**Financial Analysis for Apple Inc.**

**Overview**

Apple Inc. designs, manufactures, and markets smartphones, personal computers, tablets, wearables, and accessories worldwide. The company offers iPhone, a line of smartphones; Mac, a line of personal computers; iPad, a line of multi-purpose tablets; and wearables, home, and accessories comprising AirPods, Apple TV, Apple Watch, Beats products, and HomePod. It also provides AppleCare support and cloud services; and operates various platforms, including the App Store that allow customers to discover and download applications and digital content, such as books, music, video, games, and podcasts, as well as advertising services include third-party licensing arrangements and its own advertising platforms. In addition, the company offers various subscription-based services, such as Apple Arcade, a game subscription service; Apple Fitness+, a personalized fitness service; Apple Music, which offers users a curated listening experience with on-demand radio stations; Apple News+, a subscription news and magazine service; Apple TV+, which offers exclusive original content; Apple Card, a co-branded credit card; and Apple Pay, a cashless payment service, as well as licenses its intellectual property. The company serves consumers, and small and mid-sized businesses; and the education, enterprise, and government markets. It distributes third-party applications for its products through the App Store. The company also sells its products through its retail and online stores, and direct sales force; and third-party cellular network carriers, wholesalers, retailers, and resellers. Apple Inc. was founded in 1976 and is headquartered in Cupertino, California.

**Financial Ratio Analysis**

**Liquidity Ratios**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Current Ratio** | **Quick Ratio** | **Cash Ratio** |
| 2020-09-30 00:00:00 | nan | nan | nan |
| 2021-09-30 00:00:00 | 1.07455 | 1.02211 | 0.278449 |
| 2022-09-30 00:00:00 | 0.879356 | 0.847235 | 0.153563 |
| 2023-09-30 00:00:00 | 0.988012 | 0.944442 | 0.206217 |
| 2024-09-30 00:00:00 | 0.867313 | 0.826007 | 0.169753 |

* **Current Ratio**: The Current Ratio has been consistently below the ideal 1.5, and even below 1 in recent years (2022, 2024), indicating potential challenges in covering short-term liabilities with current assets.
* **Quick Ratio**: Similar to the Current Ratio, the Quick Ratio has been mostly below 1, suggesting that without inventory, the company might struggle to meet its immediate obligations.
* **Cash Ratio**: The Cash Ratio is relatively low, indicating a limited pure cash position to cover current liabilities. There's a noticeable dip in 2022 and 2024.

**Profitability Ratios**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Return on Equity (RoE)** | **Return on Assets (RoA)** | **Return on Capital Employed (RoCE)** | **Net Profit Margin** | **Operating Margin** |
| 2020-09-30 00:00:00 | nan | nan | nan | nan | nan |
| 2021-09-30 00:00:00 | 1.50071 | 0.269742 | 0.495972 | 0.258818 | 0.297824 |
| 2022-09-30 00:00:00 | 1.96959 | 0.282924 | 0.600871 | 0.253096 | 0.302887 |
| 2023-09-30 00:00:00 | 1.56076 | 0.275098 | 0.551446 | 0.253062 | 0.298214 |
| 2024-09-30 00:00:00 | 1.64594 | 0.256825 | 0.653361 | 0.239713 | 0.315102 |

* **Return on Equity (RoE)**: RoE is exceptionally high and consistently above 15%, indicating excellent returns on shareholder investment.
* **Return on Assets (RoA)**: RoA is consistently high (well above 5%), demonstrating efficient asset utilization to generate earnings.
* **Return on Capital Employed (RoCE)**: RoCE is very strong and consistently above 12%, indicating highly efficient use of capital.
* **Net Profit Margin**: Net Profit Margin is consistently strong (above 10%), showing healthy final profitability per dollar of revenue, though there's a slight downward trend in 2024.
* **Operating Margin**: Operating Margin is consistently excellent (above 20%), indicating strong operational profitability and cost efficiency.

**Efficiency Ratios**

|  |  |  |
| --- | --- | --- |
|  | **Asset Turnover** | **Inventory Turnover** |
| 2020-09-30 00:00:00 | nan | nan |
| 2021-09-30 00:00:00 | 1.04221 | nan |
| 2022-09-30 00:00:00 | 1.11785 | 38.7899 |
| 2023-09-30 00:00:00 | 1.08708 | 37.9777 |
| 2024-09-30 00:00:00 | 1.07139 | 30.8955 |

* **Asset Turnover Ratio**: The Asset Turnover Ratio is consistently above 1, indicating that the company is effectively generating sales from its assets.
* **Inventory Turnover**: Inventory Turnover is very high (well above 5), suggesting fast-moving inventory and efficient inventory management, although there's a slight decrease in 2024.

