

# Apple Inc. Ratio Analysis Report

## Executive Summary

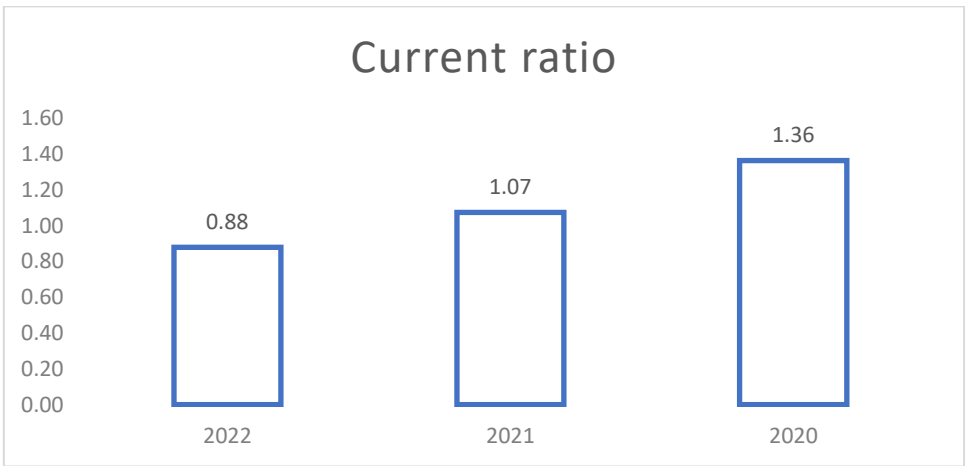
This report provides a detailed analysis of Apple Inc.'s financial performance for the fiscal years ending September 2022, 2021, and 2020. Key financial ratios and metrics have been evaluated to assess the company's liquidity, profitability, debt management, asset utilization, and market performance. The findings highlight significant trends and provide insights into Apple's financial health and operational efficiency.

## Liquidity Analysis

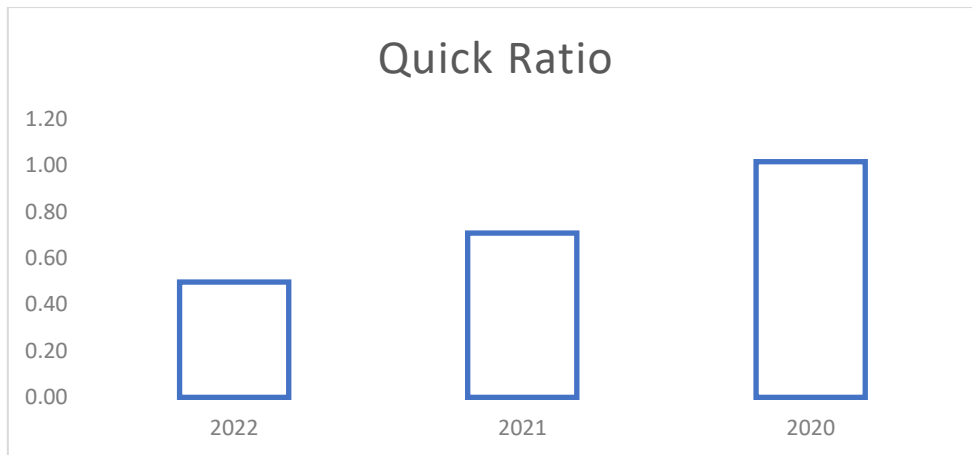
Apple's liquidity ratios suggest Apple's declining liquidity ratios from 2020 to 2022 can be attributed to several factors. The company has been actively engaging in share buybacks and increasing dividends, which reduces cash available for short-term liabilities. Additionally, Apple experienced a revenue slump, impacting cash flows. Despite these declines, Apple's strong cash reserves and marketable securities provide a buffer against potential liquidity issues, allowing it to manage short-term obligations effectively.

