Objective of the Report

The objective of this report is to assess the financial health of Amazon by analysing various financial ratios. These ratios provide insight into Amazon's operational efficiency, liquidity, solvency, profitability, and market valuation. The analysis will cover the years ended 2020 to 2022.

Financial Health

- Current Ratio: Reflects Amazon's ability to pay its short-term obligations with its short-term assets.
 The ratio is showing a decrease from 1.14 in 2021 to 0.94 in 2022, indicating a reduction in Amazon's short-term financial stability.
- Quick Ratio: Provides a more conservative view than the current ratio by excluding inventory. There is also a decrease from 0.91 in 2021 to 0.72 in 2022, suggesting a lowered immediate liquidity position.
- Cash Ratio: Even more conservative, it considers only the cash and cash equivalents against the current liabilities. This ratio increased from 0.46 in 2021 to 0.68 in 2022, indicating improved liquidity in terms of cash availability.
- Defensive Interval: Measures the number of days Amazon can operate without needing additional financing or sales. The number has decreased from 341 days in 2021 to 240 days in 2022, suggesting a reduced period of self-sustainability.
- Inventory Days: Indicates how many days it takes to turn over the inventory. A slight increase from 43 days in 2021 to 44 days in 2022 could suggest a marginal slowdown in inventory turnover.

This analysis indicates some concerns regarding Amazon's liquidity, as the current and quick ratios have decreased, although there is an improvement in cash ratio.

Profitability

The analysis of the profitability ratios for the years ended 2020, 2021, and 2022 reveals several important trends and points of consideration for Amazon's financial performance:

- Improving Gross Margin: Amazon has demonstrated an ability to increase its gross margin year over
 year, which is a positive indicator. This implies that Amazon is either managing its cost of goods sold
 more efficiently or is successful in charging higher prices. Either way, it points to a potentially stronger
 competitive position in the market.
- Declining EBITDA and EBIT Margins: Despite the improving gross margin, Amazon's EBITDA and EBIT
 margins have declined, with a particularly sharp decrease in the EBIT margin from 2021 to 2022. This
 suggests that while Amazon is generating more gross income from its sales, its operating expenses,
 including general, selling, administrative expenses, and potentially depreciation and amortisation, are
 increasing at a rate that outpaces revenue growth.
- Significant Decrease in Operating Profit (EBIT): The sharp drop in EBIT suggests that Amazon's core operations have become less profitable. EBITDA in absolute terms has also decreased from 2021 to 2022, after an increase from 2020 to 2021, this could suggest fluctuating operational performance. Although the revenue has increased constantly from 2020, the Operating expenses have increased 2x between 2021 and 2022 and is significantly impacts Amazon's profitability.
- Negative Net Margin: The net margin turning negative is a significant concern. It shows that after
 accounting for all expenses, including interest, taxes, depreciation, and amortization, Amazon is losing
 money. This change from a positive net margin in the previous years to a negative margin in 2022
 needs immediate attention to identify the root causes—whether they are rising costs, declining sales,
 or one-time charges—and to develop strategies to return to profitability.

In general, the analysis suggests that while Amazon has strengths in its gross profitability, there are considerable challenges in managing operating and other expenses. The negative net margin in 2022 is a clear signal that Amazon's financial performance has deteriorated and may need strategic adjustments to improve its bottom line. It's critical to ensure that the improvements in gross margin translate to the bottom line, and that management addresses the operational inefficiencies or external factors that have led to the decline in EBITDA, EBIT, and net profitability.

Solvency/ debt management

It seems that Amazon is improving in terms of managing its debt and reducing its reliance on leverage. The decrease in the D/E ratio and Debt to Total Assets ratio, along with a significant increase in the Times Interest Earned, suggest stronger financial health and a greater ability to cover debt-related expenses. The positive values for Debt Coverage implies Amazon is able to generate enough income to cover debt.

Asset utilisation

The ratios suggest that Amazon is improving its asset utilisation and efficiency over time. The increasing total and fixed asset turnover ratios indicate better use of assets in generating revenue. The inventory turnover shows enhanced inventory management, and the positive trend in ROA suggests improved profitability in relation to Amazon's assets.

Investor/Market Ratios

- Price to Equity (P/E) Ratio: This ratio measures Amazon's current share price relative to its per-share
 earnings. Negative values, as seen in the first column, typically indicate a Amazon with losses or
 negative earnings. The positive values in the other columns suggest profitability.
- Earnings per Share (EPS): EPS is a measure of Amazon's profitability, calculated as net income divided by the number of outstanding shares. The negative value in the first column again indicates a loss, while positive values in the other columns show profit.
- Price to Book Value (PBV) Ratio: This ratio compares a firm's market value to its book value. Higher
 values can indicate potentially overvalued stocks, or stocks of companies with strong growth
 prospects.
- Dividend Payout Ratio: This represents the portion of earnings a Amazon pays out as dividends to shareholders. A zero value, as seen across all columns, suggests that Amazon is not paying dividends. The absence of dividends might be due to a focus on growth or reinvestment strategies.

It's important to consider these ratios in the context of the industry and the overall market, as standards can vary greatly between sectors.

Conclusion

Amazon appears to be a Amazon maintaining profitability and substantial market valuation, albeit with a cautious liquidity position. Its financial strategy seems to be growth-oriented, potentially at the expense of short-term liquidity and dividend payouts. This aligns with the behaviour of many technology and growth-focused companies, which prioritize reinvestment and expansion over immediate returns to shareholders.