

## Analyzing the reasons for Apple's success

Yuzhen Yang

### Abstract:

Apple is a technological company that designs and manufactures personal computers, smartphones, tablets, and related accessories. The portfolio of Apple products includes the iPhone, MacBook, iPad, Apple Watch, and Apple TV. It also gets consumers various software applications such as iOS, macOS, watch OS, Apple Pay, Apple Care, and iCloud. Digital content is sold through the App Store, Apple Music, and News. The company's business spreads universally in the Americas, Europe, the Middle East, Asia, and Africa, with headquarters in Cupertino, California. It is the most valuable publicly traded company worldwide, with US\$394.3 billion in 2022 revenue.

**Keywords:** Apple, Success, Company, Revenue

### Background

Apple is a technological company that designs and manufactures personal computers, smartphones, tablets, and related accessories. The portfolio of Apple products includes the iPhone, MacBook, iPad, Apple Watch, and Apple TV. It also gets consumers various software applications such as iOS, macOS, watch OS, Apple Pay, Apple Care, and iCloud. Digital content is sold through the App Store, Apple Music, and News. The company's business spreads universally in the Americas, Europe, the Middle East, Asia, and Africa, with headquarters in Cupertino, California. It is the most valuable publicly traded company worldwide, with US\$394.3 billion in 2022 revenue. [1]

#### Organizational Structure

Apple Inc. is a corporation, and thus, the leading share of the company is held by institutions, which accounts for 54.20%. Apple has a hierarchical organizational management structure. Under the CEO, there are six senior executive officers and nine key directors. [2]

### Managerial Responsibilities & Agency Conflicts

Apple's Board of Directors oversees the CEO and supervises managers in the competent. They also must forecast potential risks related to the company. In responsibility to shareholders, the Board of directors ensures the Apple is capable of paying interest to shareholders. The Board of Apple conducts a unique leadership structure in which the roles of CEO and Chairman are separated. It facilitates the Board's ability to govern corporate affairs and best serve its shareholders. The Board also believes that it makes the CEO focus on managing Apple's arm with an independent Chairman's experience.

Apple's executive officers also play an essential role in the

company. The executive team is composed of Ms. Adams, Mr. Marstri, Ms. O'Brien, and Mr. Williams. Ms. Adams is responsible for overseeing all legal matters related to Apple. At the same time, Mr. Maestri considers the financial part of the company, such as financial planning, cash flow, and tax functions. Ms. O'Brien oversees Apple's retail and online teams and Apple's People teams. World operations and customs service are driven by Mr. Williams, who also looks into the development of the Apple Watch. Apple developed an executive compensation program that compensates executive officers with shareholders' interests to encourage them to provide good quality work. The compensation process over year and unmodified in 2020 due to COVID-19. [4]

In the early period of Apple, founders were forced to sell off most of their shares to investors and the broader stock market. It reinforced their power to

Further, take control of the company's operations, especially cash flow allocation. In 2012, Apple shareholders attempted to get some of Apple's cash reserves regarding dividends. However, Apple's management refused and claimed that it planned to utilize cash reserves to facilitate future expansion and other pay-off shareholders. Nonetheless, the shareholders used their power over management to push Apple to pay out approximately 72% of their operating cash flow. [5] As a result, Apple might lose its advanced position in technology.

### Portfolio Theory & CAPM

The Modern Portfolio Theory (MPT) is an approach to selecting investments to maximize overall returns with an acceptable level of risk. Risk-averse investors frequently use the method to construct efficient and diversified portfolios. [6] The Kurv Apple (AAPL) 1.75x Short Daily ETF is a good choice for risk-averse investors who

purchase stocks in multiple companies. The ETF fund is relatively cheaper and comes with low risks. In Apple, the fund is replicated 1.75 times daily, which is riskier than others due to the use of leverage. [7] However, the fund is only suitable for investors who actively monitor their stocks during a single day. If the Underlying Stock's performance is flat, it is possible to lose money for a period longer than a single day.

In modern society, the Capital Asset Pricing Model (CAPM) is considered a famous finance model. It calculates the expected return of an investment by estimating the relative return on both market and risk-free assets. [8] According to the information collected from Apple, the current risk-free rate is 2.25, and the beta is 1.99. [9] Calculate the data using the CAPM formula, and the expected market return of Apple is 19.1053%. Additionally, Apple's 5-year standard deviation is 8.49%, which implies low risk of investing in Apple Inc. [10]

## Valuation using NPV

In 2022, Apple's sales were \$5.7 billion, which decreased 3% in total. However, the net profit was -\$4.9 billion, with operating expenses of 10.2 billion. Net cash used in 2022 for operating was \$6.8 billion. The average price was 7.24 per share, and the dividend yield was 0.55%. [11] Although the dividend rate was relatively low compared to other companies, it offered the best way to beat inflation (3%). Compared to shares of Apple, an Apple Inc. bond issued on 8/8/2022 was priced at \$92.05 (18.09.2023), with a coupon rate of 3.25% and a maturity date of 8/8/2029. [12] The coupon was paid twice a year, meaning T equals 14. According to the NPV formula, the Net Present Value would be 110.828 per bond.

