Analysis of the Financial Potential of Apple, Xiaomi, and Nokia: Recommendations for Potential Investors

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Abstract. The growth of the smartphone industry is prominent. Smartphone now seems to become a necessity in people's daily life. In order to provide a more comprehensive analysis and recommendations for investors on the investment of three famous smartphone manufacturers – Apple, Xiaomi, and Nokia, this article compares Equity Beta, Return on Equity (ROE), inventory turnover, the weighted average cost of capital (WACC), leverage ratio, and business risk of three companies. The result demonstrates that Apple has the highest inventory turnover ratio and ROE, as well as the lowest inventory turnover ratio. Apple maintains its leverage and business risk at a relatively medium level among the three companies. Xiaomi has the highest leverage level and WACC but the lowest business risk. The ROE and inventory turnover ratio of Xiaomi is also the weakest among the three companies. Compared with Apple and Xiaomi, Nokia has the lowest Beta and leverage ratio, but the highest business risk and a relatively low inventory turnover ratio. This article found that Apple's shares would have a higher return, but the investment would also be relatively riskier. For investors pursuing a relatively stable income, Xiaomi would be a better choice to invest. In contrast, Nokia has less potential to bring profit to investors and shareholders.

Keywords: Investment; Potential; Apple; Xiaomi; Nokia.

1. Introduction

1.1 Background

Phones enable people to communicate over a long distance. Nowadays, in both developed and developing countries, more and more people have smartphones. Smartphone now seems to become a necessity in people's daily life. The fierce competition in the smartphone industry catalyzes the innovation of smartphone manufacturers. This article selects three phone manufacturers - Apple, Xiaomi, and Nokia - to evaluate and consider their potential in terms of profit-generating capabilities.

1.2 Related research

Through an analysis of Xiaomi, Li outlined the "overnight popularity" and the possibility of long-term development of Xiaomi's mobile phones. Li analyzed the reasons for Xiaomi's rapid growth today through various aspects such as Xiaomi's business model, competitive advantage, and future prospects. Finally, the whole analysis is summarized. As the leader of the new generation of China's mobile phone industry, Xiaomi's future is limitless, and its future profits are beyond doubt [1]. Wei analyzed several fast-growing companies and found that business model innovation is a necessary condition for a company to develop rapidly. For example, Apple uses disruptive innovation to impact the market, and thereby creating a larger market. Another example is that Xiaomi has formed a unique corporate culture through various methods, such as offline sales that are different from the traditional mobile phone industry and the use of online platforms. The innovation of these business models can effectively reduce operational risks and provide investment returns [2]. Bouwman et al. explained why Nokia would lose in the smartphone market. The main reasons include that Nokia failed to innovate the company's products in a timely manner when the smartphone appeared; the Symbian system, which was time-consuming and labor-intensive, was ineffective in the user's experience. Various reasons have caused Nokia to gradually fall behind from being the first mobile phone company [3].

Apple's success is related to its strategic marketing approach, continuous research and development of new products, product diversification, and efforts to establish target markets and global development. By now, Apple is a diversified company, making it stronger, more profitable, and more valuable [4]. Compared with other companies, Xiaomi's brand image and price are better than other companies under the same quality, and people tend to have a stronger desire to purchase (mainly for students and low- and middle-income groups). Excellent brand image and price are the keys for Xiaomi to stand out in the world mobile phone market [5]. After Apple launched its first iPhone in 2007, Apple became a dominant player in the mobile phone industry. Along with the development of the smartphone industry, Apple is still prevalent in the market. Apple's success cannot be separated from the innovation in its business model. Apple enhances the function of mobile phones and utilizes crowdsourcing in phone application creation. Moreover, Apple locks its developer and users into its platform through its IOS system and Apple store [6].

According to the study conducted by Chen and Ann in 2016, iPhone has a high customer loyalty level and user stickiness, demonstrating that iPhone fans are less likely to use other competitors' smartphones [7]. Nokia was a former dominant player in the mobile phone industry from the 1990s to the 2000s. However, in the rapid growth of the mobile phone industry, Nokia mobile phone failed to compete with those outstanding innovations. Timo and Quy suggested that the nervous emotion of top and middle managers negatively affected their communications and innovation investment, which further caused the failure of Nokia in the competition [8].