Liquidity Ratios	2022	2021	2020
Current ratio	0.88	1.07	1.36
Quick Ratio	0.50	0.71	1.02
Cash Ratio	0.31	0.50	0.86

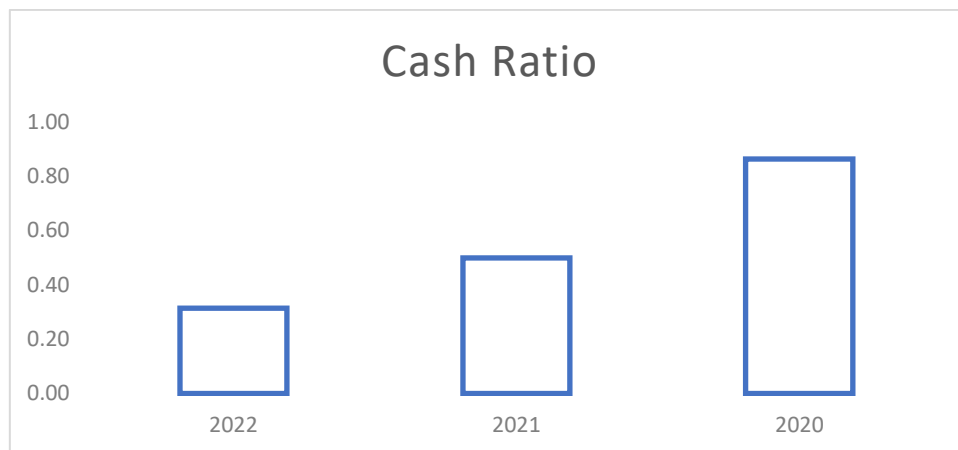
**Current Ratio:** The current ratio, which measures the company's ability to pay off its short-term liabilities with its short-term assets, has decreased from 1.36 in 2020 to 0.88 in 2022. This suggests a weakened short-term liquidity position, potentially impacting Apple's ability to cover short-term liabilities if immediate financial demands arise.



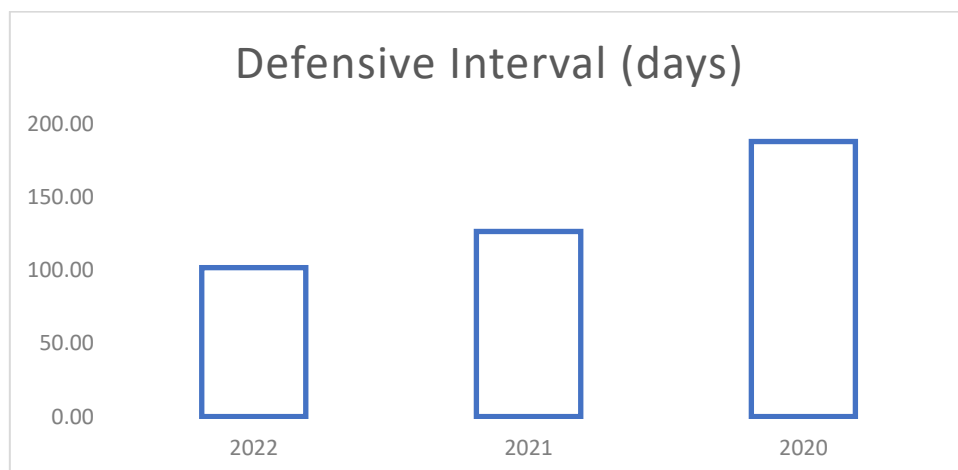
**Quick Ratio:** Excluding inventory, the quick ratio has declined from 1.02 in 2020 to 0.50 in 2022. This indicates a reduction in liquid assets relative to current liabilities, highlighting a more strained liquidity scenario without relying on inventory sales.



**Cash Ratio:** The cash ratio, which focuses on the company's cash and cash equivalents relative to current liabilities, dropped significantly from 0.86 in 2020 to 0.31 in 2022. This reduction points to a notable decrease in the most liquid assets available to meet short-term obligations.



**Defensive Interval (Days):** The defensive interval, representing the number of days Apple can operate using its current assets without additional revenue, has decreased from 187.67 days in 2020 to 101.56 days in 2022. This decline indicates fewer days of operational expenses covered by current assets, suggesting potential liquidity constraints in maintaining operations without new income.

