# Research on Financial Position of Apple

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Abstract: Today, with the rapid development of economy and technology, the new products and new technologies launched by Apple, which has been innovating, have changed people's way of life, so it stands out from many technology companies and is widely recognized around the world. And many investors are also turning their investment winds to technology companies, so it will be necessary to further analyze Apple's development through stock value and financial information. This paper mainly determines whether Apple is worth investing by analyzing its financial information and stock growth trend. This paper is based on previous literature and comparative study. It is concluded that Apple's stock is on the rise in general and has high profitability. However, its liquidity and credit are poor, but apple is still a company worth investing in.

**Keywords:** Apple, investment, financial, stock, profit

#### 1. Introduction

Before this century, production, technology, and science developed in sequence. However, the emergence of venture capital plays an essential role in technological innovation and economic development, and it can also help companies improve their international competitiveness. A country's economic competitiveness depends on its financial innovation ability and technological results, and whether the new and high technology can be transformed into commodities to be liked by the public and eventually become an industry. This statement is admitted by the whole people, and it also used as some countries' policy. Thus, venture investment is quite important in many sides such as technological and competition, which can be drawn from the development of venture capital. The role of venture capital is essential in promoting economic growth.

However, Apple has always been innovative and has continuously introduced new products and technologies, which has promoted the development of the industry. The importance of investment activities in promoting technological change is particularly significant in vendor-led and production-intensive sectors [1].

Therefore, this article will explore Apple's stock price and financial condition to understand Apple's investment risk and whether the company is worth investing in.

The research methods of this paper mainly include literature research and comparative research. Understand the basic situation of Apple And some previous financial situations by reading the previous literature. The comparative research method mainly refers to comparing Apple with the whole industry to understand apple's position in the entire industry to know whether Apple is worth investing in.

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In today's increasingly fierce competition in the capital market, a company's financial condition can reflect past operating conditions. And make a correct forecast of the future development of the enterprise to help investors and managers make the right decisions. Studies have shown that with the increase in uncertainty, people will get higher marginal profit; still, fewer people will participate in the investment [2]. This paper from the listed company Apple Enterprise to understand apple's financial status and stock price trend. With economic globalization and the international financial market, the operation of the iPhone in the market has already developed its own features. If other enterprises want to introduce their products to the market and enjoy great popularity, they should learn experience of enterprises constantly. This company can be regarded as a good and important model. Apple inc. which is a listed company can help investors make correct judgments through some financial indexes of the company.

#### 2. Overview

### **2.1. CAPM**

The Capital Asset Pricing Model (CAPM) was developed by Sharpe and Lintner and makes a significant change in the financial market [3]. The model is used to estimate the capital assets and it is a linear equilibrium model of returns on investments. It also shows returns above the risk-free rate by covariance with the overall market. CAPM model also explains the beta value which represents systemic risk. The model also indicates a positive relationship between the expected rate of return on an asset and its beta [4].

## 2.2. Introduction of Apple

Apple has become a giant consumer technology corporation in the past decades, the company launched the first personal computer and it restructured the product line in 1997 by Job. And its innovative products enjoy great popularity around the world. Thus, Apple has a huge potential as three decades ago, and investors should invest in this company [5]. Recently, the income of sales, net profits, and share price of Apple had a huge growth, which indicates its balance sheet was quite solid. Moreover, the company did not have any financial debt and had high liquidity. Its ROE is also quite high; thus, it enjoys financial success [6]. Through the company's financial performance, people can judge the company's health. Then, investors and creditors could know whether they should invest or how much returns they get. It mainly includes profitability ratios, liquidity ratios, solvency ratios, and assets activity ratios [7]. Financial statements and analyses provide an overview of a company and can be used as a management tool to evaluate the total position and operating results. And it also explains the liquidity position, long-term solvency, and financial viability [8].

#### 3. Analysis

#### 3.1. Stock

According to the financial statement released by Apple in 2021, Apple's earnings per share have shown a trend of continuous growth in the past five years. Despite a downward trend in 2019, growth resumed in 2020. In addition, since in the past two years, the pandemic has hit the whole world, the overall macroeconomic market was relatively depressed, but it still maintained rapid growth. It outperformed the S&P 500, and etc. That means Apple's stock yield is higher than any other company in the industry. Stock returns are high mainly because corporate profits depend on the ability to innovate quickly and continuously with consumer orientation. The iPhone redefined the smartphone

and changed way people interact in the information world. Since then, Apple has launched the functions, such as App Store, Siri, and the iPhone. It seems that innovation is the number one driver.