Whereas et al. argued that Nokia's management team was mentally prepared to confront the fierce challenges of emerging competitors. They stated that the main reason for causing the failure was the inappropriate timing of implementing "strategic agility and evolution variation of technologies". That is, Nokia's business structure was unable to burden both intensive evolution and the pressure from strong competitors [9]. Compared with Nokia and Apple, Xiaomi is a new entrant in the mobile phone industry. In 2014, Xiaomi entered the Indian market with its smartphone products. After around four years, Xiaomi rapidly became the top smartphone brand in the Indian market. Xiaomi's Flash sale model, low pricing, and high-quality products support Xiaomi's speedy market expansion. Besides those factors, Xiaomi also focuses on research and development (R&D) to maintain its cost-leadership strategy while producing high-quality products [10].

1.3 Objective

This paper is going to discuss three companies including Apple, Nokia and Xiaomi's probable financial return and investment risk by analyzing their financial situations, discussing the results and the suggestions for investment. Moreover, this paper will also provide a comprehensive recommendation for potential investors and inspire investors to discover the characteristic of firms that have potential in the future.

2. Description of the selected companies

"Technology, people-oriented" is Nokia's consistent concept in brand communication, always conveying to consumers the spirit of Nokia's consideration for consumers. The products of Nokia were known for their durability and functional practicability since Nokia believed that mobile phones were communication and office tools. However, Nokia's system and Nokia cellphone was lack of innovation, which caused Nokia's products to gradually fade away from the public. In contrast, even though Apple's products have been in the spotlight in the market since 2007, Apple still did not forget the importance of innovation. Apple focuses on the improvement of its product. For Apple's own system, Apple upgrades its iOS system frequently in order to improve user experience. As a company that also focuses on innovation, Xiaomi aims to offer products at low prices and high quality. The cost-leadership strategy for Xiaomi contributes a lot to its market growth. Comparing Xiaomi with Apple and Nokia, Xiaomi is a new entrant in the cellphone industry. But the market growth of Xiaomi is remarkable and should not be underestimated.

To evaluate the financial performance of Apple, Xiaomi, and Nokia, this article utilizes 6 financial metrics - equity beta, Return on Equity (ROE), inventory turnover, the weighted average cost of capital (WACC), leverage ratio, and business risk - to provide potential investors with a comprehensive financial analysis.

3. Financial Analysis

Table 1. Financial metrics for Apple, Xiaomi, and Nokia.

	Apple	Xiaomi (HKD)	Nokia
Market Value of Equity	2.53 T	283.13 B	26.98 B
Market Value of Debt	118.23 B	685.64 B	5.59 B
Cash equivalent	48.23 B	749.00 B	9.49 B
Debt / Equity	205.98	23.13	30.16
Return on Equity	162.82%	2.94%	10.94%
Enterprise value	2.60 T	219.77 B	23.08 B
Equity Beta	1.18	1.24	0.61
Tax Rate	15.35%	21.03%	13.39%
Rf (Risk-free rate of return)	3.25%	3.17%	3.25%
RM (Required Rate of Return on the market portfolio)	9.90%	9.90%	9.90%
RE (Cost of Equity)	11.06%	11.51%	7.31%
Market risk premium	6.65%	6.73%	6.65%
WACC (Weighted Average Cost of Capital)	5.98%	7.33%	6.85%
Expected Cost of Debt Capital	3.85%	8.22%	4.17%
Total Debt	118.23 B	685.64 B	5.59 B
Total Equity	63.09 B	137.21 B	40.05 B
Value of Firm	181.32 B	822.85 B	45.64 B
Leverage	65.21%	83.32%	12.25%
Business risk	45.45%	25.07%	54.42%
Inventory Turnover	41.29%	5.39%	5.94%

Beta, also known as equity beta and leveraged beta, demonstrates the correlation between companies' share prices and overall market performance. When a company has a lower beta, this would indicate that the share price of that company is less volatile compared with the market. Based on the calculation of this article, as of September 3, 2022, Xiaomi has the highest beta among the three companies. Both Xiaomi and Apple have a beta of more than 1, which indicate that Xiaomi and Apple's stock price would be more sensitive to the volatility of the overall market. For Nokia, the beta of 0.61 would demonstrate that Nokia's stock price would be less volatile regardless of a bear or bull market.