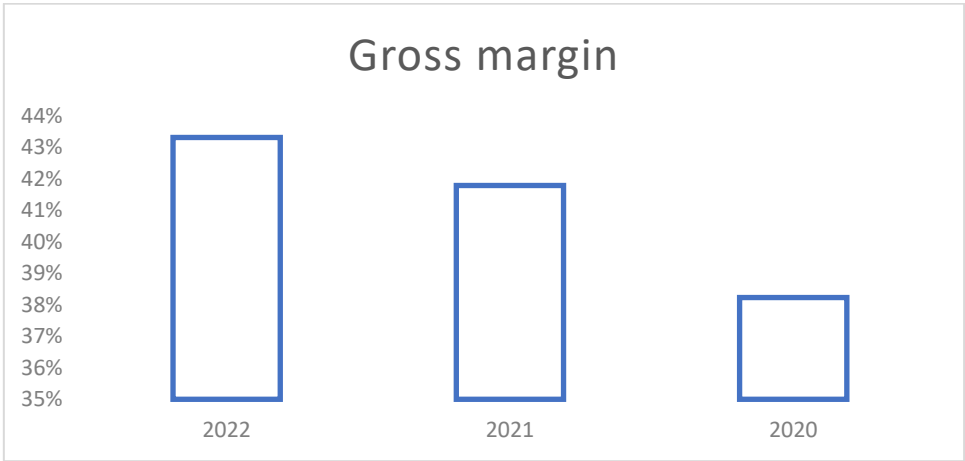


### Profitability Analysis

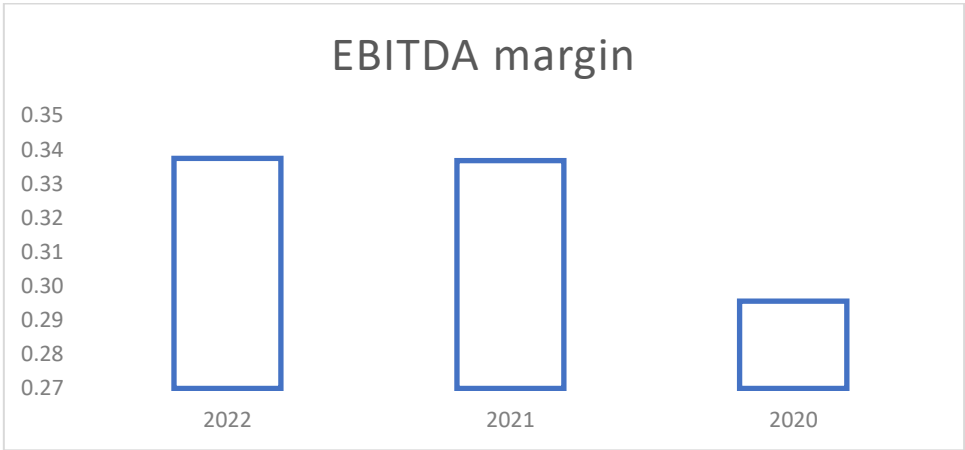
Apple's profitability ratios reflect strong performance and operational efficiency improvements over the analysed period. The revenue from 2020 to 2022 shows strong growth, with net sales increasing from \$274,515 million to \$394,328 million and net income rising from \$57,411 million to \$99,803 million. The company effectively managed costs, resulting in improved gross margins and operating income, despite rising operating expenses. The financial data reflects its robust market position and commitment to sustained growth and profitability.

Profitability	2022	2021	2020
Gross margin	43%	42%	38%
EBITDA margin	34%	34%	30%
EBIT margin	31%	31%	26%
Net margin	25%	26%	21%

