

Part 1:

Financial Analysis Report of Amazon and Walmart

Financial Statements (In Millions, except per share)	Amazon (December 31st, 2022)	Walmart (January 31st, 2023)
Revenue	513,983	611,289
EBIT	26,072	25,830
Net Income	(2,722)	11,680
Total Assets	462,675	243,197
Cash and cash equivalents	53,888	8,625
Cash from Operations	66,064	28,841
Cash from Investing Activities	(59,611)	(17,722)
Cash from Financing Activities	(1,104)	(17,039)
Diluted EPS	(0.27)	4.27

	Amazon	Walmart
Market Cap	1.607 trill	437.07 bill
Shares Outstanding	10.33 bill	2.69 bill
52-week High	157.17	169.94
52-week Low	88.12	136.09
50-day Moving Avg	148.12	157.99

Beta	1.16	0.48
Payout Ratio	0.0%	37.77%
Profit Margin	3.61%	2.55%
Return on Assets:	3.62%	6.44%
% Held by Institutions	61.78%	34.78%

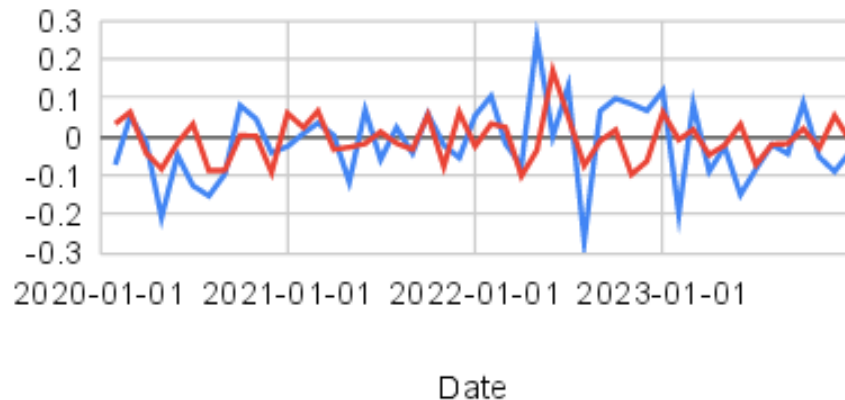
Profit Margin	3.61%	2.55%
Return on Assets:	3.62%	6.44%
% Held by Institutions	61.78%	34.78%

The payout ratio reveals what portion of a company's earnings are paid out as dividends. Analyzing the stability of the ratio helps assess the company's financial health and dividend policy and aids in understanding the investment potential. Amazon in this case has a 0.0% payout ratio indicating they simply do not pay dividends. Walmarts payout ratio sits at 37.77% which indicates they distribute 37.77% of its earnings as dividends to shareholders, with the remaining 60% being reinvested back into the business. This ratio falls within the moderate range, suggesting a balanced approach between rewarding shareholders and fueling future growth.

A company's profit margin tells you how much profit a company gets out of each dollar of sales. Amazon's profit margin sits at 3.61% which, compared to many industries, is considered low meaning the selling price for goods sold is not much higher than the cost. This applies to Walmart as well who holds a 2.55% profit margin. These can indicate a competitive industry

Return on Assets (ROA) is a financial ratio that measures how efficiently a company utilizes its assets to generate profit. Amazon's 3.62% is low compared to their industry's average. Amazon tends to prioritize growth and reinvesting heavily which can impact this metric. Walmart's 6.44% ROA is closer to the industry average indicating an efficient use of its assets. Walmart has historically balanced growth and profitability which would help explain its healthy returns.

Amazon and Walmart Monthly Returns



Blue line - Amazon

Red line - Walmart

Highest Monthly Returns

Amazon:

25.43% in May 2022

- Amazon expanded its delivery options with initiatives like "Amazon Key for Business" allowing secure deliveries inside offices or businesses..
- Amazon changed its removal and disposal order fee structure, putting pressure on sellers to manage their inventory more efficiently.
- Amazon Web Services (AWS) continued its global expansion with the launch of its second infrastructure region in Canada.

13.06% in June 2022

- The highly anticipated 20-for-1 stock split took effect on June 6th, making shares more affordable and potentially attracting new investors.
- The annual Prime Day shopping event, held on June 21st and 22nd saw record-breaking sales which showed the continued strength of Amazon's e-commerce business.

Walmart:

17.07% in June 2022

- As previously announced, Walmart implemented a 2-for-1 stock split on June 2nd, making shares more accessible to individual investors.
- Implemented measures to improve supply chain efficiency and address product availability challenges.
- Opened new stores in various locations, including its first "GoLocal" micro-fulfillment center in Florida.

6.62% in March 2021

- Acquired the iconic retail chain Lord & Taylor out of bankruptcy, expanding its presence in the apparel and home goods market.
- Completed the acquisition of Cornershop, a grocery delivery platform operating in Latin America, strengthening its online grocery offerings.
- Continued to invest heavily in e-commerce, including expanding its online grocery delivery and pickup options.

Lowest Monthly Returns

Amazon:

-26.97% on August 2022

- Labor unions continued their push to organize Amazon workers, highlighting concerns about working conditions and pay.
- Devastating wildfires in the Brazilian Amazon, coinciding with peak deforestation season, raised concerns about the company's role in the region. It raised many safety concerns and sparked protests against the company's environmental impact.

-19.97% on February 2022

- In a surprising move, Amazon announced a significant workforce reduction, eliminating over 18,000 jobs primarily in corporate and technology divisions. This decision was attributed to cost-cutting measures and a shift in priorities.
- Amazon's Super Bowl ad sparked controversy with its depiction of a mind-reading Alexa device, raising privacy concerns.
- Continued to be involved in various legal battles regarding antitrust concerns, labor practices, and product safety.

Walmart:

-10.15% in April 2022

- Launched various sustainable initiatives and promoted eco-friendly products in honor of Earth Day.
- Community Grants: Awarded \$1 million in grants to support local nonprofits and community programs.
- Wellness Events: Hosted free health screenings and events promoting healthy living throughout April.
- Announced plans to hire 100,000 new associates across the U.S., primarily in supply chain and fulfillment centers.

-9.77% in November 2022

- Continued to face supply chain disruptions and inventory management issues, impacting product availability and potentially contributing to lower-than-expected earnings.
- Reopened the Chesapeake store after a tragic shooting incident in November 2021, focusing on employee well-being and community support
- Faced criticism for working conditions and employee compensation, with unions seeking to organize workers in different locations
- Remained under scrutiny from regulators regarding potential anti-competitive practices in its market dominance.