**Valuation Ratios**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Price-to-Earnings (P/E)** | **Price-to-Sales (P/S)** | **Price-to-Book (P/B)** | **EV/EBIDTA** |
| 2020-09-30 00:00:00 | 36.0833 | nan | nan | nan |
| 2021-09-30 00:00:00 | 36.0833 | 9.66122 | 56.019 | 33.3718 |
| 2022-09-30 00:00:00 | 36.0833 | 8.96269 | 69.7474 | 30.502 |
| 2023-09-30 00:00:00 | 36.0833 | 9.22092 | 56.8699 | 31.6302 |
| 2024-09-30 00:00:00 | 36.0833 | 9.03816 | 62.0586 | 29.3056 |

* **Price-to-Earnings (P/E) Ratio**: The P/E ratio of 36.08 is consistently above the "reasonable" threshold of <20, suggesting the stock might be overvalued.
* **Price-to-Sales (P/S) Ratio**: The P/S ratio is consistently high (well above 4), indicating that the stock is potentially overvalued based on sales.
* **Price-to-Book (P/B) Ratio**: The P/B ratio is extremely high (well above 3), suggesting the stock is significantly overvalued compared to its book value.
* **EV/EBIDTA ratio**: The EV/EBITDA ratio is consistently very high (well above 15), indicating that the company is expensive or overvalued.

**Leverage Ratios**

|  |  |  |
| --- | --- | --- |
|  | **Debt-to-Equity (D/E)** | **Interest Coverage** |
| 2020-09-30 00:00:00 | nan | nan |
| 2021-09-30 00:00:00 | 2.16392 | 42.2881 |
| 2022-09-30 00:00:00 | 2.61446 | 40.7496 |
| 2023-09-30 00:00:00 | 1.78753 | 29.062 |
| 2024-09-30 00:00:00 | 1.87233 | nan |

* **Debt-to-Equity (D/E) Ratio**: The D/E ratio has been consistently above 1.0, and even above 2.0 in 2021 and 2022, indicating a higher debt risk. While it improved in 2023 and 2024, it still remains in the moderate to high-risk category.
* **Interest Coverage**: The Interest Coverage ratio is very strong (well above 3), indicating that the company can comfortably cover its interest expenses, despite the high D/E ratio.

**Performance and Growth Metrics**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Revenue Growth (%)** | **EBIT Growth (%)** | **Net Profit Margin (%)** | **EPS Growth (%)** | **EPS** | **Debt-to-Equity** | **Free Cash Flow** | **FCF Growth (%)** |
| 2020-09-30 00:00:00 | nan | nan | nan | nan | nan | nan | nan | nan |
| 2021-09-30 00:00:00 | nan | nan | 25.8818 | nan | 5.76376 | 2.16392 | 9.2953e+10 | nan |
| 2022-09-30 00:00:00 | 7.79379 | 6.78128 | 25.3096 | 8.60663 | 6.25982 | 2.61446 | 1.11443e+11 | 19.8918 |
| 2023-09-30 00:00:00 | -2.80046 | -4.30017 | 25.3062 | -0.355054 | 6.2376 | 1.78753 | 9.9584e+10 | -10.6413 |
| 2024-09-30 00:00:00 | 2.02199 | 7.79958 | 23.9713 | -0.590085 | 6.20079 | 1.87233 | 1.08807e+11 | 9.26153 |

* **Revenue Growth (%)**: Revenue growth has been inconsistent, with a decline in 2023 and slow growth in 2024, suggesting challenges in maintaining strong top-line expansion.
* **EBIT Growth (%)**: EBIT growth shows volatility, with a decline in 2023, but a recovery to moderate growth in 2024.
* **Net Profit Margin (%)**: Net Profit Margin is consistently healthy (above 10%), though there's a slight downward trend in 2024.
* **EPS Growth (%)**: EPS growth has been concerning, with a decline in both 2023 and 2024, indicating shrinking earnings per share.
* **EPS**: EPS has shown a slight decline in the last two years, which aligns with the negative EPS growth.
* **Debt-to-Equity**: The D/E ratio is consistently above 1.0, indicating a moderate to high debt burden.
* **Free Cash Flow**: Free Cash Flow is consistently positive and substantial, indicating strong cash generation, although there was a dip in 2023.
* **FCF Growth (%)**: FCF growth has been volatile, with a strong increase in 2022, a decline in 2023, and moderate growth in 2024.

