

Financial Project Write-up Section 6 (Group 3): Apple Inc.

Sohum Balsara, Behnji Dessources, Joseph Muslu, Biak Chin, Anushka Kalidindi, Bakir Jameel

I. Company Background

Apple Inc. was founded in 1976 by Steve Jobs, Steve Wozniak, and Ronald Wayne. Apple designs, manufactures, and markets consumer electronics, software, and services. Its product lineup includes the iPhone, iPad, Mac, Apple Watch, and Apple TV, complemented by software such as iOS and macOS. Services like the App Store, Apple Music, and iCloud significantly contribute to its revenue, supported by a global retail and online presence. Apple's vertical integration and control over hardware and software provide a competitive edge.

Apple is publicly traded on NASDAQ under the ticker symbol AAPL and is a key component of the Dow Jones and S&P 500 stock indices. In fiscal year 2023, Apple's stock rose 14.2%, from \$148.95 to \$170.15, driven by consistent performance, product launches like the new MacBooks with the M4 ARM chip, and steady financial management. Broader market conditions, including global supply chain challenges, geopolitical tensions, inflation concerns, and fluctuating consumer spending, influenced investor sentiment during the year. However, Apple's strong financial foundation, characterized by steady revenue growth, high profitability, and stable inventory management, served as a stabilizing factor. Analysts noted Apple's stock tends to recover quickly from market downturns, reflecting investor confidence in its ability to weather economic uncertainties.

Apple maintained a consistent 25% net profit margin, improved its inventory turnover ratio from 38.79 to 37.98, and reduced its debt-to-equity ratio from 5.96 to 4.67. Additionally, the P/E ratio increased from 24.22 to 27.62, indicating growing market expectations. These factors,

combined with Apple's ability to adapt to external pressures, highlight its strong financial health and resilience, aligning well with our financial analysis.

II. Understanding the Annual Report and 10K: Profit, Capital, and Cash Flow

Apple's financial performance in 2023 showed a slight decline compared to the previous year. Sales revenue decreased by 2.79%, from \$394.33 billion in 2022 to \$383.29 billion in 2023. Similarly, net income fell by 2.81%, from \$99.80 billion to \$97.00 billion. Despite this, Apple maintained a consistent net profit margin of 25% in both years. This trend may be driven by Apple's supply chain and production challenges. There was increased demand for semiconductor chips used in Apple phones amid problems for suppliers. As Bloomberg states "Put simply, the belt of the planet where natural disasters will intensify most rapidly due to global warming... is precisely the one where Apple has built its manufacturing footprint." Additionally, demand for smartphones is slowing as Asia is a major factor in positive sales growth and "Chinese smartphone purchases, which used to average 450 million devices a year at their peak, have shrunk to 270 million per year — contributing as a major cause behind the decline in global smartphone sales" per CNBC.

Apple's gross margin percentage was 44.13% in 2023, 43.31% in 2022 and 41.78% in 2021. The steady increase is likely due to their new products like their phone line, Airpod and AirTag gaining popularity and high margin services like Cloud Services and AppleCare. Covid 19 may also be a factor as society largely shifted and depended on technology and the internet which worked in favor of Apple.

In 2023, the cash flows from operating activities in Apple totaled to \$110.543 billion. This differs from the net income of \$96.995 billion. The factors that have contributed to this difference include depreciation and amortization expenses, revenue recognition and expense

recognition, gains or losses on sales of assets, and changes in working capital, which are recognized differently across cash flows to net income.

Apple's capital structure for 2022 comprised of 85.64% debt, and 14.36% equity, changing to 82.37% debt and 17.63% equity. Apple is highly leveraged with debt, albeit decreasing their reliance in 2023 slightly. This can be potentially dangerous, however as long as Apple continues to pay off their debt, it allows them greater flexibility in operations. In comparison, Microsoft capital structure of debt changed from 54.35% to 49.94% over 2022 to 2023, with capital structure of equity changing from 45.65% to 50.06%. Apple's nor Microsoft's change in capital structure is significant.

