

Analysis of Tesla's Earnings Quality in 2022

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Abstract

Profit quality, an important index to measure the operating ability of an enterprise, reflect the income level and profitability of the enterprise by observing the profit rate and the sustainability of the profit. As one of the largest electric vehicle and energy company in the United States, Tesla was founded in 2003. It reached approximately US\$6.72 billion of annual sales of new energy vehicles and approximately US\$2.08 billion of net profit in 2022, and the market value by this year was US\$852.787 billion. In order to understand Tesla's positioning in the new energy vehicle industry and the company's future development prospects, this article investigates and analyzes Tesla's 2022 earnings quality by analyzing several indicators.

Keywords

Earnings Quality; Tesla; Profit Margin.

1. Introduction

Revenue is the increase in the economic interests of an enterprise during the accounting period. Companies with distinct operating conditions have different levels of profitability, as well as the quality of profitability. Generally, a high profit does not guarantee a good profit quality. When analyzing the quality of earnings, the company's main business and its corresponding costs are notable aspects. A high-quality income should be featured with authenticity, sustainability, stability, and security. When selecting indicators for analyzing the profit quality of an enterprise, the practicability of the indicators and the availability of data should be taken into account, as well as a general interpretation of the actual operating conditions and operating characteristics of the enterprise. Based on the above considerations, this article chooses to observe the gross profit rate, expense ratio, and cost to analyze Tesla's profit quality.

Tesla's total revenue from 2020 to 2022 is approximately 3.15 billion, 5.38 billion, and 8.146 billion, respectively, and its net profit is approximately 86 million, 564 million, and 1.259 billion. On the whole, Tesla's operating income and net profit have shown a linear upward trend in the past three years. According to the information disclosed in Tesla's 2022 financial statements, the operating income in 2022 has increased by US\$23.09 billion compared with 2021, mainly due to a year-on-year increase of 347,024 in the delivery of Model 3 and Model Y vehicles, and a year-on-year increase of 347,024 in Model S and Model X vehicles and that of 38,183 in model S and model X vehicles.

2. Literature Review

In the capital market, the profit quality is the key for investors to analyze the financial status and operating results of companies. When analyzing the profit quality of a company, investors should pay attention to whether the selected indicators are in line with the company's profitability and whether the number of selected indicators is comprehensive. In "Research on Profit Quality", Feng Yuqing proposed several indicators for analyzing profit quality: growth, the ability of gain cash, and profit structure. The first two indicators respectively discuss the

growth and sustainability of corporate profits, the ability of corporate profits to convert income into controllable cash flow, and the profit structure analyzes the stability of revenue by observing the proportion of various profits. Other than the above indicators, these following factors should also be considered when analyzing the quality of profitability: industry competition situation, corporate strategic positioning, the ability to make profit, earnings management, and asset operation efficiency.

In recent years, New energy vehicle industry of China has developed rapidly, with production and sales increasing year by year. Established in 1997, SAIC was initially engaged in the traditional automobile manufacturing industry. To transfer to electric vehicle industry, SAIC New Energy was established, in 2015, as a wholly-owned subsidiary of the group. "SAIC Group Profit Quality Analysis" analyzes SAIC's profit quality from four aspects: production and sales analysis, profitable project structure, profitable business structure, and profitable regional structure, so as to evaluate the company's profit stability and cash assurance degree more accurately. Based on SAIC's financial data from 2013 to 2017, the company's production and sales have increased year by year, which is in line with the development trend of China's new energy vehicle industry. Its profit structure includes main business income, investment income, and net non-operating income and expenditure, of which main business income accounts for the largest proportion, and the profit mainly comes from the vehicle business.

Other than SAIC, BYD is also one of the giants in Chinese electric vehicle industry. According to "BYD Co., Ltd. Financial Report Analysis", calculating the total asset profit rate, main business profit rate, net sales rate, and return on net assets, BYD represented a low profitability from 2016 to 2019, which became better in 2020. BYD's main income comes from core profit, which is the income from the company's operations. In addition to the automobile manufacturing industry, BYD's business also includes daily-use electronic device manufacturing and electronic component manufacturing. The revenue from the automobile business accounts occupies more than half of the core profit, which is in line with the company's development strategy and its positioning in the market. According to the content of "Profit Quality Analysis under Strategic Conformity" in "Research on the Quality of BYD's Financial Status", although BYD mainly targets the Chinese market, its overseas revenue has grown rapidly in recent years. In terms of cost, the company's research and development expenses accounted for the highest proportion of its period expenses, contributing to the reduction of product production costs. Generally speaking, BYD, as a company occupying a leading position in China's new energy vehicle industry market, has a good development trend, but still needs to enhance its own profitability and product competitiveness.

