



# Analysis of Financial Indicators of Huawei Technologies Co., Ltd

Shuangqi Jiang<sup>1,\*,#</sup>, Xiajun Fan<sup>2,#</sup>, Jiayue Wei<sup>3,#</sup>

<sup>1</sup> Television School, Communication University of China, Beijing, 100024, China

<sup>2</sup>College of Public Administration, Huazhong University of Science and Technology, Wuhan, 430074, China

<sup>3</sup>School of Economics and Finance, Xi'an International Studies University, Shaanxi, 710128, China

\*Corresponding author: [jgsq1234@163.com](mailto:jgsq1234@163.com)

#These authors contributed equally.

**Abstract.** By analyzing the key financial information in the enterprise balance sheet, income statement and cash flow statement, and combined with the specific strategies introduced by Huawei, the financial situation of Huawei in different periods is studied. Huawei All the way to development, the financial indicators in the development period of the enterprise have the trend of expansion, although the enterprise has experienced the development bottleneck period around 2020, but Huawei actively seek change, to some extent to reverse the adverse financial situation. The study found that under the condition of overall financial expansion, Huawei has continuously increased investment in research and development and made great breakthroughs in mastering core technologies, but enterprises still have a lot of room for improvement in improving the efficiency of capital operation and cost control.

**Keywords:** Financial analysis, cash flow, R&D investment, net income DuPont analysis

## 1 Introduction

Huawei Founded in September 1987 in Guangdong Province, starting with the production of user switches (PBX). The company has become a global leading provider of information and communication technology (ICT) infrastructure and intelligent terminals in more than 170 countries and regions so far (Tekir, 20201). The vision and mission of Huawei is to bring the digital world into every person, every family and every organization, and build an intelligent world where everything is connected (Campion, 20202).

In 2013, Huawei cooperated with many universities around the world to develop 5G technology (Kaska et al., 20193; Schaefer, 20204; Friis & Lysne, 20215). In the same year, it surpassed Ericsson to become the world's largest communication equipment manufacturer. At present, the core business of Huawei mainly includes communication

© The Author(s) 2024

H. Cheng et al. (eds.), *Proceedings of the 2024 4th International Conference on Enterprise Management and Economic Development (ICEMED 2024)*, Advances in Economics, Business and Management Research 295, [https://doi.org/10.2991/978-94-6463-506-5\\_17](https://doi.org/10.2991/978-94-6463-506-5_17)

operator business, enterprise business and consumer business, involving five fields: ICT industry, cloud computing industry, digital energy industry, terminal industry and intelligent vehicle industry, which continues to promote the development of digital economy (Jaisal, 20206).

The financial indicators provide insight into Huawei's performance and financial health, allowing investors and stakeholders to evaluate the company's profitability, liquidity, solvency, and overall financial stability (Wahyuni et al., 20237; Baker et al., 20218; Jalal, 20209). This information can help investors make informed decisions about whether to invest in the company or not. The analysis of financial indicators can help Huawei's management team to identify areas of strength and weakness, and to develop strategies for improving the company's financial performance. Overall, the analysis of financial indicators is an important tool for evaluating the financial health and performance of Huawei. It can help investors, stakeholders, and management to make informed decisions about the company's future direction and to identify areas for improvement.

## **2 Balance-Sheet Analysis**

### **2.1 Asset Quality Analysis**

From 2021 to 2022, the total growth of current assets increased steadily and showed little change, but the proportion of the total assets decreased from 78.27% to 72.83%, and the share of current assets decreased, mainly due to the sharp decline of other investments and derivatives in 2022, but it is still the largest part of the current assets of Huawei Company. Accounts receivable and notes receivable, other assets, cash and cash equivalents all increased significantly in 2022, while the inventory and other contract costs and contract assets in the company's current assets remained basically stable. At this stage, due to the trade friction between China and the United States being blocked by economic sanctions and chip technology blockade, Huawei favored strategic contraction and reduced layout, significantly reduced other investment of current assets, among which the current part decreased correspondingly, and the non-current part increased significantly, with an overall decline of 21.41%, reflecting the conservative Huawei investment strategy in the past two years (Wen et al., 202310). On the contrary, Huawei recovered more accounts receivable, notes receivable and cash flow, in order to use the company to invest in innovative research and development as much as possible, stable operation, to ensure the enterprise through difficulties and sustainable development.