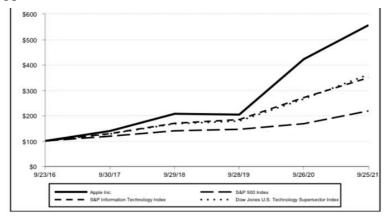


Figure 1: Difference of the cumulative total return in five years between Apple inc., the S&P500, the S&P Information technology index, and the Dow Jones U.S. Technology Supersector Index.

Figure 2 shows that in the past five years; the company's stock price has had a general upward trend. While in early 2020, under the influence of factors such as the new crown outbreak and the share price declined, but still can see Apple's share price is firm. And the S&P 500 and DOW, compared the two shares overall, showed a relatively stable trend. And far below Apple's share price. Therefore, it is consistent with previous studies that investors can get higher returns when Apple's stock price is higher.



Figure 2: The stock trend of Apple inc., S&P 500, and DOW.

#### 3.2. Profitability Metrics

## 3.2.1.**EPS**

EPS refers to after-tax earnings per share, and generally, the higher the index, the higher the profit. It can also be used to show the business results of the enterprise, and measure the profitability of the stock and investment risk. And it is also used by many investors to predict and judge the profitability and growth potential of enterprises, so as to make corresponding decisions. As seen from Figure 3, Apple's EPS has generally shown an upward trend in the past thirteen years and reached \$5.61 in 2021, indicating that Apple's profitability has maintained growth in the past ten years and has strong growth potential.

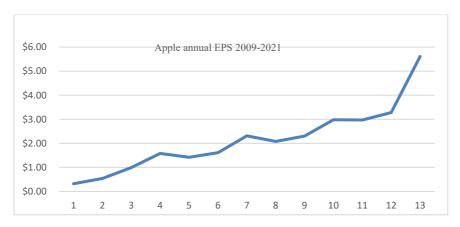


Figure 3: Apple annual EPS 2009-2021.

#### 3.2.2.ROA

ROA measures how efficiently a business uses its assets, and generally, the higher the ratio, the better. The higher the ratio, the higher the efficiency of the utilization of assets, indicating that the enterprise has a good effect on increasing income and saving expenses, as well as using funds. The total assets of a business consist mainly of the owner's capital and liabilities. The amount of profit and investment structure and management level. It is also a composite indicator. Therefore, this index can be used to analyze the economic benefit level of the company and its potential to improve the profit level. ROA is mainly determined by the turnover of total assets and the size of net profit. ROA is also higher when enterprises have higher profit margins on sales and faster turnover of assets. Therefore, the ROA can be improved by strengthening asset management to improve the utilization of assets, as well as strengthening sales management and increasing sales revenue to improve profitability. As seen from Figure 4, Apple's ROA reached its maximum value in 2012 but showed an apparent downward trend from 2013 to 2022. This may be due to the emergence of other electronic competitors in the market, such as Huawei and Samsung, which resulted in a decline in Apple's revenue. However, from 2020, its ROA began to show an upward trend, and most of Apple's ROA remained above 15%. Therefore, it has always had a higher ROA.

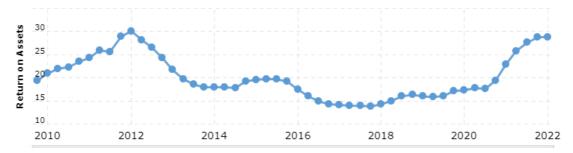


Figure 4: Apple's ROA.

#### 3.2.3. **ROE**

ROE is a public company's total profit divided by the shareholders' average equity ratio and is usually used to measure a company's profitability, which also means when the ratio is higher, then the return on investment is also higher. Shareholder investment and owner's equity are two essential parts of a company's assets. Company managers should use financial leverage reasonable to further increase the efficiency of capital utilization. However, too much equity in the company will lead to a high financial risk, such as cannot pay off debt, and it will increase the profits of the company. But

borrowing too little can make capital less efficient. Therefore, the ratio is also used to measure the efficiency of shareholder funds. As seen from Figure 5, the ROE of Apple has been on the rise and even exceeded 100% in the past two years, which indicates that Apple is also an excellent company that can manage and improve the efficiency of capital use.

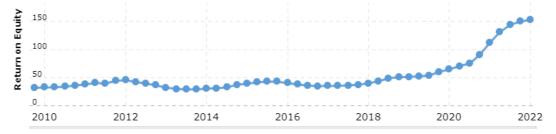


Figure 5: Apple's ROE.

## 3.2.4. Operating Margin

Operating margin equals operating profit divided by operating revenue. This percentage is usually used to judge enterprises' operating efficiency, indicating managers' ability to make profits through operations while taking operating costs into account. Generally, the higher the ratio, the better, and the comparison can only be made with the competition in the same industry. Still, a comparison between different industries is generally not possible. It can also indicate how efficient a company's management and sales are at making money. It also shows the percentage of revenue available to cover non-operating costs. The operating profit margin fluctuates greatly and is an important indicator to measure business risk. In addition, you can see whether a company's performance has improved by comparing its operating profit margin in the past. Investors will also be able to see if the company's revenue stream is its core business. Figure 6 shows Apple's operating margin reached its highest value in 2012 and did not increase significantly in the remaining years, remaining between 25% and 30%. Overall, Apple has a high operating profit margin, indicating its high management level and efficiency in making profits from sales.