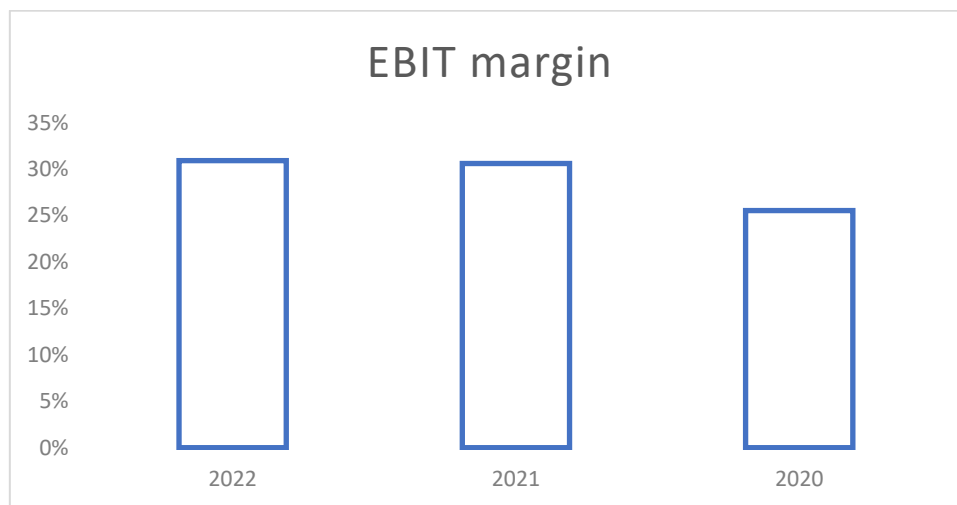
**Gross Margin:** The gross margin, indicating the percentage of revenue remaining after the cost of goods sold, improved from 38.23% in 2020 to 43.31% in 2022. This improvement suggests enhanced cost management and production efficiency.



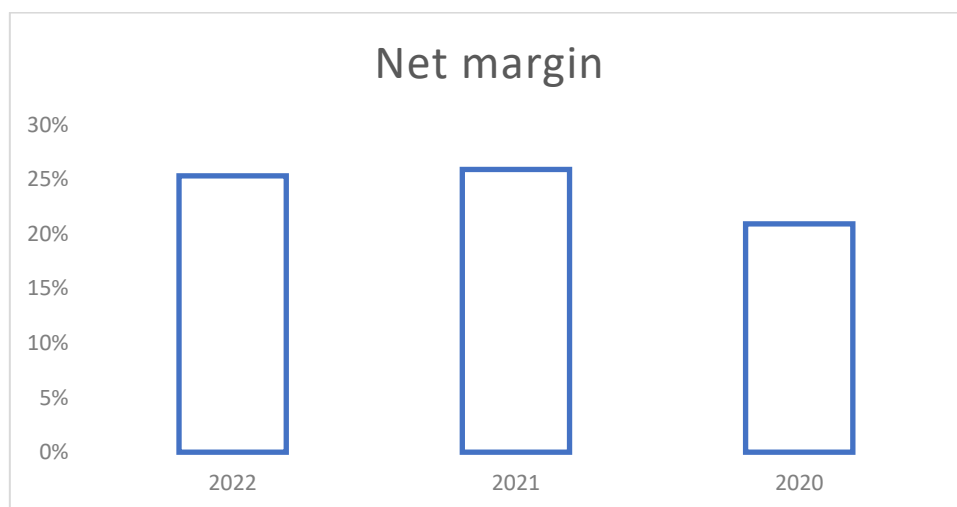
**EBITDA Margin:** The EBITDA margin remained stable at 34% in both 2021 and 2022, up from 30% in 2020. This stability highlights consistent profitability before accounting for interest, taxes, depreciation, and amortization, suggesting robust operational performance.



**EBIT Margin:** The EBIT margin, representing operating income as a percentage of revenue, remained constant at 31% in 2021 and 2022, up from 26% in 2020. This consistency underscores effective cost control and strong revenue generation from core operations.



**Net Margin:** The net margin, reflecting overall profitability after all expenses, slightly decreased from 26% in 2021 to 25% in 2022 but remains higher than the 21% reported in 2020. This indicates sustained overall profitability despite minor fluctuations.

