

# Analysis of Huawei's Financial Risk Management from the Perspective of Financial Indicators

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**Abstract:** With the continuous development of China's socio-economy, overall enterprise growth faces certain limitations; deeper economic reforms and market opening create a more challenging external environment for businesses. This implies that companies will encounter more challenges. To ensure that enterprises can operate normally and successfully achieve their business objectives, it is necessary to correctly understand financial risks and adopt rational risk management methods to avoid or reduce potential losses. This paper takes Huawei Technologies Co., Ltd. (hereinafter referred to as "Huawei") as an example and analyzes its financial indicators. Through financial data, it identifies the issues and causes of the company's financial risk management, and discusses how to prevent financial risks in enterprises, aiming to assist companies in achieving sustainable development in a fiercely competitive environment.

**Keywords:** Financial Indicators, Huawei Company, Financial Risk, Risk Management.

## 1. Introduction

In the process of business operation, there are various types of risks, and financial risk is one of the factors that have the greatest impact on the healthy and stable development of enterprises. Therefore, conducting financial risk management in a scientific and rational manner is crucial for the healthy development of enterprises.

## 2. Financial Risk Theory

### 2.1. Concept of Financial Risk

Financial risk can be viewed from two perspectives: broad and narrow. Narrowly, financial risk refers to the uncertainty of a company's ability to repay its debts with monetary funds. Broadly, financial risk refers to the opportunity and possibility of losses caused by the inconsistency between actual financial returns and expected returns due to various uncertainties affecting the company. It manifests as uncertainty in the financial situation and results of the enterprise, resulting in a decrease in the company's ability to repay debts and a decline in profits, transforming financial risk into significant asset losses. This study focuses on broad financial risk, which objectively exists in various aspects of enterprise financial management. As long as there are financial activities, financial risk inevitably exists and cannot be completely eliminated. Issues in any aspect or link of organizing and managing financial activities in an enterprise may lead to this risk transforming into losses, resulting in a decrease in the company's profitability and debt repayment ability. Therefore, only effective measures can reduce it. Financial risk can be classified based on its sources into financing risk, investment risk, operational risk, liquidity risk, and inventory management risk. Based on the degree of control, it can be divided into controllable risk and uncontrollable risk. This paper mainly analyzes the controllable factors of financial risk in Huawei.

### 2.2. Characteristics of Financial Risk

(1) Objectivity: Financial risk demonstrates objectivity within a company's financial and operational activities. That

is, risks exist in various financial activities including fund raising, application, accumulation, and distribution. Despite taking effective measures, these risks cannot be completely eliminated. Various methods and technologies are needed to manage financial risk, identify potential impacts through prevention mechanisms, and reduce them to a degree that allows for the stable development of the enterprise.

(2) Duality: Everything has two sides, and for a company, the losses and gains from financial risk coexist. There is an inverse relationship between gains and losses; the fewer the gains, the lower the risk, and vice versa. To enhance company profits, effective risk control measures must be implemented, and discussions and studies on risk control need to be intensified. If risks are not well managed during the pursuit of high profits, the company may face a severe financial crisis. Therefore, a balance between risk and benefit must be struck to promote the long-term development of the company.

(3) Uncertainty: Financial risk is objectively present and influenced by various internal and external factors, which endows it with uncertainty. This uncontrollable influence makes the occurrence probability and severity of specific events uncertain. Without preventive measures, significant economic losses can be inflicted on the business.

(4) Comprehensiveness: Financial activities are comprehensive, and financial risk permeates every link of the enterprise, manifesting in every process. Therefore, financial risk is always present and comprehensive in both time and space. Additionally, this risk is likely to affect other aspects of the business.

(5) Controllability: Although financial risks are ever-present, the occurrence of such events often exhibits certain patterns and predictability. To prevent substantial economic losses, business managers can monitor risk events and establish a financial risk prevention system, intervening with effective measures to reduce the probability of financial risks and minimize their resultant losses.

## 3. Analysis of Huawei's Financial Risks

### 3.1. Overview of Huawei

Huawei is a leading global provider of information and

communications technology (ICT) infrastructure and smart devices. Founded in 1987, Huawei started as a privately-owned high-tech enterprise focused on telecommunications. Its initial business primarily involved sales of switches. Over the past three decades, Huawei has evolved into a major international telecommunications company, ranking among the top three globally. It covers major telecom operators and consumer terminal products worldwide, engaging in the design, development, manufacturing, sales, and service of communication equipment.