Return on equity (ROE) measures the companies' ability to convert the equity financing capital into profit. ROE could also demonstrate companies' management team's ability to generate profit in limited equity capital. A lower ROE could reflect the management team's ineffectiveness in utilizing the equity capital. According to the calculation, ROE for Apple (162.82%) is hugely higher than for Nokia (10.94%) and Xiaomi (2.94%), which indicates Apple has a solid capability to generate profit. In contrast, Xiaomi's profit-generating ability is weaker than Apple and Nokia.

Furthermore, this article also analyzes the inventory turnover ratio. Because Apple, Xiaomi, and Nokia have a similar revenue stream – mobile phone sales. The inventory turnover ratio could compare the capability of companies to maintain a balance between their production and sales. A higher inventory turnover ratio could demonstrate that the market has a higher demand for the products. The measurement shows that Apple has the highest inventory turnover ratio of 41.29. While the inventory turnover ratios for Xiaomi and Nokia are lower, at 5.39 and 5.94, respectively.

WACC stands for what it takes to raise an extra dollar of capital and is calculated by averaging the ratio of all sources of capital (debt and equity) in a company. The lower the WACC, the higher the market value the company might have. There is an inverse relationship between WACC and market value. According to the calculated table, it can be seen that comparing the WACC of the three companies, Apple's WACC is the lowest (that is, 6%), while Xiaomi and Nokia are higher (7%).

Leverage represents the amount of debt a company uses to finance its assets. High leverage could indicate that the project has high risk, but it also brings high rewards. In addition, a high leverage ratio basically means that the company is in a stage of economic prosperity. Comparing these three companies, Apple and Xiaomi both have high leverage ratios of 65.21% and 83.32%, respectively. And Nokia has a meager leverage ratio of 12.25%.

Business Risk is usually explained as whether the company's revenue can meet its expenses, thereby bringing additional benefits to investors. In general, companies with high business risk tend to have a greater risk; that is, the company cannot be profitable due to various reasons and then more likely to be bankrupt. As can be seen from the data, Xiaomi has the lowest Business Risk among the three companies, which is 25.07%. Apple and Nokia followed with 45.45% and 54.42%, respectively.

4. Discussion

According to the quantitative results above, Nokia has the highest business risk compared to Xiaomi and Apple, which indicates that the profitability of Nokia itself would be relatively low due to some factors (e.g., management method). Furthermore, 10.94% of ROE for Nokia is relatively low, which indicates the company management of Nokia could not effectively utilize equity to generate profit.

Moreover, the inventory turnover ratio demonstrates how often a company has sold and replaced inventory during a given period. Based on the information mentioned before, Apple's inventory turnover ratio is higher than Xiaomi's and Nokia's. As such, Apple would have lower inventory costs compared to others. This ratio could also demonstrate the high popularity of Apple products. Therefore, it is fair that Apple has a stronger ability to generate profit than Xiaomi and Nokia.

However, a stronger profit-generating ability could not ensure that investing in Apple stock could bring the most significant benefit to the investor. Apple's market share and size are enormous, the stock has risen with the influx of funds. It is risky to take a stake in Apple in this situation since much more capital injection is needed to obtain a positive return. As such, Apple might not be an appropriate target for investors who tends to earn a stable profit from the investment. Meanwhile, the business risk of Xiaomi is relatively low. Even though Xiaomi’s management team is less capable than Nokia and Apple in utilizing equity to generate profit, Xiaomi has the potential to grow further due to its cost-leadership strategy. Combing lower business risk with Xiaomi’s focus on R&D, Xiaomi’s stock would be a better choice for investors who prefer a relatively stable return on investment.

5. Conclusion

This article mainly studies the investment returns and risks involved in Xiaomi, Apple, and Nokia. Apple has a higher brand recognition than the other two companies, and its unique marketing methods and product design have won the first mobile phone sales. The risk is that Apple’s high share price and large company size require a huge capital to be stationed to have a positive return. As an emerging industry specializing in the Chinese mobile phone market, Xiaomi has excellent cost control and rising brand recognition. As such, investing in Xiaomi obtains a lower risk and is more likely to generate profit than Apple and Nokia. As a veteran manufacturer, Nokia's current management method and strategy are unable to bring Nokia to the top list of the smartphone industry. Nokia’s stock price and future prospects might not be optimistic in the future, so the risk of investing in Nokia would be the highest.

This paper analyzed the quantitative metrics in theoretic and logically predicted the future development of Apple, Xiaomi and Nokia. However, it would not be accurate in the real world since everything in the world changes fast. In the subsequent analysis, people could further focus on those companies' stock prices and annual report information to grasp the company's future direction.

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