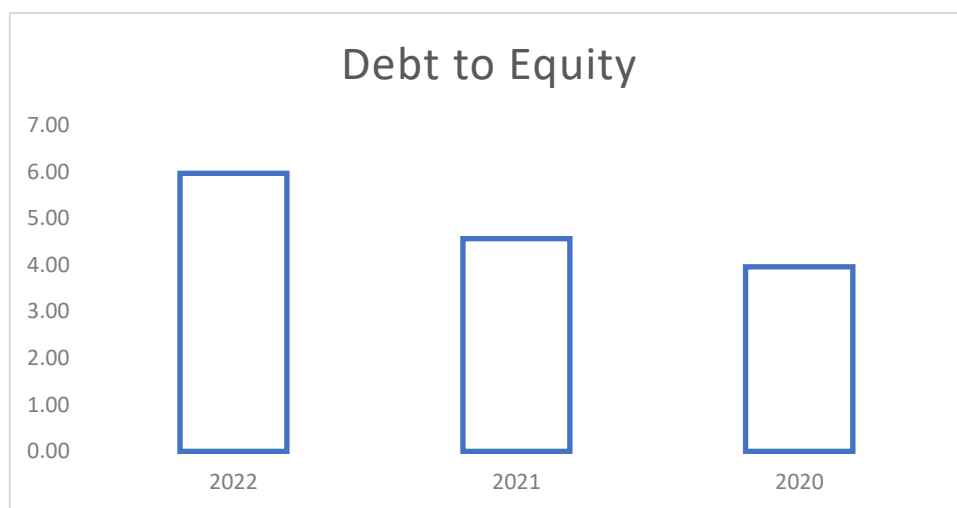


## Solvency and Debt Management

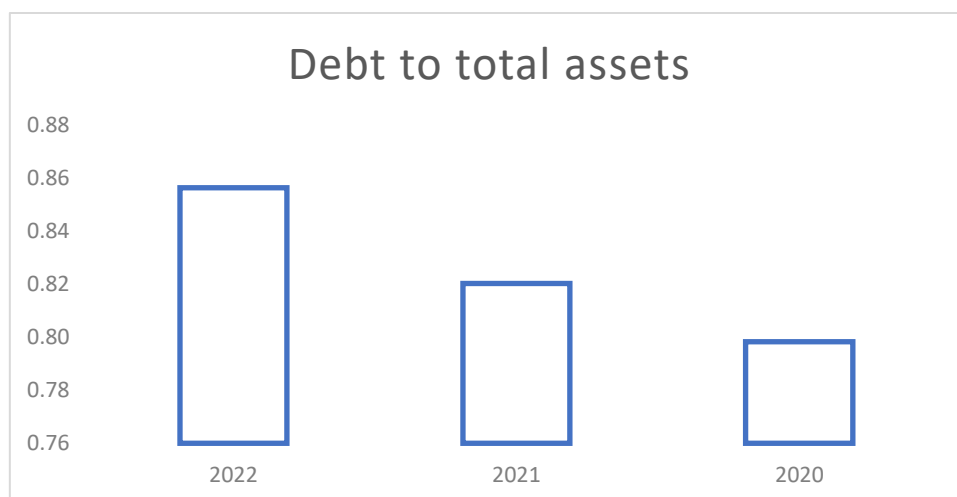
Apple's solvency and debt management ratios indicate increased leveraging but also demonstrate strong debt servicing capacity. The trend of increasing financial leverage at Apple from 2020 to 2022, as indicated by the rising debt to equity and debt to total assets ratios, reflects a strategic decision to utilize debt financing for growth and operational support. This approach allows Apple to take advantage of low-interest rates and preserve cash for strategic investments, such as research and development and share buybacks, which can enhance shareholder value. Despite the increased leverage, Apple's strong earnings and cash flows, as evidenced by the improved times interest earned and debt coverage ratios, demonstrate its robust ability to service debt.

Solvency/ debt management	2022	2021	2020
Debt to equity (D/E)	5.96	4.56	3.96
Debt to total assets	0.86	0.82	0.80
Long-term debt to capital	0.66	0.63	0.60
Times interest earned	42.57	41.64	23.35
Debt coverage	1.12	0.97	0.64