### 3.2. Analysis of Huawei's Financial Risks

As a leading player in China's information and communications technology supply sector, analyzing Huawei's financial risk management holds significant importance. To better understand Huawei's financial situation, we have compiled financial data from 2019 to 2023, using quantitative methods and combining various financial indicators to analyze the company's financial risks based on its disclosed financial statements from previous years.

#### 3.2.1. Debt Repayment Risk Analysis

Debt repayment capability refers to a company's ability to repay its debts, primarily measured in two ways: short-term debt repayment capability and long-term debt repayment capability. Whether a company has sufficient cash flow and

debt repayment capability is crucial for its healthy existence and development. This article utilizes indicators reflecting short-term debt repayment capability such as current ratio, quick ratio, inventory turnover ratio, and cash ratio, as well as the asset-liability ratio reflecting long-term debt repayment capability, to assess risk.

#### (1) Analysis of Short-term Debt Repayment Capability

As shown in Table 1, Huawei's current ratio exhibited a stable upward trend from 2018 to 2021, increasing from 1.58 to 1.96, reaching its peak. Meanwhile, the trend of the quick ratio remained consistent. This indicates that Huawei's financing policy has been relatively conservative in recent years. Due to increased investment in the promotion of 5G technology and the characteristics of long construction and repayment cycles in the telecommunications industry, Huawei's operating profit did not show significant growth. However, the cash ratio remained relatively stable, ranging from 0.33 to 0.51, indicating that Huawei's short-term liquidity improvement plans and its budgeting and planning systems have been effective in improving its capital structure. Additionally, Huawei has adopted several reasonable measures to protect its capital needs, such as maintaining a stable capital structure, obtaining sufficient credit to secure loans, and implementing effective investment and financing plans.

**Table 1.** Overview of Huawei's Short-term Debt Repayment Capability Indicators from 2019 to 2023

Financial indicators	2019	2020	2021	2022	2023
Current Ratio (times)	1.58	1.76	1.96	1.80	1.93
Inventory Turnover Ratio (times)	4.13	3.39	2.01	2.22	2.39
Quick Ratio (times)	1.20	1.31	1.49	1.31	1.48
Accounts Receivable Turnover Ratio (times)	18.20	11.12	8.65	8.06	7.64
Cash Ratio (times)	0.38	0.44	0.33	0.34	0.43

#### (2) Long-term Solvency Analysis

From Table 2, it can be observed that Huawei's debt-to-assets ratio declined annually from 2019 to 2021, with a slight increase in 2022. The debt-to-assets ratio is inversely related to the company's solvency, indicating that the company's ability to repay debt decreases as the debt-to-assets ratio increases. However, this doesn't necessarily mean that a decrease in the ratio of assets to liabilities is absolutely favorable. If the ratio is too low, it suggests that the company may not be fully leveraging financial leverage, resulting in a

decrease in the company's net asset profitability. Due to Huawei's financing being primarily debt-based and the company's significant investment in 5G technology research and development in recent years, with slow returns, Huawei's debt-to-assets ratio reached a high level of 65.6% in 2019, decreasing to 57.8% in 2021. This indicates that Huawei's earlier investments have yielded significant returns, and the overall financial structure is trending towards reasonable stability.

**Table 2.** Overview of Huawei's Long-term Debt Repayment Capability Indicators from 2019 to 2023

Financial indicators	2019	2020	2021	2022	2023
Asset-to-Liability Ratio" or "Asset Liability Ratio	65.60%	62.30%	57.80%	58.90%	59.80%

#### 3.2.2. Investment Risk Analysis

Profitability, also known as earning capacity, refers to a company's ability to increase its capital value, generally reflected by the magnitude and level of the company's profits. When a company's operating profits are high, its market competitiveness, growth potential, and profitability are enhanced. In practical terms, sales gross margin and net profit are also used to gauge the company's profitability. The indicators reflecting a company's profitability are primarily based on profit indicators grounded in sales activities and performance metrics, analyzed through metrics such as sales gross margin, operating profit margin, and return on equity.

