**Introduction**

This report employs charts and graphs to provide a three-year summary, but concise financial analysis of Apple Inc. based on specific firm factors. This includes liquidity ratios, profitability ratios, solvency/debt management, asset utilization, and investor/market ratios.

1. **Liquidity Ratios**

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Figure 1

Ratios used in this report to measure liquidity include cash ratio, current ratio, quick ratio, defensive interval, inventory days, payable days, receivable days, net trading cycle, working capital as a % of sales, and working capital. These ratios were demonstrated by the use of bar charts as shown above. It is observed that the cash ratio decreases yearly, this is an indication that cash reserves reduce in relation to current liabilities. This implies that the company may not be able to settle short-term obligations with only cash. Notwithstanding the company still has significant cash reserves, thus, the reduction from 2020 to 2022 implies the company might be utilizing cash reserves for other financial/investing activities such as paying debt, buying back shares, and so on. The next ratio is the current ratio, a current ratio above 1 is good. The current ratio of the company reveals that the company’s short-term obligations exceed its short-term assets in 2022. However, in 2020 and 2021, the current assets cover the current liabilities. A low current ratio and decreasing cash ratio are not necessarily alarming if the company is effectively managing its liquidity. Throughout the three years, the quick ratio of the company remains relatively stable, by implication, Apple easily meets short-term liabilities with liquid assets. The decline in 2021 followed a recovery in 2022. The defensive interval of the company decreases, this reveals that the company has fewer days of coverage to continue its operations that are based on liquid assets. The inventory days reveal that the company is selling its products faster. The reduction of this ratio in 2022 shows an increase in demand and efficiency in inventory management. The payable day increases which suggest that the company takes longer days to pay its bills, this is an indication of better working capital management. The receivable day's value remained fairly consistent between 2021 and 2022, indicating stable cash inflows. The net trading cycle is negative, which depicts that the company receives money from its customers faster than it pays its suppliers. The company has a highly efficient working capital structure. The decline in the company’s working capital as a % of sales is an indication that Apple does not have enough working capital relative to its sales. Similarly, working capital decreases, this shows that the company relies less on working capital to generate its sales.

**2. Profitability Ratio**



Figure 2

The ratios used here to measure profitability are gross margin, EBITDA margin, EBITDA, EBIT margin, EBIT, and Net margin from 2020 to 2022. A line graph is used to illustrate each ratio. The gross profit of the company consistently improved from 2020 to 2022. This indicates that Apple’s efficiency in managing its production costs increased. The net margin rises from 2020 to 2021, but a slight drop occurred in 2022, which might be a rise in expenses or some other costs in 2022. The high value of the net margin shows that the company is making a profit with the ability to convert revenues into actual profits after accounting for operating and non-operating costs. Thus, the constant improvement in gross and net margins suggests that the company has been successful in managing its production costs, and expenses associated with its production. The line graph of EBIT (Earnings before Interest and Taxes) shows a significant increase from 2020 to 2021, but this decreases slightly in 2022. This decrease indicates that there is no growth in that period. This may also suggest that the company faced dwindling revenue growth or higher costs, preventing the firm from increasing its EBIT. In the same vein, EBIT Margin, EBITDA (Earnings before Interest, Taxes, Depreciation, and Amortization), and EBITDA Margin increase in 2021 but decrease slightly in 2022. The decrease in these ratios is still higher than the figures in 2020 which signifies that the company can maintain a substantial amount of its revenue as operating profit after the decrease. Conclusively, figure 2 shows that the company is efficient in managing its costs with strong underlying business performance.