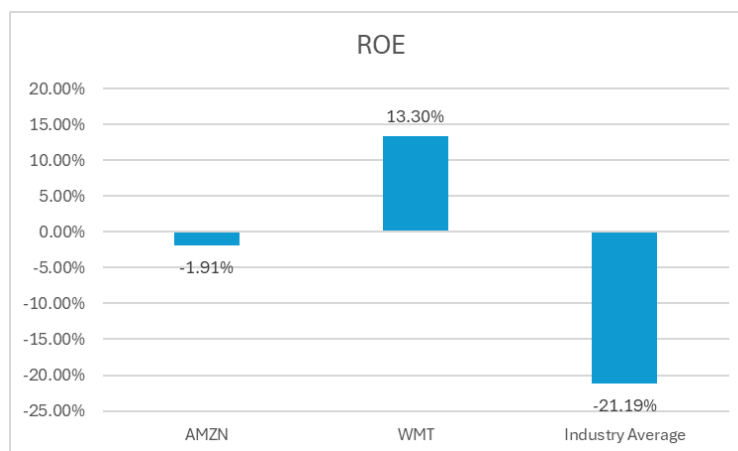
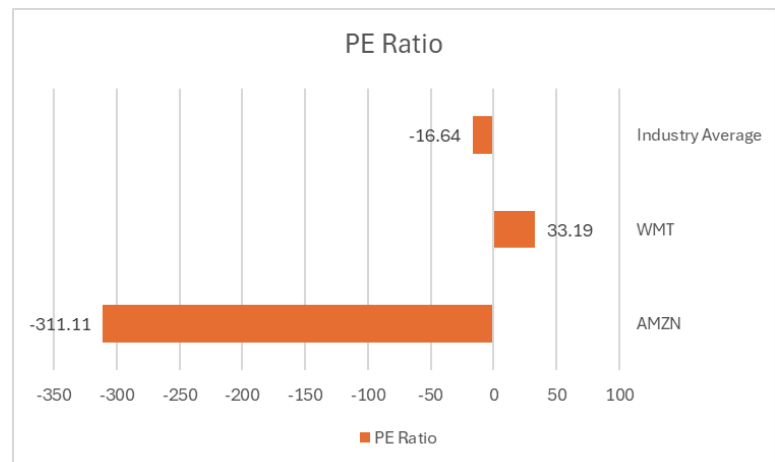
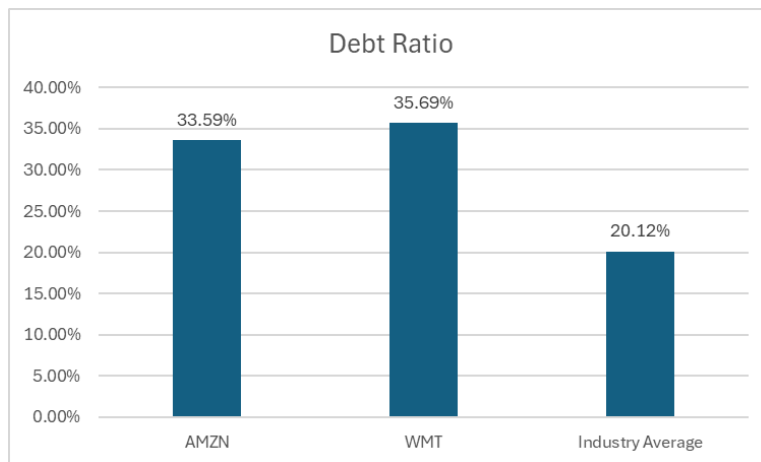
Blue line - Amazon

Red line - Walmart

Financial Ratio Analysis

Ratio Comparison

	Debt Ratio (Total Liabilities/Total Assets)	PE Ratio (Market Price per share/EPS)	ROE (Net Income/Average equity)
AMZN	33.59% (155,393/462,675)	-311.11 (84/-0.27)	-1.91% (-2,722/142,144)
WMT	37.91% (92,198/243,197)	33.19 (141.7/4.27)	13.30% (11,680/87,822)
Industry Average	20.12%	-16.64	-21.19%

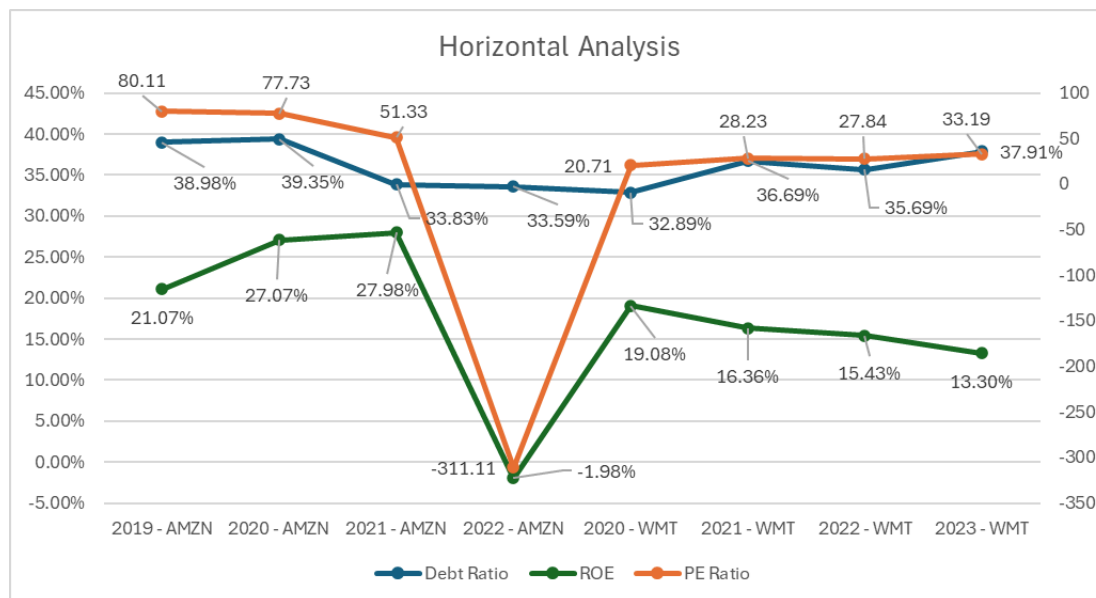


The Debt ratio measures the proportion of a company's assets that are financed by debt. It is calculated by dividing total debt by total assets. A high Debt ratio implies that a significant portion of the company's assets is funded by debt, which can increase financial risk. As high levels of debt may lead to higher interest expenses and financial instability. A lower debt ratio may indicate a

lower reliance on debt for financing which expresses the company's financial flexibility.

The P/E Ratio or Price to Earnings Ratio is a valuation metric for comparing a company's current stock price to the Earnings per share. P/E Ratios when compared with either industry average or comparable firms gives insight to the expectations of future earnings growth. Sometimes the P/E ratio is a representation of the potential and the current valuation of a company.

The return on equity, or ROE, puts into calculation the performance of an organization, relative to the net income generated over the total shareholder's equity. The ROE of an organization is an important evaluation metric because it can identify which organizations are allocating their invested capital from shareholders very efficiently.



The graph above presents a Horizontal Analysis with regards to the Debt Ratio, Return on Equity (ROE), and Price to Earnings Ratio (P/E) over the course of a 4 year period from 2019 to 2023 under the companies Amazon and Walmart. It is clear to see that Amazon and Walmart have a similar makeup of Debt for Financing around the 30 - 40% range. Which must indicate a lower reliance on debt for financing for both companies. Another easily noticeable feature of the horizontal analysis is the level of ROE that both companies respectfully stay within, however there was a huge drop off for Amazon in 2022 leading to the only negative number in their financials make up. This was due to Amazon incurring a loss of 2,722 Million in Net income which also attributes to the negative earnings per share of -0.27 which drastically changed the PE Ratio. Through the income statement it was found that in 2022 Amazon incurred a lot more operating expenses in comparison to the previous years. Now in Walmarts case the company has actually been very consistent within their financial ratios over the past 4 years. Like Amazon their revenue stream

has been steady but there has been a small but noticeable drop off in Return on Equity and a decently large increase in both their debt ratio as well and PE Ratio. This is most likely due to the decrease in basic and diluted earnings per share attributable to Walmart from 4.90 per share to 4.29 per share which is not yet significant enough to make a large dent in their financial makeup.

Earnings Call Analysis

Listen to your company's most recent earnings call as well as the competitor's most recent earnings call. For each earnings call: Cite the date of the call and the names of the main presenters for the firm.