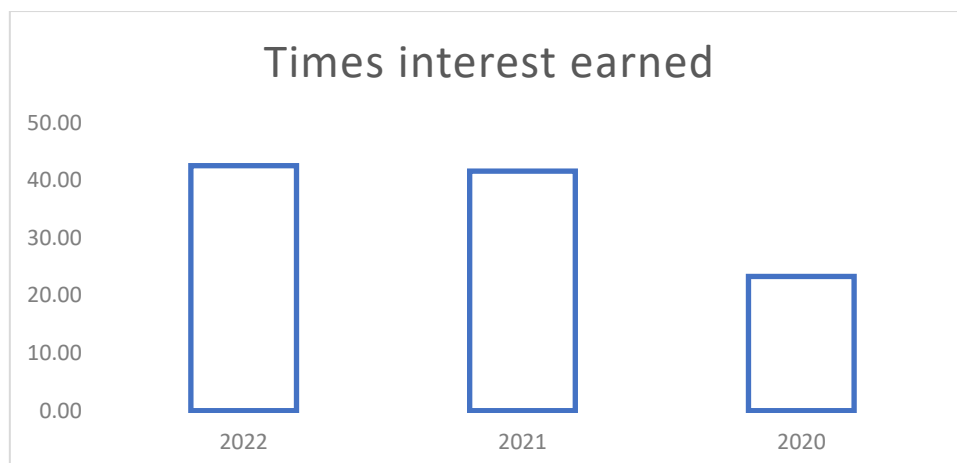
**Debt to Equity Ratio:** The debt-to-equity ratio increased from 3.96 in 2020 to 5.96 in 2022, indicating greater reliance on debt financing. While this increased leverage may enhance growth potential, it also raises financial risk.



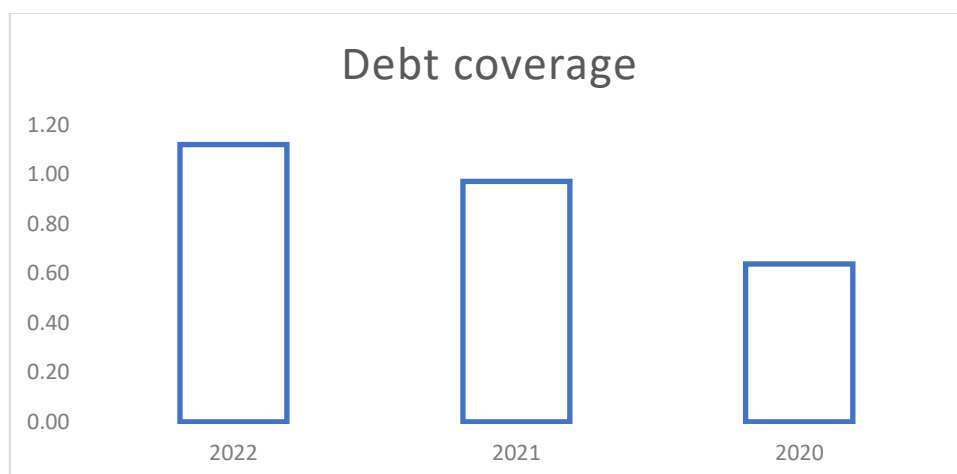
**Debt to Total Assets:** The debt to total assets ratio rose from 0.80 in 2020 to 0.86 in 2022, suggesting a higher proportion of assets financed through debt, reflecting increased financial leverage.



**Times Interest Earned:** This ratio, which measures the company's ability to cover interest expenses, improved from 23.35 in 2020 to 42.57 in 2022. This significant increase indicates a robust ability to cover interest obligations, reflecting strong earnings relative to interest expenses.



**Debt Coverage:** Debt coverage, indicating the ability to service debt from operating income, improved from 0.64 in 2020 to 1.12 in 2022. This improvement shows better capacity to service debt, contributing to financial stability.