**3. Solvency/ debt management**



Figure 3

Figure 3 above provides the solvency and debt management ratios illustrated by a bubble plot. The value of debt to equity (D/E), and debt to total assets, increases from 2020 to 2022. This trend implies that the company relies on debt financing, which might connote that the company has been taking on more debt to support its operational needs and growth. Taking more debt for either growth or operational activities in a favourable economic environment can boost the value of the shareholders or this can also increase financial risk. As the firm becomes more exposed to a rise in interest rate when there is economic turndown. The long-term debt-to-capital ratio of the company decreased from 3.02 in 2020 to 2.83 in 2021 and further decreased to 2.28 in 2022. The chart shows a downward trend which denotes that the firm has been actively managing its long-term debt in relation to its capital. This may be a result of paying off or refinancing high-cost long-term debts. This can be a positive sign for the company’s long-term financial health, as the burden of paying debts or interest expense are reduced. Furthermore, this downward trend may connote that the firm focuses on reducing leverage and improving its capital structure relying more on short-term debt and equity. The times interest earned ratio increased significantly from 23.29 in 2020 to 45.68 in 2021 but slightly decreased to 42.67 in 2022. If this ratio is high there is a stronger indication that the company can meet up with its interest obligations. This will influence creditors and investors positively. The substantial rise in 2021 indicates that the earnings of the company have grown significantly compared to its interest obligations. This gives a favourable buffer for servicing its debt. The decrease recorded in 2022 shows a negligible fall in this buffer. Thus, the ratio still shows that the company has a strong ability to cover interest payments and is efficient in risk management. The overall high level of coverage ratio implies the company is financially healthy and able to manage its debt efficiently. Free cash flow to equity (FCFE) per share increased significantly in 2021 from 275.45 in 2020 to 427.33 in 2021 and 451.29 in 2022. Likewise, FCFE increased substantially throughout the period. The increase in these ratios suggests that the company can distribute profits to shareholders despite maintaining its operations and servicing its debt. Finally, the analysis of solvency and debt management ratios for three years from 2020 to 2022 shows the company has long-term financial stability.

**4. Asset Utilization**



**Figure 4**

**All the ratios under** Asset utilization (total asset turnover, fixed asset turnover, inventory turnover, and return on assets (ROA)), increased. The rise in all the ratios shows the company’s ability to efficiently and effectively optimize the use of its assets. Again, the ratios are all positive suggesting that the company has a stronger operational system and is financially sound.

**5. Investor/market ratios**



Figure 5

The ratios depicted in Figure 5 are collectively called investor or market ratios. They provide information about profitability, prices, earnings, and returns of a company. Such information is certainly a public characteristic that can attract or sidetrack potential investors to maximize their net worth. A brief and logical analysis of each of the ratios are presented.

The price to Equity (P/E) ratio refers to the market value/price of stock to the earnings of shareholders. A high ratio is justified for a high price relative to earnings. Evidence in the figure shows that the company’s P/E ratio declined considerably from 2020 to 2023. Probably, this could be a result of either an increase in earnings or a fall in prices. The earnings per share (EPS) of the company rises with time and reached the highest in 2023. This is an indicator that the prices of the company are increasing simultaneously with the earnings that are allocated to each stock. The ratio of price to book value (P/BV) or price per book value decreases sharply. This is a sign that the stock of the company is devalued or simply the market value of the company is relatively low compared to its book value. This suggests that no matter how stock prices rise, if the book value is all the time high, the stock will remain undervalued. We see that the book value per share of the company improved, implying a healthy financial position of the company, and a sustainable increase in the net worth of shareholders. This can serve as an attractive measure to investors buying the stock of this company. As indicated in the figure, the dividend payout ratio decreases over the years, suggesting very few earnings are distributed as dividend income to shareholders, while a large proportion of earnings are retained for expansion. Most likely this company is a growing firm with many profitable investments. The dividend per share of the company seems to have increased. It is observed that the company has increased its earning capacity to pay dividends to shareholders. Since investors like consistent payment of dividends, investors will be attracted to buy the stock of this company. The company exhibits a rising dividend yield. This means a decrease in the dividend payout, an increase in prices, and an appreciation of the market value of the company. It is pretty outstanding to see that the company’s return on equity, return on capital employed and return on asset are increasing with time. This means the management of this company has used the assets of this company to create profit or effectively employed the capital to maximize earnings. The company is efficient and effective in utilizing resources. The company has an increased ratio of enterprise value to earnings before interest, tax depreciation, and amortization. This implies that the company has become more expensive compared to its earnings. It is seemingly an overvalued firm. The ratio of enterprise value to total revenue of the company rises, suggesting the market values of debt and equity increase in proportion to revenue. Investors of this company will therefore be satisfied with the revenue growth.