From Table 3, it can be observed that Huawei's return on equity (ROE) exhibited significant fluctuations from 2019 to

2023. In 2019, Huawei's ROE was 23.71%, declining to 20.66% in 2020. Through reading Huawei's annual reports and reviewing relevant materials, the decline in ROE was mainly due to the growth rate of net profit being lower than the average growth rate of net assets. In 2021, Huawei's ROE increased to 30.53%, and its operating profit margin increased to 19.1%. In that year, Huawei achieved global sales revenue of 636.8 billion yuan, a decrease of 28.6% compared to 2020. This marked the first historical revenue decline for Huawei since the publication of its annual report in 2006. However, during the same period, net profit surged without an increase in revenue. The reasons for this were as follows: Firstly, Huawei's revenue growth in 2022 was less than 1%, but operating costs increased from 329.365 billion yuan in 2021

to 360.413 billion yuan, a 9.42% increase, consuming 31 billion yuan of profit space. Secondly, since implementing its innovation development strategy, Huawei has been increasing its research and development (R&D) expenditure. R&D expenses in 2022 increased by 13.2% compared to 2021. Thirdly, Huawei's other net income and expenses in 2022 were 31.6 billion yuan, compared to 60.8 billion yuan in 2021, a decrease of 29.2 billion yuan. During the period from 2020 to 2021, Huawei divested its Honor smartphone business to safeguard its interests, leading to a substantial increase in other net income and expenses in 2021. In 2022,

**Table 3.** Overview of Huawei's Profitability Indicators from 2019 to 2023

Financial indicators	2019	2020	2021	2022	2023
Income (in millions of RMB)	858,833	891,361	636,807	642,338	704,174
Return on Equity (ROE)	23.71%	20.66%	30.53%	8.35%	18.41%
Operating Profit Margin	9.10%	8.10%	19.10%	6.60%	14.80%
Sales Gross Profit Margin	37.60%	36.70%	48.30%	43.90%	46.20%
Net Profit Margin on Sales	7.30%	7.25%	17.86%	5.54%	12.35%

### 3.2.3. Operational Risk Analysis

Operational capability refers to a company's ability to generate profits using various assets. The operational capability of an enterprise mainly refers to the efficiency and effectiveness of the use of operating assets, which we evaluate and analyze Huawei's operational capability through indicators such as "accounts receivable turnover ratio, inventory turnover ratio, and total asset turnover ratio."

As seen from Table 4, Huawei's accounts receivable turnover ratio has been continuously declining since 2019, reaching a minimum of 7.64 in 2023. A higher accounts receivable turnover ratio indicates that the company collects payments quickly, with shorter accounts receivable turnover, indicating stronger asset liquidity and debt repayment capability. Conversely, a lower ratio suggests poor liquidity of funds and weaker debt repayment ability. The persistent decline in Huawei's accounts receivable turnover ratio in recent years indicates cash flow stagnation or slowdown. If this remains low over the long term, it could pose a risk of being unable to repay maturing debts.

Huawei's total asset turnover ratio shows a downward trend, with the company's total asset turnover ratio dropping to 0.61 in 2023, indicating a decline in Huawei's overall asset operational capability. Both the company's operating income and total assets decreased in that year, primarily due to external pressures affecting the company's main business activities, leading to reduced sales revenue, slower cash flow, and decreased asset management efficiency.

The inventory turnover ratio has been steadily declining since 2019, reaching 2.01 by 2021. This consistent downward trend is attributed to a significant decrease in the company's operating costs, with no significant change in inventory. Despite Huawei's strategic plan to increase reserves of raw materials and other inventory in recent years, inefficient inventory management has led to excessive inventory, indicating a need to strengthen inventory turnover capability.

All these indicators suggest a decline in Huawei's liquidity of operational funds in recent years, indicating significant liquidity risks in operational funds, which could easily lead to shortages or wastage of corporate funds.

Huawei's ROE and operating profit margin plummeted sharply due to a significant decline in profits. Operating profit decreased from 121.412 billion yuan in 2021 to 42.216 billion yuan, a decrease of 65.23%, and net profit decreased to 35.563 billion yuan, a decrease of 68.73%. It can be seen that, under the influence of the chip crisis and the pandemic, Huawei's profit margin was greatly compressed. Additionally, due to continued unreasonable restrictions on the supply chain and market operations, Huawei's operating cash flow decreased to 17.797 billion yuan, indicating significant pressure on its operations.