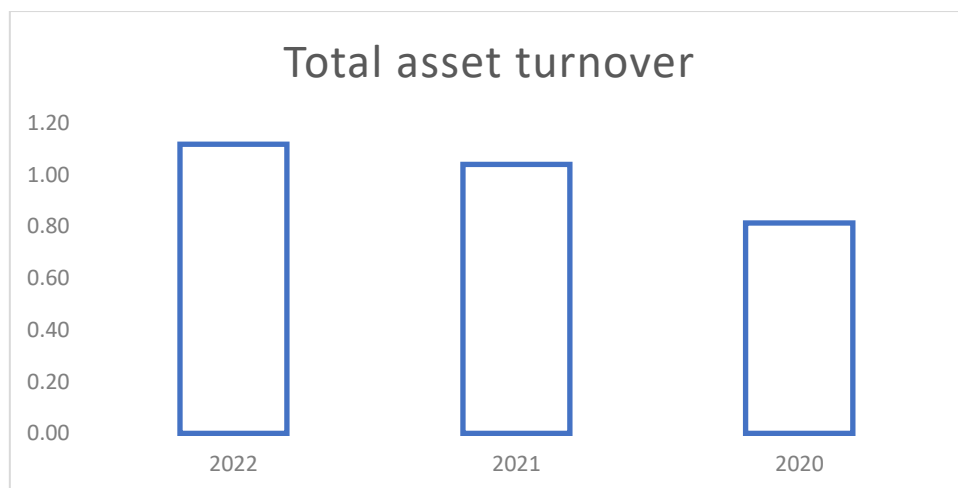


## Asset Utilisation

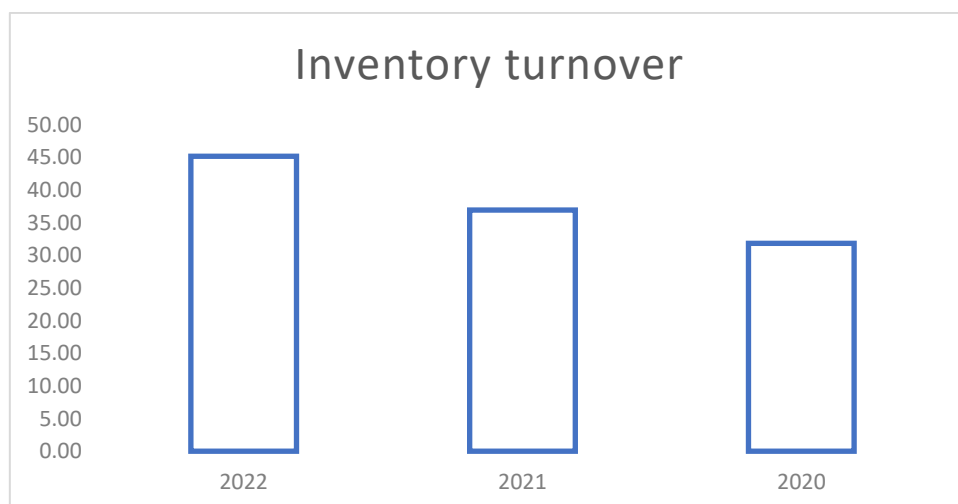
Apple's asset utilization ratios from 2020 to 2022 highlight its operational effectiveness and efficient use of assets to generate revenue. These trends reflect Apple's strategic focus on optimizing asset use to support its growth objectives and maintain its competitive edge in the market.

Asset utilization	2022	2021	2020
Total asset turnover	1.12	1.04	0.81
Fixed asset turnover	9.36	9.28	7.47
Inventory turnover	45.20	36.96	31.87
Return on assets (ROA)	28%	27%	17%

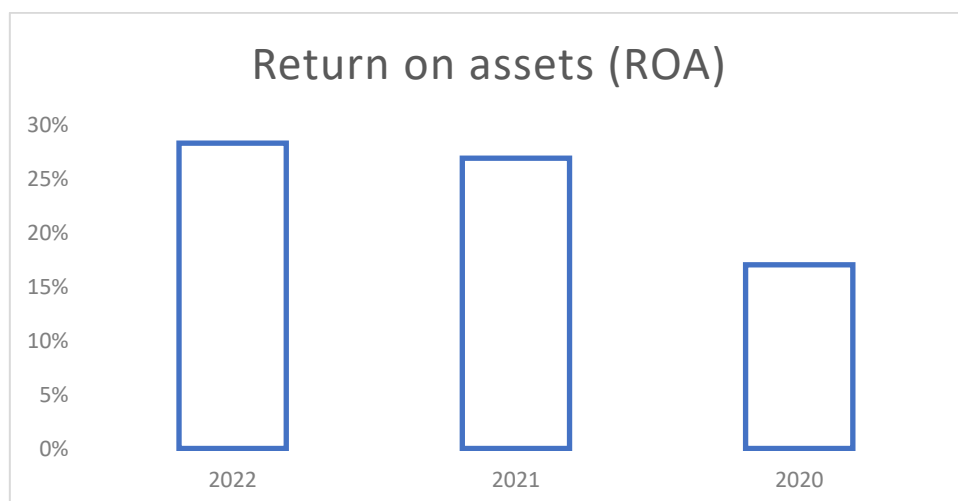
**Total Asset Turnover:** The total asset turnover ratio increased from 0.81 in 2020 to 1.12 in 2022, indicating that Apple is generating more revenue per dollar of assets, reflecting improved asset efficiency.



