

Amazon Inc.’s Financial health analysis

Ratio Analysis



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Amazon Inc.

Based on the report (Amazon, 2024) and financial ratios provided for Amazon Inc., the company's financial health appears to be mixed, with both positive and concerning trends observed across the key financial areas.

**LIQUIDITY RATIOS**

**Current Ratio:**

The current ratio decreased from 1.14 in 2021 to 0.94 in 2022, falling below 1. This indicates that Amazon's short-term assets no longer cover its short-term liabilities, or the need to liquidate long-term assets. It suggests a potential liquidity concern.

**Quick Ratio:**

The quick ratio declined from 0.91 in 2021 to 0.72 in 2022, following a similar trend to the current ratio. This further emphasizes Amazon's decreased ability to meet short-term obligations using its most liquid assets, excluding inventory.

**Cash Ratio:**

Interestingly, the cash ratio improved from 0.25 in 2021 to 0.35 in 2022, showing an increase in immediate liquidity. Despite overall liquidity concerns, Amazon has improved its cash position, which could provide some cushion against short-term financial pressures.

**Defensive Interval:**

The defensive interval decreased from 143.67 days in 2021 to 116.52 days in 2022. Amazon can continue to operate for fewer days without relying on revenue from sales, indicating a potential decrease in financial resilience.

**Working Capital Cycle:**

**Inventory Days:** Slightly decreased from 43.74 in 2021 to 43.48 in 2022.

**Payable Days:** Decreased from 105.43 in 2021 to 100.59 in 2022.

**Receivable Days**: Increased from 44.08 in 2021 to 53.53 in 2022.

**Net Trading Cycle:** Improved from -17.60 days in 2021 to -3.58 days in 2022 but remained negative.

The working capital cycle shows mixed results. While Amazon is taking longer to collect receivables, it's also paying suppliers faster. The negative net trading cycle indicates that Amazon is still able to sell products before paying suppliers, but this advantage has diminished.

**Working Capital as a % of Sales:**

This metric turned negative, from 0.04 in 2021 to -0.02 in 2022. The negative working capital as a percentage of sales suggests that Amazon's current liabilities exceed its current assets relative to its sales, indicating potential cash flow challenges.

**INSIGHTS:**

Amazon's overall liquidity position has weakened, with most ratios showing a downward trend. This could lead to increased financial risk and potential difficulties in meeting short-term obligations.

Despite overall liquidity concerns, the improvement in the cash ratio suggests that Amazon has prioritized maintaining cash reserves, which could provide some flexibility in managing short-term financial needs.

The negative working capital as a percentage of sales and the shrinking net trading cycle indicate increased pressure on Amazon's working capital management. This could impact the company's operational efficiency and financial flexibility.

Given the declining liquidity metrics, Amazon may need to reassess its financial strategies, potentially focusing on improving cash conversion cycles, renegotiating payment terms with suppliers, or exploring additional financing options.

Amazon appears to be balancing between maintaining cash reserves (as seen in the improved cash ratio) and managing overall liquidity. This suggests a cautious approach to financial management in a potentially challenging economic environment.

Fig 1: Line Chart showing some liquidity ratios

Fig 2: Graph showing some liquidity ratios

Fig 3: Line Chart showing some liquidity ratios

**PROFITABILITY RATIOS:**

**Gross Margin:**

Amazon's gross margin has been steadily declining over the three-year period, with a significant drop in 2022 from 0.05 to 0.02. This indicates that the company is facing increasing pressure on its ability to generate profit from its core business operations. The sharp decline in gross margin suggests that Amazon may be experiencing higher costs of goods sold or engaging in more aggressive pricing strategies to maintain market share. This could be due to increased competition, supply chain issues, or inflationary pressures.

**EBITDA Margin:**

After a slight improvement in 2021 from 0.12 to 0.14, Amazon's EBITDA margin dropped significantly in 2022 to 0.08. This metric, which excludes the effects of financial and accounting decisions, shows a decline in the company's operational efficiency. The decrease in EBITDA margin indicates that Amazon is facing challenges in controlling its operating expenses relative to revenue. This could be due to increased costs in areas such as labour, logistics, or technology investments.