Amazon.com, Inc. Q3 2023 Earnings Call: 10-26-2023

Main presenters:

1. Dave Fildes Amazon.com, Inc.; Vice President of Investor Relations
2. Brian Olsavsky Amazon.com, Inc.; Chief Financial Officer
3. Andrew Jassy Amazon.com, Inc.; Chief Executive Officer

Walmart, Inc. Q3 2024 Earnings Call: 11-16-2023

Main Presenters:

1. Stephanie Schiller Wissink, Senior Vice President & Head-Investor Relations, Walmart, Inc
2. C. Douglas McMillon President, Chief Executive Officer & Director, Walmart, Inc.
3. John David Rainey Executive Vice President & Chief Financial Officer, Walmart, Inc.
4. John R. Furner President & Chief Executive Officer-Walmart US, Walmart, Inc.
5. Kathryn J. Mclay, President & Chief Executive Officer, Sam's Club, Walmart, Inc.
6. Chris Nicholas President & Chief Executive Officer, Sam's Club, Walmart, Inc.

From the earnings call, give a short summary of the biggest items (news, changes, etc.) the firm's leaders chose to discuss.

Amazon: The report highlights strong financial results, operational enhancements, and ongoing innovation across Amazon's diverse business segments.

In Q3 2023, Amazon delivered robust financial performance, exceeding expectations with worldwide revenue of \$143.1 billion (up 11% YoY) and achieving a record operating income of \$11.2 billion (up 343% YoY) and \$20.2 billion in trailing 12-month free cash flow adjusted for equipment finance leases (up \$41.7 billion versus the comparable period last year). North American revenue is \$87.9 billion, and international revenue is \$32.1 billion.

Regionalization efforts contribute to cost reduction and lower inflationary pressures. In International, a closer-to-breakeven scenario with a \$95 million operating loss shows a \$2.4 billion YoY improvement. International is closer to breakeven with an operating loss of \$95 million, showing a \$2.4 billion YoY gain.

AWS (Amazon Web Services) records \$23.1 billion in revenues (up 12% YoY), emphasizing customer enthusiasm for generative AI and strategic collaborations. AWS maintains a prominent leadership position in the cloud infrastructure industry.

How might this news impact financial statements?

The positive Q3 2023 performance outlined in the statement is likely to have several impacts on Amazon's financial statements:

Income Statement:

Revenue section:

1. The reported worldwide revenue of \$143.1 billion, exceeding expectations will significantly increase the revenue section of the income statement.
2. The income statement will itemize the North American revenue of \$87.9 billion and international revenue of \$32.1 billion.
3. AWS Revenues: The \$23.1 billion in AWS revenues (up 12% YoY) will contribute to the overall revenue, and the profitability of AWS will be reflected in the income statement.

Operating Income: The record operating income of \$11.2 billion, representing a substantial increase of 343% YoY, will positively impact the operating income figure on the income statement.

1. Operating Loss Improvement: The closer-to-breakeven scenario in the international segment, with a \$95 million operating loss showing a \$2.4 billion YoY improvement, will be reflected in the income statement.
2. Cost of Sales and Operating Expenses: The mention of regionalization efforts contributing to cost reduction and lower inflationary pressures positively impact the cost of goods sold (COGS) and operating expenses on the income statement, leading to improved profit margins.
3. Net Income: Improving the international segment's operating loss could positively influence the net income figure, reflecting a healthier financial performance than the previous year.

Cash Flow Statement:

Free Cash Flow Growth: The trailing 12-month free cash flow of \$20.2 billion, adjusted for equipment finance leases and up \$41.7 billion YoY, reflects strong cash generation, which may influence the cash flow statement positively.

Balance Sheet: The improved financial performance may lead to increased assets and potentially impact financial ratios.

Earnings Per Share (EPS): The improved financial performance may positively impact earnings per share, indicating increased profitability.

Walmart: The key financial highlights for Q3 that the firm's leaders chose to discuss are growth, digital momentum, guidance adjustment, and financial outlook.

In Q3, constant currency sales increased by 4.4%, nearly \$7 billion, reflecting growth across in-store and digital channels. All operating segments experienced mid-single-digit sales growth, with Walmart US comp sales up 4.9% and Sam's Club US up 3.8% (excluding fuel). International sales grew 5.4%, driven by solid performance in Walmex (9% growth) and China (25% growth). Second, Digital Momentum: PhonePe demonstrated strong momentum, with an annualized Total Payment Volume (TPV) reaching \$1.2 trillion on nearly 5.8 billion monthly transactions. PhonePe achieved a remarkable milestone, surpassing 500 million registered users. Third, guidance Adjustment: modestly raising full-year sales guidance to 5% to 5.5%, reflecting Q3's outperformance compared to the previous guidance of 4% to 4.5%. Maintaining the guidance range for operating income growth at 7% to 7.5%. Fourth, financial outlook: reiterating the expectation for the relationship between profit and sales growth to favor profitability in Q4 and anticipating full-year operating income to grow faster than sales.

This report highlights robust growth in constant currency sales, solid digital performance, and an optimistic sales and EPS guidance adjustment for the full year. The emphasis on profitability in Q4 and the expectation of operating income outpacing sales for the entire year underscore the company's financial resilience and strategic success.

How might this news impact financial statements?

Income Statement:

1. Constant currency sales increased by 4.4%, contributing nearly \$7 billion.
2. Mid-single-digit sales growth in all operating segments, with specific percentages for Walmart US and Sam's Club US.
3. International sales grew 5.4%, with detailed performance in Walmex (9% growth) and China (25% growth).
4. PhonePe's annualized Total Payment Volume (TPV) reached \$1.2 trillion, indicating substantial digital transaction revenue.
5. Operating Expenses: The report highlights higher expenses affecting operating income, contributing to the decision to maintain the guidance range for operating income growth.
6. Mention guidance adjustment, emphasizing an optimistic outlook for sales and operating income growth.

Balance Sheet:

1. PhonePe's achievement of surpassing 500 million registered users could reflect an increase in intangible assets.
2. Adjusting sales and EPS guidance impacts future revenue and earnings, influencing the financial outlook.

Cash Flow Statement: While not explicitly mentioned, the emphasis on profitability in Q4 and the expectation of operating income outpacing sales may impact cash flows, mainly operating cash flows.

During the Q&A portion of the call, analysts and an occasional institutional investor are allowed to ask the management team questions.

What 2 questions asked did you find most interesting? Discuss why.

Amazon:

The first question was from Mark Mahaney of Evercore ISI. Mahaney's question seeks an explanation regarding the sustainability and profitability of Amazon's international segment, mainly focusing on its ability to generate consistent profits in the foreseeable future.

This question is interesting because it aims to understand whether efficiencies have been maximized and if sufficient scale has been attained in the markets to contribute to overall profitability. The emphasis is on determining if the international segment is now substantial, scalable, and profitable to a degree that compensates for any challenges in newer countries.

The question is crucial for investors as it addresses critical aspects of the international segment's performance and sustainability, providing insights that can impact investment decisions. In summary, these considerations help investors assess the international segment's overall health and strategic positioning. The responses to these questions provide a comprehensive picture of the segment's ability to generate sustained profits, navigate challenges, and manage risks, influencing investors' decisions about their investment in the company.

Brian Nowak of Morgan Stanley asked another question. Nowak's question refers to the company's progress in regionalizing warehouses, the adoption of robotics in warehouse operations, and the anticipated impact of these advancements on driving profitability to new heights.

We found the question very interesting because it seeks to understand how regionalizing warehouses, which involves strategically locating warehouses in different regions, and the company's commitment to technological innovation, related to the expected positive outcomes regarding operational efficiency and financial performance, benefit investors. Amazon's progress in regionalizing warehouses and integrating robotics aligns with investor priorities such as

operational efficiency, cost optimization, scalability, technological leadership, customer satisfaction, long-term sustainability, and the anticipation of enhanced profitability. These factors collectively make Amazon an attractive investment option for many stakeholders.

