recognize gain or loss upon the sale or other disposition of ADSs or ordinary shares in an amount equal to the difference between the amount realized upon the disposition and the holder’s adjusted tax basis in such ADSs or ordinary shares. The gain or loss will generally be capital gain or loss. Any capital gain or loss will be long term if the ADSs or ordinary shares have been held for more than one year. The deductibility of a capital loss may be subject to limitations. Any such gain or loss that the U.S. Holder recognizes 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 mainland China resident enterprise under the PRC Enterprise Income Tax Law, we may be eligible for the benefits of the Treaty. In such event, if mainland China 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 mainland China source income. Pursuant to recently issued Treasury Regulations, however, if a U.S. Holder is not eligible for the benefits of the Treaty or does not elect to apply the Treaty, then such holder may not be able to claim a foreign tax credit arising from any mainland China tax imposed on the disposition of the ADSs or ordinary shares. Each U.S. Holder is advised to consult its tax advisor regarding the tax consequences if a foreign tax is imposed on a disposition of the ADSs or ordinary shares, including the availability of the foreign tax credit or deduction under its particular circumstances, their eligibility for benefits under the Treaty and the potential impact of the recently issued Treasury Regulations.

Passive Foreign Investment Company Rules

If we are classified as a PFIC for any taxable year during which a U.S. Holder holds the ADSs or ordinary shares, and unless the U.S. Holder makes a mark-to-market election (as described below), the U.S. Holder will generally be subject to special tax rules on (i) any excess distribution that we make to the U.S. Holder (which generally means any distribution paid during a taxable year to a U.S. Holder that is greater than 125 percent of the average annual distributions paid in the three preceding taxable years or, if shorter, the U.S. Holder's holding period for the ADSs or ordinary shares), and (ii) any gain realized on the sale or other disposition including, under certain circumstances, a pledge, of ADSs or ordinary shares. Under the PFIC rules:

- the excess distribution or gain will be allocated ratably over the U.S. Holder's holding period for the ADSs or ordinary shares;
- the amount allocated to the current taxable year and any taxable years in the U.S. Holder's holding period prior to the first taxable year in which we are classified as a PFIC (each, a "pre-PFIC year") will be taxable as ordinary income; and
- the amount allocated to each prior taxable year, other than a pre-PFIC year, will be subject to tax at the highest tax rate in effect for individuals or corporations, as appropriate, for that year, increased by an additional tax equal to the interest on the resulting tax deemed deferred with respect to each such taxable year.

If we are a PFIC for any taxable year during which a U.S. Holder holds the ADSs or ordinary shares, and any of our subsidiaries, the VIE or any of the subsidiaries of the VIE entity is also a PFIC, such U.S. Holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC for purposes of the application of these rules. U.S. Holders are urged to consult their tax advisors regarding the application of the PFIC rules to any of our subsidiaries, the VIE or any of the subsidiaries of the VIE.

As an alternative to the foregoing rules, a U.S. Holder of "marketable stock" (as defined below) in a PFIC may make a mark-to-market election with respect to such stock. If a U.S. Holder makes this election with respect to the ADSs, the holder will generally (i) include as ordinary income for each taxable year that we are a PFIC the excess, if any, of the fair market value of ADSs held at the end of the taxable year over the adjusted tax basis of such ADSs and (ii) deduct as an ordinary loss the excess, if any, of the adjusted tax basis of the ADSs over the fair market value of such ADSs held at the end of the taxable year, but such deduction will only be allowed to the extent of the amount previously included in income as a result of the mark-to-market election. The U.S. Holder's adjusted tax basis in the ADSs would be adjusted to reflect any income or loss resulting from the mark-to-market election. If a U.S. Holder makes a mark-to-market election in respect of the ADSs and we cease to be classified as a PFIC, the holder will not be required to take into account the gain or loss described above during any period that we are not classified as a PFIC. If a U.S. Holder makes a mark-to-market election, any gain such U.S. Holder recognizes upon the sale or other disposition of the ADSs in a year when we are a PFIC will be treated as ordinary income and any loss will be treated as ordinary loss, but such loss will only be treated as ordinary loss to the extent of the net amount previously included in income as a result of the mark-to-market election.

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 ("regularly traded") on a qualified exchange or other market, as defined in applicable United States Treasury regulations. Our ADSs are listed on the Nasdaq Global Market, which is an established securities market in the United States. Consequently, if our ADSs continue to be listed on the Nasdaq Global Market and are regularly traded, we expect that the mark-to-market election would be available to a U.S. Holder that holds our ADSs were we to be or become a PFIC. Our ADSs are expected to qualify as being regularly traded, but no assurance may be given in this regard.

Because a mark-to-market election cannot technically be made for any lower-tier PFICs that we may own, a U.S. Holder may continue to be subject to the PFIC rules 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.

We do not intend to provide information necessary for U.S. Holders to make qualified electing fund elections which, if available, would result in tax treatment different from (and generally less adverse than) the general tax treatment for PFICs described above.

If a U.S. Holder owns the ADSs or ordinary shares during any taxable year that we are a PFIC, the holder must generally file an annual IRS Form 8621. You should consult your tax advisor regarding the U.S. federal income tax consequences of owning and disposing of the ADSs or ordinary shares if we are or become a PFIC.

F. Dividends and Paying Agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on Display

We previously filed with the SEC our registration statement on Form F-1 (Registration No. 333-227497), as amended, including the prospectus contained therein, to register the issuance and sale of our ordinary shares represented by ADSs in relation to our initial public offering. We have also filed with the SEC the registration statement on Form F-6 (Registration No. 333-227702) to register the ADSs.

We are subject to periodic reporting and other informational requirements of the Exchange Act as applicable to foreign private issuers, and are required to file reports and other information with the SEC. Specifically, we are required to file annually an annual report on 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 Citibank, N.A., the depository of the 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 depository 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 depository 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.niu.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.

J. Annual Report to Security Holders

Not applicable.

Item 11. Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Risk

Our exposure to interest rate risk primarily relates to the interest expenses on our short term bank borrowings. Our short term bank borrowing bears interests at fixed rates. We have not been exposed to, nor do we anticipate being exposed to, material risks due to changes in market interest rates. However, our future interest expenses may exceeds expectations due to changes in market interest rates. If we were to renew these short term bank borrowings, we might be subject to interest rate risk.

Foreign Exchange Risk

A substantial majority of all of our revenues and expenses are denominated in Renminbi. We do not believe that we currently have any significant direct foreign exchange risk and have not used any derivative financial instruments to hedge exposure to such risk. Although our exposure to foreign exchange risks should be limited in general, the value of your investment in the 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 the ADSs will be traded in U.S. dollars. In addition, as our business and operation expand in European and other overseas markets, we are exposed to increased foreign exchange risks for U.S. dollar and other currencies.

Substantially all of our revenues and expenses are denominated in RMB. The value of the 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. After the PRC government changed its policy of pegging the value of RMB to the U.S. dollar in 2005, the RMB 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 the Renminbi and the U.S. dollar in the future.

Any significant depreciation of the Renminbi may materially and adversely affect our revenues, earnings and financial position as reported in U.S. dollars. 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 shares or ADSs or for other business purposes, appreciation of the U.S. dollar against the Renminbi would have a negative effect on the U.S. dollar amount available to us.

Inflation

Since our inception, inflation in China has not materially affected our results of operations. According to the National Bureau of Statistics of China, the year-over-year percent changes in the consumer price index for December 2020, December 2021 and December 2022 were increases of 2.5%, 0.9% and 1.8%, respectively. Although we have not been materially affected by inflation, we may be affected if China experiences higher rates of inflation in the future.

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

Citibank, N.A. acts as the depositary bank for the American Depositary Shares. Citibank's depositary offices are located at 388 Greenwich Street, New York, New York 10013. American Depositary Shares are frequently referred to as "ADSs" and represent ownership interests in securities that are on deposit with the depositary bank. ADSs may be represented by certificates that are commonly known as "American Depositary Receipts" or "ADRs." The depositary bank typically appoints a custodian to safekeep the securities on deposit. In this case, the custodian is Citibank, N.A.—Hong Kong, located at 9/F, Citi Tower, One Bay East, 83 Hoi Bun Road, Kwun Tong, Kowloon, Hong Kong.

An ADS holder will be required to pay the following fees under the terms of the deposit agreement:

Service	Fees
· Issuance of ADSs (e.g., an issuance of ADS upon a deposit of Class A ordinary shares, upon a change in the ADS(s)-to Class A ordinary share(s) ratio, or for any other reason), excluding ADS issuances as a result of distributions of Class A ordinary shares	Up to U.S. 5¢ per ADS issued
· Cancellation of ADSs (e.g., a cancellation of ADSs for delivery of deposited property, upon a change in the ADS(s)-to Class A ordinary share(s) ratio, or for any other reason)	Up to U.S. 5¢ per ADS cancelled
· Distribution of cash dividends or other cash distributions (e.g., upon a sale of rights and other entitlements)	Up to U.S. 5¢ per ADS held
· Distribution of ADSs pursuant to (i) stock dividends or other free stock distributions, or (ii) exercise of rights to purchase additional ADSs	Up to U.S. 5¢ per ADS held
· Distribution of securities other than ADSs or rights to purchase additional ADSs (e.g., upon a spin-off)	Up to U.S. 5¢ per ADS held
· ADS Services	Up to U.S. 5¢ per ADS held on the applicable record date(s) established by the depository bank

An ADS holder will also be responsible to pay certain charges such as:

- taxes (including applicable interest and penalties) and other governmental charges;
- the registration fees as may from time to time be in effect for the registration of Class A ordinary shares on the share register and applicable to transfers of Class A ordinary shares to or from the name of the custodian, the depository bank or any nominees upon the making of deposits and withdrawals, respectively;
- certain cable, telex and facsimile transmission and delivery expenses;
- the expenses and charges incurred by the depository bank in the conversion of foreign currency;
- the fees and expenses incurred by the depository bank in connection with compliance with exchange control regulations and other regulatory requirements applicable to Class A ordinary shares, ADSs and ADRs; and
- the fees and expenses incurred by the depository bank, the custodian, or any nominee in connection with the servicing or delivery of deposited property.

ADS fees and charges for (i) the issuance of ADSs, and (ii) the cancellation of ADSs are charged to the person for whom the ADSs are issued (in the case of ADS issuances) and to the person for whom ADSs are cancelled (in the case of ADS cancellations). In the case of ADSs issued by the depository bank into DTC, the ADS issuance and cancellation fees and charges may be deducted from distributions made through DTC, and may be charged to the DTC participant(s) receiving the ADSs being issued or the DTC participant(s) holding the ADSs being cancelled, as the case may be, on behalf of the beneficial owner(s) and will be charged by the DTC participant(s) to the account of the applicable beneficial owner(s) in accordance with the procedures and practices of the DTC participants as in effect at the time. ADS fees and charges in respect of distributions and the ADS service fee are charged to the holders as of the applicable ADS record date. In the case of distributions of cash, the amount of the applicable ADS fees and charges is deducted from the funds being distributed. In the case of (i) distributions other than cash and (ii) the ADS service fee, holders as of the ADS record date will be invoiced for the amount of the ADS fees and charges and such ADS fees and charges may be deducted from distributions made to holders of ADSs. For ADSs held through DTC, the ADS fees and charges for distributions other than cash and the ADS service fee may be deducted from distributions made through DTC, and may be charged to the DTC participants in accordance with the procedures and practices prescribed by DTC and the DTC participants in turn charge the amount of such ADS fees and charges to the beneficial owners for whom they hold ADSs.

In the event of refusal to pay the depositary bank fees, the depositary bank may, under the terms of the deposit agreement, refuse the requested service until payment is received or may set off the amount of the depositary bank fees from any distribution to be made to the ADS holder. Certain depositary fees and charges (such as the ADS services fee) may become payable shortly after the closing of the ADS offering. Note that the fees and charges an ADS holder may be required to pay may vary over time and may be changed by us and by the depositary bank. An ADS holder will receive prior notice of such changes.

Fees and Other Payments Made by the Depositary to Us

The depositary bank may reimburse us for certain expenses incurred by us in respect of the ADR program, by making available a portion of the ADS fees charged in respect of the ADR program or otherwise, upon such terms and conditions as we and the depositary bank agree from time to time. In 2022, we received approximately US\$4,500 as reimbursement from the depositary.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

See “Item 10. Additional Information—B. Memorandum and Articles of Association—Ordinary Shares” for a description of the rights of securities holders, which remain unchanged.

Item 15. Controls and Procedures

A. 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, 2022, 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.

B. Management’s Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. 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 and 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 our assets, (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 our receipts and expenditures are being made only in accordance with authorizations of our management and directors, and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements. As required by Section 404 of the Sarbanes-Oxley Act and related rules as promulgated by the SEC, our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2022 using criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”).

Based on this assessment, our management, with the participation of our chief executive officer and chief financial officer, concluded that our internal control over financial reporting was effective as of December 31, 2022.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness of our internal control over financial reporting to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

C. Attestation Report of the Registered Public Accounting Firm

Our independent registered public accounting firm, KPMG Huazhen LLP, has audited the effectiveness of our company’s internal control over financial reporting as of December 31, 2022.

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors

Niu Technologies:

Opinion on Internal Control Over Financial Reporting

We have audited Niu Technologies and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

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, 2021 and 2022, the related consolidated statements of comprehensive income (loss), changes in shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2022, and the related notes (collectively, the consolidated financial statements), and our report dated April 21, 2023 expressed an unqualified opinion on those consolidated financial statements.

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 of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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.

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/ KPMG Huazhen LLP

Beijing, China

April 21, 2023

D. 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 16. [Reserved]

Item 16A. Audit Committee Financial Expert

Our board of directors has determined that Mr. Changqing Ye, an independent director (under the standards set forth in Nasdaq Stock Market Rule 5605 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

Our board of directors adopted a code of business conduct and ethics that applies to our directors, officers, employees and advisors in September 2018. We have posted a copy of our code of business conduct and ethics on our website at <http://ir.niu.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 KPMG Huazhen LLP, our principal external auditors, for the periods indicated.

	2021		2022	
Audit fees ⁽¹⁾	US\$	1,296,108	US\$	1,267,526
Tax fees ⁽²⁾		Nil	US\$	83,498

(1) "Audit fees" in 2022 represent the aggregate fees billed or payable for professional services rendered by our principal auditors for the audit of the 2022 consolidated financial statements and internal control over financial reporting as of December 31, 2022 and assistance with and review of documents filed with the SEC.

(2) "Tax fees" mean the aggregate fees billed for services rendered by independent registered public accounting firm for tax compliance services and tax advisory services.

The policy of our audit committee or our board of directors is to pre-approve all audit and non-audit services provided by KPMG Huazhen LLP, including as described above.

Item 16D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

Item 16F. Change in Registrant's Certifying Accountant

Not applicable.

Item 16G. Corporate Governance

As a Cayman Islands exempted company listed on Nasdaq, we are subject to the Nasdaq corporate governance listing standards. Rule 5620(a) requires that each company listing common stock or voting preferred stock, and their equivalents, must hold an annual meeting of shareholders no later than one year after the end of the company's fiscal year-end. However, Nasdaq rules permit a foreign private issuer like us to follow the corporate governance practices of its home country. Certain corporate governance practices in the Cayman Islands, which is our home country, differ significantly from requirements for companies incorporated in other jurisdictions such as the United States. We have informed Nasdaq that we will follow home country practice with respect to the annual meeting of shareholders. Our shareholders may be afforded less protection than they would otherwise enjoy under the Nasdaq listing standards applicable to U.S. domestic issuers given our reliance on the home country practice exception. See "Item 3. Key Information—D. Risk Factors—Risks Related to the American Depositary Shares—We are a foreign private issuer within the meaning of the rules under the Exchange Act, and as such we are exempt from certain provisions applicable to U.S. domestic public companies."

Item 16H. Mine Safety Disclosure

Not applicable.

