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AI-Driven Financial Insights: Analyzing Microsoft, Tesla, and Apple 10-K Filings (2022-2024)

Sources:

Manually extracted from the official SEC's Electronic Data Gathering, Analysis, and Retrieval System.

- [Apple Inc](#)
- [Microsoft Corp:](#)
- [Tesla, Inc](#)

Metrics extracted (in **millions USD**):

- Total Revenue
- Net Income
- Total Assets
- Total Liabilities
- Cash Flow from Operations (CFO)

Derived metrics:

- Revenue Growth (%): Year-over-year growth in revenue
- Net Income Growth (%): Year-over-year growth in net income
- Net Profit Margin (%): $\text{Net Income} \div \text{Revenue} \times 100$
- Operating CF Margin (%): $\text{CFO} \div \text{Revenue} \times 100$
- Leverage (Liabilities \div Assets)
- CAGR (2022–2024): 2-year compound annual growth rate for Revenue and Net Income

****Note**:** Some values are missing ('NaN') because they were not reported in the SEC filings (e.g., certain 2022 balance sheet values). These are intentionally left blank.

Company-Level Insights (2022–2024)

Apple Inc.

- Revenue: Slight dip in 2023 (-2.8%), small rebound in 2024 (+2.0%).
- Net Income: Flat in 2023 (+0.1%), but dropped by -6.3% in 2024.
- Profitability: Very strong margins (~25–26% profit margin, ~28–31% CFO margin).
- Leverage: High (≈ 2.0), meaning liabilities are about double assets.
- CAGR (2022→2024): Revenue essentially flat (-0.42%), Net Income slightly negative (-0.08%).

****Takeaway:**** Apple remains highly profitable but shows slowing/stagnant growth and carries relatively high leverage.

Microsoft Corp.

- Revenue: Consistent growth — +6.9% in 2023, +15.7% in 2024.
- Net Income: Small dip in 2023 (-0.5%), then a strong rebound in 2024 (+21.8%).
- Profitability: Extremely high and stable profit margin (~35%) and CFO margin (41–49%).
- Leverage: Low (≈ 0.5), showing financial strength.
- CAGR (2022→2024): Revenue +11.1%, Net Income +10.4%.

****Takeaway:**** Microsoft combines robust growth with strong profitability and a conservative balance sheet.

Tesla, Inc.

- Revenue: Strong growth in 2023 (+18.8%), but nearly flat in 2024 (+0.95%).
- Net Income: Grew +19.4% in 2023, then dropped sharply in 2024 (-52.7%).
- Profitability: Profit margin fell from ~15% (2022–23) to ~7% in 2024.
- Leverage: Moderate (≈ 0.40), with manageable liabilities relative to assets.
- CAGR (2022→2024): Revenue +9.3% growth annually, but Net Income (fell -24.8% per year over the 2-year period)

****Takeaway:**** Tesla is still growing revenue but struggled in 2024, with profitability cut in half — a potential risk factor.

Cross-Company Comparison

- Revenue Leaders: Apple leads in all three years, averaging nearly \$390T (in millions USD → \$390B) over 2022–24, though its growth has stagnated.
- Profitability: Microsoft dominates on margins — maintaining ~36% net profit margin and ~45% operating cash flow margin, far higher than Apple (~25%) or Tesla (~11%).
- Growth: Microsoft shows the ****strongest sustained growth**** (double-digit CAGR in both revenue and profit). Tesla's revenue grew but profit collapsed, while Apple stayed flat.
- Leverage: Apple is highly leveraged (≈ 2.0 liabilities-to-assets), unlike Microsoft (≈ 0.5) or Tesla (≈ 0.4).

Final Thoughts:

- Microsoft looks healthiest: strong growth, stable profitability, low leverage.
- Apple is highly profitable but heavily indebted and slowing in growth.
- Tesla is volatile — rapid revenue expansion, but profits dropped sharply in 2024, raising risk concerns.