Based on the above articles, earnings quality is a crucial consideration when analyzing the stability and reliability of a company. When analyzing the quality of earnings, the indicators selected by investors should take into account the stability, reliability, and durability of the enterprise. The four aspects observed in the "Analysis of SAIC's Profit Quality" can be used as a reference for investors. By reading the above papers discussing the profit quality of SAIC and BYD, it is not difficult to find that the gross profit rate of the vehicle industry is relatively lower than other industries because of the higher cost of production, which is a characteristic of the automobile industry, especially for new energy vehicles. As a leader in the global new energy vehicle industry, Tesla has advanced BMS technology and electronic control technology, etc., and maintains a high reputation and trust in the world. In order to explore the level of Tesla's profit quality, we can compare the business conditions of competitors SAIC Motor and BYD Co., Ltd.

3. Research Methods & Procedures (Financial Statement Analysis)

3.1. Consolidated Statements of Operation

Table 1. Tesla's 2022 10-K Financial Statements

	Year Ended December 31,		
	2022	2021	2020
Revenues			
Automotive sales	\$ 67,210	\$ 44,125	\$ 24,604
Automotive regulatory credits	1,776	1,465	1,580
Automotive leasing	2,476	1,642	1,052
Total automotive revenues	71,462	47,232	27,236
Energy generation and storage	3,909	2,789	1,994
Services and other	6,091	3,802	2,306
Total revenues	81,462	53,823	31,536
Cost of revenues			
Automotive sales	49,599	32,415	19,696
Automotive leasing	1,509	978	563
Total automotive cost of revenues	51,108	33,393	20,259
Energy generation and storage	3,621	2,918	1,976
Services and other	5,880	3,906	2,671
Total cost of revenues	60,609	40,217	24,906
Gross profit	20,853	13,606	6,630
Operating expenses			
Research and development	3,075	2,593	1,491
Selling, general and administrative	3,946	4,517	3,145
Restructuring and other	176	(27)	
Total operating expenses	7,197	7,083	4,636
Income from operations	13,656	6,523	1,994
Interest income	297	56	30
Interest expense	(191)	(371)	(748)
Other (expense) income, net	(43)	135	(122)
Income before income taxes	13,719	6,343	1,154
Provision for income taxes	1,132	699	292
Net income	12,587	5,644	862
Net income attributable to noncontrolling interests and redeemable noncontrolling interests in subsidiaries	31	125	141
Net income attributable to common stockholders	\$ 12,556	\$ 5,519	\$ 721
Net income per share of common stock attributable to common stockholders (1)			
Basic	\$ 4.02	\$ 1.87	\$ 0.25
Diluted	\$ 3.62	\$ 1.63	\$ 0.21
Weighted average shares used in computing net income per share of common stock (1)			
Basic	3,130	2,959	2,798
Diluted	3,475	3,386	3,249

Tesla's net income in 2022 was US\$12.587 billion, with a gross profit margin of 15.45% and an increase of nearly 5% over the previous year. Its income sources can be roughly divided into three parts: automobile income (including automobile sales, automobile leasing, automobile regulatory credit), energy manufacturing and storage, services, etc., while income from automobile sales, energy manufacturing, storage and services accounted for 96.3% of the total income. Vehicle sales revenue includes revenue related to cash and financing delivery of new vehicles, as well as certain other features and services that meet the definition of performance obligations under ASC 606, including access to our FSD (full self-drive) features, Internet connectivity, Supercharger network and over-the-air software updates. For the year ended December 31, 2022, the cost of revenue from vehicle sales increased by \$17.18 billion, or 53%, compared to the year ended December 31, 2021. The average combined cost per unit of Model 3 and Model Y has increased year-on-year due to rising raw material, logistics and warranty costs. In 2022, 82.5% of total revenue came from automotive sale, which was about the same as 81.98% in 2021. Although the performance in 2020 is not as good as the performance of the next two years, it still had 78.02%. The stable and high proportion of main business shows the sustainability of Tesla's main business income.