Item 16I. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

On December 16, 2021, the PCAOB issued a report to notify the SEC of its determination that the PCAOB was unable to inspect or investigate completely registered public accounting firms headquartered in mainland China and Hong Kong, and our auditor was subject to that determination. In May 2022, Niu Technologies was conclusively listed by the SEC as a Commission-Identified Issuer under the HFCAA following the filing of our annual report on Form 20-F for the fiscal year ended December 31, 2021. On December 15, 2022, the PCAOB removed mainland China and Hong Kong from the list of jurisdictions where it is unable to inspect or investigate completely registered public accounting firms. For this reason, we do not expect to be identified as a Commission-Identified Issuer under the HFCAA after we file this annual report.

As of the date of this annual report and to our knowledge:

- (i) no governmental entities in the Cayman Islands own shares of Niu Technologies, and no governmental entities in China own shares of Niu Technologies or the VIE;
- (ii) the governmental entities in China do not have a controlling financial interest in Niu Technologies or the VIE;
- (iii) none of the members of the board of directors of Niu Technologies or our operating entities, including the VIE, is an official of the Chinese Communist Party; and
- (iv) none of the currently effective memorandum and articles of association (or equivalent organizing document) of Niu Technologies or the VIE contains any charter of the Chinese Communist Party.

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 Niu Technologies, its subsidiaries and the variable interest entity are included at the end of this annual report.

Item 19. Exhibits

<u>Exhibit Number</u>	<u>Description of Document</u>
1.1	Sixth Amended and Restated Memorandum and Articles of Association of the Registrant, effective October 23, 2018 (incorporated by reference to Exhibit 3.2 of the Registrant's registration statement on Form F-1 (file no. 333-227497), filed with the Securities and Exchange Commission on September 24, 2018)
2.1	Registrant's Specimen American Depositary Receipt (incorporated by reference to Exhibit 4.3 of the Registrant's registration statement on Form F-1 (file no. 333-227497), filed with the Securities and Exchange Commission on September 24, 2018)
2.2	Registrant's Specimen Certificate for Ordinary Shares (incorporated by reference to Exhibit 4.2 of the Registrant's registration statement on Form F-1 (file no. 333-227497), as amended, filed with the Securities and Exchange Commission on October 9, 2018)
2.3	Deposit Agreement dated October 18, 2018 among the Registrant, the depositary and holder of the American Depositary Receipts (incorporated by reference to Exhibit 4.3 of the Registrant's registration statement on Form S-8 (file no. 333229190), as amended, filed with the Securities and Exchange Commission on January 11, 2019)
2.4	Fourth Amended and Restated Shareholders Agreement between the Registrant and other parties thereto dated August 22, 2018(incorporated by reference to Exhibit 4.4 of the Registrant's registration statement on Form F-1 (file no. 333-227497), filed with the Securities and Exchange Commission on September 24, 2018)
2.5	Description of American Depositary Shares of the Registrant (incorporated herein by reference to Exhibit 2.5 to the annual report on Form 20-F filed by the Registrant with the Securities and Exchange Commission on April 24, 2020)
2.6	Description of Ordinary Shares of the Registrant (incorporated herein by reference to Exhibit 2.6 to the annual report on Form 20-F filed by the Registrant with the Securities and Exchange Commission on April 24, 2020)
4.1	Amended and Restated 2016 Global Share Incentive Plan of the Registrant (incorporated by reference to Exhibit 10.1 of the Registrant's Registration Statement on Form F-1 (file no. 333-227497) filed with the Securities and Exchange Commission on September 24, 2018)
4.2	2018 Share Incentive Plan of the Registrant (incorporated by reference to Exhibit 10.2 of the Registrant's Registration Statement on Form F-1 (file no. 333-227497) filed with the Securities and Exchange Commission on September 24, 2018)
4.3	Form of Employment Agreement between the Registrant and its executive officers (incorporated by reference to Exhibit 10.4 of the Registrant's registration statement on Form F-1 (file no. 333-227497), filed with the Securities and Exchange Commission on September 24, 2018)

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- 4.4 [Form of Indemnification Agreement between the Registrant and its directors and executive officers \(incorporated by reference to Exhibit 10.3 of the Registrant's registration statement on Form F-1 \(file no. 333-227497\), filed with the Securities and Exchange Commission on September 24, 2018\)](#)
- 4.5 [English translation of the Powers of Attorney among the Registrant's WFOE, Beijing Niudian and shareholders of Beijing Niudian \(incorporated by reference to Exhibit 4.5 of the Registrant's Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 24, 2020\)](#)
- 4.6 [English translation of the Second Amended and Restated Equity Pledge Agreement among the Registrant's WFOE, Beijing Niudian and shareholders of Beijing Niudian dated February 27, 2020 \(incorporated by reference to Exhibit 4.6 of the Registrant's Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 24, 2020\)](#)
- 4.7 [English translation of the Amended and Restated Exclusive Business Cooperation Agreement among the Registrant's WFOE, Beijing Niudian and shareholders of Beijing Niudian dated July 20, 2018 \(incorporated by reference to Exhibit 10.7 of the Registrant's registration statement on Form F-1 \(file no. 333-227497\), filed with the Securities and Exchange Commission on September 24, 2018\)](#)
- 4.8 [English translation of the Second Amended and Restated Exclusive Option Agreement among the Registrant's WFOE, Beijing Niudian and shareholders of Beijing Niudian dated February 27, 2020 \(incorporated by reference to Exhibit 4.8 of the Registrant's Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 24, 2020\)](#)
- 4.9 [Motor Purchase and Sales Contract between Bosch \(Ningbo\) E-scooter Motor Co., Ltd. and Jiangsu Xiaoniu Electric Technology Co., Ltd. dated March 21, 2017 \(incorporated by reference to Exhibit 10.12 of the Registrant's Registration Statement on Form F-1 \(file no. 333-227497\) filed with the Securities and Exchange Commission on September 24, 2018\)](#)
- 4.10 [Manufacturing Cooperation Agreement Between Jiangsu Xiaoniu Diandong Technology Co., Ltd. and Changzhou Shanqi Motorcycle Co., Ltd. dated December 1, 2018 \(incorporated by reference to Exhibit 4.13 of the Registrant's Annual Report on Form 20-F \(file no. 001-38696\) filed with the Securities and Exchange Commission on April 25, 2019\)](#)
- 4.11 [Development Collaboration Agreement Between the Registrant and Volkswagen Aktiengesellschaft dated March 15, 2019 \(incorporated by reference to Exhibit 4.14 of the Registrant's Annual Report on Form 20-F \(file no. 001-38696\) filed with the Securities and Exchange Commission on April 25, 2019\)](#)
- 8.1* [List of Principal Subsidiaries and the variable interest entity](#)
- 11.1 [Code of Business Conduct and Ethics \(incorporated by reference to Exhibit 99.1 of the Registrant's Registration Statement on Form F-1 \(file no. 333-227497\) filed with the Securities and Exchange Commission on September 24, 2018\)](#)
- 12.1* [Certification by Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002](#)
- 12.2* [Certification by Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002](#)
- 13.1** [Certification by Principal Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002](#)
- 13.2** [Certification by Principal Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002](#)
- 15.1* [Consent of KPMG Huazhen LLP](#)
- 15.2* [Consent of DaHui Lawyers](#)

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101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* 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.

Niu Technologies

By: /s/ YAN LI

Name: Yan Li

Title: Chairman of the Board of Directors and Chief
Executive Officer

Date: April 21, 2023

NIU TECHNOLOGIES

INDEX TO THE CONSOLIDATED FINANCIAL STATEMENTS

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Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Niu Technologies:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Niu Technologies and subsidiaries (the Company) as of December 31, 2021 and 2022, the related consolidated statements of comprehensive income (loss), changes in shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2022, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2022, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2022, 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, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated April 21, 2023 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company has changed its method of accounting for leases as of January 1, 2021, due to the adoption of Accounting Standards Codification Topic 842, *Leases*.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated 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 consolidated 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 consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Report of Independent Registered Public Accounting Firm

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated 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 consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters 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 matters below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue recognition for electric scooter sales

As discussed in Note 2(q) and 19 to the consolidated financial statements, the Company recorded RMB2,853,895,423 of revenues related to electric scooter sales for the year ended December 31, 2022, which included revenue generated from electric scooter sales to its PRC domestic offline distributors and overseas offline distributors. The transfer of control of the products is satisfied at a point in time, which occurs when the products are accepted by the domestic offline distributors, overseas offline distributors or individual customers. When the Company sells its products to its domestic offline distributors for domestic sales in the PRC, acceptance of the products by the domestic offline distributors is evidenced by goods receipt notes signed by the domestic offline distributors, which is generally at the Company's warehouse. When the Company sells its products to overseas offline distributors for overseas sales, acceptance of the products by the overseas offline distributors is evidenced by shipping documents dependent upon the terms of the underlying contract.

We identified the evaluation of timing of revenue recognition for electric scooter sales to domestic offline distributors and overseas offline distributors as a critical audit matter. Significant audit effort was required in evaluation the proper timing of revenue recognition for electric scooter sales to domestic offline distributors and overseas offline distributors.

The following are the primary procedures we performed to address this critical audit matter. We applied auditor judgment to determine the nature and extent of procedures to be performed over the evaluation of timing of revenue recognition for electric scooter sales to domestic offline distributors and overseas offline distributors. We evaluated the design and tested the operating effectiveness of certain internal controls related to timing of revenue recognition for electric scooter sales to domestic offline distributors and overseas offline distributors. This included controls over the Company's review of goods receipt notes and underlying contracts related to electric scooter sales to domestic offline distributors, shipping documents and underlying contracts related to electric scooter sales to overseas offline distributors, and the accurate timing of recording revenues. For a selection of electric scooter sales contracts with domestic offline distributors and overseas offline distributors, we read the contracts and evaluated the Company's assessment of the contract terms impacting the timing of revenue recognition. For a sample of electric scooter sales to domestic offline distributors, we evaluated the proper timing of revenue recognized by inspecting (1) the underlying contracts, (2) purchase orders, and (3) goods receipt notes signed by the domestic offline distributors. For a sample of electric scooter sales to overseas offline distributors, we evaluated the proper timing of revenue recognized by inspecting (1) the underlying contracts, (2) purchase orders, and (3) shipping documents for the overseas offline distributors. In addition, we evaluated the sufficiency of audit evidence obtained by assessing the results of procedures performed.

/s/ KPMG Huazhen LLP

We have served as the Company's auditor since 2018.

Beijing, China
April 21, 2023

NIU TECHNOLOGIES
CONSOLIDATED BALANCE SHEETS

	Note	As of December 31,		
		2021	2022	
		RMB	RMB	US\$ (Note 2(d))
ASSETS				
Current assets				
Cash and cash equivalents	2(f)	208,373,759	534,286,849	77,464,311
Term deposits—current	2(g)	95,635,500	208,589,770	30,242,674
Restricted cash	2(h)	223,971,197	186,340,321	27,016,807
Short-term investments	3	773,678,455	160,406,301	23,256,728
Accounts receivable, net	4	268,557,176	299,742,923	43,458,639
Inventories	5	269,637,042	417,009,148	60,460,643
Prepayments and other current assets	6	56,061,263	205,695,717	29,823,076
Total current assets		1,895,914,392	2,012,071,029	291,722,878
Non-current assets				
Term deposits—non-current	2(g)	35,939,250	20,000,000	2,899,727
Property, plant and equipment, net	7	397,215,911	397,356,795	57,611,320
Intangible assets, net	8	3,668,189	1,857,320	269,286
Operating lease right-of-use assets	20	94,201,263	86,597,121	12,555,402
Deferred income tax assets	17(b)	11,907,344	6,132,499	889,129
Other non-current assets	9	2,367,064	12,683,090	1,838,875
Total non-current assets		545,299,021	524,626,825	76,063,739
Total assets		2,441,213,413	2,536,697,854	367,786,617
LIABILITIES				
Current liabilities				
Short-term bank borrowings (including short-term bank borrowings of VIE without recourse to the Company of RMB180,000,000 and RMB160,000,000 as of December 31, 2021 and 2022, respectively)	10	180,000,000	160,000,000	23,197,819
Notes payable (including notes payable of VIE without recourse to the Company were RMB143,622,874 and RMB316,832,113 as of December 31, 2021 and 2022, respectively)	11	143,622,874	316,832,113	45,936,338
Accounts payable (including accounts payable of VIE without recourse to the Company of RMB523,296,506 and RMB 459,406,790 as of December 31, 2021 and 2022, respectively)		538,930,163	459,466,937	66,616,444
Income taxes payable (including income taxes payable of VIE without recourse to the Company of RMB14,718,748 and RMB1,501,992 as of December 31, 2021 and 2022, respectively)		17,601,525	1,898,065	275,194
Advances from customers (including advances from customers of VIE without recourse to the Company of RMB15,026,392 and RMB23,522,149 as of December 31, 2021 and 2022, respectively)	2(r)	17,266,994	24,931,897	3,614,785
Deferred revenue—current (including deferred revenue-current of VIE without recourse to the Company of RMB32,757,740 and RMB37,539,733 as of December 31, 2021 and 2022, respectively)	2(r)	32,757,740	37,539,733	5,442,750
Accrued expenses and other current liabilities (including accrued expenses and other current liabilities of VIE without recourse to the Company of RMB181,985,323 and RMB175,352,229 as of December 31, 2021 and 2022, respectively)	12	198,904,558	192,092,943	27,850,859
Total current liabilities		1,129,083,854	1,192,761,688	172,934,189

The accompanying notes are an integral part of these consolidated financial statements.

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	Note	As of December 31,		
		2021	2022	
Non-current liabilities				
Deferred revenue—non-current (including deferred revenue non-current of VIE without recourse to the Company of RMB10,693,692 and RMB11,429,500 as of December 31, 2021 and 2022, respectively)	2(r)	10,693,692	11,429,500	1,657,122
Deferred income tax liabilities (including deferred income tax liabilities of VIE without recourse to the Company of RMB1,992,388 and RMB1,398,279 as of December 31, 2021 and 2022, respectively)	17(b)	1,992,388	1,398,279	202,731
Operating lease liabilities (including operating lease liabilities of VIE without recourse to the Company were RMB13,921,859 and RMB7,569,128 as of December 31, 2021 and 2022, respectively)	20	13,921,859	7,569,128	1,097,420
Other non-current liabilities (including other non-current liabilities of VIE without recourse to the Company of RMB20,967,430 and RMB13,441,382 as of December 31, 2021 and 2022, respectively)	13	20,967,430	13,441,382	1,948,817
Total non-current liabilities		47,575,369	33,838,289	4,906,090
Total liabilities		1,176,659,223	1,226,599,977	177,840,279
Commitments and contingencies	21			
SHAREHOLDERS' EQUITY:				
Class A Ordinary Shares (US\$0.0001 par value, 4,900,000,000 shares authorized as of December 31, 2021 and 2022; 137,138,810 and 137,719,542 shares issued and outstanding as of December 31, 2021 and 2022)	14	89,038	89,428	12,966
Class B Ordinary Shares (US\$0.0001 par value, 50,000,000 shares authorized as of December 31, 2021 and 2022; 16,542,020 shares issued and outstanding as of December 31, 2021 and 2022)	14	10,316	10,316	1,496
Additional paid-in capital		1,855,403,759	1,915,825,641	277,768,608
Accumulated other comprehensive loss		(51,121,030)	(16,536,686)	(2,397,594)
Accumulated deficit		(539,827,893)	(589,290,822)	(85,439,138)
Total shareholders' equity		1,264,554,190	1,310,097,877	189,946,338
Total liabilities and shareholders' equity		2,441,213,413	2,536,697,854	367,786,617

The accompanying notes are an integral part of these consolidated financial statements.