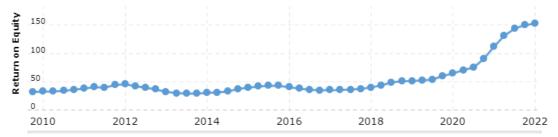


Figure 6: Apple's Operating Margin.

## 3.3. Liquidity Metrics-Current Ratio

When measuring short-term debt solvency, people often choose a liquidity ratio, which can also be used to measure and judge the short-term risk of enterprises. Some scholars have pointed out that liquidity is an essential factor affecting portfolio returns [9]. when the ratio is higher, it indicates that liquidity is greater and the ability to pay short-term liabilities is greater. But because the nature of business varies from company to company, the requirements for liquidity will also vary. But in general, ratio two is considered reasonable. If the ratio is above 2, the company has a lot of money in liquid assets, meaning that these assets are not being used properly. For example, large inventory and receivables will also lead to slow capital turnover, thus affecting the company's profitability. Sometimes, a business may still have a high liquidity ratio despite the red letter in its cash flow.

However, Apple's liquidity ratio is not very high (Figure 7). Most of the ratio remained between 1.0 and 1.5 from 2014 to 2020, indicating that the company's liquidity is relatively poor.



Figure 7: Apple's Current Ratio.

## 3.4. Credit Metrics-Debt to Equity Ratio

The debt-to-equity ratio is defined broadly as total liabilities / equity. In a narrow sense, it means long-term liabilities divided by equity. It mainly reflects the enterprise's financial structure and the security degree of the owner's equity in the creditor's capital. If the ratio is high, it indicates that the proportion of debt capital in the total capital is high, meaning that the enterprise's financial strength is weak. The safety degree of debt capital is low. And it also shows that the company is borrowing and may be unable to repay the existing debt. The figure below shows that Apple's ratio has been increasing yearly and even exceeded 1 in the past two years, indicating that Apple inc. has a lot of long-term debt and may face debt risk if it is not handled in a timely (Figure 8) [10].



Figure 8: Debt to Equity Ratio.

## 4. Discussion / Suggestion

The primary reason Apple's stock price keeps rising is to keep selling and operating its main product line, the iPhone. Only an efficient operation can lay a good foundation for the company's development, which can help the company obtain more financing. In the growth stage, the company needs a lot of investment. When the profit margin of the enterprise is relatively high due to its rapid expansion, it needs a lot of capital, which also requires a lot of investment. A company with sound operations and strong growth sends a positive signal, which causes the stock price to rise. Therefore, it further builds investor confidence, encouraging more investors to invest. Therefore, if the company wants to have sound signal transmission, it must develop the main business and lay a good foundation for developing the lead business.

For any listed enterprise, excellent operational ability and profitability will be the prerequisites for expanding its equity scale. High operational capability can give fantastic future development laid a good foundation. And giving future fund-raising activities brings a solid guarantee, especially in the period of growth of enterprises. The result of the large-scale investment is indispensable; such

enterprises with high growth will have greater demand for financing. Suppose the operational capacity and growth of the listed company are high in the short term. In that case, it can send positive signals to promote the price rise of the issued stock, stabilize and enhance investors' confidence, and attract more potential investors' attention. In this regard, it is necessary to lay a good foundation, improve their strength, and ensure that operational and growth capacity continue to be good which is expected to bring long-term and stable development. But at the same time, these listed companies should also be aware of the advantages and disadvantages of debt for developing their enterprises. Although many companies will choose to borrow, if the company's obligation is too high, it will face a debt crisis, leading to bankruptcy.

## 5. Conclusion

From the above analysis, it can be concluded that Apple has high profitability, but there are specific problems with its liquidity and credit. But overall, Apple's stock price has risen over the past few years, and former stock owners have made a lot of money. That makes Apple a long-term bet and a company worth investing in.

However, this paper still has some limitations, some existing data were mainly collected in data collection, so there were not many data innovations, and the data presentation format was relatively simple. In addition, this study specifically analyzes Apple's data and compares its previous performance but lacks comparisons with its competitors.

In the future research process, we can use more forms of data presentation to vividly display some of Apple 's data. Secondly, Apple Inc.'s performance can be compared with that of its competitors in future studies to draw more accurate conclusions. Thus, through those ways, it can help the research become more proper.

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