From 2021 to 2022, Huawei non-current assets increased significantly, which constituted the main source of the increase of the company's total assets in the two years. The enterprise survived the lowest winter since the end of 2019, with good prospects and tendency to expand production scale; the non-current part of other investments and derivatives doubled, and the increased investment in long-term investment may be Huawei launched new industrial layout and investment or expanded new business scope (mainly the enterprise business).

## 2.2 Capital Structure Analysis

Combined with the Figure 1, the largest proportion of long-term borrowings in non-current liabilities and total liabilities increased from 28.55% to 29.23% of total liabilities from 2021 to 2022. Both short-term borrowing and long-term borrowing increased by 8.9% and 12.9% year on year, mainly to ensure and support Huawei's research and development of new technologies and the expansion of new areas in the future. Current assets are still the main body of Huawei enterprise assets, with a continuous steady financial position, mainly relying on technical services and terminal equipment business to support the development of the company, with strong resilience and flexibility. Non-current assets from the quantity and the share of total assets have risen, the liquidity of the enterprise assets, but the increase of long-term investment, and the property, plant and equipment investment increases that the enterprise is expanding production, production efficiency, the company can bring long-term stable returns and returns very confident, optimistic prospects.

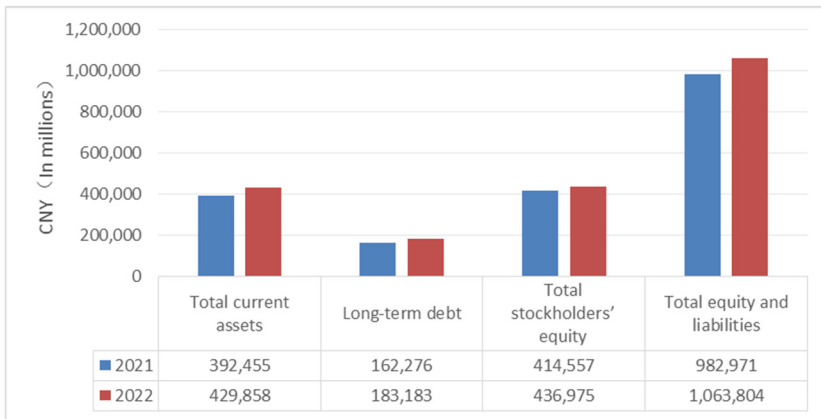


Fig. 1. Components of Capital Structure

## 3 Income Statement Analysis

### 3.1 Revenue Analysis

As shown in table 1, in 2020, sales revenue was 891368 million CNY, but fell to 636807 million CNY in 2021, mainly due to international factors and slowing customer demand for 5G deployment, and the overall decline of Huawei revenue affected by the epidemic. In 2022, the sales revenue will be 642,338 million CNY, up 0.9% year on year. The net profit was 35,562 million CNY, and the enterprise slowed down the terminal business with the help of industry digitalization and green low-carbon transformation. Within three years, the operator business continued to rise, reaching 283978 million CNY in 2022. From a regional perspective, the product sales market is mainly concentrated in China, while the operator business benefited from the continuous growth of EM market traffic. The total sales revenue in Europe, Middle East and Africa reached 149206

million CNY, up 14% compared with 2021, and the total sales revenue in the Americas was 31.9 billion CNY, up 9% year on year. Overall, Huawei saw less revenue in China, the Asia-Pacific region, and increased revenue in Europe, the Middle East and Africa, the Americas and other regions.

**Table 1.** Period-to-period of revenues

	2020	2021	2022
sales revenue(million)	891368	636807	642338
operating profit(million)	72501	121412	42216

### 3.2 Cost of Goods Sold Analysis

As shown in table 2, in 2022, the sales cost of Huawei was 360.4 billion CNY, up 9% year-on-year. In 2022, the gross profit was 281.9 billion CNY, down 8% compared with 2021. The main reason is that the price of semiconductor chips as key parts of electronic products manufacturing has increased significantly.