Corresponding to operating profit, Tesla's cost mainly comes from automotive sales, including direct and indirect materials, labor costs, manufacturing overhead (including depreciation costs of tools and machinery, transportation and logistics costs, vehicle connection costs, and power distribution and infrastructure costs associated with the supercharger network and estimated warranty expense reserves). By observing the operating activities part of the cashflow statement and the emergency purchase part disclosed in the notes to the balance sheet, it is found that Tesla's raw material costs and labor costs did not account for a high proportion of the total cost of automotive sales. For 2022, Tesla had depreciation costs account for 7.55% of the cost of automotive sales and 6.18% of the total cost. The possible reasons includes poor asset quality, high frequency of use, improper maintenance, aging equipment, and technology updates. Based on the information on fixed assets provided in the Notes section,

Tesla measures depreciation by the straight-line method, and by the useful life it provides (the life of its production equipment and vehicles ranges from 3 to 15 years) and the investment part of the cash flow statement, the quality of its fixed assets is not bad, and there is no such thing as poor quality, improper maintenance, or aging equipment. Tesla has a large demand and investment in fixed assets, of which had more than doubled from 2020 to 2021. Based on upper information and evaluation, it can be inferred that Tesla is more likely to had a technological innovation in the past few years.

3.2. Consolidated Balance Sheet

Table 2. Tesla's 2022 10-K Financial Statements

	December 31, 2022	December 31, 2021
Assets		
Current assets		
Cash and cash equivalents	\$ 16,253	\$ 17,576
Short-term investments	5,932	131
Accounts receivable, net	2,952	1,913
Inventory	12,839	5,757
Prepaid expenses and other current assets	2,941	1,723
Total current assets	40,917	27,100
Operating lease vehicles, net	5,035	4,511
Solar energy systems, net	5,489	5,765
Property, plant and equipment, net	23,548	18,884
Operating lease right-of-use assets	2,563	2,016
Digital assets, net	184	1,260
Intangible assets, net	215	257
Goodwill	194	200
Other non-current assets	4,193	2,138
Total assets	\$ 82,338	\$ 62,131
Liabilities		
Current liabilities		
Accounts payable	\$ 15,255	\$ 10,025
Accrued liabilities and other	7,142	5,719
Deferred revenue	1,747	1,447
Customer deposits	1,063	925
Current portion of debt and finance leases	1,502	1,589
Total current liabilities	26,709	19,705
Debt and finance leases, net of current portion	1,597	5,245
Deferred revenue, net of current portion	2,804	2,052
Other long-term liabilities	5,330	3,546
Total liabilities	36,440	30,548
Commitments and contingencies (Note 15)		
Redeemable noncontrolling interests in subsidiaries	409	568
Equity		
Stockholders' equity		
Preferred stock; \$0.001 par value; 100 shares authorized; no shares issued and outstanding	—	—
Common stock; \$0.001 par value; 6,000 shares authorized; 3,164 and 3,100 shares issued and outstanding as of December 31, 2022 and December 31, 2021, respectively (1)	3	3
Additional paid-in capital	32,177	29,803
Accumulated other comprehensive (loss) income	(361)	54
Retained earnings (1)	12,885	329
Total stockholders' equity	44,704	30,189
Noncontrolling interests in subsidiaries	785	826
Total liabilities and equity	\$ 82,338	\$ 62,131

By observing the balance sheet, Tesla's total asset in 2022 was US\$82.338 billion, increased US\$20.207 billion from the total asset of the previous year, of which current assets and PPE increased by US\$13.817 billion and US\$4.664 billion, respectively. Correspondingly, Tesla's total liabilities in 2022 was US\$36.44 billion, which increased US\$5.892 billion from the previous year mainly due to accounts payable. The company's total asset-liability ratio in 2022 is 44.26%. Not only had the extent to which the company's total assets is financed by borrowing reflected by this indicator, it also measures the degree to which the company protects the interests of creditors when it is liquidated. A ratio below 0.5 for Tesla indicates that a larger portion of its assets are funded by shareholder equity and that the business is well funded and does not need to borrow to operate. In addition, the low asset-liability ratio also reflects the stronger business operation ability of the enterprise. By comparing current assets and current liabilities, Tesla's current ratio in 2022 is 1.53. It is generally believed that the current ratio should be above 2:1, which means that the current assets are twice the current liabilities. Even if half of the current assets cannot be realized in the short term, all current liabilities can be guaranteed to be paid. However, Tesla's current ratio is lower than 2:1, which means that if more than half of the current assets cannot be realized in the short term, it cannot guarantee that all current liabilities would be repaid in the short term. Its quick ratio is 0.94. When calculating, it is necessary to deduct the value of inventories and prepaid expenses from current assets. This is because inventory usually takes more time to be exchange into current asset, and some may be unsalable and cannot be realized. Traditionally experienced, the normal range for