NIU TECHNOLOGIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Note	For the Year Ended December 31,			
		2020	2021	2022	
		RMB	RMB	RMB	US\$ (Note 2(d))
Revenues	19	2,444,328,764	3,704,537,419	3,168,597,334	459,403,430
Cost of revenues		(1,885,180,256)	(2,891,758,188)	(2,498,916,443)	(362,308,827)
Gross profit		559,148,508	812,779,231	669,680,891	97,094,603
Operating expenses:					
Selling and marketing expenses		(200,761,383)	(332,007,462)	(440,408,982)	(63,853,300)
Research and development expenses		(105,335,357)	(135,218,399)	(176,478,130)	(25,586,924)
General and administrative expenses		(104,858,814)	(141,798,910)	(158,460,764)	(22,974,651)
Total operating expenses		(410,955,554)	(609,024,771)	(775,347,876)	(112,414,875)
Government grants		22,441,492	48,726,818	16,385,038	2,375,607
Operating income (loss)		170,634,446	252,481,278	(89,281,947)	(12,944,665)
Interest expenses		(7,380,833)	(6,167,805)	(5,715,878)	(828,724)
Interest income		8,787,309	5,375,969	12,860,216	1,864,556
Investment income		17,697,800	21,167,575	10,917,736	1,582,923
Income (loss) before income taxes		189,738,722	272,857,017	(71,219,873)	(10,325,910)
Income tax benefit (expense)	17(a)	(21,086,256)	(47,036,608)	21,756,944	3,154,460
Net income (loss)		168,652,466	225,820,409	(49,462,929)	(7,171,450)
Other comprehensive income (loss)					
Foreign currency translation adjustment, net of nil income taxes		(30,137,470)	(9,657,187)	37,342,724	5,414,186
Unrealized gain on available for sale securities, net income taxes of RMB4,254,339, RMB5,809,288 and RMB1,184,686 for the year 2020, 2021 and 2022, respectively		12,763,017	17,427,865	6,460,896	936,741
Less: reclassification adjustment for gain on available for sale securities realized in net income, net income taxes of RMB4,424,450, RMB5,291,894 and RMB1,698,460 for the year 2020, 2021 and 2022, respectively		(13,273,350)	(15,875,681)	(9,219,276)	(1,336,669)
Comprehensive income (loss)		138,004,663	217,715,406	(14,878,585)	(2,157,192)
Net income (loss) per ordinary share					
—Basic	18	1.12	1.47	(0.32)	(0.05)
—Diluted	18	1.07	1.41	(0.32)	(0.05)
Weighted average number of ordinary shares and ordinary shares equivalents outstanding used in computing net income (loss) per ordinary share					
—Basic	18	150,897,412	153,672,358	155,176,922	155,176,922
—Diluted	18	157,835,868	160,460,976	155,176,922	155,176,922

The accompanying notes are an integral part of these consolidated financial statements.

NIU TECHNOLOGIES
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2020, 2021 AND 2022

	Ordinary shares		Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total shareholders' equity
	Shares	RMB	RMB	RMB	RMB	RMB
Balance as of January 1, 2020	149,416,898	96,471	1,738,102,741	(12,368,224)	(934,300,768)	791,530,220
Net income	—	—	—	—	168,652,466	168,652,466
Foreign currency translation adjustment, net of nil income taxes	—	—	—	(30,137,470)	—	(30,137,470)
Unrealized holding gains on available-for-sale security, net of RMB4,254,339 income taxes	—	—	—	12,763,017	—	12,763,017
Reclassification adjustment for gains on available-for-sale securities realized in net income, net of RMB4,424,450 income taxes	—	—	—	(13,273,350)	—	(13,273,350)
Share-based compensation	—	—	39,608,915	—	—	39,608,915
Exercise of share-based awards	2,943,554	2,031	24,228,415	—	—	24,230,446
Balance as of December 31, 2020	152,360,452	98,502	1,801,940,071	(43,016,027)	(765,648,302)	993,374,244
Net income	—	—	—	—	225,820,409	225,820,409
Foreign currency translation adjustment, net of nil income taxes	—	—	—	(9,657,187)	—	(9,657,187)
Unrealized holding gains on available-for-sale security, net of RMB5,809,288 income taxes	—	—	—	17,427,865	—	17,427,865
Reclassification adjustment for gains on available-for-sale securities realized in net income, net of RMB5,291,894 income taxes	—	—	—	(15,875,681)	—	(15,875,681)
Share-based compensation	—	—	47,218,156	—	—	47,218,156
Exercise of share-based awards	1,320,378	852	6,245,532	—	—	6,246,384
Balance as of December 31, 2021	153,680,830	99,354	1,855,403,759	(51,121,030)	(539,827,893)	1,264,554,190
Net loss	—	—	—	—	(49,462,929)	(49,462,929)
Foreign currency translation adjustment, net of nil income taxes	—	—	—	37,342,724	—	37,342,724
Unrealized holding gains on available-for-sale security, net of RMB1,184,686 income taxes	—	—	—	6,460,896	—	6,460,896
Reclassification adjustment for gains on available-for-sale securities realized in net income, net of RMB1,698,460 income taxes	—	—	—	(9,219,276)	—	(9,219,276)
Share-based compensation	—	—	58,219,186	—	—	58,219,186
Exercise of share-based awards	580,732	390	2,202,696	—	—	2,203,086
Balance as of December 31, 2022	154,261,562	99,744	1,915,825,641	(16,536,686)	(589,290,822)	1,310,097,877
Balance as of December 31, 2022 — US\$ (Note 2(d))		14,462	277,768,608	(2,397,594)	(85,439,138)	189,946,338

The accompanying notes are an integral part of these consolidated financial statements.

NIU TECHNOLOGIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Year Ended December 31,			
	2020	2021	2022	US\$
	RMB	RMB	RMB	(Note 2(d))
Operating activities:				
Net income (loss)	168,652,466	225,820,409	(49,462,929)	(7,171,450)
<i>Adjustments to reconcile net income (loss) to net cash provided by operating activities</i>				
Allowance for doubtful accounts	505,912	1,272,454	25,044,327	3,631,086
Share-based compensation	39,608,915	47,218,156	58,219,186	8,440,989
Depreciation and amortization	50,239,037	95,473,048	142,711,409	20,691,209
Reduction in the carrying amount of right-of-use assets	—	10,730,213	8,525,547	1,236,088
Investment income	(17,697,800)	(21,167,575)	(10,917,736)	(1,582,923)
Unrealized foreign exchange loss (gain)	3,358,752	1,882,626	(7,508,084)	(1,088,570)
Deferred income tax expense (benefit)	(18,150,489)	4,321,601	(6,079,533)	(881,449)
Loss on disposal of property, plant and equipment	17,160	235,581	478,457	69,370
Write-down of inventories	5,809,583	3,679,669	8,991,793	1,303,687
<i>Changes in operating assets and liabilities:</i>				
Accounts receivable	13,402,725	(168,520,346)	(56,145,868)	(8,140,386)
Inventories	30,565,820	(131,185,130)	(156,107,463)	(22,633,455)
Prepayments and other current assets	1,080,721	(24,763,588)	(125,888,562)	(18,252,126)
Other non-current assets	(391,736)	1,520,050	(1,834,238)	(265,940)
Accounts payable and notes payable	136,838,756	286,726,602	93,747,996	13,592,182
Advances from customers	32,655,527	(22,764,635)	7,545,887	1,094,051
Deferred revenue	(7,944,641)	18,119,340	5,517,801	800,006
Other non-current liabilities	5,846,549	(4,374,815)	(9,365,449)	(1,357,862)
Income tax receivable	—	—	(13,349,602)	(1,935,510)
Income taxes payable	11,541,289	3,046,431	(15,703,460)	(2,276,788)
Accrued expenses and other current liabilities	9,660,165	15,256,165	(13,056,147)	(1,892,963)
Operating lease liabilities, current and non-current	—	(8,351,554)	(7,219,675)	(1,046,754)
Net cash provided by (used in) operating activities	465,598,711	334,174,702	(121,856,343)	(17,667,508)
Investing activities:				
Cash paid for purchase of property, plant and equipment	(111,745,878)	(285,745,233)	(135,349,387)	(19,623,816)
Payment of land use rights	(39,749,734)	—	—	—
Purchase of intangible assets	(86,358)	—	—	—
Purchase of term deposits	(411,324,241)	(357,162,950)	(635,470,550)	(92,134,569)
Cash received from redemption of term deposits	445,826,800	353,295,700	551,794,100	80,002,624
Cash paid for purchase of short-term investments	(2,726,500,000)	(6,032,000,000)	(2,593,000,000)	(375,949,661)
Cash received from sale of short-term investments	2,308,347,800	6,027,167,575	3,213,917,736	465,974,270
Prepayment for an investment	—	—	(4,000,000)	(579,945)
Others	—	(614,066)	—	—
Net cash provided by (used in) investing activities	(535,231,611)	(295,058,974)	397,891,899	57,688,903
Financing activities:				
Cash received from exercise of employee stock options	24,230,446	6,246,384	2,203,086	319,417
Proceeds from short-term bank borrowings	180,000,000	340,000,000	340,000,000	49,295,367
Repayment for short-term bank borrowings	(217,394,132)	(340,000,000)	(360,000,000)	(52,195,094)
Net cash provided by (used in) financing activities	(13,163,686)	6,246,384	(17,796,914)	(2,580,310)
Effect of foreign currency exchange rate changes on cash, cash equivalents and restricted cash	(23,332,213)	(8,490,370)	30,043,572	4,355,907
Net increase (decrease) in cash, cash equivalents and restricted cash	(106,128,799)	36,871,742	288,282,214	41,796,992
Cash, cash equivalents and restricted cash at the beginning of the year	501,602,013	395,473,214	432,344,956	62,684,126
Cash, cash equivalents and restricted cash at the end of the year	395,473,214	432,344,956	720,627,170	104,481,118
Supplemental information				
Interest paid	8,937,637	6,346,189	5,711,056	828,025
Income tax paid	27,695,456	39,668,576	13,374,909	1,939,180
Payable for property, plant and equipment	6,313,746	11,279,464	7,522,480	1,090,657
Prepayment for a service in previous year to purchase of an investment	—	—	3,000,000	434,959

The accompanying notes are an integral part of these consolidated financial statements.

NIU TECHNOLOGIES

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. DESCRIPTION OF ORGANIZATION AND PRINCIPAL ACTIVITIES

Organization and principal activities

Niu Technologies (“the Company”), through its wholly-owned subsidiaries, consolidated variable interest entity (“VIE”) and VIE’s subsidiaries (collectively referred to as “the Group”), is principally engaged in designing, manufacturing and selling of electric scooters and its accessories under the brand name of “NIU”. The Group’s principal operations and geographic markets are mainly in the People’s Republic of China (“PRC”).

The accompanying consolidated financial statements include the financial statements of the Company, its wholly-owned subsidiaries, consolidated VIE and VIE’s subsidiaries.

The VIE arrangements

The Group operates its online business in the PRC through Beijing Niudian Technologies Co., Ltd. (“Beijing Niudian”, or the “VIE”), a limited liability company established under the laws of the PRC on September 18, 2014. Beijing Niudian holds the necessary PRC operating licenses for the online business. The equity interests of Beijing Niudian are legally held by individuals who act as nominee equity holders of the VIE on behalf of Beijing Niudian Information Technology Co., Ltd. (“Niudian Information”), the Company’s wholly owned subsidiary. A series of contractual agreements, including Powers of Attorney, Exclusive Business Cooperation Agreement, Equity Pledge Agreement, Exclusive Option Agreement and Spousal Consent Letters (collectively, the “VIE Agreements”), were entered among the Company, Niudian Information, Beijing Niudian and its nominee equity holders on May 27, 2015 and were subsequently amended to include registration of the Equity Pledge Agreement with the relevant registration authority on June 11, 2018, amended when an equity holder transferred certain equity interests to another equity holder on July 20, 2018.

The contractual agreements were further amended when two equity holders transferred certain equity interests to another equity holder on March 10, 2020.

Pursuant to the VIE Agreements, the Company is able to exercise effective control over, bears the risks of, enjoys substantially all of the economic benefits of the VIE, and has an exclusive option to purchase all or part of the equity interests in the VIE when and to the extent permitted by PRC law at the lowest price possible. The Company’s management concluded that Beijing Niudian is a VIE and the Company is its primary beneficiary. As such, the consolidated financial statements of the VIE are included in the consolidated financial statements of the Company.

The principal terms of the VIE Agreements are further described below.

1) Powers of Attorney

The Company and each of the equity holders of Beijing Niudian entered into Powers of Attorney. Pursuant to the Powers of Attorney, the equity holders of Beijing Niudian irrevocably appointed the Company as their attorney-in-fact to exercise all equity holder rights, including, but not limited to, convening and attending in the equity holders’ meeting, appointing or removing directors, executive officers and senior management, disposing of all or part of the equity holder’s interests in Beijing Niudian, casting equity holder’s vote on matters requiring equity holders’ approval and doing all other acts in the capacity of equity holder as permitted by Beijing Niudian’s Memorandum and Articles of Association. In addition, the Company has a right to assign its rights and benefits under the Powers of Attorney to any other parties without an advance notice to the equity holders of Beijing Niudian. The Powers of Attorney shall continue in force and be irrevocable as long as the equity holders of Beijing Niudian remain as the equity holders of Beijing Niudian.

2) *Exclusive Business Cooperation Agreement*

Niudian Information and Beijing Niudian entered into an Exclusive Business Cooperation Agreement, whereby Niudian Information is appointed as the exclusive service provider for the provision of business support, technology and consulting services to Beijing Niudian. Unless a written consent is given by Niudian Information, Beijing Niudian is not allowed to engage a third party to provide such services, while Niudian Information is able to designate another party to render such services to Beijing Niudian. Beijing Niudian shall pay Niudian Information on a monthly basis a service fee, which shall equal to 100% of the monthly net profits of Beijing Niudian, and Niudian Information has the sole discretion to adjust the basis of calculation of the service fee amount according to service provided to Beijing Niudian. Niudian Information owns the exclusive intellectual property rights, whether created by Niudian Information or Beijing Niudian, as a result of the performance of the Exclusive Business Cooperation Agreement unless terminated in writing by Niudian Information. The Exclusive Business Cooperation Agreement will be in effect until September 17, 2044 which represents the end of operation term of Beijing Niudian.

3) *Equity Pledge Agreement*

An Equity Pledge Agreement was entered into by and among Niudian Information, Beijing Niudian and equity holders of Beijing Niudian. To guarantee payment from Beijing Niudian, including but not limited to the service fee pursuant to the Exclusive Business Cooperation Agreement, and the performance of Beijing Niudian and the nominee equity holders' obligations under the contractual arrangements including the Exclusive Business Cooperation Agreement, Exclusive Option Agreement and Powers of Attorney, the equity holders of Beijing Niudian pledged their respective equity in Niudian Information under the Equity Pledge Agreement to Niudian Information as collateral. In the event Beijing Niudian fails to pay Niudian Information its service fee, Niudian Information will have the right to sell the pledged equity and apply the proceeds received to pay any outstanding service fees due by Beijing Niudian to Niudian Information. The equity holders of Beijing Niudian agree that, during the term of the Equity Pledge Agreement, they will not dispose of the pledged equity or create or allow any encumbrance on the pledged equity, and they also agree that Niudian Information's rights relating to the equity pledges shall not be prejudiced by any legal actions of the equity holders of Beijing Niudian, their successors or their designees. The equity pledges have been registered with the relevant registration authority and became effective and enforceable since registration. The Equity Pledge Agreement may only be terminated upon the fulfillment of all contractual obligations under the Exclusive Business Cooperation Agreement, Exclusive Option Agreement and Powers of Attorney. During the term of the Equity Pledge Agreement, Niudian Information is entitled to receive dividends attributable to the pledged Beijing Niudian equity.