**Inventory Turnover:** The inventory turnover ratio improved from 31.87 in 2020 to 45.20 in 2022. This suggests efficient inventory management and faster conversion of inventory into sales, which is crucial for operational efficiency.

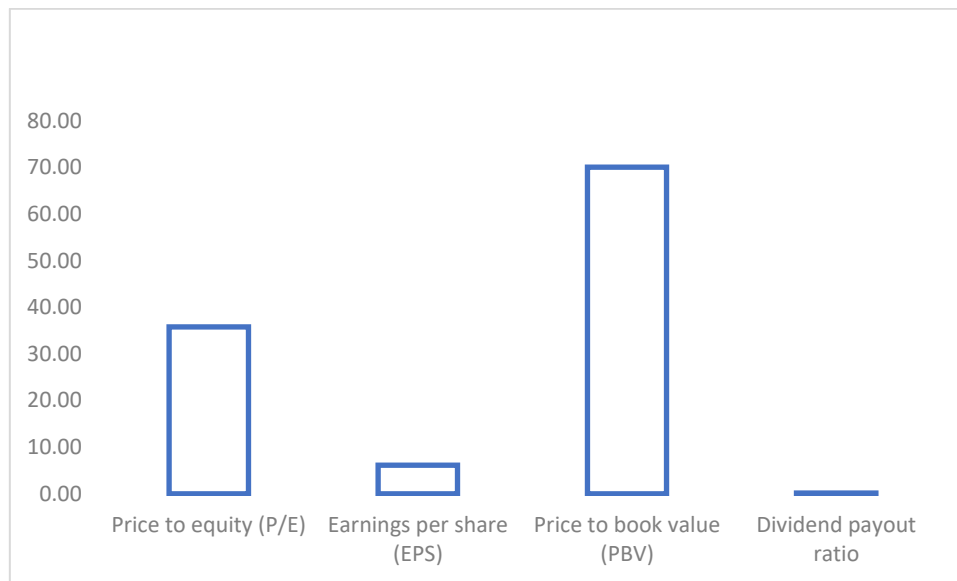


**Return on Assets (ROA):** ROA, measuring the efficiency in generating profit from assets, increased from 17% in 2020 to 28% in 2022, reflecting enhanced profitability relative to the assets employed.



## Investor/Market Ratios

Apple's market performance ratios highlight strong investor confidence and attractive returns.



**Price to Equity (P/E) Ratio:** The P/E ratio for 2022 is 35.81, indicating high market expectations for future growth and suggesting that investors are willing to pay a premium for Apple's earnings.

**Earnings Per Share (EPS):** EPS increased to 6.11 in 2022, reflecting higher profitability on a per-share basis, which is a positive indicator for shareholders.

**Price to Book Value (PBV) Ratio:** The PBV ratio is 70.02 in 2022, indicating that investors value Apple significantly above its book value, reflecting strong market confidence in the company's future prospects.

**Dividend Payout Ratio:** The dividend payout ratio is 15% in 2022, indicating a balanced approach between retaining earnings for growth and providing returns to shareholders, which can attract income-focused investors.

## Conclusion

Apple's financial performance from 2020 to 2022 demonstrates a robust and strategically managed growth trajectory. Despite a declining trend in liquidity ratios, primarily due to active share buybacks and increased dividends, Apple's substantial cash reserves and marketable securities provide a solid buffer against potential liquidity constraints. The company's profitability ratios reflect strong performance, with significant growth in net sales and net income, underscoring effective cost management and operational efficiency. Apple's strategic use of debt is evident in the increased leverage ratios, which, while raising financial risk, are offset by improved debt servicing capabilities, as shown by the times interest earned and debt coverage ratios. The asset utilization ratios highlight Apple's operational effectiveness, with improved total asset turnover and inventory turnover ratios indicating efficient use of resources to drive revenue. Additionally, the investor and market ratios, such as the P/E and PBV ratios, reflect strong investor confidence and high market expectations for future growth. Overall, Apple's financial health and strategic initiatives position the company favourably for sustained growth and continued market leadership.