**Growth Rates**

**Sales**



**Operating Expenses**



Figure 6

Analyzing the growth rate of a company is essential to understand the financial position of the company. It is also an important way of revealing the performance of the management term over the time horizon. Therefore, we provide the analysis of the Apple company based on the several elements in which the growth rate can be observed. These are products, services, net sales, gross profit, depreciation and amortization, share-based compensation expense, deferred income tax expense/(benefit) and myriad/sundry expenses. The analysis covers a period of three years, 2020 through 2022. In 2021 the growth rate of products was 35%, but this declined to 6%. This sharp reduction in the company’s growth rate might be necessitated by a fall in demand, while the astronomically unexpected rise in 2021 was induced by post-COVID excess demand, which was however short-lived. The growth rate in service accelerated to 27% in 2021, but in 2022, it declined to 14% to reveal that other competitors were striving very hard to gain market share, even as the entire market was maturing over time. The sales growth rate was 33% in 2021. This significantly dropped to only 8% in 2022. This implies that the net sales of the company is growing at a reduced rate. This should trigger a concern for the management if they care about the future financial performance of the company. In the same manner, the gross profit growth rate went down from 46% in 20221 to 12% in 2022. This reduction in the growth of gross profit is still an indication of healthy performance, but the management should be aptly cautious of sustaining future profit. This reduction in the gross profit growth rate is induced by factors such as a reduction in sales, a hike in operational costs and an increase in competition. Depreciation/amortization growth rate falls from 2% in 2021 to -2% in 2022. This is a reflection that few capital assets are added to the stock of capital in the company or most of the assets have fully depreciated. Deferred income tax expenses appeared to be volatile. It was 21.20% in 2021 but reduced to -1.19% in 2022. This reduction in tax rate implies that the company is benefiting from reduced tax burdens or postponed tax assets. Share-based compensation expenses decline from 16% in 2021 to 14% in 2022. This means the company’s incentives to shareholders in terms of either bonuses or splits have drastically reduced. Other operating expenses of sundry nature dropped from 0.52% in 2021 to -1.79% in 2022 indicating that some of the sundry expenses have been dispensed or reduced.

**Main line items of the balance sheet**



Figure 7

Main line items of the balance sheet presented on the bar chart above are total current assets, total non-current assets, total assets, total current liabilities, total non-current liabilities, total liabilities, and total shareholders' equity and total liabilities and shareholders' equity. These main line items give a quick view of the financial standing or condition of a firm at a particular time. Total current assets, which represent the short-term resources of the firm that are supposed to be converted into cash within one year and total assets which is the combination of total current assets and total non-current assets all show no growth in 2022. The stagnant performance of current assets indicates that there is no significant improvement in the company’s liquidity position. This may be caused by delays in converting assets into cash. Thus, without growth in total current assets, it might be difficult for the company to meet up with short-term obligations promptly. Total non-current assets (long-term investments, property, plant, equipment, and other assets) growth decreases from 0.20 in 2021 to 0.01 in 2022. The high growth of total non-current assets in 2021 suggests that the company significantly increased its capital investment in that period compared to its investment in 2022. Total current liabilities increase from 0.19 in 2021 to 0.23 in 2022. This implies that the company has acquired more short-term debts/obligations, in the form of short-term loans, account payables or other liabilities. Thus, if total current liabilities increase continually without an associated increase or rise in total current assets, it will be challenging for the firm to meet its short-term obligations. However, total non-current liabilities decrease over the period. This connotes that the company is reducing its long-term debts, reducing leverage risk. Similarly, the firm total liabilities which is the combination of both current and non-current liabilities also decline. The total shareholders' equity is the owners’ claim on the company’s assets once all liabilities have been settled. Meanwhile, the total liabilities and shareholders' equity is the sum of all liabilities and equity. The company recorded a decline in these items. A substantial and continuous decline in shareholders' equity will raise serious concerns about the financial health and stability of the company.