4) *Exclusive Option Agreement*

Each of the equity holders of Beijing Niudian entered into an Exclusive Option Agreement with the Company, Niudian Information, and Beijing Niudian, pursuant to which the equity holders of Beijing Niudian granted the Company, and Niudian Information or other person upon the designation by the Company, an irrevocable and exclusive option to purchase, at its discretion and to the extent permitted under the PRC law, all or part of the equity holders' interests in Beijing Niudian at RMB100 or the lowest price that the PRC law permits at the time unless a valuation of the equity is required by the PRC law. The equity holders of Beijing Niudian commit that without the prior written consent of the Company, the equity holders of Beijing Niudian will not, among other things, (i) create any pledge or encumbrance on their equity interests in Beijing Niudian, (ii) transfer or otherwise dispose of their equity interests in Beijing Niudian, (iii) change Beijing Niudian's registered capital, (iv) amend Beijing Niudian's articles of association, (v) dispose of Beijing Niudian's material assets or enter into any material contract with a value of over RMB100,000 (except in the ordinary course of business), or (vi) merge Beijing Niudian with any other entity. In addition, Beijing Niudian undertakes that, without the Company's prior written consent, it will not, among other things, create any pledge or encumbrance on any of its assets, or transfer or otherwise dispose of its material assets (except in the ordinary course of business). Beijing Niudian and its equity holders shall appoint those individuals recommended by the Company as directors of Beijing Niudian. Beijing Niudian shall provide operating and financial information to the Company at the request of the Company and ensure the continuance of the business. The Exclusive Option Agreement will remain effective until all equity interests in Beijing Niudian held by its equity holders are transferred or assigned to the Company or its designee. Beijing Niudian and its equity holders shall not have any right to terminate the Exclusive Option Agreement.

5) *Spousal Consent Letters*

The spouses of each of nominee equity holders signed Spousal Consent Letters to consent that the equity interests in Beijing Niudian held by and registered in the name of the respective nominee equity holders will be disposed of pursuant to the VIE Agreements. These spouses agreed not to assert any rights over the equity interest in Beijing Niudian held by their spouses. In addition, in the event that the spouses obtain any equity interests in Beijing Niudian held by their spouses for any reason, they agreed to be bound by the VIE Agreements.

Risks in relation to the VIE structure

In the opinion of the Company's management, the VIE Agreements have resulted in the Company having the power to direct activities that most significantly impact the VIE, including appointing key management, setting up operating policies, exerting financial controls and transferring profit or assets out of the VIE at its discretion. The Company considers that it has the right to receive all the benefits and assets of the VIE. As the VIE was established as a limited liability company under the PRC law, its creditors do not have recourse to the general credit of the Company for the liabilities of the VIE, and the Company does not have the obligation to assume the liabilities of the VIE.

The Company has determined that the VIE Agreements are in compliance with PRC laws and are legally enforceable. However, uncertainties in the PRC legal system could limit the Company's ability to enforce the VIE Agreements; and if the equity holders of the VIE were to reduce their interest in the Company, their interests may diverge from that of the Company and that may potentially increase the risk that they would seek to act contrary to the contractual terms.

The Company's ability to control the VIE also depends on the rights provided to the Company under the Powers of Attorney to vote on all matters requiring equity holders' approval in the respective VIE. As noted above, the Company believes these Powers of Attorney are legally enforceable but yet they may not be as effective as direct equity ownership. In addition, if the corporate structure of the Group or the contractual arrangements between the Company, Niudian Information, the VIE and its respective equity holders were found to be in violation of any existing PRC laws and regulations, the relevant PRC regulatory authorities could:

- revoke the business license and/or operating licenses of such entities;
- discontinue or place restrictions or onerous conditions on the Group's operations;
- impose fines, confiscate the income from the VIE, or impose other requirements with which the Group may not be able to comply;
- require the Group to restructure its ownership structure or operations, including terminating the contractual arrangements with the VIE and deregistering the equity pledges of the VIE, which in turn would affect the Company's ability to consolidate, derive economic interests from, or exert effective control over the VIE; or
- restrict or prohibit our use of the proceeds of this offering to finance our business and operations in China.

The imposition of any of the above restrictions or actions may result in a material and adverse effect on the Group's ability to conduct its business. In addition, if the imposition of any of these restrictions causes the Company to lose the right to direct the activities of the VIE or the right to receive its economic benefits, the Company would no longer be able to consolidate the VIE. The Company's management believes that the likelihood to lose the Company's current ownership structure or the contractual arrangements with the VIE is remote based on the current facts and circumstances.

There is no VIE in which the Company has a variable interest but is not the primary beneficiary. Currently there is no contractual arrangement that could require the Company to provide additional financial support to the VIE.

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The following consolidated assets and liabilities information of the Group's VIE as of December 31, 2021 and 2022, and consolidated revenues, net income and cash flow information for the years ended December 31, 2020, 2021 and 2022, have been included in the accompanying consolidated financial statements. All intercompany transactions and balances with the Company and its wholly-owned subsidiaries have been eliminated upon consolidation.

	As of December 31,		
	2021	2022	
	RMB	RMB	
Cash	82,463,740	493,570,803	
Restricted cash	47,829,733	6,229,605	
Short-term investments	743,448,951	160,406,301	
Accounts receivable, net	267,671,920	298,732,239	
Inventories	266,291,644	411,954,893	
Prepayments and other current assets	38,715,248	187,576,865	
Amounts due from inter-companies	23,235,199	24,251,018	
Total current assets	1,469,656,435	1,582,721,724	
Term deposits-non-current	20,000,000	20,000,000	
Property, plant and equipment, net	394,114,176	394,621,585	
Intangible assets, net	1,532,700	1,317,785	
Operating lease right-of-use assets	94,201,263	86,597,121	
Deferred income tax assets	11,907,344	6,132,499	
Other non-current assets	2,367,064	5,677,414	
Total assets	1,993,778,982	2,097,068,128	
Short-term bank borrowings	180,000,000	160,000,000	
Notes payable	143,622,874	316,832,113	
Accounts payable	523,296,506	459,406,790	
Amounts due to inter-companies	485,716,726	476,120,909	
Income taxes payable	14,718,748	1,501,992	
Advances from customers	15,026,392	23,522,149	
Deferred revenue—current	32,757,740	37,539,733	
Accrued expenses and other current liabilities	181,985,323	175,352,229	
Total current liabilities	1,577,124,309	1,650,275,915	
Deferred revenue-non-current	10,693,692	11,429,500	
Deferred income tax liabilities	1,992,388	1,398,279	
Operating lease liabilities	13,921,859	7,569,128	
Other non-current liabilities	20,967,430	13,441,382	
Total liabilities	1,624,699,678	1,684,114,204	
	For the Year Ended December 31,		
	2020	2021	2022
	RMB	RMB	RMB
Revenues	2,500,023,611	3,768,134,434	3,187,989,945
Net income (loss)	175,070,451	213,848,471	(9,347,980)
Net cash provided by (used in) operating activities	570,195,979	354,675,219	(74,417,318)
Net cash provided by (used in) investing activities	(518,734,956)	(329,808,349)	455,930,283
Net cash used in financing activities	(37,394,132)	—	(20,000,000)
Effect of foreign currency exchange rate changes on cash and restricted cash	(1,765,646)	(422,991)	7,993,970
Net increase in cash and restricted cash	12,301,245	24,443,879	369,506,935
Cash and restricted cash at the beginning of the year	93,548,349	105,849,594	130,293,473
Cash and restricted cash at the end of the year	105,849,594	130,293,473	499,800,408

The unrecognized revenue-producing assets that are held by the VIE primarily consist of ICP License, Production License for National Industrial Products, trademarks, patents, know-how and customer relationships. None of the assets of the VIE can be used only to settle obligations of VIE. None of the assets of the VIE has been pledged or collateralized. The creditors of the VIE do not have recourse to the general credit of the Company or its consolidated subsidiaries.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of presentation

The accompanying consolidated financial statements of the Group have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”).

(b) Principles of consolidation

The consolidated financial statements of the Group have been prepared in accordance with U.S. GAAP. The consolidated financial statements include the financial statements of the Company, its subsidiaries, the VIE for which the Company or its subsidiary is the primary beneficiary, and the VIE’s subsidiaries.

Subsidiaries are those entities in which the Company, directly or indirectly, controls more than one half of the voting power or has the power to govern the financial and operating policies, to appoint or remove the majority of the members of the board of directors, or to cast a majority of votes at the meeting of directors. A VIE is an entity in which the Company, or its subsidiary, through contractual arrangements, exercises effective control over the activities that most impact the economic performance, bears the risks of, and enjoys the rewards normally associated with ownership of the entity, and therefore the Company or its subsidiary is the primary beneficiary of the entity.

All intercompany transactions and balances among the Company, its subsidiaries, the VIE and the VIE’s subsidiaries have been eliminated upon consolidation.

(c) Use of estimates

The preparation of the consolidated financial statements in accordance with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, related disclosures of contingent assets and liabilities at the balance sheet date, and the reported revenues and expenses during the reported period in the consolidated financial statements and accompanying notes. Significant accounting estimates include, but not limited to, depreciable lives of property, plant and equipment and intangible assets, the realization of deferred income tax assets, future warranty expenses, current expected credit loss and discount rate for operating leases. Changes in facts and circumstances may result in revised estimates. Actual results could differ from those estimates, and as such, differences may be material to the consolidated financial statements.

(d) Convenience translation

Translations of balances in the consolidated financial statements from RMB into US\$ as of and for the year ended December 31, 2022 are solely for the convenience of the readers and were calculated at the rate of US\$1.00=RMB6.8972, representing the noon buying rate in The City of New York for cable transfers of RMB as certified for customs purposes by the Federal Reserve Bank of New York on December 30, 2022. No representation is made that the RMB amounts could have been, or could be, converted, realized or settled into US\$ at that rate on December 30, 2022, or at any other rate. The US\$ convenience translation is not required under U.S. GAAP and all US\$convenience translation amounts in the accompanying consolidated financial statements are unaudited.

(e) Commitments and contingencies

In the normal course of business, the Group is subject to loss contingencies, such as legal proceedings and claims arising out of its business, that cover a wide range of matters, including, among others, government investigations, shareholder lawsuits, and non-income tax matters. An accrual for a loss contingency is recognized when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. If a potential material loss contingency is not probable but is reasonably possible, or is probable but cannot be estimated, then the nature of the contingent liability, together with an estimate of the range of possible loss if determinable and material, is disclosed.

(f) Cash and cash equivalents

Cash consists of cash on hand and cash at bank. Cash equivalents represent term deposits with original maturities of three months or less, which are readily convertible to known amounts of cash. The Group believes it is not exposed to significant credit risk on cash and cash equivalents, term deposits and restricted cash. Cash at bank and term deposits are deposited in financial institutions at the following locations:

	As of December 31,	
	2021	2022
	RMB	RMB
Financial institutions in the mainland of the PRC		
—Denominated in EUR	322,563	5,986,595
—Denominated in RMB	81,007,725	278,917,866
—Denominated in GBP	938	244,790
—Denominated in USD	106,696,922	220,296,524
Total cash and cash equivalents balances held at mainland PRC financial institutions	188,028,148	505,445,775
Financial institutions in the United States		
—Denominated in USD	2,186,796	10,087,973
Total cash balances held at United States financial institutions	2,186,796	10,087,973
Financial institutions in the Hong Kong S.A.R.		
—Denominated in HKD	6,426,737	78,206
—Denominated in USD	10,815,999	14,631,590
Total cash balances held at Hong Kong S.A.R. financial institutions	17,242,736	14,709,796
Financial institutions in Indonesia		
—Denominated in IDR	77,198	707,035
—Denominated in USD	591,480	2,746,479
Total cash balances held at Indonesia financial institutions	668,678	3,453,514
Total cash and cash equivalents balances held at financial institutions	208,126,358	533,697,058
Financial institutions in the mainland of the PRC		
—Denominated in RMB	20,000,000	20,000,000
—Denominated in USD	111,574,750	208,589,770
Total term deposits held at mainland PRC financial institutions	131,574,750	228,589,770

(g) Term deposits

Term deposits include current and non-current term deposits. Current term deposits represent deposits placed with bank with original maturities of more than three months but less than one year. Non-current term deposits represent deposits placed with bank with original maturities of more than one year.

(h) Restricted cash

Restricted cash is an amount of cash deposited with banks in conjunction with borrowings from banks and notes payable. Restriction on the use of such cash and the interest earned thereon is imposed by the banks and remains effective throughout the terms of the bank borrowings and notes payable. Restricted cash is classified as current asset on the Company's consolidated balance sheets, as all the balance are expected to be released to cash within the next 12 months from December 31, 2022. The Group's restricted cash are denominated in RMB and USD and are deposited at financial institutions in the mainland of the PRC.

The following table provides a reconciliation of cash and cash equivalents and restricted cash reported within the consolidated balance sheets that sum to the total of the same such amounts shown in the consolidated statements of cash flows.

	As of December 31,	
	2021	2022
	RMB	RMB
Cash and cash equivalents	208,373,759	534,286,849
Restricted cash	223,971,197	186,340,321
Total cash, cash equivalents and restricted cash	432,344,956	720,627,170

(i) Short-term investments

The Group's short-term investments represent the Group's investments in financial products managed by financial institutions in the PRC which are redeemable at the option of the Group on any working day or have the original maturities of less than twelve months, which are classified as available-for-sale securities. Short-term investments are reported at fair value, with unrealized holding gains or losses, net of the related tax effect, excluded from earnings and recorded as a separate component of accumulated other comprehensive income (loss) until realized. Realized gains or losses from the sale of short-term investments are determined on a specific identification basis and are recorded as investment income when earned.

(j) Inventories

Inventories, consisting of raw materials, work in progress and finished goods, are stated at the lower of cost or net realizable value. The cost of inventory is determined using the weighted average cost method. Cost of work-in-process and finished goods comprise direct materials, direct production costs and an allocation of production overheads based on normal operating capacity. The Group takes ownership, risks and rewards of the products purchased. Inventory is written down for damaged and slow-moving goods, which is dependent upon factors such as historical and forecasted consumer demand. When appropriate, write downs to inventory are recorded to write down the cost of inventories to their net realizable value.

(k) Property, plant and equipment, net

Property, plant and equipment are stated at cost less accumulated depreciation and any recorded impairment.

Costs incurred in the construction of property, plant and equipment, including down payments and progress payments, are initially capitalized as construction in progress and transferred into their respective asset categories when the assets are ready for their intended use, at which time depreciation commences. Construction in progress is not depreciated until such time when the asset is substantially completed and ready for its intended use. All construction in progress has been transferred into respective asset categories and the balance was nil as of December 31, 2021 and 2022.

The estimated useful lives are as follows:

Building	50 years
Machinery and equipment	3 - 10 years
Furniture	3 - 5 years
Leasehold improvements	3 - 5 years
Office and electronic equipment	2 - 5 years
Motor vehicles	3 - 4 years

Depreciation on property, plant and equipment is calculated on the straight-line method over the estimated useful lives of the assets.

Depreciation of property, plant and equipment attributable to manufacturing activities is capitalized as part of inventories, and recognized as cost of revenues when the inventory is sold.

When items are retired or otherwise disposed of, income is charged or credited for the difference between net book value and the proceeds received thereon. Ordinary maintenance and repairs are charged to expense as incurred, and replacements and betterments are capitalized and amortized over the remaining useful life.

(l) Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets with finite lives are carried at cost less any accumulated amortization and any accumulated impairment losses.

Intangible assets with finite lives are amortized over the useful economic life on straight-line basis and assessed for impairment whenever there is an indication that the intangible assets may be impaired.

(m) Leases

Prior to January 1, 2021, payments made under operating lease were charged to the consolidated statements of comprehensive income (loss) on a straight-line basis over the term of underlying lease. Leases with escalated rent provisions are recognized on a straight-line basis commencing with the beginning of the lease term. There are no capital improvement funding, lease concessions or contingent rent in the lease agreements. The Group has no legal or contractual asset retirement obligations at the end of the lease term.

The Group adopted Accounting Standards Codification Topic 842, *Leases* (“ASC 842”) as of January 1, 2021, using a modified retrospective method for leases that exist at, or are entered into after, January 1, 2021, and has not recast the comparative periods presented in the consolidated financial statements. The Group elected the package of practical expedients that not to reassess: (1) whether any expired or existing contracts are or contain leases, (2) lease classification for any expired or existing leases, and (3) initial direct costs for any expired or existing leases. The Group also elected the practical expedient of the short-term lease exemption for contracts with lease terms of 12 months or less. The Group categorizes leases with contractual terms longer than twelve months as either operating or finance lease. However, the Group has no finance leases for any of the periods presented.