Apple's audit in 2023 was conducted by Ernst & Young LLP, which has been serving as Apple's auditor since 2009. The previous auditor was KPMG International Limited. Ernst & Young LLP did not identify any material weaknesses. They also noted on a critical audit matter "involving \$19.5 billion in gross tax benefits, of which \$9.5 billion, if recognized would impact Apple Inc's effective tax rate" per the SEC filing.

III. Financial Analysis and Recommendations

Profitability Ratios

1. Return on Equity (ROE):

ROE measures how effectively a company uses shareholders' equity to generate profit. A higher ROE indicates better efficiency. Apple's ROE slightly decreased from 1.75 to 1.72, which is still considered excellent. In comparison, Microsoft's ROE decreased a greater amount from 0.47 to 0.39. This decline in Microsoft's ROE indicates weaker profitability. Apple's ROE remains far better despite the decrease, suggesting strong management of equity to maximize returns.

2. Return on Assets (ROA):

The efficiency with which a company uses its assets for generating profits is measured by

ROA. Apple had a steady ROA of 0.28 over the last two years, representing that the assets are stable and effective. The ROA of Microsoft, however, declined from 0.21 to 0.19 due to the deterioration of efficiency. Apple is much ahead of Microsoft in terms of ROA, which means that Apple is better at utilizing its assets to get profits.

3. Net Profit Margin:

Net profit margin refers to the part of revenue that goes into profit. The higher the margin, the better the cost controls or pricing power. Apple's net profit margin stood at a constant 0.25 over the past two years, reflecting profits earned consistently. Microsoft's margin fell from 0.37 to 0.34, still ahead of Apple. Although Apple's net profit margin appears stable, it is lower than Microsoft's, indicating there is some room for improvement in either cost control or revenue generation.

Overall Summary:

Profitability ratios show that Apple excels in utilizing both equity and assets to generate returns. However, its lower net profit margin indicates weaker control over costs or pricing compared to Microsoft. Overall, Apple is more profitable but must improve its margin to enhance competitiveness.

Asset Turnover Ratios

1. Total Asset Turnover Ratio:

Total asset turnover indicates the efficiency of a company to generate sales from total assets. Apple's ratio reduced slightly from 1.12 to 1.09, and from 0.57, Microsoft's ratio dropped to 0.55. Although there was a decrease, the turnover of Apple is nearly twofold compared to Microsoft, meaning that the assets are utilized much more effectively.

2. Fixed Asset Turnover Ratio:

This ratio measures how well a company uses its fixed assets, such as property and

equipment, to generate revenue. Apple's ratio fell slightly from 7.46 to 6.90, Microsoft's ratio also declined from 3.28 to 3.09. Although both companies saw declines, Apple remains significantly more efficient in using fixed assets. Apple's ratio is strong and shows effective management of fixed investments.

3. Receivables Turnover Ratio:

RTR reflects how quickly a company collects its receivables where a higher ratio indicates faster collections. Apple's ratio dropped from 14.48 to 13.29, while Microsoft's ratio decreased from 4.82 to 4.56. Even with the decline, Apple's collection efficiency is far superior to Microsoft's, highlighting effective credit management.

4. Inventory Turnover Ratio:

Inventory turnover ratio shows how efficiently a company manages and sells its inventory. Apple's ratio decreased slightly from 38.79 to 37.98, while Microsoft's ratio improved from 19.65 to 21.10. Despite Microsoft's improvement, Apple's inventory management is significantly stronger, depicting a fast-moving inventory system.

Overall Summary:

Asset turnover ratios demonstrate that Apple operates with greater efficiency than Microsoft across all metrics. Despite minor declines, Apple excels in utilizing assets, collecting receivables, and managing inventory, which are critical for sustaining competitive operational performance.

Liquidity Ratios

1. Current Ratio:

Current ratio measures a company's ability to cover short-term liabilities with its current assets. A ratio above 1.0 is generally favorable. Apple's ratio increased from 0.88 to 0.99, showing an improvement in liquidity. Microsoft's ratio slightly declined from 1.78 to 1.77,

but it remains significantly higher than Apple's. While Apple is improving, the ratio still falls below the benchmark of 1.0, indicating potential liquidity concerns compared to Microsoft's.

Overall Summary:

Apple has improved its liquidity, but its current ratio still falls below the ideal threshold. While progress is encouraging, Apple must continue to strengthen its liquidity to match or surpass Microsoft's short-term financial stability.