quick ratio is to maintain at 1:1, which indicates that for every 1 dollar of current liabilities of an enterprise, there is 1 dollar of easily realizable current assets to cover, and the short-term solvency is reliably guaranteed. With a low quick ratio, the short-term debt repayment risk of the enterprise would be greater; inversely, the enterprise would have too much funds in quick assets, which would rise the opportunity cost of enterprise investment. However, the above criteria are not absolute. In real world, the characteristics of the industry of which an enterprise is engaged in should be taken into consideration. For Tesla, in 2022, every 1 dollar of current liabilities only had 0.94 dollar of easily realizable current assets to pay off, indicating that its repayment ability is relatively average so that only 94% of current liabilities can be paid off in a short period of time.

3.3. Consolidated Statements of Cash-flow

Table 3. Tesla's 2022 10-K Financial Statements

	Year Ended December 31,		
	2022	2021	2020
Cash Flows from Operating Activities			
Net income	\$ 12,587	\$ 5,644	\$ 862
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and impairment	3,747	2,911	2,322
Stock-based compensation	1,560	2,121	1,734
Inventory and purchase commitments write-downs	177	140	202
Foreign currency transaction net unrealized loss (gain)	81	(55)	114
Non-cash interest and other operating activities	340	245	525
Digital assets loss (gain), net	140	(27)	—
Changes in operating assets and liabilities:			
Accounts receivable	(1,124)	(130)	(652)
Inventory	(6,465)	(1,709)	(422)
Operating lease vehicles	(1,570)	(2,114)	(1,072)
Prepaid expenses and other current assets	(1,417)	(271)	(251)
Other non-current assets	(2,551)	(1,291)	(344)
Accounts payable and accrued liabilities	6,029	4,578	2,102
Deferred revenue	1,131	793	321
Customer deposits	155	186	7
Other long-term liabilities	1,904	476	495
Net cash provided by operating activities	14,724	11,497	5,943
Cash Flows from Investing Activities			
Purchases of property and equipment excluding finance leases, net of sales	(7,158)	(6,482)	(3,157)
Purchases of solar energy systems, net of sales	(5)	(32)	(75)
Purchases of digital assets	—	(1,500)	—
Proceeds from sales of digital assets	936	272	—
Purchase of intangible assets	(9)	—	(10)
Purchases of investments	(5,835)	(132)	—
Proceeds from maturities of investments	22	—	—
Receipt of government grants	76	6	123
Business combinations, net of cash acquired	—	—	(13)
Net cash used in investing activities	(11,973)	(7,868)	(5,132)
Cash Flows from Financing Activities			
Proceeds from issuances of common stock in public offerings, net of issuance costs	—	—	12,269
Proceeds from issuances of debt	—	8,883	9,713
Repayments of convertible and other debt	(3,364)	(14,167)	(11,623)
Collateralized lease repayments	—	(9)	(240)
Proceeds from exercises of stock options and other stock issuances	541	707	417
Principal payments on finance leases	(502)	(439)	(338)
Debt issuance costs	—	(9)	(6)
Proceeds from investments by noncontrolling interests in subsidiaries	—	2	24
Distributions paid to noncontrolling interests in subsidiaries	(157)	(161)	(208)
Payments for buy-outs of noncontrolling interests in subsidiaries	(45)	(10)	(35)
Net cash (used in) provided by financing activities	(3,527)	(5,203)	9,973
Effect of exchange rate changes on cash and cash equivalents and restricted cash	(444)	(183)	334
Net (decrease) increase in cash and cash equivalents and restricted cash	(1,220)	(1,757)	13,118
Cash and cash equivalents and restricted cash, beginning of period	18,144	19,901	6,783
Cash and cash equivalents and restricted cash, end of period	\$ 16,924	\$ 18,144	\$ 19,901
Supplemental Non-Cash Investing and Financing Activities			
Acquisitions of property and equipment included in liabilities	\$ 2,148	\$ 2,251	\$ 1,088
Supplemental Disclosures			
Cash paid during the period for interest, net of amounts capitalized	\$ 152	\$ 266	\$ 444
Cash paid during the period for taxes, net of refunds	\$ 1,203	\$ 561	\$ 115