How did the management team respond to these 2 questions?

For the first question regarding the sustainability and profitability of Amazon's international segment, the management highlighted the profitability of established countries like the UK, Germany, Japan, and France, emphasizing ongoing efforts in price, selection, and convenience, and mentioned how the launch of 10 new countries in the last six years, accelerated profitability. The management sees clear positive trendlines and is committed to accelerating progress, particularly in emerging markets.

For the second question, management emphasizes the significant and ongoing investment in robotics, spanning several years, which has substantially impacted productivity, cost efficiency, and safety within fulfillment centers. The statement anticipates further advancements in robotics initiatives, with many expected to come to fruition in 2024 and 2025, aiming to improve cost-effectiveness, productivity, and safety within the company's operations.

Did you feel their response was sufficient? Discuss why or why not.

We think their response to the first question was sufficient because it captures the key points, including the acknowledgment of profitability of established countries, ongoing initiatives for operational improvement, the positive customer response internationally, the growth trajectory of emerging markets, and the company's commitment to continued investment and acceleration of progress.

Their response to the second question does not directly address the progress in regionalizing warehouses, as it only focuses on the adoption of robotics in warehouse operations and the anticipated impact on productivity, cost efficiency, and safety.

Walmart:

What 2 questions asked did you find most interesting? Discuss why.

The first question was from Robby Ohmes of Bank of America. Ohmes asked for additional clarification on lowering grocery prices in the context of persistent inflation mentioned in the opening comments, whether there is an expectation of deflation in dry grocery items, and inquiries about the impact of wage pressures on inflation trends. His question is interesting as it seeks to determine if there is an interplay between lowering grocery prices, potential deflation in dry grocery items, and the impact of wage pressures on inflation trends, providing stakeholders with a more detailed perspective on these economic dynamics. This information is crucial for investors as it allows for a deeper understanding of the company's response to economic factors, potential impacts on costs and consumer behavior, and the overall strategic positioning in a dynamic market.

Investors can use this information to make informed decisions about their investment portfolios and assess the company's resilience in economic uncertainties.

The second question was from Seth Sigman of Barclays. Sigman asked about consumer behavior discussed throughout the year, highlighting various signals of sensitivity, such as buying patterns around paycheck cycles and seeking value during promotional events. The request for more perspective, particularly regarding market share across income cohorts, indicates a desire for a detailed explanation of these observed consumer trends.

We find his question interesting as it seeks insights into the identified signals of sensitivity exhibited by consumers, emphasizing patterns like purchasing behavior around paycheck cycles and increased interest in value during promotional events. Furthermore, the question seeks clarification on market share across different income cohorts. An explanation would involve detailing the company's observations and analyzing market share trends within distinct income groups. Understanding consumer behavior, market share trends, and income cohort dynamics at Walmart provides investors with valuable information for strategic decision-making. It allows them to assess the company's responsiveness to market trends, competitive position, and potential for long-term growth, ultimately influencing investment decisions and portfolio management.

How did the management team respond to these 2 questions?

For the first question, the management emphasizes the company's readiness to manage through a deflationary environment, expressing a commitment to lower customer prices. They also discuss the growth trajectory over the past years and acknowledge the potential for a growth rate of around 4% in a deflationary scenario, focusing on share growth and improving customer experience. The automation plan and digital businesses are highlighted as factors contributing to operating income percentage growth, reaffirming the company's commitment to executing its strategy.

For the second question, the speaker expresses satisfaction with share growth throughout the year, highlighting recent higher share growth in general merchandise categories observed month by month in the third quarter. They acknowledge being well-positioned with a strong value proposition across categories that helps customers save time and money.

Did you feel their response was sufficient? Discuss why or why not.

The response summarizes the speaker's statement but does not explicitly address the context of persistent inflation mentioned in the opening comments or the impact of wage pressures on inflation trends. While it covers the information about potential deflation in dry grocery items, it would be more comprehensive if it specifically mentioned how wage pressures are addressed in the statement.

As for the second question, the provided summary must address various signals of sensitivity in consumer behavior, such as buying patterns around paycheck cycles and seeking value during promotional events. Additionally, it does not offer a detailed explanation of market share across income cohorts. To better answer the question, the response should include information related to

observed signals of sensitivity in consumer behavior and provide insights into market share dynamics across different income cohorts.

Part 2:

Stock Research Report of Amazon and Walmart

1. **Credit Rating Analysis**

- **Credit ratings of Amazon and Walmart**

Amazon Credit rating: A1

Walmart Credit rating: Aa2

- **Which are investment grade? Which is the highest and lowest?**

Amazon: A1 is an upper-medium investment grade, subject to low credit risk.

Walmart: Aa2 is a high investment grade, subject to very low credit risk.

So Walmart has a better investment grade than Amazon.

According to Moody's rating, the investment grades are "Baa" or higher.

The highest investment grade: Aaa

The lowest investment grade: C

Sources: [moody's rating symbols and definitions.pdf](#)

[Amazon.com, Inc. Credit Rating - Moody's \(moody's.com\)](#)

[Walmart Inc. Credit Rating - Moody's \(moody's.com\)](#)

- What do these ratings suggest and why observe them?

An investment-grade rating from Moody's indicates that the issuer has a relatively low risk of defaulting on its debt obligations. Moody's assigns letter grades to indicate credit quality, with the highest-quality ratings typically denoted as "Aaa" or "Aa". "A", "Baa" and "Ba" range from upper medium to have speculative elements, and lower-quality grades ranging from "B", "Caa", "Ca" to "C."

Investment-grade ratings generally include the following categories:

1. Aaa, Aa, : High-quality, minimal to very low credit risk.
2. A, Baa: Upper medium to medium grade. Subject to low to moderate credit risk.
3. Ba, B, Caa, Ca and C: speculative to highest credit risk or default.

Investment-grade ratings are generally safer than lower-rated or non-investment-grade (junk) bonds. Investors often use these ratings to assess the risk associated with a particular debt instrument and make informed investment decisions.

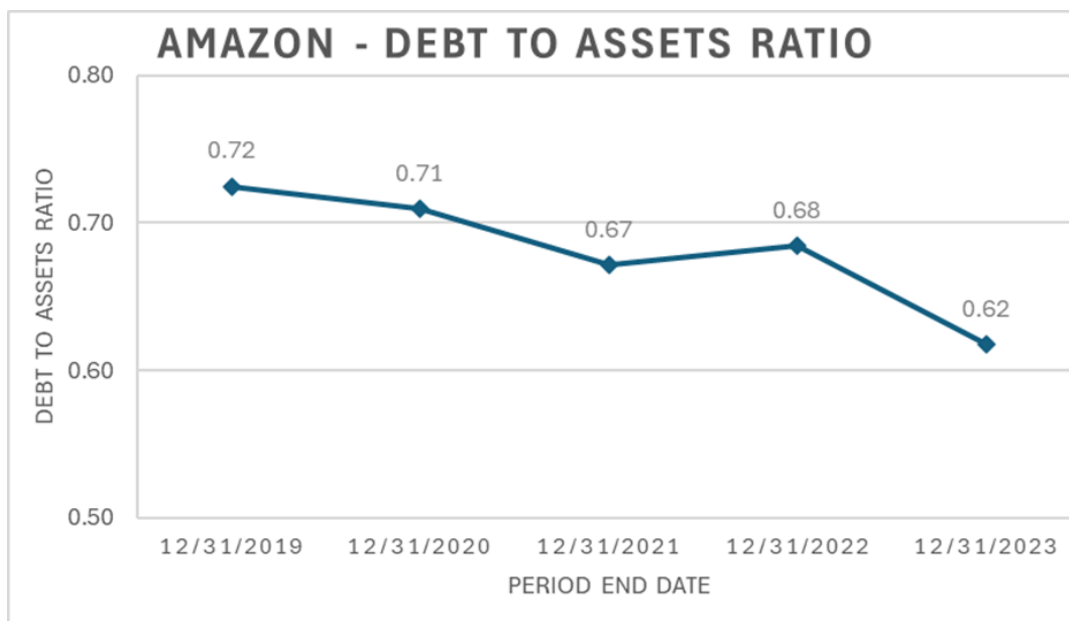
- Debt-to-Assets ratios over the past 5 years