The Group determines if an arrangement is a lease or contains a lease at lease inception. For operating leases, the Group recognizes a right-of-use asset and a lease liability based on the present value of the lease payments over the lease term, reduced by lease incentives received, plus any initial direct costs, using the discount rate for the lease at the commencement date. Variable lease payments not dependent on an index or rate are excluded from the right-of-use asset and lease liability calculations and are recognized in expense in the period which the obligation for those payments is incurred. As the rate implicit in the Group’s lease is not typically readily available, the Group uses an incremental borrowing rate based on the information available at the lease commencement date in determining the present value of lease payments. This incremental borrowing rate reflects the fixed rate at which the Group could borrow on a collateralized basis the amount of the lease payments in the same currency, for a similar term, in a similar economic environment. The Group’s lease terms may include options to extend or terminate the lease. Such options are accounted for only when it is reasonably certain that the Group will exercise the options. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

From time to time, the Group purchases the rights to use government-owned land for a fixed period of time. Prior to the adoption of ASC 842, these land use rights were recorded at cost less accumulated amortization and any accumulated impairment losses in land use right, net in the consolidated balance sheets. Amortization is provided on a straight-line basis over the estimated useful lives, which is 50 years and represents the shorter of the estimated usage years or the terms of the land use rights certificate. Upon the adoption of ASC 842 on January 1, 2021, land use rights acquired assessed in accordance with ASC 842 and recognized in operating right-of-use assets if they meet the definition of lease.

(n) Impairment of long-lived assets

Long-lived assets such as property, plant and equipment, intangible assets and operating lease right-of-use assets with finite lives are evaluated for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be fully recoverable or that the useful life is shorter than the Group had originally estimated. When these events occur, the Group evaluates the impairment for the long-lived assets by comparing the carrying value of the assets with an estimate of future undiscounted cash flows expected to be generated from the use of the assets and their eventual disposition. If the sum of the expected future undiscounted cash flows is less than the carrying value of the assets, the Group recognizes an impairment loss based on the excess of the carrying value of the assets over the fair value of the assets. No impairment of long-lived assets was recognized for the years ended December 31, 2020, 2021 and 2022.

(o) Value added taxes

The Company's PRC subsidiaries are subject to value added tax ("VAT"). Revenues from sales of products are generally subject to VAT at the rate of 13%. Revenues from services are generally subject to VAT at the rate of 6%. VAT are subsequently paid to PRC tax authorities after netting input VAT on purchases and VAT export rebates. The excess of output VAT over input VAT and VAT export rebates is reflected in Accrued expenses and other current liabilities, and the excess of input VAT and VAT export rebates over output VAT is reflected in prepayments and other current assets in the consolidated balance sheets.

(p) Fair value measurements

Fair value represents the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability.

Accounting guidance defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. Accounting guidance establishes a three-level fair value hierarchy and requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The three levels of inputs are:

- Level 1—Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2—Include other inputs that are directly or indirectly observable in the marketplace.
- Level 3—Unobservable inputs which are supported by little or no market activity.

Accounting guidance also 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.

Financial assets and liabilities of the Group primarily consist of cash and cash equivalents, term deposits, restricted cash, short-term investments, accounts receivable, short-term bank borrowings, notes payable and accounts payable. The Group measures short-term investments at fair value on a recurring basis. Short-term investments include financial products issued by financial institutions, which are valued based on prices per unit quoted by issuers. They are categorized in Level 2 of the fair value hierarchy.

As of December 31, 2021 and 2022, the carrying values of other financial instruments approximated to their fair values as their interest rates are comparable to the prevailing interest rates in the market.

The Group's non-financial assets, such as property, plant and equipment, intangible assets and operating lease right-of-use assets, would be measured at fair value only if they were determined to be impaired.

(q) Revenue recognition

The Group generates substantially all of its revenues from sales of electric scooters, accessories and spare parts to the Group's PRC domestic offline distributors and overseas offline distributors or directly to individual customers online. The Group also generates its revenues from its subscription-based mobile application services, as well as insurance service as an agent.

The Group recognizes revenues upon the satisfaction of its performance obligation (upon transfer of control of promised goods or services to customers) in an amount that reflects the consideration to which the Group expects to be entitled to in exchange for those goods or services, excluding amounts collected on behalf of third parties (for example, value added taxes). For each performance obligation satisfied over time, the Group recognizes revenue over time by measuring the progress toward complete satisfaction of that performance obligation. If the Group does not satisfy a performance obligation over time, the performance obligation is satisfied at a point in time.

To achieve that core principle, the Group applies the five steps defined under Accounting Standards Codification Topic 606: (i) identify the contract(s) with a customer, (ii) identify the performance obligations in the contract, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations in the contract, and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The Group assesses its revenue arrangements against specific criteria in order to determine if it is acting as principal or agent. Revenue arrangements with multiple performance obligations are divided into separate distinct goods or services. A performance obligation is considered distinct from other obligations in a contract when it (a) provides a benefit to the customer either on its own or together with other resources that are readily available to the customer and (b) is separately identified in the contract. The Group allocates the transaction price to each performance obligation based on the relative SSP of the goods or services provided. Revenue is recognized upon the transfer of control of promised goods or services to a customer.

Products

The Group identified one performance obligation which is to sell products, such as electric scooters, accessories and spare parts, to the Group's PRC domestic offline distributors and overseas offline distributors or directly to individual customers online. For all sales of products, the Group requires a signed contract or purchase order, which specifies pricing, quantity and product specifications. Revenue of product sales is recognized on a gross basis upon the satisfaction of its performance obligation, which is to transfer the control of the promised products to customers.

The transfer of control of the products is satisfied at a point in time, which occurs when the products are accepted by the domestic offline distributors, overseas offline distributors or individual customers. When the Group sells its products to its domestic offline distributors for domestic sales in PRC, acceptance of the products by the domestic offline distributors is evidenced by goods receipt notes signed by the domestic offline distributors, which is generally at the Group's warehouse. When the Group sells its products to overseas offline distributors for overseas sales, acceptance of the products by overseas offline distributors is evidenced by shipping documents dependent upon the terms of the underlying contract. When the Group sells its products to individual customers through its own online store and third-party e-commerce platform, the Group is responsible for the delivery to individual customers. Acceptance of the products is evidenced by goods receipt notes signed by individual customers.

The Group provides sales volume rebate to qualified distributors based on the volume sold to such distributors in a certain period and grants online individual customers unconditional right to return the products within 7 days after their acceptance.

Revenues are measured as the amount of consideration the Group expects to receive in exchange for transferring products to domestic offline distributors, overseas offline distributors or individual customers. Consideration is recorded net of sales volume rebate, sales returns and VAT. Sales returns is estimated based on historical experiences, which were insignificant for the years ended December 31, 2020, 2021 and 2022.

The Group utilizes delivery service providers to deliver products to overseas offline distributors and individual customers (“shipping activities”), but the delivery service is not considered as a separate obligation as the shipping activities are performed before the overseas offline distributors and individual customers obtain control of the products. Therefore, shipping activities are not considered a separate promised service to them but rather are activities to fulfill the Group’s promise to transfer the products. Outbound shipping charges to overseas offline distributors and individual customers are included as a part of the revenues, and outbound shipping-related costs are recorded as cost of revenues. Shipping costs incurred for sales of products and recognized as cost of revenues were RMB43,743,258, RMB49,456,660 and RMB101,970,407 for the years ended December 31, 2020, 2021 and 2022, respectively.

For some sales, the Group collects cash before delivery. Cash collected before product delivery is recognized as advances from customers.

Service

When the Group sells its smart electric scooters to its customers, it also provides mobile application services for free for one to two years (the “free service period”). Customers are able to locate their smart electric scooters, as well as obtain the operating status (e.g. battery status), and claim online repair and maintenance requests of their smart electric scooters, upon their registration of their smart electric scooters on the Group’s mobile application. Customers may subscribe to such service after the free service period if they want to continue using aforementioned functions.

Such revenue arrangements are divided into separate distinct performance obligations, including electric scooters and mobile application services. The Group determines the SSP for electric scooters and mobile application services based on their relative selling prices.

The allocated revenue to mobile application services of free service period and subscribed mobile application service revenue is deferred and recognized on a straight-line basis over the service period, as the Group determines that the customer simultaneously receives and consumes benefits provided by the Group as the Group performs during the free service period or the subscription period.

The deferred revenue that will be recognized in the next twelve months is classified as current portion, and the remaining balance of deferred revenue is classified as non-current portion.

The Group also sells insurance plan for electric scooters (“NIU Cover”) to individual customers at their option. The insurance is provided by third party insurance companies. The Group determines that it acts as an agent for the NIU Cover service because it does not obtain control of the service before the service is transferred to the customers. The Group recognizes revenue on net basis when the insurance agreement is entered into between individual customers and insurance providers.

Remaining performance obligations

The remaining performance obligation disclosure provides the aggregate amount of the transaction price yet to be recognized as of the end of the reporting period and an explanation as to when the Group expects to recognize these amounts in revenue. Additionally, as a practical expedient, the Group does not disclose the remaining performance obligations of contracts that have an original duration of one year or less.

As of December 31, 2022, the aggregate amount of the transaction price allocated to remaining performance obligations that are unsatisfied or partially unsatisfied was RMB73,901,130. Given the profile of contract terms, RMB62,471,630 of the remaining performance obligation is expected to be recognized as revenue within the next 12 months and RMB11,429,500 is expected to be recognized as revenue between next 12 to 36 months.

(r) Contract Balances

Timing of revenue recognition may differ from the timing of invoicing to customers. Accounts receivable are recorded at the invoiced amount and do not bear interest. Amounts collected on accounts receivable are included in net cash provided by operating activities in the consolidated statements of cash flows.

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Prior to the adoption of ASC 326, *Financial Instruments - Credit Loss*, an allowance for doubtful accounts is made and recorded into general and administrative expenses based on aging of accounts receivable and on any specifically identified accounts receivable that may become uncollectible. Management considers the following factors when determining the collectability of specific accounts: historical experience, credit worthiness of the clients, aging of the receivables and other specific circumstances related to the accounts. Accounts receivable which are deemed to be uncollectible are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. There is a time lag between when the Group estimates a portion of or the entire account balances to be uncollectible and when a write off of the account balances is taken. The Group does not have any off-balance sheet credit exposure related to its customers.

The Group adopted ASU 2016-13, *Financial Instruments - Credit Losses, Measurement of Credit Losses on Financial Instruments*, and subsequent amendments to the initial guidance within ASU 2018-19, ASU 2019-04, ASU 2019-05, ASU 2019-11 and ASU 2020-02, collectively referred to as “ASC 326” on January 1, 2021 using the modified retrospective approach. Upon adoption of ASC 326 starting from January 1, 2021, the provision of credit losses for accounts receivable is based upon the current expected credit losses (“CECL”) model. The CECL model requires an estimate of the credit losses expected over the life of accounts receivable since initial recognition, and accounts receivable with similar risk characteristics are grouped together when estimating CECL. In assessing the CECL, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical credit loss experience, adjusted for relevant factors impacting collectability and forward-looking information indicative of external market conditions. While the Group uses the best information available in making determination, the ultimate recovery of recorded receivables is also dependent upon future economic events and other conditions that may be beyond the Group’s control. Accounts receivable which are deemed to be uncollectible are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. There is a time lag between when the Group estimates a portion of or the entire account balances to be uncollectible and when a write off of the account balances is taken. The Group does not have any off-balance sheet credit exposure related to its customers. This adoption did not have material impact on the Company’s consolidated financial statements.

A contract liability is recognized when the Group has an obligation to transfer products or services to a customer for which the Group has received consideration from the customer, or for which an amount of consideration is due from the customer. Contract liabilities are included in advances from customers and deferred revenue on the consolidated balance sheets.

Changes in the Group’s contract liabilities (advances from customers and deferred revenue) are presented in the following table for the years ended December 31, 2021 and 2022:

Contract liabilities as of January 1, 2021	65,394,281
Cash received in advance, excluding VAT	3,426,755,022
Revenue recognized from opening balance of contract liabilities	(61,217,823)
Revenue recognized from contract liabilities arising during 2021	(3,370,213,054)
Contract liabilities as of December 31, 2021	60,718,426
Cash received in advance, excluding VAT	2,852,443,422
Revenue recognized from opening balance of contract liabilities	(50,024,734)
Revenue recognized from contract liabilities arising during 2022	(2,789,235,984)
Contract liabilities as of December 31, 2022	73,901,130

(s) Warranties

The Group provides for the estimated costs of warranties at the time when revenue is recognized. The specific terms and conditions of those warranties vary among different parts of electric scooters. Factors that affect the Group’s warranty obligation include product defect rates and costs of repair or replacement. These factors are estimates that may change based on new information that becomes available each period. The portion of the warranty reserve expected to be incurred within the next 12 months is included within accrued expenses and other current liabilities while the remaining balance is included within other non-current liabilities on the consolidated balance sheets.

(t) Cost of Revenues

Cost of revenues mainly consists of the cost of products sold, write-downs of inventories, logistics costs and warranty costs.

(u) Selling and Marketing Expenses

Selling and marketing expenses mainly consist of advertising expenses, promotion expenses and payroll and related expenses for personnel engaged in selling and marketing activities. Advertising expenses, which consist primarily of online and offline advertisements, are expensed when the services are received. The advertising expenses were RMB86,763,367, RMB160,415,978 and RMB191,776,905 for the years ended December 31, 2020, 2021 and 2022, respectively.

(v) General and Administrative Expenses

General and administrative expenses mainly consist of payroll and related costs for employees involved in general corporate functions, professional fees, current expected credit losses, foreign currency exchange gains (losses) and other general corporate expenses, as well as expenses associated with the use by these functions of facilities and equipment, such as rental and depreciation expenses.

(w) Research and Development Expenses

Research and development expenses mainly consist of payroll and related costs for employees involved in researching and developing new products and technologies, and outsourced design expenses as well as expenses associated with the use by these functions of facilities and equipment, such as rental and depreciation expenses. Research and development expenses are expensed as incurred.

(x) Government Grants

Government grants are recognized when there is reasonable assurance that the Group will comply with the conditions attached to it and the grant will be received. Grants that compensate the Group for expenses incurred are recognized in the Group's consolidated statements of comprehensive income (loss) on a systematic basis in the same periods in which the expenses are incurred. Grants that compensate the acquisition cost of an asset are recorded as a liability in the Group's consolidated balance sheets and are recognized in the Group's consolidated statements of comprehensive income (loss) over the useful life of the asset. As of December 31, 2021 and 2022, nil of liability was related to the government grants that compensate the acquisition cost of an asset.

The Group's government grants mainly consist of certain subsidies or tax refund from local government or industrial parks where its offices locate. For the years ended December 31, 2020, 2021 and 2022, RMB22,441,492, RMB48,726,818 and RMB16,385,038 of government grants are recognized in the consolidated statements of comprehensive income (loss), respectively. There were no significant commitment, contingencies or provision for recapture conditions for the government grants received for the years ended December 31, 2020, 2021 and 2022.

(y) Share-based Compensation

The Company periodically grants share-based awards, including but not limited to, restricted share units and share options to eligible employees and directors.

Share-based awards granted to employees and directors are measured at the grant date fair value of the awards, and are recognized as compensation expense using the straight-line method over the requisite service period, which is generally the vesting period. Forfeitures are accounted when they occur.

A change in any of the terms or conditions of share-based awards is accounted for as a modification of the awards. The Group calculates incremental compensation cost of a modification as the excess of the fair value of the modified awards over the fair value of the original awards immediately before its terms are modified at the modification date. For vested awards, the Group recognizes incremental compensation cost in the period the modification occurs. For awards not being fully vested, the Group recognizes the sum of the incremental compensation cost and the remaining unrecognized compensation cost for the original awards over the remaining requisite service period after modification.

Share-based compensation in relation to the restricted share units is measured based on the fair value of the Company's ordinary shares at the grant date of the award. The fair value is the closing prices of the Company's stock traded in the open market as of the grant date. Share-based compensation in relation to the share options is estimated using the Binomial Option Pricing Model. The determination of the fair value of share options is affected by the share price of the Company's ordinary shares as well as the assumptions regarding a number of complex and subjective variables, including the expected share price volatility (estimated based on the historical volatility of the Company and comparable peer public companies with a time horizon close to the expected term of the Company's options), risk-free interest rate, exercise multiple and expected dividend yield. The fair value of these awards was determined with the assistance from a valuation report prepared by an independent valuation firm using management's estimates and assumptions.