The cash flow of an enterprise can be roughly divided into the following four parts: operating activities, investing activities, financing activities, and cash flows from extraordinary items. In 2022, Tesla's cash, cash equivalents, and restricted cash had a total outflow of US\$1.22 billion, of which operating activities, investment activities, and financing activities have inflows of US\$14.724 billion, outflows of US\$11.973 billion, and inflows of US\$3.527 billion. Operating activities are the main operations of a business that generate cash inflows that can be used in investment and financing to generate further cash inflows. Investing activities aim to use idle funds to generate value, and financing activities aim to raise funds for operating activities. And the cash flows generated by these two activities are used to assist operating activities. Compare with 2021, Tesla's cash inflow from operating activities in 2022 increased by US\$3.227 billion, of which net income increased by US\$6.943 billion and inventory increased by US\$4.756 billion. The year-on-year increase in profits and demand shows that Tesla's development is stable, and it also shows that it has a strong business capability in the new energy vehicle market. For investment activities, an enterprise usually do both inside investment and outside investment. [] Tesla's investment in real estate and equipment in 2022 was US\$7.158 billion, which is US\$676 million and US\$4 billion higher than the previous two years. The year-by-year increase in inside investment shows that the company has a good development prospect and a good growth potential. Its expenditure on outside investment in 2022 was US\$5.835 billion, and its

expenditure on outside investment in 2021 was US\$132 million. According to Tesla's appendix, its investments are primarily in a portfolio of marketable securities, including U.S. government securities, corporate debt securities, time deposits and certain certificates of deposit. The surge in outside investment cash outflows indicates that Tesla was making profits through non-main business activities, because the company may need more profits to provide financial support for subsequent development. Compared with Tesla's substantial increase in net profit in 2022, using more idle resources for investment has improved the resource utilization efficiency of the enterprise. In addition, expanding non-main business can help enterprises balance risks and reduce business risks when the main business may be affected by market fluctuations. Tesla's return on investment in 2021 is approximately 16.76%, which is higher than the market average return on investment, proving that Tesla has a certain ability to identify investment risks.

3.4. Profit Quality Analysis

In recent years, the technology and market environment of the new energy vehicle industry have been constantly changing, and its cost of production is much higher than that of other industries. Generally, the gross profit rate of companies in the new energy vehicle industry ranges from 10% to 20%. Although Tesla's gross profit margin in 2022 is only 15.45%, take into account the characteristics of the industry, its operating performance is relatively good. Tesla's revenue mainly comes from automotive sales and services. Automotive sales revenue includes revenue related to cash and financing delivery of new vehicles, as well as certain other features and services that meet the definition of performance obligations under ASC 606, including access to our FSD features, Internet connectivity, Supercharger network and over-the-air software updates. To the year ended December 31, 2022, the cost of revenue from automotive sales increased by \$17.18 billion, or 53%, compared to the year ended December 31, 2021. The average combined cost per unit of Model 3 and Model Y has increased year-on-year due to rising raw material, logistics and warranty costs. In 2022, automotive sales consisted 82.5% of total revenue, which is pretty much the same as 81.98% in 2021. Although the performance in 2020 was not as good as the performance of the following two years, it still had 78.02%. The stable and high proportion of main business shows the sustainability of Tesla's main business income. Corresponding to operating profit, Tesla's cost mainly comes from automotive sales, including direct and indirect materials, labor costs, manufacturing overhead (including depreciation costs of tools and machinery, transportation and logistics costs, vehicle connection costs, and power distribution and infrastructure costs and estimated warranty expense reserves in relation to our Supercharger network). Cost of automotive sales revenue also includes adjustments for warranty charges and charges to write down the carrying value of inventory when it exceeds its estimated net realizable value, and to make allowances for obsolete and inventory inventories that exceed forecasted demand. By observing the operating activities part of the cashflow statement and the emergency purchase part disclosed in the notes to the balance sheet, it is obvious that Tesla's raw material costs and labor costs do not consist a high proportion of the total cost of automotive sales. In comparison, depreciation costs consist 7.55% of the cost of automotive sales and 6.18% of the total cost. The possible reasons includes poor asset quality, high frequency of use, improper maintenance, aging equipment, and technology updates. Based on the information about fixed assets provided in the appendix, Tesla measures depreciation using the straight-line method, and through the asset's useful life and the investment part of the cash flow statement provided by Tesla, the quality of its fixed assets is not bad, and there is no poor quality, improper maintenance, and aging equipment. Plus, Tesla has a large demand and investment in fixed assets, which is more than doubled from 2020 to 2021, so Tesla is more likely to have technological updates in the past few years. To sum up, the author believes that Tesla's operating results are relatively good, and its products have certain competitiveness in the market. Tesla's excellent operating performance provides