**Table 2.** Period-to period changes in product sales, COGS and gross margin

	2020	2021	2022
Revenue(million)	891368	636807	642338
Cost of sales(million)	(564236)	(329365)	(360413)
Gross profit(million)	327132	307442	281925

### 3.3 Expenses Analysis

As shown in table 3, in the past three years, Huawei adhere to the cloud, intelligent car parts and software root technology for future basic research and open innovation continuous investment, research and development expense rate rose 2.7%, pressure type investment in ecological construction, digital change in the field of sales management cost rose 0.7 percentage, in the sales cost beyond operating income of about 25.5 billion CNY, Huawei continue to increase development investment want to get rid of the dilemma is expected to continue in the next five years.

**Table 3.** Period-to period changes in R&D expenses and SG&A expenses

	2020	2021	2022
Research and development expenses(million)	141893	142666	161494
Selling and administrative expenses(million)	113430	104161	109785

### 3.4 Net Income Analysis

As shown in table 4, in 2020 Huawei enterprise net income of 1018 million CNY, then decrease year by year, and research and development investment in 2022, 2021 rose

13.2%, r & d proportion will affect net profit, also explains the Huawei enterprise revenue rising during the three years, the profits, therefore, Huawei nearly three years lost huge cash flow, break the technical barriers is the way of Huawei business recovery.

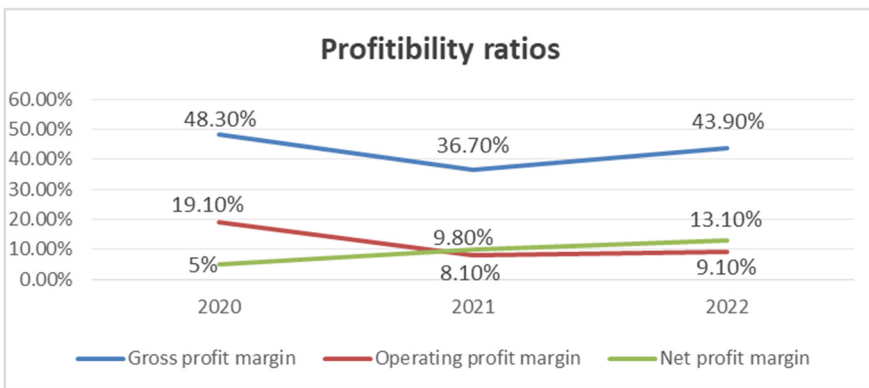
**Table 4.** Comparison of net income and expenses

	2020	2021	2022
Net finance income(million)	1018	493	(367)
Selling and administrative expenses(million)	113430	104161	109785

### 3.5 Profitability Ratios

As an important indicator of the company's profit, gross margin reflects the company's sales indicators, the amount of product appreciation is related to the gross margin, operating profit margin can not only reflect the business ability of the enterprise but also reflect the efficiency of the enterprise. As shown in figure 2, in 2020, Huawei's gross margin reached 48%, which has a higher pricing level compared to 2021 and 2022. In 2021, gross and operating margins both fell to the lowest in three years, mainly due to a decline in Huawei's consumer business.

During the past three years, the net profit margin of Huawei increased steadily, indicating that its business condition is relatively stable and can maintain the environment of continuous profit. The growth of net profit is mainly due to the sale of some businesses, the improvement of operation quality and the optimization of product portfolio. Huawei In the future market, we will continue to invest in business continuity and future-oriented technology research and innovation, such as cloud, artificial intelligence, intelligent vehicle components and basic software technologies, to create a good research and development and operation environment.



**Fig. 2.** Profitability ratios

## 4 Cash Flow Statement Analysis

### 4.1 Operating Cash Flow

Operating cash flow meets the requirements of adequacy and short-term solvency. Its overall performance is maintained at a high level, reflecting the stability of cash flow, reflecting the company's stable operating performance and high long-term solvency. The steady increase in operating cash flow reflects the growth requirements of the company. Huawei The company's operating cash flow is generally positive, from 2010 to 2021. The company's operating cash flow has increased by about 400% as shown in figure 3. Huawei In recent years, the continuous development of overseas markets, so its debt financing overseas, especially in 2011 to 2016, Huawei overseas financing debt is more, use of financial sharing platform give full play to the financial leverage, further broaden the financing channels, get more economic benefits, the sharing of economic forms also makes Huawei accelerating development. The growth of operating cash flow mainly comes from the increase of Huawei research and development expenses, which reached 141.9 billion CNY in 2020. The emergence of Hongmeng System and Kunpeng enhanced the market competitiveness of products and the sales revenue. Although Huawei's overseas market share has been affected due to the trade war between China and the US, showing negative growth for the first time in a decade in 2021, the overall growth was stable and positive. However, it is worth noting that although Huawei operating cash flow showed a significant rebound in 2021, the operator business and consumer business in the main business saw a decline of 7.0% and 49.6% respectively in 2021, and its business transformation and adjustment of business strategy are also imperative.