AMAZON:

Year	Total Debt (in Millions)	Total Assets (in Millions)	Debt to Assets Ratio
12/31/2019	163,188	225,248	0.72
12/31/2020	227,791	321,195	0.71
12/31/2021	282,304	420,549	0.67
12/31/2022	316,632	462,675	0.68
12/31/2023	325,979	527,854	0.62

Debt to Assets Ratio= Total Debt / Total Assets

* As of December 31, all values are in USD.*



Sources: [Amazon.com, Inc. - SEC filings - SEC Filings Details \(aboutamazon.com\)](#)

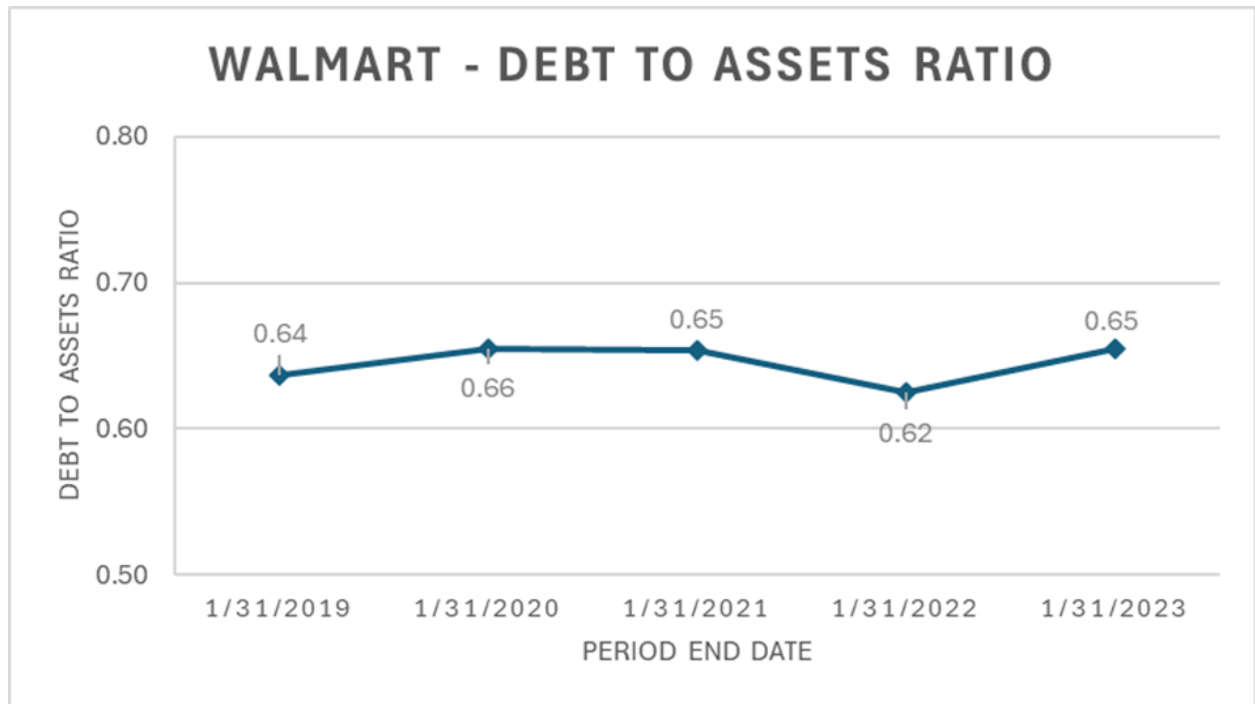
AMZN | Amazon.com Inc. Annual Balance Sheet - WSJ

WALMART:

Year	Total Debt (in Million)	Total Equity (in Million)	Debt to Equity Ratio
1/31/2019	139,661	219,295	0.64
1/31/2020	154,943	236,495	0.66
1/31/2021	164,965	252,496	0.65
1/31/2022	152,969	244,860	0.62
1/31/2023	159,206	243,197	0.65

Debt to Assets Ratio= Total Debt / Total Assets

* As of December 31, all values are in USD.*



Sources: [Walmart Investor Relations - Financials - SEC Filings - SEC Filings Details](#)

[WMT | Walmart Inc. Annual Balance Sheet - WSJ](#)

- **Interest Coverage Ratio over the past 5 years.**

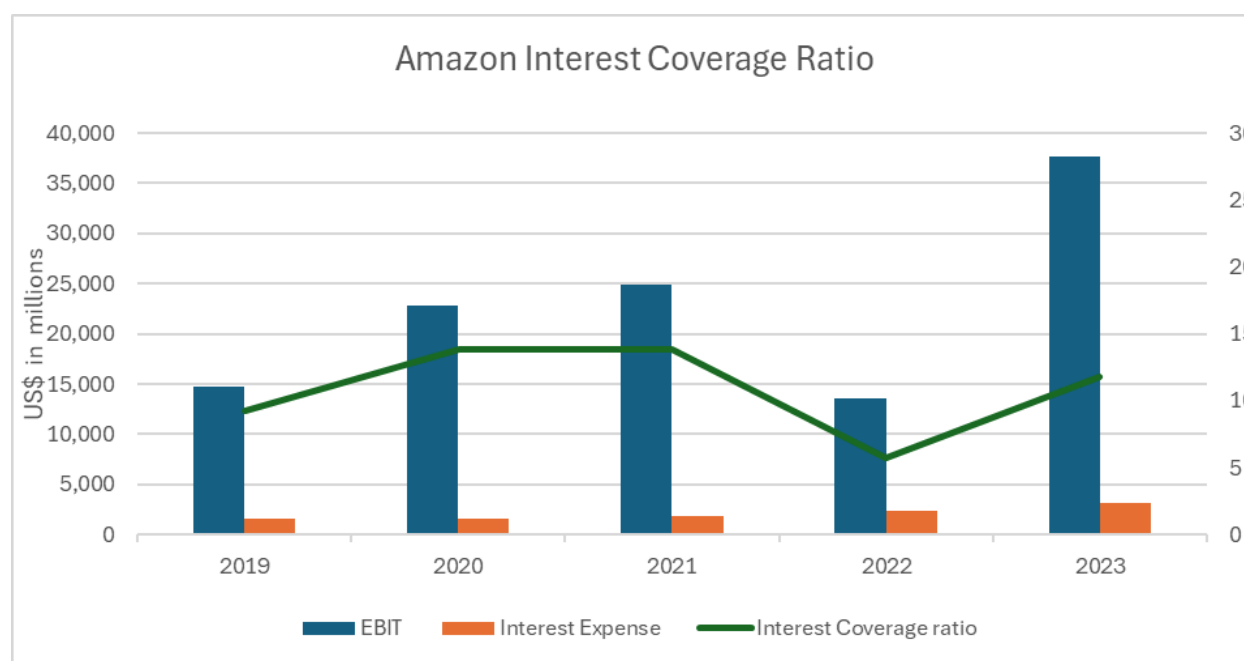
AMAZON:

YEAR	EBIT In Millions	Interest Expense In Millions	Interest Coverage Ratio
2019	14,742	1,600	9.21
2020	22,824	1,647	13.86
2021	24,941	1,809	13.79
2022	13,511	2,367	5.71

2023	37,619	3,182	11.82
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Interest Coverage Ratio= EBIT / Interest Expenses

As of December 31, all values are in USD



Source: [AMZN | Amazon.com Inc. Annual Income Statement - WSJ](#)

[Amazon.com, Inc. - SEC filings - SEC Filings Details \(aboutamazon.com\)](#)

WALMART:

YEAR	EBIT	Interest Expense	Interest Coverage
	In Millions	In Millions	Ratio
2019	21,957	2,395	9.17
2020	21,468	2,599	8.26
2021	26,948	2,315	11.64

2022	28,442	1,994	14.26
2023	24,528	2,128	11.53

Interest Coverage Ratio= EBIT / Interest Expenses

As of December 31, all values are in USD

Source: [WMT | Walmart Inc. Annual Income Statement - WSI](#)

[Walmart Investor Relations - Financials - SEC Filings - SEC Filings Details](#)

- What do these ratios suggest about the firms?