it with subsequent financial support for investment in fixed assets and technology development, making its products more competitive, thus forming a virtuous circle.

4. Summary

As one of the leaders in the new energy vehicle industry, Tesla has the mission of accelerating the world's transition to sustainable energy. Based on the cost analysis and the data disclosed in the three financial data tables, the company has a good sales performance, and it has steadily increased year by year. It can be seen from the income statement that its income mainly comes from its main business, namely automotive sales and energy manufacturing, storage and services. Among them, Tesla's car sales turnover consisted 82.5% of its total revenue in 2022. For the total cost, its higher depreciation cost is likely to come from technology update. Plus the cash flow of its investment activities, a large part of the income is used for investment in fixed assets and technological development. By calculating the quick ratio, Tesla's debt repayment ability is relatively average to which 94% of current liabilities can be paid off in a short period of time in 2022. Overall, it can be inferred that the company is still in the expansion stage. Its strategy is to develop new energy vehicle manufacturing technology to make products more in line with user needs, improve the affordability and efficiency of vehicles, and thus enhance the competitiveness of its products. The year-on-year increase in operating income is a testament to Tesla's strategy to make its products more and more popular in the market. While developing new energy vehicle technology, Tesla also focuses on improving and developing battery technology and improving FSD capabilities, and facts have proved that continuous improvement of technology is the key to Tesla's success. In addition, Tesla's surge in revenue between 2020 and 2022 is also inseparable from its development of the Chinese market in 2021 (it received subsidies of US\$6 million and US\$76 million from the Shanghai government from 2021 to 2022, respectively). Comparing the income and turnover from 2020 with those of 2022, it is explicit that Tesla's net income, inside investment and outside investment all have an exponential upward trend, which proves that it was a wise movement to develop the Chinese market. Compare with BYD Co., Ltd., the advantage of Tesla's new energy vehicles is reflected in the intelligent assisted driving system, while the disadvantage lies in the relatively incomplete supply chain system. Sum up, Tesla engages in a broad range of business, its development prospects are relatively clear, and it has certain competitiveness in the new energy vehicle industry.

References

- [1] Wang Meidan Research on Tesla's Internationalization Strategy [D] Shandong: Shandong University, 2021.
- [2] Feng Yutong Inspiration from the Development of Chinese New Energy Vehicle Enterprises: A Case Study Based on Tesla [J] Times Automotive, 2023 (15): 83-86. DOI: 10.3969/j.issn.1672-9668.2023.15.028.
- [3] Zhu Gaoshuang, Fu Rong Analysis of the Rationality of Tesla's Price Reduction Behavior - Based on Cost Perspective [J] International Business Accounting, 2023 (11): 27-31 DOI: 10.3969/j.issn.1673-8594.2023.11.006.
- [4] Jiang Binbin, Xu Paul Research on Marketing Strategy of New Energy Vehicle Enterprises under Environmental Uncertainty: A Comparison between BYD and Tesla [J] Chinese Business Review, 2022 (2): 37-40. DOI: 10.19699/j.cnki.issn2096-0298.2022.037.
- [5] Feng Yuqing Research on Profit Quality [J] Enterprise Technology and Development, 2021 (1): 137-139 DOI: 10.3969/j.issn.1674-0688.2021.01.051.
- [6] Yang Ye Research on Profit Quality [J] Volkswagen Standardization, 2020 (22): 17-18. DOI: 10.3969/j.issn.1007-13500.2020.22.008.

- [7] Si Ye, Chen Wanjiang Analysis of Profit Quality [J] Western Economic Management Forum, 2012,23 (2): 59-60 DOI: 10.3969/j.issn.2095-1124.2012.02.014.
- [8] <https://www.sec.gov/Archives/edgar/data/1318605/000095017023001409/tsla-20221231.Htm>.