**EBIT Margin:**

Amazon's EBIT margin turned negative in 2022 after maintaining positive values in the previous two years. This is a significant shift, indicating that the company's operating income has become a loss. The negative EBIT margin suggests that Amazon's core business operations are no longer profitable before interest and taxes. This could be due to substantial investments, increased competition, or economic headwinds affecting the e-commerce and cloud computing sectors.

**Net Margin:**

Mirroring the EBIT margin, Amazon's net margin also turned negative in 2022. This represents a substantial decline in the company's overall profitability. The negative net margin indicates that Amazon is no longer generating a profit from its total revenue. This could have significant implications for investor confidence, future growth strategies, and the company's ability to fund operations and investments.

**INSIGHTS**

All the four profitability metrics show a clear downward trend, with 2022 marking a particularly challenging year for Amazon. This suggests systemic issues affecting the company's ability to generate profits across various stages of its operations.

The significant drop in gross margin indicates rising costs or pricing pressures at the product level. This could be due to inflation, supply chain disruptions, or increased competition.

The decline in EBITDA margin suggests difficulties in managing operating expenses relative to revenue growth. Amazon may need to reassess its cost structure and operational efficiency.

These profitability trends may prompt Amazon to reevaluate its growth strategies, pricing policies, and investment plans. The company might need to focus on cost-cutting measures, efficiency improvements, or pivot towards more profitable business segments.

The negative profitability metrics in 2022 are likely to raise concerns among investors and could impact Amazon's stock performance and ability to raise capital.

While 2022 shows poor profitability, it's crucial to consider whether this is a temporary setback due to specific circumstances (e.g., post-pandemic adjustments, global economic conditions) or indicative of longer-term challenges for Amazon's business model.

Fig 4: Graph showing profitability ratios

**SOLVENCY AND DEBT MANAGEMENT RATIOS**:

**Debt to Equity (D/E) Ratio:**

The D/E ratio has increased from 0.34 in 2020 to 0.46 in 2022, indicating a significant rise in Amazon's leverage. This 35% increase over two years suggests that Amazon is increasingly relying on debt to finance its operations and growth. While this can amplify returns in good times, it also increases financial risk.

**Debt to Total Assets:**

This ratio has grown from 0.15 in 2020 to 0.19 in 2022, representing a 27% increase. This trend aligns with the D/E ratio, further confirming Amazon's increasing debt load relative to its asset base. While still relatively low, this upward trend warrants attention.

**Long-term Debt to Capital:**

The ratio has risen from 0.25 in 2020 to 0.31 in 2022, a 24% increase. This indicates that Amazon is using more long-term debt in its capital structure, which could impact its financial flexibility and increase interest expenses in the long run.

**Times Interest Earned:**

This ratio has dramatically declined from 9.96 in 2020 to -1.67 in 2022, passing through a peak of 18.83 in 2021. The negative value in 2022 is particularly concerning as it suggests that Amazon's earnings before interest and taxes (EBIT) were insufficient to cover its interest expenses. This sharp deterioration indicates a significant increase in financial risk.

**Debt Coverage:**

Following a similar pattern to the times interest earned ratio, debt coverage has plummeted from 5.77 in 2020 to -0.94 in 2022, after peaking at 9.92 in 2021. The negative value in 2022 implies that Amazon's operating cash flows were insufficient to cover its total debt obligations, signalling potential liquidity issues.

**Free Cash Flow (FCFE) per Share:**

FCFE per share has been negative throughout the period but shows a volatile trend. It worsened from -$0.41 in 2020 to -$3.05 in 2021, before improving to -$1.18 in 2022. While the recent improvement is positive, the persistent negative values indicate that Amazon is not generating sufficient free cash flow for equity holders.

**INSIGHTS**

Amazon has consistently increased its debt levels relative to equity and assets over the past three years. This strategy could provide resources for growth but also increases financial risk.

The dramatic decline in the times interest earned ratio, turning negative in 2022, is a red flag. It suggests that Amazon's core operations are struggling to generate sufficient earnings to cover interest expenses.

The negative debt coverage ratio in 2022 indicates potential challenges in meeting debt obligations with operating cash flows, which could lead to liquidity issues if not addressed.

The consistently negative but fluctuating FCFE per share suggests that Amazon is investing heavily, potentially at the expense of short-term shareholder returns.