The Debt-assets ratio measures a firm's financial leverage; it shows the degree to which a company has used debt to finance its assets. The debt-to-assets ratio provides valuable information about a company's financial structure, risk profile, and ability to meet debt obligations.

The interest coverage ratio is a financial measure utilized to assess a company's ability to meet its interest payments on outstanding debt. This ratio offers a significant understanding of the company's financial health and ability to handle debt effectively.

2. Corporate Governance Scores courtesy of ISS

- What are the E, S, and G trying to measure when considering ESG.

ESG stands for Environmental, Social, and Governance and encompasses a set of criteria for assessing a company's conduct in these domains. It considers aspects like environmental impact,

treatment of employees and communities, and corporate governance quality. This score aids investors and other stakeholders in evaluating a company's management sustainability and ethical business operations, identifying strengths and areas needing improvement. Sustainalytics. Inc. provides ESG Risk Ratings on a numerical scale ranging from 0 (Lowest risk) to 100 (highest risk). These scores are additionally classified into five risk levels: Negligible (0-9.9), Low (10-19.9), Medium (20-29.9), High (30-39.9) and severe (40+).

Amazon's ESG Risk Rating is 30.6 (High Risk) with Environmental Risk Score= 6.0, Social Risk Score= 15.4, and Governance Risk Score= 9.2). Walmart's ESG Risk Rating is 25.3 (medium Risk), Environmental Risk Score= 5.9, Social Risk Score= 12.4, and Governance Risk Score= 7.1)

Sources: [ESG Risk Ratings \(sustainalytics.com\)](https://www.sustainalytics.com/esg-risk-ratings)

[Amazon.com, Inc. \(AMZN\) Environment, Social and Governance \(ESG\) Ratings - Yahoo Finance](https://finance.yahoo.com/quote/AMZN/analyst/esg)

[Walmart Inc. \(WMT\) Environment, Social and Governance \(ESG\) Ratings - Yahoo Finance](https://finance.yahoo.com/quote/WMT/analyst/esg)

- **Compare the ISS Quality Score and pillar scores found on Yahoo Finance (Under Profile)**

Amazon.com, Inc.'s ISS Governance Quality Score as of January 1, 2024, is 10.

The pillar scores are Audit: 4; Board: 10; Shareholder Rights: 2; Compensation: 10.

[Amazon.com, Inc. \(AMZN\) Company Profile & Facts - Yahoo Finance](https://finance.yahoo.com/quote/AMZN/analyst/iss)

Walmart Inc.'s ISS Governance Quality Score as of January 1, 2024, is 9.

The pillar scores are Audit: 8; Board: 8; Shareholder Rights: 1; Compensation: 10.

[Walmart Inc. \(WMT\) Company Profile & Facts - Yahoo Finance](https://finance.yahoo.com/quote/WMT/analyst/iss)

- **What do these scores suggest**

The Governance Quality Score is a systematic evaluation and filtering tool crafted to facilitate thorough corporate governance assessments across four primary domains: Board Structure,

Compensation, Shareholder Rights, and Audit & Risk Oversight. These scores offer insights into relative risk levels, graded from 1 (minimal risk) to 10 (significant risk).

Amazon.com, Inc. received a governance quality score 10 as of January 1, 2024. This score is derived from the individual scores across the four pillars: Audit (4), Board (10), Shareholder Rights (2), and Compensation (10). This suggests that while the company performs strongly in areas like board composition and executive compensation, some concerns regarding shareholder rights and audit quality could be addressed or improved.

Walmart Inc. received a governance quality score 9 as of January 1, 2024. This score is derived from the individual scores across the four pillars: Audit (8), Board (8), Shareholder Rights (1), and Compensation (10). This suggests that while the company performs well in areas such as audit quality, board composition and executive compensation, there may be significant concerns regarding shareholder rights that could be addressed or improved.

Source: [QualityScore Techdoc Nov2016.pdf \(iss-corporate.com\)](#)

[ISS ESG Gateway | ISS \(issgovernance.com\)](#)

3. Beta Comparison

- **Compare the Betas of both firms**

AMAZON has a beta of 1.14, indicating that the company's stock is slightly more volatile than the market. In practical terms, this means that Amazon's price tends to move slightly more than the market when the market goes up or down.

WALMART has a beta of .49, indicating a volatility that is much less than the market since the market's beta is 1.10. This suggests that Walmart's stock price will move much less often than the market in response to market changes. On the other hand when comparing Walmarts beta to the specific industry it is in, it will show that its still less volatile than the industry average but by much less.

In comparison to each other, Amazon's stock price is much more volatile and subject to changes in the market than Walmart's stock.

- **How is the Beta Calculated and What does it suggest**

Beta is a key concept in finance, representing a measure of a stock's risk in relation to the market. In other words, it's a measure of a stock's sensitivity to market movements and can be found on a company's stock summary page. To calculate the beta you must take the average from all the periods being tracked over a specified amount of time and dividing that by the market's variance. This measure is used in the Capital Asset Pricing Model (CAPM), a model that calculates the expected return of an asset based on its beta and expected market returns. The market average is 1.10 while the industry averages are 1.46 for amazon and 0.6 for Walmart.

4. Required Return Using CAPM

The CAPM is a financial model used to estimate the expected return on a security based on its risk. The higher the risk is the more potential returns are expected to compensate for the increased chance of loss. CAPM is calculated using the following equation: $\text{Risk-free-rate} + \text{beta}(\text{market return} - \text{risk free rate})$. The risk free rate is found on the treasury yield website using the most recent entry on February 23rd 2024, in this case we found it was 4.26%. The Market return is found by using the arithmetic average found on the historical returns website and we found that to be 12.98%. The Beta can either be calculated or found on each company's stock summary page of Yahoo Finance.

Amazon is expected to have the highest return among the two companies, with an expected return of 14.2%. Walmart is expected to have a return of 8.53% which is a significant amount less than both Amazon's return and the market's return of 12.98%. This is because Amazon has the highest beta of the two of them which means that it is more volatile than the market. However, it also means that Amazon has the potential to earn higher returns than the market if the market goes up. Walmart's return being lower than both Amazon and the market indicates that the security is considered less risky than the average investment in the market.

Sources: <https://finance.yahoo.com/quote/XLP>

https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/Betas.html

https://home.treasury.gov/resource-center/data-chart-center/interest-rates/TextView?type=daily_treasury_yield_curve&field=tdr_date_value_month=202402

5. Payout Policy

- **How have these two companies returned cash to shareholders? Have they paid dividends or bought back stock?**

Amazon - Amazon does not payout dividends to shareholders as they follow specific profit distribution strategies in order to prioritize expansion efforts over distributing profits to shareholders and focus on long term growth. Instead Amazon has repurchased common stock but not at a frequent rate. In the most recent 10-K, Amazon had repurchased 46.2 million shares of common stock for \$6.0 billion in 2022. This is the only repurchase within a 3 year period and as of Dec 31st, 2023, \$6.1 billion remain under the repurchase program.