## Conclusion

Apple's business is extremely profitable, and its buyback program contributes to its share price. With Apple's outlook during the year, the stock price witnesses a 9.7% upward change, closing on Sept.6. [13] . I will buy a bond at a low price and delete the app. Once the value of the bond rises considerably, I sell the bond at a higher price. Apple's sales of products and services are impressive, particularly the iPhone. However, the core iPhone market is reaching a saturation point, so market growth will slow unless Apple innovates the device to remain competitive. Moreover, I am a full-time student. I do not have that much time to monitor the bond day by day.

## References

[1] Levy, S. (2023, September 15). Desktop publishing revolution. Encyclopædia Britannica. <https://www.britannica.com/topic/Apple-Inc/Desktop-publishing-revolution>

[2] Zhang, X. (2022, January). Analysis of business model and financial operation: Evidence from Apple.

[https://www.researchgate.net/publication/361832558\\_Analysis\\_of\\_Business\\_Model\\_and\\_Financial\\_Operation\\_Evidence\\_from\\_Apple](https://www.researchgate.net/publication/361832558_Analysis_of_Business_Model_and_Financial_Operation_Evidence_from_Apple)

[3] Adams, K. (2022, January 6). Directory Listing /Archives/edgar/data/320193/000119312522003583. Directory List of /Archives/edgar/data/320193/000119312522003583.

<https://www.sec.gov/Archives/edgar/data/320193/000119312522003583>

[4] Adams, K. (2021, January 5). UNITED STATES SECURITIES AND EXCHANGE COMMISSION. Definitive proxy statement.

<https://www.sec.gov/Archives/edgar/data/320193/000119312521001987/d767770ddef14a.htm#toc>

[5] Misamore, B. (2018, June 21). How Google & Apple Approach the Principal-Agent Problem: HBS Online. Business Insights Blog.

<https://online.hbs.edu/blog/post/apple-google-principal-agent-problem>

[6] Team, T. I. (2023, August 29). Modern Portfolio Theory: What MPTIs and How Investors Use It. Investopedia.

<https://www.investopedia.com/terms/m/modernportfolio-theory.asp>

[7] Kurv Investment Management LLC. (2023, March 24). SUMMARY PROSPECTUS. SEC.gov.

[https://www.sec.gov/Archives/edgar/data/1848758/000138713123004121/zaap-497k\\_032423.htm](https://www.sec.gov/Archives/edgar/data/1848758/000138713123004121/zaap-497k_032423.htm)

[8] Kenton, W. (2023, May 24). What Is the Capital Asset Pricing Model (CAPM)? Investopedia.

<https://www.investopedia.com/terms/c/capm.asp>

[9] Yahoo. (2023, September 18). Apple Inc. (AAPL) Valuation Measures & Financial Statistics. Yahoo! Finance.

<https://finance.yahoo.com/quote/AAPL/key-statistics>

[10] Dybek, M. (2022, October 29). Apple Inc. (NASDAQ:AAPL): CAPM. Stock Analysis on Net.

<https://www.stock-analysis-on.net/NASDAQ/Company/Apple-Inc/DCF/CAPM>

[11] neonode. (2023, March 9). Q4 and FY 2022 Earnings Call. SEC.gov.

[https://www.sec.gov/Archives/edgar/data/87050/000121390023018701/ea174629ex99-2\\_neonode.htm](https://www.sec.gov/Archives/edgar/data/87050/000121390023018701/ea174629ex99-2_neonode.htm)

[12] STU. (2023, September 18). APPLE INC.DL-NOTES 2022(22/29) Bond | Markets Insider. Business Insider.

[https://markets.businessinsider.com/bonds/apple\\_inc-dl-notes\\_202222-29-bond-2029-us037833en61?op=1](https://markets.businessinsider.com/bonds/apple_inc-dl-notes_202222-29-bond-2029-us037833en61?op=1)

[13] Divine, J. (2023, September 7). Should You Buy Apple (AAPL) Stock? | Investing | U.S. News.

<https://money.usnews.com/investing/stock-market-news/articles/pros-and-cons-to-buying-apple-aapl-stock>