The improvement in FCFE per share from 2021 to 2022, despite remaining negative, could indicate that Amazon's investments are starting to pay off or that cost-cutting measures are being implemented.

Fig 5: Graph showing profitability ratios

**ASSET UTILIZATION RATIOS:**

**Total Asset Turnover:**

The total asset turnover ratio has shown a slight decline over the three-year period, from 1.20 in 2020 to 1.11 in 2022. This ratio measures how efficiently a company uses its assets to generate sales. The decrease indicates that Amazon is generating slightly less revenue per dollar of assets. The downward trend could be a sign that the company's asset base is growing faster than its sales, or that sales growth is slowing.

**Fixed Asset Turnover:**

This ratio has decreased more noticeably, from 2.05 in 2020 to 1.63 in 2022. Fixed asset turnover measures how efficiently a company uses its fixed assets (like property, plant, and equipment) to generate sales. The significant drop suggests that Amazon's efficiency in utilizing its fixed assets has declined.

**Inventory Turnover:**

The inventory turnover ratio has fluctuated, decreasing from 9.80 in 2020 to 8.34 in 2021, then slightly increasing to 8.40 in 2022. Despite the overall decrease since 2020, the slight improvement in 2022 is a positive sign. A higher inventory turnover generally indicates more efficient inventory management. The present ratio suggests that Amazon is still managing its inventory relatively well, turning it over about 8.4 times per year.

**Return on Assets (ROA):**

ROA has shown the most dramatic change, dropping from 0.07 in 2020 to -0.01 in 2022, with a peak of 0.08 in 2021. The negative ROA in 2022 indicates that Amazon is not generating a profit from its assets. This is a significant concern, as it suggests the company is struggling to convert its asset investments into bottom-line profits. The sharp decline from 2021 to 2022 points to a substantial challenge in maintaining profitability.

**INSIGHTS**

All four ratios show a downward trend from 2020 to 2022, indicating an overall decline in Amazon's asset utilization efficiency.

The decreases in asset turnover ratios, particularly fixed asset turnover, suggest that Amazon has been investing heavily in assets, but these investments have not yet translated into proportional revenue or profit growth.

The negative ROA in 2022 is particularly concerning, as it indicates that Amazon is not currently profitable relative to its asset base. This could be due to increased costs, competitive pressures, or investments that have not yet paid off.

Despite the overall decline, inventory management remains relatively strong, which is crucial for a retail-focused business like Amazon.

The slight improvement in inventory turnover from 2021 to 2022 could be a small positive sign, indicating that some efficiency measures may be taking effect.

Fig 6: Graph showing profitability ratios

**INVESTOR/MARKET RATIOS:**

Amazon's investor/market ratios present a concerning picture. The price-to-earnings ratio has turned negative, decreasing from 54.21 in 2021 to -662.52 in 2022, suggesting that the market has lost confidence in the company's future earnings potential. The earnings per share have also turned negative, decreasing from $3.24 in 2021 to -$0.27 in 2022. The price-to-book ratio has remained elevated, decreasing from 13.32 in 2021 to 12.48 in 2022, indicating that the market still perceives the company to be overvalued relative to its book value.

In summary, the company's liquidity position, profitability, and debt management ratios present areas of concern, while its asset utilization and investor/market ratios indicate a more challenging outlook. It would be prudent for the company to closely monitor these financial metrics and implement appropriate strategies to address the identified weaknesses and strengthen its overall financial health.

**PRICE TO EQUITY (P/E) RATIOS:**

The P/E ratio has dramatically shifted from 54.21 in 2021 to -662.52 in 2022. This negative P/E ratio is a result of negative earnings per share, indicating that Amazon experienced a loss in 2022. This is a significant change from the previous two years when the company was profitable. The negative P/E suggests that investors are paying a premium for a company currently operating at a loss, possibly based on future growth expectations or the belief that the loss is temporary.

**Earnings per Share (EPS):**

EPS has declined sharply from $3.24 in 2021 to -$0.27 in 2022. This represents a significant deterioration in profitability. The negative EPS indicates that Amazon is facing considerable challenges in maintaining profitability, possibly due to increased costs, market pressures, or substantial investments.