(z) Employee Benefits

The Company's subsidiaries and the VIE and VIE's subsidiaries in PRC participate in a government mandated, multiemployer, defined contribution plan, pursuant to which certain retirement, medical, housing and other welfare benefits are provided to employees. PRC labor laws require the entities incorporated in China to pay to the local labor bureau a monthly contribution calculated at a stated contribution rate on the monthly basic compensation of qualified employees. The Group has no further commitments beyond its monthly contribution. Employee social benefits included as cost of products and expenses in the accompanying consolidated statements of comprehensive income (loss) amounted to RMB13,248,094, RMB31,122,424 and RMB42,637,403 for the years ended December 31, 2020, 2021 and 2022, respectively.

(aa) Income Taxes

Current income taxes are provided on the basis of net income (loss) for financial reporting purposes, and adjusted for income and expense items which are not assessable or deductible for income tax purposes, in accordance with the regulations of the relevant tax jurisdictions. Deferred income taxes are provided using the liability method. Under this method, deferred income tax assets and liabilities are recognized for the tax effects of temporary differences and are determined by applying enacted statutory tax rates that will be in effect in the period in which the temporary differences are expected to reverse to the temporary differences between the financial statements' carrying amounts and the tax bases of assets and liabilities. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset deferred tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle deferred tax liabilities and assets on a net basis or their deferred tax assets and liabilities will be realized simultaneously.

A valuation allowance is provided to reduce the amount of deferred income tax assets if based on the weight of available evidence, it is more-likely-than-not that some portion, or all, of the deferred income tax assets will not be realized. The effect on deferred income taxes arising from a change in tax rates is recognized in the consolidated statements of comprehensive income (loss) in the period of change.

The Group applies a "more likely than not" recognition threshold in the evaluation of uncertain tax positions. The Group recognizes the benefit of a tax position in its consolidated financial statements if the tax position is "more likely than not" to prevail based on the facts and technical merits of the position. Tax positions that meet the "more likely than not" recognition threshold are measured at the largest amount of tax benefit that has a greater than fifty percent likelihood of being realized upon settlement. Unrecognized tax benefits may be affected by changes in interpretation of laws, rulings of tax authorities, tax audits, and expiry of statutory limitations. In addition, changes in facts, circumstances and new information may require the Group to adjust the recognition and measurement estimates with regard to individual tax positions. Accordingly, unrecognized tax benefits are periodically reviewed and re-assessed. Adjustments, if required, are recorded in the Group's consolidated financial statements in the period in which the change that necessitates the adjustments occur. The ultimate outcome for a particular tax position may not be determined with certainty prior to the conclusion of a tax audit and, in certain circumstances, a tax appeal or litigation process. The Group records interest and penalties related to unrecognized tax benefits (if any) in interest expenses and general and administrative expenses, respectively. As of December 31, 2021 and 2022, the Group did not have any significant unrecognized uncertain tax positions.

(bb) Foreign currency translation and foreign currency risks

The Company's reporting currency is Renminbi ("RMB"). The functional currency of the Company and its subsidiary incorporated at Hong Kong S.A.R. are the United States dollars ("US\$"). The functional currency of the Company's subsidiary incorporated in Indonesia is Indonesia Rupiah ("IDR").

The functional currency of the Company's PRC subsidiaries, VIE and VIE's subsidiaries is RMB.

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Transactions denominated in currencies other than the functional currency are remeasured into the functional currency at the exchange rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in a foreign currency are remeasured into the functional currency using the applicable exchange rate at the balance sheet date. The resulted exchange differences are recorded as foreign currency exchange gain or losses in the consolidated statements of comprehensive income (loss).

The financial statements of the Company, its subsidiaries incorporated at Hong Kong S.A.R. and Indonesia are translated from the functional currency into RMB. Assets and liabilities are translated into RMB using the applicable exchange rates at the balance sheet date. Equity accounts other than earnings generated in the current period are translated into RMB using the appropriate historical rates. Revenues, expenses, gains and losses are translated into RMB using the average exchange rates for the relevant period. The resulted foreign currency translation adjustments are recorded as a component of other comprehensive loss in the consolidated statements of comprehensive income (loss) and the accumulated foreign currency translation adjustments are recorded as a component of accumulated other comprehensive loss in the consolidated statements of changes in shareholders' equity.

The RMB is not a freely convertible currency. The PRC State Administration for Foreign Exchange, under the authority of the PRC government, controls the conversion of RMB to foreign currencies. The value of the RMB is subject to changes of central government policies and international economic and political developments affecting supply and demand in the China foreign exchange trading system market.

(cc) Concentration and risk

Concentration of customers and suppliers

No customers individually represent greater than 10% of total revenues of the Group for the years ended December 31, 2020, 2021 and 2022.

A supplier from whom individually represents greater than 10% of total purchases of the Group for the years ended December 31, 2020, 2021 and 2022, is as follows:

	For the Year Ended December 31,					
	2020		2021		2022	
	RMB	%	RMB	%	RMB	%
Supplier A	*	*	298,264,146	12 %	354,980,995	13 %

A customer accounting for 10% or more of accounts receivable, net is as follows:

	As of December 31,			
	2021		2022	
	RMB	%	RMB	%
Customer X	117,742,621	44 %	135,105,131	45 %

A customer accounting for 10% or more of advances from customers is as follows:

	As of December 31,			
	2021		2022	
	RMB	%	RMB	%
Customer Y	*	*	2,787,482	11 %

No suppliers individually represent greater than 10% of accounts payable of the Group as of December 31, 2021 and 2022.

* The amount was less than 10% of total balance.

Concentration of credit risk

Financial instruments that potentially expose the Group to concentrations of credit risk consist principally of cash and cash equivalents, term deposits, restricted cash, short-term investments and accounts receivable, net.

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The Group's investment policy requires cash and cash equivalents, term deposits, restricted cash and short-term investments to be placed with high-quality financial institutions and to limit the amount of credit risk from any one issuer. The Group regularly evaluates the credit standing of the counterparties or financial institutions.

The Group conducts credit evaluations on its customers prior to delivery of goods or services. The assessment of customer creditworthiness is primarily based on historical collection records, research of publicly available information and customer on-site visits by senior management. Based on this analysis, the Group determines what credit terms, if any, to offer to each customer individually. If the assessment indicates a likelihood of collection risk, the Company will not deliver the services or sell the products to the customer or require the customer to pay cash, post letters of credit to secure payment or to make significant down payments.

Interest rate risk

The Group's short-term bank borrowing bears interests at fixed rates. If the Group were to renew these loans, the Group might be subject to interest rate risk.

(dd) Earnings (Loss) per Share

Basic earnings (loss) per share is computed by dividing net income (loss) attributable to holders of ordinary shares by the weighted average number of ordinary shares or ordinary share equivalents outstanding during the year using the two-class method. Vested share options, which are exercisable for nominal consideration, and vested restricted share units are included in the calculation of the weighted-average number of shares of ordinary shares as ordinary share equivalents. Under the two-class method, any net income is allocated between ordinary shares and other participating securities based on their participating rights. A net loss is not allocated to participating securities when the participating securities does not have contractual obligation to share losses.

Diluted earnings (loss) per share is calculated by dividing net income (loss) attributable to ordinary shareholders by the weighted average number of ordinary shares used in calculating basic net earnings (loss) per ordinary share and dilutive ordinary equivalent shares outstanding during the period. Ordinary equivalent shares consist of ordinary shares issuable upon the exercise of outstanding share option with the exception of vested share options with nominal exercise consideration and unvested restricted share units (using the treasury stock method). Ordinary equivalent shares are calculated based on the most advantageous conversion rate or exercise price from the standpoint of the security holder. Ordinary equivalent shares are not included in the denominator of the diluted earnings (loss) per share calculation when inclusion of such shares would be anti-dilutive.

(ee) Segment Reporting

The Company's chief operating decision maker has been identified as the Chief Executive Officer, who reviews consolidated results when making decisions about allocating resources and assessing performance of the Group. For the purpose of internal reporting and management's operation review, the Company's Chief Executive Officer and management personnel do not segregate the Group's business by product. All products and services are viewed as in one and the only operating segment.

(ff) Statutory Reserves

In accordance with the PRC Company Laws, the Group's PRC subsidiaries, VIE and VIE's subsidiaries must make appropriations from their after-tax profits as determined under the Generally Accepted Accounting Principles in the PRC ("PRC GAAP") to non-distributable reserve funds including statutory surplus fund and discretionary surplus fund. The appropriation to the statutory surplus fund must be 10% of the after-tax profits as determined under PRC GAAP. Appropriation is not required if the statutory surplus fund has reached 50% of the registered capital of the PRC companies. Appropriation to the discretionary surplus fund is made at the discretion of the PRC companies.

The statutory surplus fund and discretionary surplus fund are restricted for use. They may only be applied to offset losses or increase the registered capital of the respective companies. These reserves are not allowed to be transferred to the Company by way of cash dividends, loans or advances, nor can they be distributed except for liquidation.

For the years ended December 31, 2020, 2021 and 2022, the Group's PRC subsidiaries made appropriations to the statutory reserves of RMB22,208,130, RMB20,875,864 and RMB42,654, respectively.

(gg) Recent Accounting Pronouncements

In November 2021, the FASB issued ASU No. 2021-10, Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance, requiring annual disclosures about transactions with a government that are accounted for by analogizing to a grant or contribution accounting model. The disclosure requirements include the nature of the transaction and the related accounting policy used, the line items on the balance sheets and statements of operations that are affected and the amounts applicable to each financial statement line item and the significant terms and conditions of the transactions. The ASU is effective for annual periods beginning after December 15, 2021. The disclosure requirements can be applied either retrospectively or prospectively to all transactions in the scope of the amendments that are reflected in the financial statements at the date of initial application and new transactions that are entered into after the date of initial application. The Group adopted the new standard on January 1, 2022, which had no material impact on the consolidated financial statements.

3. SHORT-TERM INVESTMENTS

Short-term investments consisted of the following:

	As of December 31,	
	2021	2022
	RMB	RMB
Aggregate cost basis	770,000,000	160,000,000
Gross unrealized holding gain	3,678,455	406,301
Aggregate fair value	<u>773,678,455</u>	<u>160,406,301</u>

The Group's short-term investments represent wealth management products issued by commercial banks in the PRC which are redeemed upon demand of the Group. The wealth management products are invested in debt securities issued by the PRC government, corporate debt securities, bank deposits, central bank bills and other securities issued by other financial institutions. As of December 31, 2021 and 2022, there were no gross unrealized holding losses.

4. ACCOUNTS RECEIVABLE, NET

Accounts receivable, net consisted of the following:

	As of December 31,	
	2021	2022
	RMB	RMB
Accounts receivable	273,106,542	329,336,616
Allowance for doubtful accounts	(4,549,366)	(29,593,693)
Accounts receivable, net	<u>268,557,176</u>	<u>299,742,923</u>

The movement of the allowance for doubtful accounts is as follows:

	For the Year Ended		
	December 31,		
	2020	2021	2022
	RMB	RMB	RMB
Balance at the beginning of the year	3,288,535	3,307,381	4,549,366
Additions	505,912	1,272,454	25,044,327
Write-off	(487,066)	(30,469)	—
Balance at the end of the year	<u>3,307,381</u>	<u>4,549,366</u>	<u>29,593,693</u>

5. INVENTORIES

Inventories consisted of the following:

	As of December 31,	
	2021	2022
	RMB	RMB
Raw materials	194,707,940	149,903,238
Works in progress	27,802	69,290
Finished goods	74,901,300	267,036,620
Inventories	269,637,042	417,009,148

Write-downs of inventories from the carrying amount to its estimated net realizable value amounted to RMB5,809,583, RMB3,679,669 and RMB8,991,793 were made for the years ended December 31, 2020, 2021 and 2022, and were recorded as cost of revenues.

6. PREPAYMENTS AND OTHER CURRENT ASSETS

Prepayments and other current assets consisted of the following:

	As of December 31,	
	2021	2022
	RMB	RMB
Deductible input VAT and VAT rebates receivable	15,509,025	104,391,993
Advances to suppliers	35,620,903	54,722,157
Deferred charge	2,300,871	14,359,452
Income tax receivable	—	13,349,602
Receivable from online platforms	591,388	11,555,500
Interest receivable	995,789	1,916,240
Others*	1,043,286	5,400,773
Prepayments and other current assets	56,061,263	205,695,717

* Others mainly include deposits receivable.

7. PROPERTY, PLANT AND EQUIPMENT, NET

Property, plant and equipment consisted of the following:

	As of December 31,	
	2021	2022
	RMB	RMB
Furniture	301,967,565	380,987,667
Building	138,365,906	148,449,403
Machinery and equipment	113,720,676	135,365,960
Office and electronic equipment	29,067,529	31,868,495
Leasehold improvement	10,753,230	10,778,718
Motor vehicles	3,674,913	3,811,160
Property, plant and equipment	597,549,819	711,261,403
Less: Accumulated depreciation	(200,333,908)	(313,904,608)
Property, plant and equipment, net	397,215,911	397,356,795

Depreciation expense on property, plant and equipment was allocated to the following expense items:

	For the Year Ended December 31,		
	2020	2021	2022
	RMB	RMB	RMB
Cost of revenues	11,942,414	19,702,392	23,554,266
General and administrative expenses	5,237,258	7,856,968	8,113,535
Selling and marketing expenses	27,665,201	62,949,248	104,721,594
Research and development expenses	2,695,347	3,092,290	4,381,707
Total depreciation expense	47,540,220	93,600,898	140,771,102

8. INTANGIBLE ASSETS, NET

Intangible assets consisted of the following:

RMB	Amortization period	As of December 31, 2021		
		Gross carrying amount	Accumulated amortization	Net carrying amount
Trademarks	5-10 years	8,248,272	(6,165,790)	2,082,482
Domain name	5-10 years	3,792,424	(3,576,528)	215,896
License	10 years	1,943,396	(573,585)	1,369,811
Total		13,984,092	(10,315,903)	3,668,189

RMB	Amortization period	As of December 31, 2022		
		Gross carrying amount	Accumulated amortization	Net carrying amount
Trademarks	5-10 years	8,983,153	(8,503,451)	479,702
Domain name	5-10 years	3,820,913	(3,618,766)	202,147
License	10 years	1,943,396	(767,925)	1,175,471
Total		14,747,462	(12,890,142)	1,857,320

Amortization expense on intangible assets was allocated to the following expense items:

	For the Year Ended December 31,		
	2020	2021	2022
	RMB	RMB	RMB
Cost of revenues	194,340	194,340	194,340
General and administrative expenses	1,783,927	1,677,810	1,745,967
Total amortization expense	1,978,267	1,872,150	1,940,307

As of December 31, 2022, estimated amortization expense of the existing intangible assets for each of the next five years is RMB542,464, RMB262,895, RMB262,895, RMB248,717 and RMB247,428.

9. OTHER NON-CURRENT ASSETS

Other non-current assets consisted of the following:

	As of December 31,	
	2021	2022
	RMB	RMB
Prepayment for an investment	—	7,000,000
Deposits	1,934,441	2,376,350
Prepayment for property, plant and equipment	432,623	1,914,411
Others	—	1,392,329
Other non-current assets	2,367,064	12,683,090

10. SHORT-TERM BANK BORROWINGS

	As of December 31,	
	2021	2022
	RMB	RMB
China Merchants Bank loan	20,000,000	—
SPD Silicon Valley Bank loan	160,000,000	160,000,000
Short-term bank borrowings	180,000,000	160,000,000

On July 23, 2021, China Merchants Bank provided Jiangsu Xiaoniu with a 10-month short-term credit bank borrowing of RMB20,000,000 bearing interest of 3.5% per annum. In May 2022, Jiangsu Xiaoniu fully repaid the borrowing, and obtained a 12-month short-term bank borrowing from China Merchants Bank in amounts of RMB20,000,000 bearing interest of 3.3% per annum. In November 2022, Jiangsu Xiaoniu repaid the borrowing. As of December 31, 2022, outstanding balances of the borrowing was nil.

