**Investment Analysis Report: Ratio Analysis of Apple Inc.**

# **1. Introduction**

Apple Inc. (AAPL), headquartered in Cupertino, California, is a global leader in consumer electronics, software, and digital services. This report presents a ratio analysis to assess the company’s financial health and performance, providing insights into liquidity, profitability, solvency, asset utilization and investor/market ratios.

# **2. Key Ratios Analyzed**

1. **Liquidity Ratios**
2. **Profitability Ratios**
3. **Solvency Ratios**
4. **Asset Utilization Ratios**
5. **Investor/Market Ratios**

# **3. Liquidity Ratios**

Liquidity ratios evaluate a company’s ability to meet its short-term obligations with the following ratios being considered as shown in the table and chart below: -

**Table 1 – Liquidity**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **2020** | **2021** | **2022** |
| **Liquidity** |  |  |  |  |
| Current ratio | | 1.36 | 1.07 | 0.88 |
| Quick Ratio | | 1.33 | 1.02 | 0.85 |
| Cash Ratio | | 0.36 | 0.28 | 0.15 |
| Defensive Interval | | 1318 | 1067 | 927 |
| Inventory Days | | 9 | 11 | 8 |
| Payable Days | | 91 | 94 | 105 |
| Receivable Days | | 35 | 45 | 46 |
| Net trading cycle | | -48 | -38 | -51 |
| Working Capital as a % of Sales | | 14.0% | 2.6% | -4.7% |
| Working Capital | | 38,321 | 9,355 | (18,577) |

**Chart 1 – Liquidity**

**Apple’s 2022 Current Ratio**: 0.88

* **Interpretation**: The current ratio below 1 indicates that Apple may not have enough current assets to cover its short-term liabilities.

**Apple’s 2022 Quick Ratio**: 0.85

* **Interpretation**: The current ratio is below 1 indicating that Apple doesn't have enough quick assets to meet all its short-term obligations. If it suffers an interruption, it may find it difficult to raise the cash to pay its creditors.

# **4. Profitability Ratios**

Profitability ratios assess a company's ability to generate income relative to its revenue, assets, and equity with the following margins being considered as shown in the table and chart below: -

**Table 2 - Profitability**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Profitability** | | **2020** | **2021** | **2022** |
| Gross margin | | 38.2% | 41.8% | 43.3% |
| EBITDA margin | | 24.1% | 29.8% | 30.3% |
| EBITDA | | 66,288 | 108,949 | 119,437 |
| EBIT margin | | 24.4% | 29.9% | 30.2% |
| EBIT |  | 67,091 | 109,207 | 119,103 |
| Net margin | | 20.9% | 25.9% | 25.3% |

**Apple’s 2022 Gross Margin**: 43.3%

* **Interpretation**: A high gross profit margin indicates that Apple generates a significant portion of revenue after covering production costs, reflecting strong pricing power and efficient cost management.

**Apple’s 2022 Net Margin**: 25.3%

* **Interpretation**: Apple’s ability to retain 25.3% of its revenue as net profit is indicative of its operational efficiency and effective cost control.

**Chart 2 – Profitability**

# **5. Solvency Ratios**

Solvency ratios assess Apple’s long-term financial stability and its ability to meet long-term obligations with the following ratios being considered as shown in the table and chart below: -

**Table 3 – Solvency**

|  |  |  |  |
| --- | --- | --- | --- |
| **Solvency/ debt management** | **2020** | **2021** | **2022** |
| Debt to equity (D/E) | 3.96 | 4.56 | 5.96 |
| Debt to total assets | 0.80 | 0.82 | 0.86 |
| Long-term debt to capital | 1.51 | 1.73 | 1.95 |
| Times interest earned | 22.35 | 40.64 | 41.57 |
| Debt coverage | 4.82 | 6.79 | 7.14 |
| Free cash flow (FCFE) per share | 0.40 | 0.44 | 0.72 |

**Chart 3 – Solvency**

**Apple’s 2022 Debt-to-Equity Ratio**: 5.96

* **Interpretation**: Apple has a significant amount of debt relative to its equity. However, given its high profitability and consistent cash flows, the company appears to be leveraging debt effectively to enhance shareholder returns.