**Price to Book Value (PBV):**

The PBV ratio has decreased from 13.32 in 2021 to 12.48 in 2022, continuing a downward trend from 19.53 in 2020. While still high, the declining PBV suggests that the market is valuing Amazon less generously relative to its book value. This could indicate that investors are becoming more cautious about the company's prospects.

**Book Value per Share (BV):**

BV has increased from $13.43 in 2021 to $14.33 in 2022, showing a positive trend over the three-year period. The increasing book value per share suggests that Amazon is still building its asset base relative to its outstanding shares, which could be seen as a positive sign for long-term value.

**Dividend Ratios:**

The absence of data for dividend payout ratio, dividend per share, and dividend yield indicates that Amazon does not pay dividends. This is consistent with Amazon's long-standing policy of reinvesting profits into the business rather than distributing them to shareholders.

**Return on Equity (ROE):**

ROE has plummeted from 0.24 in 2021 to -0.02 in 2022, a significant decline from the relatively stable performance in 2020 and 2021. The negative ROE indicates that Amazon is not generating returns for its shareholders, which is a major concern and reflects the company's overall profitability issues in 2022.

**Return on Capital Employed (ROCE):**

ROCE has decreased from 0.13 in 2021 to 0.06 in 2022, continuing a downward trend from 0.18 in 2020. The declining ROCE suggests that Amazon is becoming less efficient at generating profits from its capital employed, which could indicate challenges in its core operations or increased competition.

**Return on Assets (ROA):**

ROA has turned negative, moving from 0.08 in 2021 to -0.01 in 2022. The negative ROA indicates that Amazon is not efficiently using its assets to generate profits, which is a significant concern for a company of its size and market position.

**INSIGHTS**

Amazon experienced a severe decline in profitability in 2022, as evidenced by negative EPS, ROE, and ROA. This suggests significant operational challenges or substantial investments that have yet to pay off.

Despite poor financial performance, the still-high PBV ratio indicates that investors maintain some confidence in Amazon's long-term prospects. However, the negative P/E ratio signals a disconnect between current performance and market valuation.

The increasing book value per share, contrasted with declining profitability ratios, suggests that Amazon continues to grow its asset base but is struggling to translate this into profits.

Declining ROCE and negative ROA point to potential issues with operational efficiency and asset utilization, which could be areas for management to address urgently.

The absence of dividends, combined with the willingness of investors to accept negative returns in the short term, indicates that Amazon is still viewed as a growth company. However, the company needs to demonstrate a path back to profitability to maintain this status.

**RECOMMENDATIONS**

Amazon Inc. must urgently implement a strategic overhaul to address its declining profitability, operational efficiency and restore investors’ confidence. This should involve:

* **Cost Optimization:** Aggressively reduce operating expenses without compromising long-term growth potential. Focus on streamlining operations, optimizing supply chains, and improving labour productivity.
* **Capital Allocation Review:** Reassess major investment projects and consider pausing or scaling back initiatives that are not delivering immediate returns. Prioritize investments that can quickly improve profitability and cash flow.
* **Working Capital Management:** Improve the negative working capital position by negotiating better terms with suppliers, optimizing inventory levels, and enhancing receivables collection processes.
* **Debt Management:** Given the increased leverage and negative interest coverage, develop a clear plan to reduce debt levels and improve the company's financial flexibility.
* **Operational Efficiency Drive:** Launch a company-wide initiative to improve asset utilization and return on capital employed. This could involve divesting underperforming assets and focusing on core, profitable business units.
* **Transparent Investor Communication:** Clearly articulate the company's strategy for returning to profitability and improving shareholder returns. Provide specific, measurable targets and regular updates on progress.
* **Innovation Focus:** Double down on innovations that can create significant competitive advantages and improve profit margins, particularly in areas like AI, logistics, and cloud computing.
* **Pricing Strategy Review:** Analyse pricing strategies across all business segments to ensure they are optimized for profitability while maintaining market share.
* **Leadership Accountability:** Tie executive compensation more closely to profitability metrics and operational efficiency improvements to align management interests with shareholder value creation.

**References**

Amazon. (2024). *Amazon.com, Inc.* Reports First Quarter Results. Retrieved from <https://ir.aboutamazon.com/annual-reports-proxies-and-shareholder-letters/default.aspx>