On June 12, 2019, Jiangsu Xiaoniu, Beijing Niudian and Changzhou Niudian jointly entered into a facility agreement with SPD Silicon Valley Bank that provided a credit facility of up to RMB120,000,000 with tenor period of twelve months. The interest rate for each drawdown was at base interest rate of People's Bank of China. In June 2020, Jiangsu Xiaoniu entered into an amendment agreement to (i) change the facility amount up to RMB160,000,000 and (ii) change the cash security to equivalent amount of RMB176,000,000 at the time of drawdown. In June 2020, Jiangsu Xiaoniu and Changzhou Niudian fully repaid the loans of RMB60,000,000 and RMB60,000,000 borrowed in June 2019, respectively, and the restricted cash in US dollar deposit equivalent to RMB132,000,000 was released. Also in June 2020, Jiangsu Xiaoniu and Changzhou Niudian obtained new loans from SPD Silicon Valley Bank under the amendment agreement in amounts of RMB80,000,000 and RMB80,000,000, respectively. The Company provided cash security with US dollar deposit equivalent to RMB176,000,000 at the bank. In June 2021, Jiangsu Xiaoniu and Changzhou Niudian fully repaid the loans and the restricted cash was released. Also in June 2021, Jiangsu Xiaoniu entered into an amended facility agreement to (i) extend the facility maturity date to June 12, 2023, and (ii) change the interest rate to a fixed rate of 3.5% per annum, which was further changed to 3.2% per annum in December 2021. Also in June 2021, Jiangsu Xiaoniu and Changzhou Niudian obtained new loans from SPD Silicon Valley Bank under the new amended facility agreement in amounts of RMB120,000,000 and RMB40,000,000, respectively. The Company provided cash security with US dollar deposit equivalent to RMB176,000,000 at the bank. In September and December 2021, Changzhou Niudian and Jiangsu Xiaoniu repaid loans of RMB40,000,000 and RMB120,000,000, respectively, and the restricted cash was released. In December 2021, Jiangsu Xiaoniu obtained a new loan from SPD Silicon Valley Bank under the amendment agreement in amounts of RMB160,000,000. In June 2022, Jiangsu Xiaoniu fully repaid the loan and the restricted cash was released and Jiangsu Xiaoniu entered into an amended facility agreement to change the interest rate to 3.0% per annum, and obtained a loan from SPD Silicon Valley Bank in amount of RMB160,000,000 with the maturity date in December 2022. In December 2022, Jiangsu Xiaoniu repaid such loan and obtained a loan from SPD Silicon Valley Bank in amount of RMB160,000,000 with the maturity date in January 2023. As of December 31, 2021 and 2022, total outstanding balance of these loans were RMB160,000,000 and RMB160,000,000, respectively, and total outstanding balance of restricted cash were equivalent to RMB176,141,464 and RMB176,204,380, respectively. In January 2023, Jiangsu Xiaoniu fully repaid the loan and the restricted cash was released.

11. NOTES PAYABLE

On December 31, 2021 and 2022, Jiangsu Xiaoni obtained credit facility of up to RMB200,000,000 from China Merchants Bank and RMB300,000,000 from Bank of China, respectively, for both bank borrowings and notes payable with tenor period of twelve months. As of December 31, 2021 and 2022, notes payable represent bank acceptance notes with non-interest bearing, issued to suppliers by the Group, which are due within twelve months.

12. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

	As of December 31,	
	2021	2022
	RMB	RMB
Refundable payment—current	36,977,756	41,735,515
Accrued payroll and social insurance	34,931,618	28,508,469
Warranty—current	29,854,144	24,797,169
Other taxes payable	17,056,573	18,813,540
Construction payable	10,829,465	16,512,545
Sales rebate	36,275,780	13,878,273
Operating lease liabilities—current	7,689,187	7,743,648
Interest payable	275,178	280,000
Others*	25,014,857	39,823,784
Accrued expenses and other current liabilities	198,904,558	192,092,943

* Others mainly include accrued marketing expenses, accrued professional fees and other general corporate expenses.

The Group provides limited warranty to its end customers for terms varying from six months to three years, subject to certain conditions, such as normal use. For the electric motor, the Group provides a 24-month or 30,000-kilometer warranty. For lithium-ion battery packs, the Group provides 24-month or 20,000-kilometer warranty or a 36-month or 30,000-kilometer warranty, depending on the model.

For other parts of the Group's electric scooters, the Group provides quality warranty varying from six months to 24 months depending on the parts. The Group is responsible for replacing or repairing the faulty products during their respective warranty terms.

The Group provides for the estimated costs of warranties at the time revenue is recognized. Factors that affect the Group's warranty obligation include product defect rates and costs of repair or replacement.

Movement of provision for warranty is as follows:

	For the Year Ended December 31,		
	2020	2021	2022
Accrued warranty—beginning of year	59,951,866	59,195,896	47,788,122
Accrual for warranties issued during the year	35,197,541	35,181,557	20,355,810
Warranty claims paid	(18,590,107)	(22,554,689)	(23,894,070)
Pre-existing warranty expired	(17,363,404)	(24,034,642)	(10,437,572)
Accrued warranty—end of year	59,195,896	47,788,122	33,812,290

13. OTHER NON-CURRENT LIABILITIES

Other non-current liabilities consisted of the following:

	As of December 31,	
	2021	2022
	RMB	RMB
Warranty—non-current	17,933,978	9,015,121
Refundable payment from franchised stores—non-current	1,680,058	1,233,466
Others	1,353,394	3,192,795
Other non-current liabilities	20,967,430	13,441,382

14. ORDINARY SHARE

The Company's authorized share capital is US\$500,000 divided into 5,000,000,000 shares comprising of (i) 4,900,000,000 Class A ordinary shares with a par value of US\$0.0001 each, (ii) 50,000,000 Class B ordinary shares with a par value of US\$0.0001 each and (iii) 50,000,000 shares with a par value of US\$0.0001 each of such class or classes (however designated) as the board of directors may determine in accordance with the Company's Memorandum and Articles of Association.

Holders of Class A ordinary shares and Class B ordinary shares have the same rights except for voting and conversion rights. Each Class A ordinary share entitles the holder to one vote on all matters subject to vote at general meetings of the Company, and each Class B ordinary share entitles the holder to four votes on all matters subject to vote at general meetings of the Company. Class A ordinary shares are not convertible into Class B ordinary shares under any circumstances.

On August 18, 2020, a Class B ordinary shareholder converted 1,260,000 Class B ordinary shares to Class A ordinary shares.

On May 17, 2021, a Class B ordinary shareholder converted 1,440,000 Class B ordinary shares to Class A ordinary shares.

As of December 31, 2022, there were 137,719,542 Class A ordinary shares and 16,542,020 Class B ordinary shares outstanding.

15. SHARE-BASED COMPENSATION

Share options and restricted share units

a) 2016 Global Incentive Plan

In January 2016, the Company's Shareholders and Board of Directors approved 2016 Global Share Incentive Plan and amended it in March 2018 (the "Amended 2016 Plan"). Under the Amended 2016 Plan, a maximum aggregate number of 5,861,480 ordinary shares may be issued pursuant to all awards granted. Share options or restricted share units expire 10 years from the grant date.

b) 2018 Share Incentive Plan

In September 2018, the Company's Shareholders and Board of Directors approved the 2018 Share Incentive Plan (the "2018 Plan"). Under the 2018 Plan, the maximum aggregate number of ordinary shares available for issuance is 6,733,703 ordinary shares, which shall be increased by a number equal to 1.5% of the total number of ordinary shares issued and outstanding on the last day of the immediately preceding fiscal year, each fiscal year during the term of the 2018 Plan, if determined and approved by the board of directors for the relevant fiscal year. The board of directors has approved annual increases of 2,241,253, 2,285,407, and 2,305,212 ordinary shares for the years ended December 31, 2020, 2021 and 2022, representing 1.5% of total issued and outstanding shares as of December 31, 2019, 2020 and 2021, respectively, pursuant to the 2018 Share Incentive Plan.

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A summary of the share options activities under the Amended 2016 Plan and the 2018 Plan for the year ended December 31, 2022 is presented below:

	Number of share	Weighted average exercise price US\$	Weighted remaining contractual years	Aggregate intrinsic value US\$
Outstanding at January 1, 2022	4,655,428	2.07		
Granted	—	—		
Exercised	(228,020)	1.44		
Forfeited	(12,800)	0.20		
Outstanding at December 31, 2022	4,414,608	2.11	5.38	4,351,057
Exercisable as of December 31, 2022	3,669,818	1.86	5.13	4,305,679

Compensation costs recognized for share options for the years ended December 31, 2020, 2021 and 2022 were allocated to the following expense items:

	For the Year Ended December 31,		
	2020 RMB	2021 RMB	2022 RMB
Cost of revenues	171,501	8,318	—
Selling and marketing expenses	3,012,857	2,235,102	1,936,414
Research and development expenses	4,895,748	4,018,126	3,862,189
General and administrative expenses	9,614,592	6,649,255	5,008,382
Total share options compensation expense	17,694,698	12,910,801	10,806,985

As of December 31, 2022, RMB6,049,531 of total unrecognized compensation expense related to share options is expected to be recognized over a weighted average period of approximately 0.59 years.

A summary of the restricted share units activities for the year ended December 31, 2022 is presented below:

	Number of shares	Weighted average grant date fair value US\$
Unvested as of January 1, 2022	3,019,048	6.32
Granted	2,683,756	3.98
Vested	(972,642)	5.97
Forfeited	(638,754)	5.85
Cancelled	(200,750)	11.77
Unvested as of December 31, 2022	3,890,658	4.59

For the year ended December 31, 2022, 2,555,756 restricted share units, including 790,756 restricted share units granted for replacement as mentioned below, were granted with vesting in four equal annual installments and 128,000 restricted share units were granted with vesting in two equal annual installments under the 2018 Plan.

In March 2022, the Company entered into an arrangement with four grantees, whereby all of their unvested 120,750 restricted share units were cancelled and with the concurrent grant of 790,756 restricted share units with vesting in four equal annual installments under the 2018 Plan. The total compensation costs in amount of RMB27,615,088 relating to the modified award, including the unrecognized compensation cost remaining from the original awards and the incremental compensation cost resulting from the modification, were recognized ratably over the grantees' remaining requisite service period of the modified award.

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In December 2022, the Company entered into agreements with two grantees, whereby all of their unvested 80,000 restricted share units were cancelled and the unrecognized compensation cost of RMB1,562,099 was recognized as compensation costs immediately in the consolidated statement of comprehensive loss for the year ended December 31, 2022.

Compensation costs recognized for restricted share units for the years ended December 31, 2020, 2021 and 2022 were allocated to the following expense items:

	For the Year Ended December 31,		
	2020	2021	2022
	RMB	RMB	RMB
Cost of revenues	472,182	838,515	1,224,796
Selling and marketing expenses	6,932,616	11,057,530	13,497,270
Research and development expenses	6,021,889	13,043,898	18,499,553
General and administrative expenses	8,487,530	9,367,412	14,190,582
Total restricted share units compensation expense	21,914,217	34,307,355	47,412,201

As of December 31, 2022, RMB99,977,753 of total unrecognized compensation expense related to restricted share units is expected to be recognized over a weighted average period of approximately 2.62 years.

Total share-based compensation expenses recognized for the years ended December 31, 2020, 2021 and 2022 were allocated to the following expense items:

	For the Year Ended December 31,		
	2020	2021	2022
	RMB	RMB	RMB
Cost of revenues	643,683	846,833	1,224,796
Selling and marketing expenses	9,945,473	13,292,632	15,433,684
Research and development expenses	10,917,637	17,062,024	22,361,742
General and administrative expenses	18,102,122	16,016,667	19,198,964
Total share-based compensation expense	39,608,915	47,218,156	58,219,186

16. FAIR VALUE MEASUREMENT

The following tables present the fair value hierarchy for those assets measured at fair value on a recurring basis as of December 31, 2021 and 2022, respectively:

RMB	December 31, 2022			Total Fair Value
	Level 1	Level 2	Level 3	
Short-term investments (Note 3)	—	160,406,301	—	160,406,301

RMB	December 31, 2021			Total Fair Value
	Level 1	Level 2	Level 3	
Short-term investments (Note 3)	—	773,678,455	—	773,678,455

17. INCOME TAX

a) *Income tax*

Cayman Islands

Under the current laws of the Cayman Islands, the Company is not subject to tax on income or capital gain. Additionally, the Cayman Islands does not impose a withholding tax on payments of dividends to shareholders.

No stamp duty is payable in respect of the issue of the shares or on an instrument of transfer in respect of a share.

United States

Under the current U.S. federal corporate income tax, the Company’s subsidiary in United States are subject to 21% income tax on its taxable income generated from operations in United States. The company’s subsidiaries have no taxable income for all periods presented.

British Virgin Islands

Under the current laws of the British Virgin Islands (“B.V.I.”), entities incorporated in the B.V.I. are not subject to tax on their income or capital gains.

Indonesia

Under the current laws of the Republic of Indonesia, the Company’s subsidiaries in Indonesia are subject to 25% income tax on its taxable income generated from operations in Indonesia.

Hong Kong

Under the Hong Kong tax laws, subsidiaries in Hong Kong are subject to the Hong Kong profits tax rate at 16.5% and they are exempted from income tax on their foreign-derived income and there are no withholding taxes in Hong Kong on remittance of dividends. A two-tiered profits tax rates regime was introduced in 2018 where the first HK\$2 million of assessable profits earned by a company will be taxed at half of the current tax rate (8.25%) whilst the remaining profits will continue to be taxed at 16.5%. There is an anti-fragmentation measure where each group will have to nominate only one company in the group to benefit from the progressive rates. The Company did not make any provisions for Hong Kong profit tax as there were no assessable profits derived from or earned in Hong Kong for any of the periods presented.

PRC

Under the PRC Corporate Income Tax Law (“CIT Law”), preferential tax treatments will be granted to entities which conduct businesses in certain encouraged sectors and to entities otherwise classified as “High and New Technology Enterprises” (“HNTE”). Jiangsu Xiaoni has been qualified as a HNTE and enjoys a preferential income tax rate of 15% for the fiscal years from 2021 to 2023. An entity could re-apply for the HNTE certificate when the prior certificate expires. The Group’s other PRC subsidiaries, the VIE, and VIE’s other subsidiaries are subject to the statutory income tax rate of 25%.

The CIT Law also provides that an enterprise established under the laws of a foreign country or region but whose “de facto management body” is located in the PRC be treated as a resident enterprise for PRC tax purposes and consequently be subject to the PRC income tax at the rate of 25% for its global income. The Implementing Rules of the CIT Law define the location of the “de facto management body” as “the place where the exercising, in substance, of the overall management and control of the production and business operation, personnel, accounting, property, etc., of a non-PRC company is located.” Based on a review of surrounding facts and circumstances, the Group does not believe that it is likely that its operations outside the PRC should be considered a resident enterprise for PRC tax purposes.