Solvency Ratios

1. Times Interest Earned Ratio:

Times interest earned ratios is the ability of a company to generate enough income to cover its interest costs . For Apple, the ratio moved upwards marginally from 5.11 to 5.23, implying improved interest payment management. In contrast, Microsoft's ratio fell sharply to 5.39 from 7.81. In spite of the fact that its ratio is still relatively higher, Apple is catching up owing to a stronger financial position.

2. Debt-to-Equity Ratio:

Debt to equity ratio measures a company's financial leverage. A lower ratio indicates less reliance on debt. Apple's ratio improved significantly from 5.96 to 4.67, reflecting reduced financial risk. Microsoft's ratio also improved from 1.19 to 1.00, which remains far lower than Apple's. While Apple has made progress, it still relies more heavily on debt, which poses higher risk compared to Microsoft's conservative leverage.

Overall Summary:

Solvency ratios indicate that Apple is reducing its reliance on debt and improving its ability to cover interest payments. However, it remains more leveraged than Microsoft, which could be a concern if economic conditions worsen.

Market Ratios

1. Price/Earnings (P/E) Ratio:

This ratio underlines expectations and confidence by investors on a company's future growth, where a high ratio can imply that it has been overvalued. The rise in Apple's P-E ratio from 24.22 to 27.62 indicates heightened investor confidence. However, Microsoft has shown a greater increase in P-E ratio growth from 25.92 to 34.63, hinting at greater market optimism regarding Microsoft, both ratios are relatively high and exhibit signs of overvaluation but might just as well be indicative of high growth potential.

2. Dividend Yield Ratio:

Dividend yield ratio shows the return on investment from dividends. A higher ratio is more attractive to shareholders. Apple's ratio declined from 0.60 to 0.55, while Microsoft's ratio also decreased from 0.99 to 0.81. Both companies reduced dividend payouts, but Microsoft continues to offer a higher yield, making it more attractive to income-focused investors.

Overall Summary:

Market ratios suggest growing investor confidence in both Apple and Microsoft, though Microsoft outpaces Apple in market optimism and shareholder returns. Apple's improving P/E ratio indicates growth potential, but the lower dividend yield may deter some investors.

Three Recommendations

A. Apple should not receive short-term loans due to its below-optimal current ratio of 0.99 as it can indicate potential liquidity problems. While the current ratio rose from the previous year, .88, the risk is still the ratio not being over 1, which is the minimum, and its previous years being low as Apple need to maintain a healthy ratio (1.5 to 3 according to Akaunting.com).

B. Apple should receive long-term loans due to its improving debt-to-equity ratio of 4.67, despite higher leverage. Potential concerns include inflation and tension with global markets, like China which accounts for 19% of total sales (Forrester), however, that applies to any given company.

C. Investors should hold Apple stock due to its solid performance but higher leverage. Investors should buy Microsoft stock for its better dividend yield, lower leverage, and growth potential since Microsoft has more products that are broad (platforms, apps, devices, etc.) whereas Apple's main source of revenue is their physical devices (phone, laptop, tablet).

Citations

- https://northeastern-my.sharepoint.com/:x:/g/personal/balsara_s_northeastern_edu/EX92_VA6Z5xJrnwjbuySvuABnfkQcrBgsc4f-5yp3y9-GA?e=4KZd7Z
- <https://www.bloomberg.com/graphics/2023-opinion-apple-supply-chain-climate-change/>

- <https://www.cnn.com/2023/08/17/global-smartphone-market-to-hit-decade-low-apple-could-take-top-spot.html>
- <https://www.sec.gov/ix?doc=/Archives/edgar/data/0000320193/000032019323000106/aapl-20230930.htm>
- <https://www.sec.gov/ix?doc=/Archives/edgar/data/789019/000095017024087843/msft-20240630.htm>
- <https://www.sec.gov/ix?doc=/Archives/edgar/data/0000789019/000095017023035122/msft-20230630.htm>
- <https://www.forrester.com/blogs/apple-sales-and-profits-analysis-for-fy-2023-top-10-insights/>
- <https://akaunting.com/blog/what-is-a-good-current-ratio>