**Table 4.** Overview of Huawei's Operational Capability Indicators from 2019 to 2023

Financial indicators	2019	2020	2021	2022	2023
Accounts Receivable (in millions of RMB)	85,294	75,026	72,242	87,177	97,224
Accounts Receivable Turnover Ratio (times)	18.20	11.12	8.65	8.06	7.64
Total Asset Turnover Ratio (times)	1.13	1.03	0.68	0.63	0.61
Inventory Turnover Ratio (times)	4.13	3.39	2.01	2.22	2.39

## 3.3. Analysis of Huawei's Financial Risk Factors

### 3.3.1. Internal Factors

(1) High operating expenses affecting company development. In the era of accelerating the development of new quality productivity and in response to the national economic shift from high-speed growth to high-quality development, Huawei has shifted its corporate management policy to focus more on green technological innovation. This has led to a situation where the company continues to increase its investment in technology research and development, despite a significant decrease in revenue. Consequently, operating expenses have become excessive, impacting profitability and requiring external financing to sustain the company's rapid growth.

(2) Concentrated debt repayment increasing corporate burden. Compared to other publicly listed companies, Huawei, as a private enterprise, relies mainly on bank loans, bond financing, and internal funding, apart from its operational activities, to obtain operating funds. However, in 2022, compared to previous years, there was a significant concentration on repaying loans and bonds, leading to an increased burden on the company.

### 3.3.2. External Factors

(1) Overseas sanctions. Due to multiple unilateral sanctions

imposed, several semiconductor companies suspended their supply cooperation with Huawei. This led to a severe chip supply crisis for Huawei, forcing its products to face shortages or downgrades, particularly affecting its competitiveness in high-end and overseas markets. This posed significant challenges to Huawei's supply chain, especially in its consumer business division, which mainly includes the production and sales of smartphones and other electronic products, resulting in severe impacts. Simultaneously affected by the ban on Huawei's 5G networks, many operators have excluded Huawei from their 5G suppliers due to concerns over supply chain security, leading to a gradual decline in Huawei's overseas market revenue.

(2) Saturation of the market and intense competition. The high-end smartphone market faces fierce competition, with the market already relatively saturated, and demand for new phones gradually reaching saturation. In the context of a softening trend in the electronics market, the telecommunications and electronic consumer markets face two major challenges: lengthening replacement cycles and serious product homogenization. These factors indicate a slowdown in market size growth. Meanwhile, new technologies like artificial intelligence continue to emerge, driving the digitalization and intelligence of electronic products, intensifying industry competition.

#### **4. Huawei's Financial Risk Prevention Strategies**

(1) Strengthening control over funds and improving the structure of the company's liquidity assets are the primary focuses of financial planning. The company aims to adjust its survival threshold to prioritize cash flow and real profits. Performance assessments are being adjusted to increase the weighting of cash flow and profits, encouraging employees to focus on profit growth. Additionally, inventory management is being optimized to control inventory levels reasonably, avoiding excess that could impact profits and cash flow, ensuring the stability of company operations. Furthermore, utilizing capital structure and short-term liquidity planning budget forecasting systems, the company evaluates and forecasts medium to long-term capital needs and short-term capital gaps to ensure the financial requirements for business development, including maintaining a sound capital structure and financial flexibility.

(2) Strengthening budget risk control is vital. In the process of social and economic development, a company's sales determine its sustainability. Strengthening financial risk management involves enhancing budget management through sales budgeting, cost budgeting, cash budgeting, and other measures. Firstly, development plans are formulated,

with management personnel predicting trends and setting budgets accordingly. Departments collaborate to ensure mutual benefits, while also compiling data on each department's goal completion status. Secondly, the finance department analyzes the collected data, conducts departmental discussions, and formulates relevant standards based on departmental feedback. Finally, company managers set budget targets based on development standards while clarifying responsibilities between departments.

(3) Enhancing risk awareness is crucial. Financial risks are ubiquitous, and any operational mistake can lead to significant economic losses for a company. Therefore, Huawei emphasizes the importance of financial risk management and seeks to enhance risk prevention awareness throughout the organization.

#### **5. Summary**

Drawing on Huawei's actual development, this analysis of the company's financial data has comprehensively reviewed and summarized the relevant content of Huawei's financial risk management. Examining both internal and external factors contributing to current financial risks, it underscores the crucial role of financial risk prevention in enterprise development. Recommendations have been made for companies to enhance budgetary and fund controls while also strengthening awareness of risk prevention.

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