The components of income (loss) before income taxes are as follows:

	For the Year Ended December 31,		
	2020 RMB	2021 RMB	2022 RMB
Cayman	(1,356,797)	(9,397,404)	(10,448,513)
Indonesia	(1,124,698)	(881,810)	(984,230)
Hong Kong S.A.R.	(7,773,553)	(6,700,069)	(14,613,793)
B.V.I.	—	—	(278,774)
PRC, excluding Hong Kong S.A.R.	199,993,770	289,836,300	(44,894,563)
Total	189,738,722	272,857,017	(71,219,873)

Income tax expense (benefit) consists of the following:

	For the Year Ended December 31,		
	2020	2021	2022
	RMB	RMB	RMB
Current income tax expense (benefit)	39,236,745	42,715,007	(15,677,411)
Deferred income tax expense (benefit)	(18,150,489)	4,321,601	(6,079,533)
Total	21,086,256	47,036,608	(21,756,944)

Withholding tax on undistributed dividends

The CIT law also imposes a withholding income tax of 10% on dividends distributed by a foreign investment enterprise (“FIE”) to its immediate holding company outside of China, if such immediate holding company is considered as a non-resident enterprise without any establishment or place within China or if the received dividends have no connection with the establishment or place of such immediate holding company within China, unless such immediate holding company’s jurisdiction of incorporation has a tax treaty with China that provides for a different withholding arrangement. The Cayman Islands, where the Company is incorporated, does not have such tax treaty with China. According to the arrangement between Mainland China and Hong Kong Special Administrative Region on the Avoidance of Double Taxation and Prevention of Fiscal Evasion in August 2006, dividends paid by an FIE in China to its immediate holding company in Hong Kong will be subject to withholding tax at a rate of no more than 5% (if the foreign investor owns directly at least 25% of the shares of the FIE). The Group plans to indefinitely reinvest the undistributed earnings of the Group’s PRC entities, and therefore, no provision for PRC dividend withholding tax was accrued.

Reconciliation of the differences between PRC statutory income tax rate and the Group’s effective income tax rate for the years ended December 31, 2020, 2021 and 2022 are as follows:

	For the Year Ended December 31,		
	2020	2021	2022
	RMB	RMB	RMB
Computed expected income tax expense (benefit)	47,434,681	68,214,254	(17,804,968)
Non-PRC entities not subject to income tax	2,563,762	4,244,821	6,581,327
Research and development expenses bonus deduction	(18,776,104)	(23,328,287)	(34,910,421)
Non-deductible share-based compensation expenses	9,453,660	11,015,406	13,866,734
Other non-deductible expenses	446,051	723,768	638,898
Preferential tax rate difference	—	—	(3,075,033)
Tax filing differences	267,137	2,682,378	(3,770,720)
Change in valuation allowance	(20,302,931)	(16,515,732)	16,717,239
Actual income tax expense (benefit)	21,086,256	47,036,608	(21,756,944)
Effect of preferential tax rates on basic earnings per Class A and Class B ordinary share	—	—	0.02
Effect of preferential tax rates on diluted earnings per Class A and Class B ordinary share	—	—	0.02

b) *Deferred income tax assets and deferred income tax liabilities*

	As of December 31,	
	2021	2022
	RMB	RMB
Deferred income tax assets		
Net operating loss carry forwards	22,656,515	33,325,461
Accrued warranty	11,947,031	5,071,844
Accrued payroll and social insurance	986,755	—
Deferred revenue	12,131,023	8,470,357
Allowance for doubtful accounts	1,136,674	7,037,684
Write-downs for inventories	1,793,858	825,208
Less: Valuation allowance	(24,508,473)	(40,764,285)
Total deferred income tax assets, net	26,143,383	13,966,269
Deferred income tax liabilities		
Short-term investments	859,258	60,946
Property, plant and equipment	15,369,169	9,171,103
Total deferred income tax liabilities	16,228,427	9,232,049
Net deferred income tax assets	11,907,344	6,132,499
Net deferred income tax liabilities	1,992,388	1,398,279

As of December 31, 2022, the Group had net operating loss carry forwards of RMB133,301,844 attributable to the PRC subsidiaries, the VIE and VIE's subsidiaries. Tax losses of RMB6,303,283, nil, RMB29,986,636, RMB21,713,526 and RMB75,298,399 will expire, if unused, by 2023, 2024, 2025, 2026 and 2027, respectively.

A valuation allowance is provided against deferred income tax assets when the Group determines that it is more likely than not that some portion or all of the deferred income tax assets will not be utilized in the foreseeable future. The valuation allowance as of December 31, 2021 and 2022 was primarily provided for the deferred income tax assets of certain PRC subsidiaries, VIE and VIE's subsidiaries. In making such determination, the Group evaluates a variety of factors including the Group's operating history, accumulated deficit, existence of taxable temporary differences and reversal periods. The ultimate realization of deferred income tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible or utilizable. Management considers projected future taxable income and tax planning strategies in making this assessment.

Changes in valuation allowance are as follows:

	For the Year Ended		
	December 31,		
	2020	2021	2022
	RMB	RMB	RMB
Balance at the beginning of the year	62,864,281	41,219,052	24,508,473
Additions (Reversals)	(20,302,931)	(16,515,732)	16,717,239
Decrease relating to expiration of loss carry forwards	(1,342,298)	(194,847)	(461,427)
Balance at the end of the year	41,219,052	24,508,473	40,764,285

According to the PRC Tax Administration and Collection Law, the statute of limitation is three years if the underpayment of taxes is due to computational errors made by the taxpayer or the withholding agent. The statute of limitation is extended to five years under special circumstances where the underpayment of taxes is more than RMB100,000. In the case of transfer pricing issues, the statute of limitation is 10 years. There is no statute of limitation in the case of tax evasion. The income tax returns of the Company's PRC subsidiaries, consolidated VIE and VIE's subsidiaries for the years from 2018 to 2022 are open to examination by the PRC tax authorities.

18. NET INCOME (LOSS) PER ORDINARY SHARE

The following table sets forth the basic and diluted net income (loss) per ordinary share computation and provides a reconciliation of the numerator and denominator for the years presented:

	For the Year Ended December 31,		
	2020 RMB	2021 RMB	2022 RMB
Numerator:			
Net income (loss) attributable to ordinary shareholders	168,652,466	225,820,409	(49,462,929)
Denominator:			
Weighted average number of ordinary shares outstanding	150,775,447	153,174,715	154,109,051
Weighted average number of ordinary shares equivalents outstanding	121,965	497,643	1,067,871
Denominator for basic net income (loss) per ordinary share	150,897,412	153,672,358	155,176,922
Dilutive effect of outstanding share options	4,900,551	4,366,690	—
Dilutive effect of unvested restricted share units	2,037,905	2,421,928	—
Denominator for diluted net income (loss) per ordinary share	157,835,868	160,460,976	155,176,922
Net income (loss) per ordinary share			
—Basic	1.12	1.47	(0.32)
—Diluted	1.07	1.41	(0.32)

Securities that could potentially dilute basic net income per share in the future that were not included in the computation of diluted net income (loss) per share because to do so would have been antidilutive for the years ended December 31, 2020, 2021 and 2022 are as follow:

	For the Year Ended December 31,		
	2020	2021	2022
Share options	—	—	4,414,608
Unvested restricted share units	66,800	—	3,890,658

19. REVENUE INFORMATION

Revenues consist of the following:

	For the Year Ended December 31,		
	2020 RMB	2021 RMB	2022 RMB
Electric scooter sales	2,143,292,397	3,252,988,512	2,853,895,423
Accessory and spare parts sales	258,928,790	397,088,122	242,296,734
Service revenues	42,107,577	54,460,785	72,405,177
Revenues	2,444,328,764	3,704,537,419	3,168,597,334

The following summarizes the Group's revenue from the following geographic areas (based on the location of customers):

	For the Year Ended		
	December 31,		
	2020	2021	2022
	RMB	RMB	RMB
PRC	2,039,210,587	3,158,966,932	2,583,843,616
Europe	305,244,466	430,201,301	343,157,877
Others	99,873,711	115,369,186	241,595,841
Revenues	2,444,328,764	3,704,537,419	3,168,597,334

20. OPERATING LEASES

The Group leases its facilities and offices under non-cancelable operating lease agreements. For the year ended December 31, 2021, the operating lease cost and short-term lease cost were RMB11,947,682 and RMB1,357,660, respectively. For the year ended December 31, 2022, the operating lease cost and short-term lease cost were RMB9,352,700 and RMB847,735, respectively. There were no leasing costs other than operating lease costs and short-term lease costs for the years ended December 31, 2021 and 2022.

A summary of supplemental information related to operating leases as of December 31, 2021 and 2022 is as follows:

	As of December 31,	
	2021	2022
	RMB	RMB
Operating lease right-of-use assets	94,201,263	86,597,121
Operating lease liabilities—current	7,689,187	7,743,648
Operating lease liabilities—non-current	13,921,859	7,569,128
Total operating lease liabilities	21,611,046	15,312,776

	For the Year Ended December 31,	
	2021	2022
	RMB	RMB
Cash paid for amounts included in the measurement of operating lease liabilities	9,569,023	8,046,828
Right-of-use assets obtained in exchange for new operating lease liabilities	10,201,553	921,405
Right-of-use assets obtained in exchange for prepayment for land use right	26,550,000	—
Modification to operating lease liabilities	(11,469,923)	—

The weighted average remaining lease term as of December 31, 2022 were 2.5 years, and the weighted average discount rate of the operating leases were 4.60%.

Maturities of lease liabilities under the Group's non-cancellable operating leases as of December 31, 2022 were as follows:

	As of December 31, 2022	
	RMB	
Within 1 year	8,271,447	
After 1 year but within 2 years	5,130,512	
After 2 years but within 3 years	2,197,223	
After 3 years but within 4 years	555,785	
Total undiscounted lease payment	16,154,967	
less: Imputed interest	(842,191)	
Present value of lease liabilities	15,312,776	

As of December 31, 2022, the Group has no significant lease contract that has been entered into but not yet commenced.

Rental expenses were RMB14,034,591 for the year ended December 31, 2020.

21. COMMITMENTS AND CONTINGENCIES

The Group did not have any significant capital or other commitments or guarantees or contingencies as of December 31, 2022.

22. PARENT COMPANY ONLY CONDENSED FINANCIAL INFORMATION

For the presentation of the parent company only condensed financial information, the Company records its investment in subsidiaries, consolidated VIE and VIE’s subsidiaries, under the equity method of accounting as prescribed in ASC 323, “Investments-Equity Method and Joint Ventures”. Such investments are presented on the condensed balance sheets as “Investment in subsidiaries, consolidated VIE and VIE’s subsidiaries” and the subsidiaries, consolidated VIE and VIE’s subsidiaries’ income as “Share of income from subsidiaries, consolidated VIE and VIE’s subsidiaries” on the condensed statements of results of operations. The parent company only condensed financial information should be read in conjunction with the Company’s consolidated financial statements. As of December 31, 2022, there were no material contingencies, significant provisions of long-term obligations, mandatory dividend or redemption requirements of redeemable stocks or guarantees of Niu Technologies, except for those, which have been separately disclosed in the consolidated financial statements.

(a) Condensed Balance Sheets

	As of December 31,	
	2021 RMB	2022 RMB
Assets		
Current assets		
Cash and cash equivalents	107,768,887	12,375,894
Term deposits-current	95,635,500	208,589,770
Restricted cash	176,141,464	176,204,380
Prepayments and other current assets	8,394,159	12,486,238
Total current assets	387,940,010	409,656,282
Non-current assets		
Investment in and amount due from subsidiaries, consolidated VIE and VIE’s subsidiaries	865,698,047	906,298,879
Term deposits—non-current	15,939,250	—
Other non-current assets	—	1,219
Total assets	1,269,577,307	1,315,956,380
Liabilities		
Current liabilities		
Amount due to subsidiaries, consolidated VIE and VIE’s subsidiaries	4,262,270	4,262,270
Accrued expenses and other current liabilities	760,847	1,596,233
Total current liabilities and total liabilities	5,023,117	5,858,503
Shareholders’ equity:		
Class A ordinary shares	89,038	89,428
Class B ordinary shares	10,316	10,316
Additional paid-in capital	1,855,403,759	1,915,825,641
Accumulated other comprehensive loss	(51,121,030)	(16,536,686)
Accumulated deficit	(539,827,893)	(589,290,822)
Total shareholders’ equity	1,264,554,190	1,310,097,877
Total liabilities and shareholders’ equity	1,269,577,307	1,315,956,380

(b) Condensed Statements of Results of Operations

	For the Year Ended December 31,		
	2020	2021	2022
	RMB	RMB	RMB
Total operating expenses	(7,308,201)	(11,441,931)	(15,414,575)
Share of income (loss) from subsidiaries, consolidated VIE and VIE's subsidiaries	47,710,647	235,264,719	(39,264,560)
Interest income	5,951,405	1,997,621	5,216,206
Income (loss) before income taxes	46,353,851	225,820,409	(49,462,929)
Income tax expense	—	—	—
Net income (loss)	46,353,851	225,820,409	(49,462,929)

(c) Condensed Statements of Cash Flows

	For the Year Ended December 31,		
	2020	2021	2022
	RMB	RMB	RMB
Net cash provided by (used in) operating activities	(55,920,062)	25,839,822	(23,565,305)
Net cash provided by (used in) investing activities	34,502,559	16,132,750	(95,940,040)
Net cash provided by financing activities	24,230,446	6,246,384	2,203,086
Effect of foreign currency exchange rate changes on cash, cash equivalents and restricted cash	(16,693,391)	(6,107,381)	21,972,182
Net increase (decrease) in cash, cash equivalents and restricted cash	(13,880,448)	42,111,575	(95,330,077)
Cash, cash equivalents and restricted cash at the beginning of the year	255,679,224	241,798,776	283,910,351
Cash, cash equivalents and restricted cash at the end of the year	241,798,776	283,910,351	188,580,274

List of Principal Subsidiaries and Consolidated Affiliated Entity

Subsidiaries	Place of Incorporation
Niu Technologies Group Limited	Hong Kong
Niu Innovation Limited	Hong Kong
PT Niu Technologies Indonesia	Indonesia
Beijing Niudian Information Technology Co., Ltd.	PRC
Changzhou Niudian Information Technology Co., Ltd.	PRC
Consolidated Variable Interest Entity	Place of Incorporation
Beijing Niudian Technology Co., Ltd.	PRC
Subsidiaries of Consolidated Variable Interest Entity	Place of Incorporation
Jiangsu Xiaoniu Diandong Technology Co., Ltd.	PRC
Shanghai Xiaoniu Internet Technology Co., Ltd.	PRC
Changzhou Niudian International Trading Technology Co., Ltd.	PRC
Changzhou Niudian Electric Technology Co., Ltd.	PRC

**Certification by the Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Yan Li, certify that:

1. I have reviewed this annual report on Form 20-F of Niu Technologies;
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: April 21, 2023

By: /s/ Yan Li

Name: Yan Li

Title: Chairman of the Board of Directors
and Chief Executive Officer

**Certification by the Principal Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Fion Wenjuan Zhou, certify that:

1. I have reviewed this annual report on Form 20-F of Niu Technologies;
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
6. 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: April 21, 2023

By: /s/ Fion Wenjuan Zhou

Name: Fion Wenjuan Zhou

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 Niu Technologies (the “Company”) on Form 20-F for the year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Yan 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: April 21, 2023

By: /s/ Yan Li

Name: Yan Li

Title: Chairman of the Board of Directors
and 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 Niu Technologies (the "Company") on Form 20-F for the year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Fion Wenjuan Zhou, 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: April 21, 2023

By: /s/ Fion Wenjuan Zhou

Name: Fion Wenjuan Zhou

Title: Chief Financial Officer

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statement (No. 333-229190) on Form S-8 of our reports dated April 21, 2023, with respect to the consolidated financial statements of Niu Technologies and the effectiveness of internal control over financial reporting.

/s/ KPMG Huazhen LLP

Beijing, China
April 21, 2023

BEIJING
NEW YORK
SHANGHAI

Date: April 21, 2023

Niu Technologies

No.1 Building, No. 195 Huilongguan East Road,
Changping District, Beijing 102208
People's Republic of China

Dear Sir/Madam:

We hereby consent to the use of our name and the summary of our opinion under the headings, “Item 3. Key Information—D. Risk Factors—Risks Related to Our Corporate Structure” and “Item 4. Information on the Company—C. Organizational Structure”, included in Niu Technologies’ Annual Report on Form 20-F for the year ended December 31, 2022 (“Annual Report”), which will be filed with the Securities and Exchange Commission (“SEC”) in the month of April 2023, and further consent to the incorporation by reference into the Registration Statement (Form S-8 No. 333-229190) pertaining to Niu Technologies’ Amended and Restated 2016 Global Share Incentive Plan and 2018 Share Incentive Plan. 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 hereby 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 Sincerely,

/s/ DaHui Lawyers

/s/ DaHui Lawyers
