**Apple Inc.**

**1.0 Liquidity**

1.1 Current Ratio, Quick Ratio, Cash Ratio, Defensive Interval

Liquidity ratios are in a downward trend in the three years and that is impacting the defensive interval. The company’s position to pay its near term obligations is worsening and in 2022 current assets no longer cover current liabilities. However the short term operations are not at all yet in any danger as the company can pay its daily operating expenses for over 500 days without needing to tap into non-current assets.

1.2 Inventory Days, Payable Days, Receivable Days, Net Trading Cycle

In terms of net trading cycle the company is in a strong position. Whilst inventory days remained largely unchanged, the receivable days increased somewhat over three years meaning the company takes longer to collect payments. The increase in payable days more than compensate for this resulting in an increase in net trading cycle meaning the company keeps liquidity longer by having stronger leverage over suppliers. This improves the liquidity position.

1.3 Working Capital

A clear deterioration is visible in working capital. Current assets are not sufficient to cover short term debt obligations should they all come due. The company has no liquidity to invest in growth from its working capital compromising future growth prospects.

**2.0 Profitability**

2.1 Gross Profit, EBITDA, EBIT

The company is becoming more profitable although a slowdown in growth is visible from 2021. Gross profit is increasing meaning the company manages to increase efficiency by producing goods / providing services at a more cost effective way and/or increasing revenue. The company maintains operating efficiency shown by growing EBIT and EBITDA. Growing EBIT/EBITDA helps maintain good debt management in the event of increasing debt.

2.2 Gross margin, EBITDA margin, EBIT margin

All four profitability margins showcased growth in 2021 over 2020 but was tailing off going into 2022. The company managed to increase operational efficiency in 2021 over 2020 but that growth reduced in 2022. The slight decrease in net margin growth in 2022 over 2021 is something to watch but the company still has very strong profitability growth.

**3.0 Solvency/debt management**

3.1 Debt to Equity, Debt to Total assets, Long-term Debt to Capital, Debt Coverage, TIE

D/E increase and debt coverage ratio points to increased short term debt especially in light of EBIT growth. Strong EBIT growth explains growth in TIE and creates a comfortable buffer for the increased debt payments. Despite some short term debt growth the company remains in a very strong position to fulfil debt obligations.

3.2 FCFE per Share, FCFE

This chart is what most investors want to see. There is a massive growth in both FCFE and FCFE per share indicating that plenty of cash is left to either pay dividends, re-invest in the business, buy back shares or buy marketable securities without the need to borrow funds.

**4.0 Asset utilization**

4.1 Total Asset Turnover, Fixed Asset Turnover, inventory Turnover, ROA

The company is utilizing its assets to a greater degree to generate revenue however unchanged fixed asset turnover indicates that the company has not become more efficient in utilizing its fixed assets. A good sign is that following a small drop in inventory turnover recovered and more in 2022 and increased over 2020 meaning the company turns over its inventory more times in a given period generating more revenue. The efficiency growth seen in the increase of total asset turnover and inventory turnover translates into a growth of ROA. The ROA figure is excellent, strong utilization of assets to generate sales.

**5.0 Investor/market ratios**

5.1 P/E, EPS, PBV, BV

Both EPS and BV represent good growth. The P/E and P/BV analysis would make sense in comparison to companies in same sectors and industries.

5.2 Dividend Payout Ratio, Dividend per Share, Dividend Yield

The company has been reducing the payout ratio indicating either investing in future growth, building a safety net or buying back shares on the assumption that the price is low and it cannot get a better return on the excess cash elsewhere. The steady increase in dividend per share shows a financially stable, mature business.

5.3 Return on Investment Measures (ROE, ROCE, ROA)

From the above chart it is clear that Apple is using its equity, capital and assets very efficiently to generate returns. The higher ROE to ROA indicates that the company has a lot of debt but ROCE shows that both debt and equity is well utilized and generating returns for all investors.

5.4 EV, EV/EBITDA

The EV/EBITDA valuation metric shows that the company maybe overvalued and this would explain the ratio decline as strong earnings hasn’t been followed by equal price increases.

**6.0 Sales Growth Income Statement, Balance Sheet**

6.1 Sales Growth Rates, Gross Profit

Growth across the main sales items show a spike in 2021 attributable in larger part to products. Could it be delayed purchase due to COVID? There is a near return to 2020 levels in 2022. No clear trend over the three years.

6.2 Operating Expenses Income Statement

The company experienced an increase in operating expenses in both line items, accelerating in 2022. The R&D component could forecast a stronger future growth prospect whilst the SG&A could negatively impact profitability.

6.3 Balance Sheet Current Assets

Overall there was a decline in total current assets. Worth highlighting the year 2021 as this chart shows the effects of the global shutdown. Huge increase in accounts receivable likely due to late payments and a massive inventory built up possibly due to decreased demand during the pandemic. This later cleared as the world opened up, also shown by the spike in sales and the inventory decline into 2022. Cash and equivalents have been decreasing over the three years, marketable securities declined in 2021 and 2022 correlating with decline in current liquidity ratios (current, quick, cash). Other current assets and non trade assets increased but were not able to balance the decline in the ratios.

6.4 Balance Sheet Non-Current Assets

Investment in other non-current assets and marketable securities are clearly visible, possibly moving from the short term to the long term. Whilst this move improves the long term prospects, it weakens short term liquidity. Also there were some investment in the property, plant and equipment line which is essential for operations and future growth.

6.5 Balance Sheet Total Assets

The negative growth in current assets has ended in 2022, the trend to the positive is clear so far and it is taking off some pressure from the firm’s short term liquidity position especially since the firm managed to decrease inventory and account receivables (less liquid items). Total assets increased but mainly due to growth in non-current assets which aids long term stability.

6.6 Balance Sheet Current Liabilities

Increase in accounts payable signals liquidity constraints but also leverage over suppliers. Deferred revenue growth is a good sign as the liquidity is available whilst products/services have not been delivered/provided, essentially pre-funding production. However in the case of subscription services fees are collected and services provided continuously. The large spike in commercial paper and growth of term debt signals short term liquidity issues.

6.7 Balance Sheet Non-Current Liabilities

Initial concern of increased debt and other long term liabilities in 2020 and further debt growth in 2021 began to decline in 2022.

6.8 Balance Sheet Total Liabilities

The increase in current liabilities was not offset by the decrease in non-current liabilities hence the total is still growing. The main question is what the increased short term obligations are used for.

6.9 Balance Sheet Shareholders’ Equity

Total liabilities growth outweigh total asset gain which will reduce shareholders’ equity growth. The massive drop in retained earnings show that the company had to utilize previous years’ profits, the only question is to what end. This can be both positive or negative. The AOCI’s enormous drop in 2022 is important to look at even though the loss is not yet realised to prepare for the potential effects in the income statement down the line.

**7.0 % of Net Sales**

7.1 COGS, Gross Profit, R&D, SG&A, Operating Income, Net Profit

COGS decline nicely corresponds with the increase in gross profit whilst revenue likely not affected negatively. Efficiency gains are observable in operating income growth as well. Net profit growth levelled out in 2022.

**8.0 Additional items**

8.1 Income Tax Rate, Capex as % of Sales, Capex as % of Fixed Assets

Considering Apple is a mature business, growth opportunities are limited hence the moderate capex. The focus is on maintaining current operations.