**Margins as a % of net sales**

**Margins as a % of net sales**



**Operating expense/income**



Figure 8

The analysis of Margins as a percentage of net sales and each operating expenses are done using a pie chart and dot plot respectively (2020-2022). It is essential to evaluate key margins as a percentage of net sales, cost of goods sold, and gross profit margin are used here. Also, the operating expenses like depreciation and amortization and share-based compensation expenses of the firm are examined. The cost of goods sold (COGS) of the company over the three years declined consistently. The decline of COGS reveals that the company is efficient in its operations as the cost of producing goods is reduced. This decrease also shows that the company has better supply chain management, can negotiate excellently with its suppliers and that production processes are optimized. Therefore, the company can make significant profits. The gross profit margin is part of sales revenue that is above the COGS, and it shows the ability of the firm to manage its pricing and input costs over time. The gross profit of the company rose from 38.23 in 2020 to 43.31 in 2022. This is an indication that the company succeeded in adjusting production costs while still maintaining revenue growth.

The operating expenses of the firm include the costs involved in running the company’s core business. They are depreciation and amortization, share-based compensation, deferred income tax expense/benefit, and other expenses. It is seen that depreciation and amortization constantly decreased from 4.03 in 2020 to 2.82 in 2022, implying that the firm has experienced a decrease in its non-cash expenses (wears and tears of assets). More efficient utilization of existing or old assets or less capital-intensive investment might cause this steady decrease. Share-based compensation expenses also remained relatively stable but fluctuated slightly from 2.49 in 2020 to 2.16 in 2021 and 2.29 in 2022. These values are almost in the same range, which suggests that the policy of the company regarding employee stock-based compensation remained consistent throughout the period. However, the deferred income tax expense/benefit shows significant fluctuations. In 2020, 2021 and 2022 the company recorded a deferred income tax expense/benefit of -0.08, -1.31, and 0.23 respectively. The variation in deferred tax is a sign of changes in tax liability expectations, that may be fuelled by a possible shift in corporate strategy otherwise changes in tax regulations. The value of other expenses from 2020 to 2022 remained negligible. This reveals that non-operating costs have had little impact on the overall financial performance of the company.

The company’s operating income increased from 24.15 in 2020 to 30.29 in 2022. Similarly, the net profit margin increases from 20.91 in 2020 to 25.31 in 2022. This increase shows that the firm is able to manage its main business operations and operating and non-operating expenses efficiently to generate revenue. Finally, this trend reveals that the company has well-managed its operational challenges at the same time as maintaining profitability.

**Additional Items**



Figure 9

Three additional items which include income tax rate, capex as a percentage of sales, and capex as a percentage of fixed assets for the years 2020 to 2022 were analyzed using a line graph presented in Figure 9 above. These ratios further give more insights into the capital expenditure and taxation of the company. The income tax rate from 14.16 in 2020 increased to 23.24 in 2021, this sharp increase might be due to changes in tax regulations, and higher taxable income or the company no longer enjoyed certain tax incentives. However, this value decreases in 2022 to 16.43 this may be a result of an improvement in the tax planning strategies put in place that year by the company. Capital expenditure (Capex) as a percentage of sales increased from 2.66 in 2020 to 3.03 in 2021. The increase possibly may be due to an increase in operations, improving its technological infrastructure or upgrading its facilities. Nevertheless, the slight reduction in Capex may be caused by several factors such as responding to market conditions instead of expansion and focusing on optimizing existing resources. Capexas a percentage of fixed assets rose from 19.88 in 2020 to 25.42 in 2022. This rise is a sign that the company carried out significant investments in fixed assets to boost the firm’s long-term operational strength. In 2022 capex as a percentage of fixed assets decreases to 25.42 from 28.11 in 2021. This shift may be that the company, after achieving significant expansion in its investment now focuses on maintaining its assets, allocating its resources to other aspects like research and development, marketing and debt reduction among other things. Lastly, the overall metric reveals that Apple is a dynamic company that adapts different strategies to achieve its objectives and aligns with its internal goals and external economic factors.

**Conclusion**

The analysis of the financial ratio of Apple reveals several important trends in the company’s financial health and stability. While there is positive and significant growth in some of the metrics analyzed in this report. There are still some areas the firm needs to focus more attention on like the increase in total current liabilities and decrease in total shareholders’ equity. Also, the company should reconsider its investing and financing strategies to improve its asset growth, maintain a positive equity position, and ensure a healthier financial position in the future.