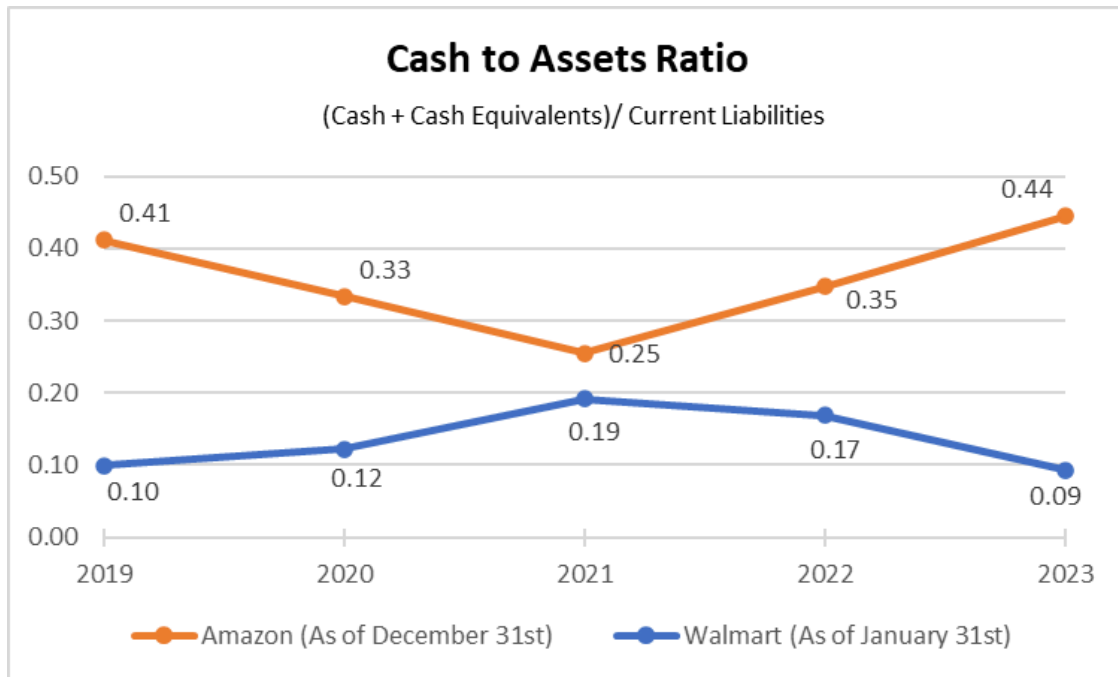
Walmart - Walmart provides returns for shareholders in the form of both share repurchases and dividends. Walmart paid the following total in Dividend payments: \$6.1 billion, \$6.2 billion, & \$6.1 billion over a 3 year period from 2021 - 2023. The annual dividend per share in 2023 was \$2.24 and in 2024 it has increased to \$2.28 annually and paid \$0.57 per share quarterly. Walmart also has a Share repurchase program that received authorization for \$19.3 billion of share repurchases funded through the company's free cash flow. As of Jan 31st, 2023 Walmart has repurchased a total number of 73.9 million shares paid for a total amount of \$9.92 billion over the average price of \$134.17 per share.

- **How much cash does each company have in the most recent 10-K?**

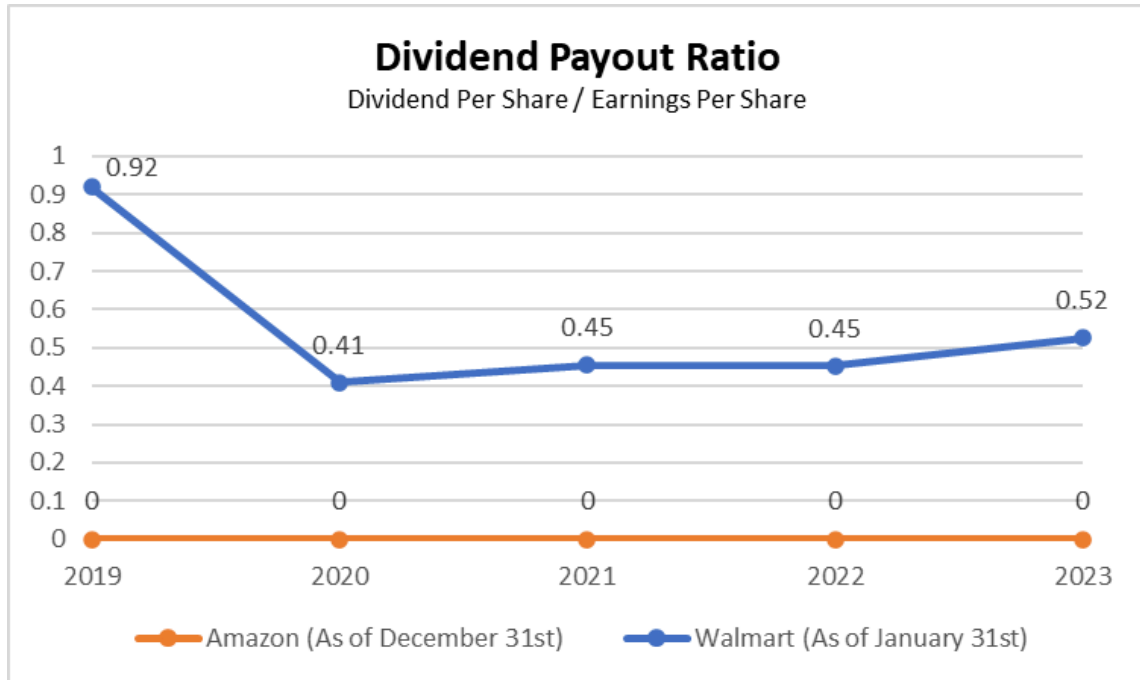
Amazon - As of December 31st, 2023 per the most recent 10-K balance sheet, Amazon has a total of \$73.387 billion in Cash and Cash equivalents.

Walmart - As of January 31st, 2023 per the most recent 10-K balance sheet, Walmart has a total of \$8.625 billion in Cash and Cash equivalents.