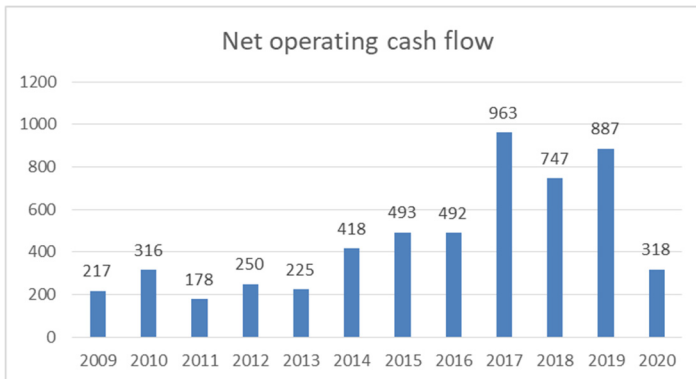


Fig. 3. Huawei's operating net cash flow from 2010 to 2020

### 4.2 Investment Cash Flow

Investment cash flow is always negative, which reflects the Huawei internal and foreign investment flows is higher than the stocks, bonds, Huawei investment most into the research and development investment, As shown in figure 4, in 2019, due to the us

sanctions chip imports, Huawei suffered obvious technology vacuum, in 2019, investment cash flow plunged to 114.9 billion, fell 270%. In contrast, Huawei's R&D spending in 2021 reached 142.7 billion CNY, accounting for about 22.4 percent of its annual revenue, setting a record high. At the same time, in order to manage liquidity risks, the company converted its cash into bonds and other superior investment products that can be hedging in the forward market. Its short-term investment reached 4.163 billion CNY, up 16.5% year on year, reflecting the development strategy of Huawei to accelerate external expansion.

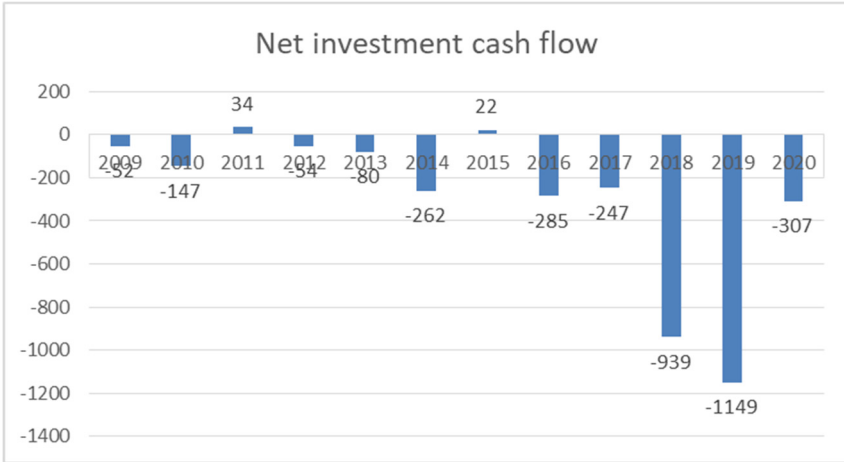
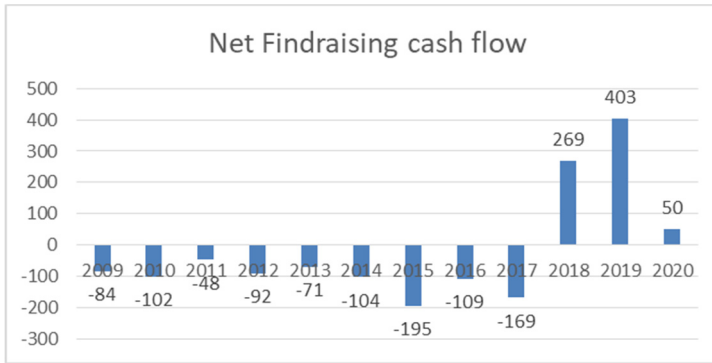