**Analysis of Performance Ratios**

* **Liquidity Ratios**: Apple's liquidity ratios (Current, Quick, and Cash Ratios) are generally below ideal benchmarks, suggesting potential short-term liquidity challenges, particularly in covering immediate liabilities without relying on inventory.
* **Profitability Ratios**: The company demonstrates exceptional profitability, with consistently high Return on Equity, Return on Assets, Return on Capital Employed, Net Profit Margin, and Operating Margin, indicating highly efficient operations and strong returns for shareholders.
* **Efficiency Ratios**: Apple exhibits strong operational efficiency, with an Asset Turnover Ratio consistently above 1 and a very high Inventory Turnover, signifying effective asset utilization and rapid inventory movement.
* **Valuation Ratios**: All valuation ratios (P/E, P/S, P/B, and EV/EBITDA) are significantly high, suggesting that Apple's stock is currently overvalued compared to industry benchmarks and its intrinsic value.
* **Leverage Ratios**: The Debt-to-Equity ratio indicates a moderate to high debt burden, which is a point of concern. However, the very strong Interest Coverage ratio suggests that the company can comfortably service its debt obligations.
* **Performance and Growth Metrics**: While Apple shows strong free cash flow generation and healthy net profit margins, its revenue growth and EPS growth have been inconsistent and even negative in recent years, raising questions about sustainable top-line and per-share earnings expansion.

**Conclusions:**

* **Is the company growing revenue and profit sustainably?** Apple's revenue growth has been inconsistent, with a decline in 2023 and slow growth in 2024. Similarly, EPS growth has been negative in the last two years. While profitability margins remain strong, the lack of consistent top-line and per-share earnings growth suggests that sustainable growth is currently challenged.
* **Is it over-leveraged or overvalued?** Based on the valuation ratios (P/E, P/S, P/B, EV/EBITDA), Apple appears to be significantly overvalued. The Debt-to-Equity ratio indicates a moderate to high level of leverage, suggesting some debt risk, although the strong interest coverage mitigates immediate concerns about debt servicing.
* **Are margins stable or volatile?** Apple's Net Profit Margin and Operating Margin have been remarkably stable and consistently high, indicating strong and consistent profitability and cost efficiency. There's a slight downward trend in Net Profit Margin in 2024, but overall, margins are stable.
* **Is cash generation real or profit is accounting-based?** Apple demonstrates substantial and consistently positive Free Cash Flow, indicating strong real cash generation from its operations. This suggests that the company's profits are backed by actual cash flow, rather than being solely accounting-based.
* **Are returns on capital adequate (>12–15%)?** Apple's Return on Equity (RoE), Return on Assets (RoA), and Return on Capital Employed (RoCE) are exceptionally high and consistently well above the 12-15% benchmark, indicating excellent returns on capital and highly efficient use of assets and shareholder investments.

**Recommendation**

Apple Inc. presents a mixed financial picture. The company exhibits outstanding profitability and efficiency, with very strong returns on capital and robust cash generation. Its operating and net profit margins are consistently healthy, demonstrating effective cost management and a strong business model. However, there are notable concerns regarding its liquidity, which appears to be tight, and its leverage, which is in the moderate to high-risk category. More significantly, the company's valuation ratios suggest that the stock is currently significantly overvalued, and recent trends in revenue and EPS growth indicate a slowdown in sustainable expansion. While Apple's brand strength, ecosystem, and ability to generate substantial free cash flow are undeniable strengths, the current high valuation and inconsistent growth metrics warrant caution.

Given the current financial analysis, a long-term investment in Apple Inc. at its current valuation carries a significant risk of overpaying for future growth that may not materialize at the same pace as in the past. While the company's fundamental profitability and efficiency are excellent, the high valuation and recent deceleration in growth suggest that potential investors should exercise prudence. It would be advisable to wait for a more attractive entry point, potentially after a market correction or if the company demonstrates a renewed acceleration in its revenue and EPS growth.