# Interpreting the Results of Apple Inc. (2020–2022)

## Executive Summary

* **Financial Performance**: From 2020 to 2022, Apple Inc. demonstrated strong financial health across profitability, solvency, and asset utilisation metrics.
* **Liquidity Challenges**: A gradual decline in liquidity ratios due to increased current liabilities signals potential short-term financing challenges.
* **Profitability Growth**:
  + EBIT and EBITDA surged by approximately 80%, highlighting Apple's effective revenue scaling and cost control.
  + Asset efficiency, with improvements in total asset turnover and inventory turnover ratios, underscored Apple’s operational resilience.
* **Debt Management**:
  + Apple’s high **Times Interest Earned (TIE)** ratio indicates strong earnings capacity relative to interest expenses.
  + **Strategic debt management** provided financial leverage that positions the company for sustained growth.
* **Service Revenue and Innovation**: Service revenue growth and increased R&D investments reflected Apple’s commitment to innovation and market diversification.

## Liquidity Ratios

Between 2020 and 2022, Apple Inc. experienced shifts in liquidity as current liabilities increased each year. This growth in liabilities led to a gradual decline in key liquidity ratios (current, quick, and cash ratios), suggesting potential challenges in meeting short-term obligations.

Figure : Apple's Liquidity Ratios

A closer look at the **Defensive Interval**—which measures Apple’s ability to cover operating expenses using liquid assets—reveals a significant drop from 1,300.2 days in 2020 to 914.7 days in 2022. This trend indicates that while Apple’s liquid assets remained strong, they were increasingly deployed toward operational costs.

The **Net Trading Cycle**, a measure of the time cash is held before paying suppliers, extended across these years. While Apple managed to turn over inventory faster, the increased receivables period and delayed supplier payments prolonged the cycle. This extension suggests longer cash conversion periods, which may impact cash flow timing for operational expenses. Consequently, **Working Capital** increased, highlighting Apple’s reliance on supplier funding to cover short-term obligations, a beneficial strategy that enhances operational flexibility.

Figure : Apple's Net Operating Cycle

## Profitability Ratios

Throughout this period, Apple demonstrated solid profitability with stable **Gross Margin** (43.3% in 2022) and **Net Margin**. All major profitability metrics—**Gross Margin**, **EBITDA Margin**, **EBIT Margin**, and **Net Margin**—showed stability, reflecting effective cost control relative to revenue.

* **EBIT** and **EBITDA** surged by approximately 80% over three years, highlighting Apple’s capacity to scale revenues while containing costs.
* **Net Income** rose from $57,411 million in 2020 to $99,803 million in 2022, indicating strong growth.

Figure : Post-Expense Earnings (2020-2022)

Notably, **Earnings per Share (EPS)** increased from $3.3 in 2020 to $6.2 in 2022, reinforcing Apple’s capacity to generate shareholder value.

**Solvency/Debt Management Ratios**

Apple’s **Debt/Equity Ratio** climbed from 1.6x in 2020 to 2.2x in 2022, primarily due to short-term debt obligations. Apple’s use of leverage indicates strategic borrowing to support growth initiatives. However, **Debt to Total Assets** and **Long-Term Debt to Capital** remained stable, indicating balanced long-term debt levels.

* The **Times Interest Earned (TIE)** ratio was extremely high in 2021 at 422.3x and slightly decreased to 357.6x in 2022. This high figure indicates ample earnings to cover interest expenses.
* **Debt Coverage Ratio** also improved from 0.7x in 2020 to 1.0x in 2022, indicating increased ability to meet debt obligations with cash flow.

Apple maintained stable **Free Cash Flow to Equity (FCFE)** per share, ensuring consistent returns to shareholders despite fluctuations in debt levels.

## Asset Utilisation

Apple optimised asset efficiency over these years. The improvement in **Total Asset Turnover** from 0.8x to 1.1x signifies Apple’s increased efficiency in using assets to generate revenue. Similarly, **Fixed Asset Turnover** and **Inventory Turnover** ratios saw improvements, with the latter rising sharply from 32.4x in 2021 to 45.2x in 2022, due to refined inventory management.

**Return on Assets (ROA)** rose from 17.73% in 2020 to 28.29% in 2022, highlighting Apple’s ability to generate higher returns from its assets—a positive indicator of efficient asset utilization.

## Investor/Market Ratios

Apple’s **Price-to-Earnings (P/E) Ratio** declined from 35.3x in 2020 to 22.6x in 2022, potentially indicating that the stock became more reasonably priced relative to earnings. Meanwhile, **Earnings per Share (EPS)** grew from $3.3 in 2020 to $6.1 in 2022, suggesting potential for future share price increases, although EPS alone isn’t a sole indicator of stock performance.

The **Price-to-Book Value (PBV)** ratio remained low across these years, suggesting Apple’s stock was close to book value, potentially signalling undervaluation. The lower **Dividend Payout Ratio** aligns with Apple’s focus on reinvesting capital for growth, while the **Dividend Yield** remained stable.

* The **Return on Equity (ROE)** rose markedly from 87.87% in 2020 to 196.96% in 2022, mainly due to short-term borrowings. This growth demonstrates exceptional returns to equity holders.
* Additionally, **Return on Capital Employed (ROCE)** improved from 40.42% in 2020 to 79.82% in 2022, reaffirming Apple’s efficient use of capital to generate returns.

Figure : Apple's Return Ratios

Apple’s **Enterprise Value (EV)** was notably high at 25.2x in 2020 due to increased market valuations during the COVID-19 pandemic but decreased to a more sustainable 16.9x by 2022.

## Growth Rates

While product sales slowed in 2022, service revenues grew by 14.18%, reflecting the rising adoption of Apple’s service offerings, including Apple Pay, Mac software, and iTunes. Net sales and gross profits decelerated in 2022 after a high-growth period in 2021, hinting at market stabilization post-pandemic.

Figure : Sales Growth and Decline Rates

Figure : Revenues by Segments

Apple’s **Research & Development (R&D)** and **Selling, General, and Administrative (SG&A)** expenses increased over the period, reflecting Apple’s investment in innovation and market expansion. Cash and marketable securities decreased as Apple reinvested excess cash into operational activities to support growth.

## Summary

Overall, Apple Inc. maintained a strong financial position from 2020 to 2022, with high profitability and optimised asset utilisation standing out as key strengths. Strategic leverage enabled substantial returns on equity, enhancing value for shareholders. Although declining liquidity ratios suggest that Apple may need to closely monitor short-term obligations, its impressive cash flow and effective supplier funding strategies mitigate immediate risks. Apple’s strategic balance between growth investments and operational efficiency suggests it is well-positioned for continued success in a competitive market.