Fig. 4. Huawei's investment net cash flow from 2010 to 2020

### 4.3 Financing Cash Flow

Financing cash flow: Before 2017, it was generally negative, as shown in figure 5, from -84 in 2010 to -169 in 2017, the net cash flow of financing activities had an increasing trend. Combined with the gradual increase of the business revenue of the enterprise to 60 billion yuan, it can be learned that in recent years, Huawei is not willing to absorb external financing, and it has a strong ability to create revenue, plus the dividend distribution to shareholders, leading to a slight negative amount in its financing cash flow. However, in 2018 and 2019, the net cash flow of financing appeared a large positive number, showing a strong expansion demand of Huawei at this time. On financing channels, Huawei in 2020 and 2021 mainly through the issuance of corporate bonds and external borrowing for financing, on the bond issue cash flow, from 2020, 442 million to 516 million, the maturing bond cash flow is far less than the borrowed cash flow, steady bond cash flow net inflows also reflects the market for its future development trend. The sharp decline in financing cash flow was mainly attributed to the large increase in the number of Huawei bond issues in 2020. In 2020, Huawei's bond issuance rose by about 50% from 2019.



**Fig. 5.** Huawei's fundraising net cash flow from 2010 to 2020

## 5 Conclusions

In general, in the past three years, due to the decline of other investments and derivatives, the total current assets showed a downward trend, the R & D expenses accounted for a large proportion of the total capital, and the debt repayment ability was slightly lacking. However, Huawei operating ability is improved, and shareholders' income ability is enhanced. Although the asset turnover rate showed a big decline between 2020 and 2021, the income from other businesses was much higher than the loss. The Huawei ROE index showed an upward trend, reflecting the optimistic development prospects of Huawei. At the same time, affected by the epidemic, the low efficiency of Huawei company's funds also needs to be solved. Huawei three years net profit steady growth, the enterprise operating condition is relatively stable, revenue in the Asia-pacific region in China, in Europe, the Americas and other regions, the increase of commodity sales costs, so the enterprise gross profit rate growth is slowing, enterprise internal sales management expenses continue to rise, want to get rid of the plight of low cash flow, Huawei still need innovation, to break the technical barriers, seek the development in the field of renewal, continue to improve the management ability.

## References

1. Tekir, G. (2020). Huawei, 5G network and digital geopolitics. *International Journal of Politics and Security*, 2(4 (Çin Özel Sayısı)), 113-135.
2. Champion, A. S. (2020). From CNOOC to Huawei: Securitization, the China threat, and critical infrastructure. *Asian Journal of Political Science*, 28(1), 47-66.
3. Kaska, K., Beckvard, H., & Minárik, T. (2019). Huawei, 5G and China as a security threat. *NATO Cooperative Cyber Defence Center for Excellence (CCDCOE)*, 28, 1-26.
4. Schaefer, K. J. (2020). Catching up by hiring: The case of Huawei. *Journal of International Business Studies*, 51, 1500-1515.
5. Friis, K., & Lysne, O. (2021). Huawei, 5G and security: Technological limitations and political responses. *Development and Change*, 52(5), 1174-1195.



6. Jaisal, E. K. (2020). The US, China and Huawei debate on 5G telecom technology: Global apprehensions and the Indian scenario. *Open Political Science*, 3(1), 66-72.
7. Wahyuni, E. S., Aspan, H., & Mauliza, P. (2023). Financial Analysis Of Entrepreneurship Education. *International Journal of Economics and Management Research*, 2(3), 10-18.
8. Baker, H. K., Kumar, S., Goyal, K., & Sharma, A. (2021). International review of financial analysis: A retrospective evaluation between 1992 and 2020. *International Review of Financial Analysis*, 78, 101946.
9. Jalal, Z. E. (2020). A review of theoretical approaches to financial analysis. *Креативная экономика*, 14(10), 2367-2382.
10. Wen, T., Li, P., Chen, L., & An, Y. (2023). Market reactions to trade friction between China and the United States: Evidence from the soybean futures market. *Journal of Management Science and Engineering*, 8(3), 325-341.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