# **6. Asset Utilization Ratios**

Asset utilization is a key financial metric that measures how efficiently a company uses its assets to generate revenue with the following ratios being considered as shown in the table and chart below: -

**Table 4 – Asset Utilization**

|  |  |  |  |
| --- | --- | --- | --- |
| **Asset utilization** | **2020** | **2021** | **2022** |
| Total asset turnover | 0.85 | 1.04 | 1.12 |
| vFixed asset turnover | 1.52 | 1.69 | 1.81 |
| Inventory turnover | 41.75 | 32.37 | 45.20 |
| Return on assets (ROA) | 0.18 | 0.27 | 0.28 |

**Apple’s 2022 Asset Turnover Ratio**: 1.12

* **Interpretation**: Apple generates $1.12 in revenue for every dollar of assets, reflecting its efficiency in using assets to drive sales. Apple’s asset turnover ratio has remained consistent, slightly improving in from 202 to 2022 due to strong revenue growth without proportional growth in asset base.

**Apple’s 2022 Inventory Turnover Ratio**: 45.20

* **Interpretation**: A high inventory turnover ratio implies that Apple efficiently manages its inventory, minimizing holding costs and keeping inventory levels in line with demand.

**Chart 4- Asset Utilization**

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# **Investor/Market Ratio**

Investor/Market ratios offer insights into a company's market performance, providing potential investors with key information to evaluate the attractiveness of investing with the following ratios being considered as shown in the table and chart below: -

|  |  |  |  |
| --- | --- | --- | --- |
| **Investor/market ratios** | **2020** | **2021** | **2022** |
| Price to equity (P/E) | 67.83 | 39.60 | 36.51 |
| Earnings per share (EPS) | 0.01 | 0.01 | 0.01 |
| Price to book value (PBV) | 174.50 | 204.16 | 287.35 |
| Book value per share (BV) | 1.29 | 1.10 | 0.78 |
| Dividend payout ratio | -0.25 | -0.15 | -0.15 |
| Dividend per share | 0.00 | 0.00 | 0.00 |
| Dividend yield | -61.75 | -63.44 | -65.08 |
| Return on equity (ROE) | 0.88 | 1.50 | 1.97 |
| Return on capital employed (ROCE) | 1.03 | 1.73 | 2.35 |
| Return on assets (ROA) | 0.18 | 0.27 | 0.28 |
| Enterprise value to EBITDA (EV/EBITDA) | 1.68 | 1.21 | 1.17 |
| Enterprise value (EV) | 111430.00 | 131531.00 | 140162.00 |

**Apple's Current P/E Ratio**: 36.51

* **Analysis**: A higher-than-average P/E ratio could imply that investors are expecting higher future growth from Apple. However, it also means the stock could be overvalued relative to earnings, making it a pricier investment compared to other tech firms.

**Apple’s P/B Ratio**: 287.35

* **Analysis**: A high P/B ratio indicates that investors are willing to pay significantly above the company's asset value due to the expectation of future growth and profitability.

1. **Conclusion**

Apple Inc. demonstrates strong profitability, with impressive gross and net profit margins and a stellar ROE. While its liquidity ratios may seem modest, the company’s robust cash flow and financial strategies likely mitigate short-term liquidity concerns. Apple leverages debt effectively, as indicated by its solvency ratios, and exhibits strong operational efficiency.

Investors can view Apple as a financially healthy company with solid performance metrics, making it an attractive long-term investment opportunity. However, its high dependence on leveraging should be monitored for any future changes in market conditions. Investors should view Apple’s asset utilization as a positive factor, indicating strong operational management, though ongoing monitoring of capital expenditures and external risks will be essential for long-term success.