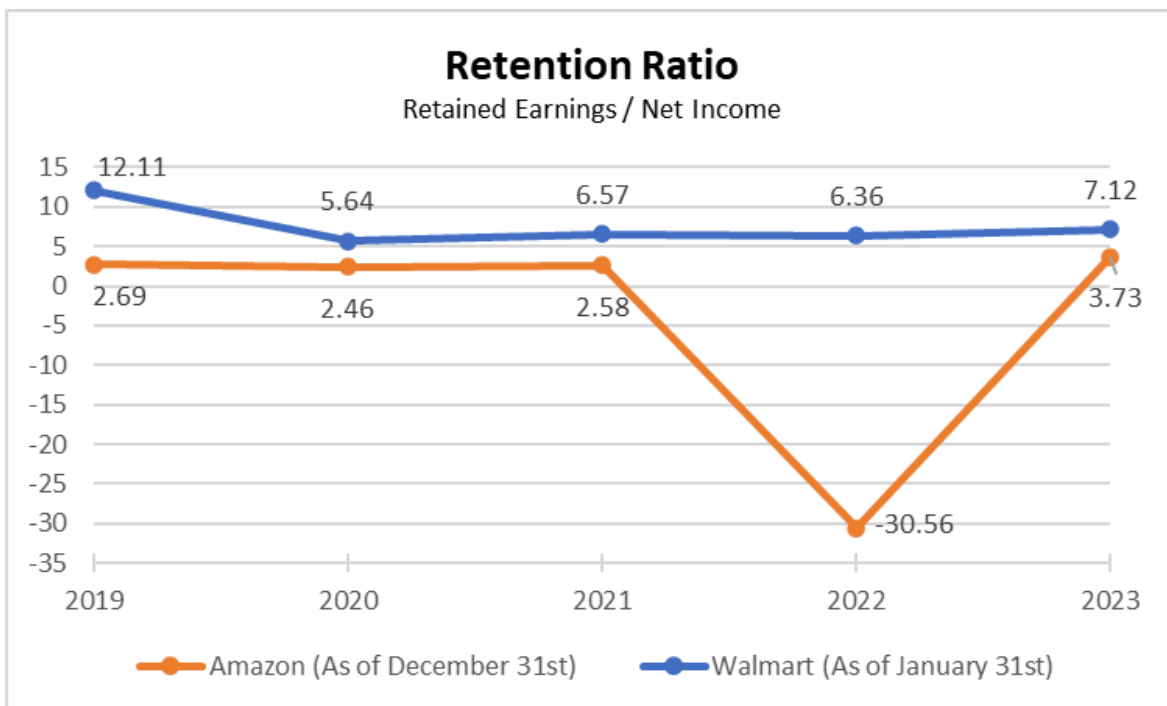
- **Cash to assets ratio over the past 5 years.**



- **Dividend payout ratio over the past 5 years.**



- Retention ratio over the past 5 years.



- **Given this payout policy and the current cash balance of this firm, would you advise the firm to change its payout policy.**

Given the circumstances of the current cash balance and payout policy of Amazon. I would advise amazon to keep the current payout policy that they have been operating under over the business's life. Amazon does not and has not paid out any dividends over the course of operations but has repurchased common stock and had stock splits as well in the past. By continuing to practice this strategic approach Amazon's shareholders have seen exponential growth of the company due to the dedication to growth by Amazon. The consistent focus on innovation and expansion of presence across various market sectors comes from the priority to develop and expand the company through their funds which may not be possible with priorities lying elsewhere such as dividend payments.

6. Weighted Average Cost of Capital (WACC)

- **Estimating each company's cost of equity**

$$\text{Cost of Equity} = R_f + \beta(R_m - R_f)$$

Amazon -

$$\begin{aligned}\text{Cost of Equity} &= 4.26 + 1.14(4.6) \\ &= \mathbf{9.50\%}\end{aligned}$$

Walmart -

$$\begin{aligned}\text{Cost of Equity} &= 4.26 + 0.49(4.6) \\ &= \mathbf{6.51\%}\end{aligned}$$

- **Estimating each company's cost of debt**

$$\text{Cost of Debt} = \text{Interest Expense} / \text{Total Debt}$$

Amazon -

$$\text{Cost of Debt} = 3,182 / 161,062$$

$$= 1.98\%$$

Walmart -

$$\text{Cost of Debt} = 2,128 / 67,245$$

$$= 3.16\%$$

- **Estimate each company's weight of debt and weight of equity**

$$\text{Weight of Equity} = \text{Equity} / (\text{Debt} + \text{Equity})$$

$$\text{Weight of Debt} = \text{Debt} / (\text{Debt} + \text{Equity})$$

Amazon -

$$\text{Weight of Equity} = 1,816,921 / (1,816,921 + 161,062)$$

$$= \underline{0.919}$$

$$\text{Weight of Debt} = 161,062 / (1,816,921 + 161,062)$$

$$= \underline{0.081}$$

Walmart -

$$\text{Weight of Equity} = 365,345 / (67,245 + 365,345)$$

$$= \underline{0.845}$$

$$\text{Weight of Debt} = 67,245 / (67,245 + 365,345)$$

$$= \underline{0.155}$$

- **Why might some firms have higher amounts of equity compared to others?**

The reason why some firms might have higher amounts of equity compared to others is because of the specific approach and strategies that a company has when it comes to growth. Such as Amazon in this case, they have a dedication to the growth of the company in innovation, market presence expansion and other areas of the company. These metrics would inspire the growth of the company and its stock. While other companies such as Walmart have more of a dedication to shareholder returns in the forms of dividends and preferred shares. Although Walmart does not currently have preferred shares outstanding leading to the reason for the equity to appear in a higher amount. Unlike Walmart, amazon has never paid any dividends and has instead chosen to expand their market cap by repurchases of stock to allow even more growth through the help of consumer funding.

- **Estimate the tax rate for each company**

$$\text{Tax Rate} = \text{Tax Expense} / \text{Pre-Tax Income}$$

Amazon -

$$\begin{aligned} \text{Tax Rate} &= 7,120 / 37,557 \\ &= \underline{18.96\%} \end{aligned}$$

Walmart -

$$\begin{aligned} \text{Tax Rate} &= 5,724 / 17,016 \\ &= \underline{33.64\%} \end{aligned}$$

- **Components/inputs of the WACC formula for each firm.**

	Amazon	Walmart
w_d	8.10%	15.50%
w_{ps}	0.00%	0.00%
w_s	91.90%	84.50%
Tax rate	18.96%	33.64%
r_d	1.98%	3.16%
r_{ps}	0.00%	0.00%
r_s	9.50%	6.51%
WACC	8.86%	5.83%

- **Calculating the WACC for each company**

$$\text{WACC} = (E / (E + D)) * \text{Cost of Equity} + D / (E + D) * \text{Cost of Debt} * (1 - \text{Tax Rate})$$

Amazon -

$$\begin{aligned}\text{WACC} &= 0.9190 * 9.50\% + 0.081 * 1.98\% * (1 - 18.96\%) \\ &= \underline{8.86\%}\end{aligned}$$

Walmart -

$$\begin{aligned}\text{WACC} &= 0.8450 * 6.51\% + 0.155 * 3.16\% * (1 - 33.64\%) \\ &= \underline{5.83\%}\end{aligned}$$

- What is learned from the WACC comparison.

Comparing the WACC between Walmart and Amazon offers valuable insights into their respective financial structures and strategies. The WACC reflects the variations of capital mix between the 2 companies. Walmart exhibits a lower WACC of **5.83%**, attributed to a higher reliance on debt (15.50%) and a lower cost of equity (6.51%). Additionally, Walmart's lower cost of debt (3.16%) further contributes to its reduced WACC. With a lower WACC it potentially indicates that Walmart has a higher reliance on debt and concerns about its growth prospects or competitive positioning. In contrast, Amazon's higher WACC potentially indicates Amazon's preference for equity. Amazon's WACC stands at **8.86%**, computed with a higher proportion of equity (91.90%) and a relatively lower cost of equity (9.50%) compared to Walmart. Market perception, mirrored in WACC differentials, influences investor confidence in each company's growth prospects, with Amazon typically enjoying greater investor trust. These figures suggest that Amazon's financing strategy may prioritize equity, possibly reflecting its growth-oriented approach, while Walmart leans more towards debt, which might align with its stable operational model.

- Is it better for the firm to have a higher or lower WACC?

It is generally better for a firm to have a lower WACC. A lower WACC indicates that the company can raise funds at a lower cost, which can lead to higher investment returns and increased profitability. A lower WACC may also suggest that the company has a more efficient capital structure and is effectively managing its financial resources. Minimizing your WACC is typically a key objective for firms seeking to optimize their cost of capital and maximize shareholder wealth. This can enhance the firm's competitiveness, increase its ability to undertake new projects or investments, and ultimately create more value.

Sources:

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