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Equity Valuation | Walmart Inc.

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Abstract

This dissertation presents a valuation of Walmart Inc., a leading global retailer based on the USA. The purpose of the valuation is to provide a 12 month price target for Walmart's shares as of May 16, 2024, and to offer an investment recommendation relative to the share price at that date. After evaluating various equity valuation methods, the Discounted Cash Flow (DCF) method using the Weighted Average Cost of Capital (WACC) as the discount rate was chosen, alongside a Sum-of-Parts Relative Valuation. The analysis considers macroeconomic factors, industry trends, and historical performance to forecast future performance. The resulting valuation estimates a share price of \$67.60, indicating a 4.56% upside potential from the May 16, 2024 price of \$64.65, leading to a HOLD recommendation. The dissertation concludes with a comparison of these valuation results to an equity report from BNP Paribas, which forecasts Walmart's share price for May 2025.

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Resumo

Esta dissertação apresenta uma avaliação da Walmart Inc., um líder global na indústria de retalho com sede nos EUA. O objetivo da avaliação é fornecer uma meta de preço para as ações da Walmart para um período de 12 meses, a partir de 16 de maio de 2024, e oferecer uma recomendação de investimento com base no preço das ações nessa data. Após a avaliação de vários métodos de valorização de ações, foi escolhido o método do Fluxo de Caixa Descontado (DCF), utilizando o Custo Médio Ponderado de Capital (WACC) como taxa de desconto, em conjunto com uma Avaliação Relativa por Soma de Partes. A análise considera fatores macroeconómicos, tendências do setor e desempenho histórico para prever o desempenho futuro. A avaliação resultante estima um preço de ação de \$67,60, indicando um potencial de valorização de 4.56% em relação ao preço de \$64,65 em 16 de maio de 2024, levando a uma recomendação de MANTER. A dissertação conclui com uma comparação dos resultados desta avaliação com um relatório de ações emitido pelo BNP Paribas, que prevê o preço das ações da Walmart para maio de 2025.

Título: Equity Valuation | Walmart Inc.

Autor: Pedro Afonso Monteiro

Palavras-chave: Walmart, Retalho, Preço de ações, Fluxo de Caixa Descontado, Avaliação Relativa

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1. Introduction

This dissertation seeks to determine Walmart Inc.'s fair-value share price and provide a well-informed investment recommendation for the company.

Walmart stands as a global leader in the retail industry, offering an extensive range of products including groceries, health and wellness items, home improvement goods, electronics, clothing, and more. As the world's largest retailer by both revenue and scale, Walmart's mission is encapsulated in its motto: "*Save money, live better*". The company's strategy centers on delivering consistently low prices, ensuring convenience and affordability for customers. Walmart achieves this through a diverse range of store formats designed to cater to various consumer needs and regional preferences, while also enhancing its e-commerce capabilities that complement its vast network of physical stores to provide a seamless shopping experience.

The first section of this dissertation reviews the underlying theories of valuation in finance, exploring various methods available for valuing companies. It examines the strengths and weaknesses of each approach, discusses the circumstances under which specific methods are more effective, and identifies the most suitable techniques for valuing Walmart.

The subsequent sections of this dissertation will provide an in-depth analysis of Walmart, covering key historical milestones, its business model, stock performance over time, and growth strategies. An overview of the retail industry will also be presented, alongside an assessment of the major challenges and competitors Walmart faces. The valuation of Walmart will be conducted using a combination of the Discounted Cash Flow (DCF) method, the Multiples method, and by considering analyst consensus. Finally, the valuation results will be compared with an equity report issued by BNP Paribas to assess alignment and differences.

2. Literature Review

2.1 Valuation Overview

Valuation is a crucial part of finance, playing an essential role for managers and investors. Determining the value of a business is critical to many managerial decisions. Behind any major resource allocation decision, there must lie a calculation of what that move is worth.

Since the future of any business is uncertain, assessing its value is complicated and it is not an exact science. Valuation methodology has been a focus of many studies for decades, however there is no “one size fits all” method to calculate the value of a business. Many different methods have been developed, using different assumptions, each with its own strengths and weaknesses.

A thorough valuation considers the information contained in each method, allowing a company to be viewed from several viewpoints, providing a better understanding of the overall value of the business.

“The first step is to recognize that virtually every popular valuation approach is simply a different way of expressing the same underlying model.” (All roads lead to Rome, 1999)

Damodaran (2006) states that in general there are four approaches to valuation. Discounted Cashflow valuation, which considers the value of an asset to be the Present Value of its expected future cashflows; Liquidation and Account valuation, which uses book value of assets as a starting point of the valuation; Relative Valuation, which estimates the value of an asset by looking at the pricing of comparable assets relative to a common variable such as earnings, cashflows or sales. The final approach, Contingent Claims valuation, uses Option pricing models to measure the value of assets that share option characteristics.

2.2 Discounted Cash Flow approach (DCF)

The DCF approach is the most used in the academic world. This approach is based on the idea that the valuation of a firm hinges on the measurement of two basic parameters: Assessment of future cash flows and an appropriate discount rate that reflects the risk involved in the cash flow estimation. (Note on Cash flow valuation methods: comparison of WACC, FTW, CCF and APV approaches, Mitra, Richard Ivey School of Business)

Equation 1: Present Value of future cash flows

$$\text{Present Value} = \sum_{t=1}^{t=n} \frac{CF_t}{(1+r)^t}$$

Where,

n = Life of the asset

CF_t = Cash flow in period t

r = Discount rate

Despite being the most commonly used, this approach is associated with inaccuracy issues, since it uses several assumptions for future projections which are subjective and sensitive to bias.

The DCF approach can be split into Enterprise Valuation, valuing the entire business, and Equity Valuation, focusing on shareholder value. Common Enterprise Valuation models include Free Cash Flow to Firm (FCFF), Economic Value Added (EVA), and Adjusted Present Value (APV). For Equity Valuation, the Free Cash Flow to Equity (FCFE) and Dividend Discount Model (DDM) are most used.

In the following pages I will present each of these models in depth, in order to choose the best combination of methodologies to arrive at the fair value of Walmart.

2.3 Free Cashflow models

There are two approaches to obtaining Free Cashflow, depending on whether the goal is to value the company as a whole, or to consider only the value to shareholders.

2.3.1 Free Cashflow to Firm (FCFF)

The Free Cashflow to Firm is the sum of the cashflows to all stakeholders of the firm, including both Equity and Debt holders. In essence, this is the amount of cashflows generated after accounting for taxes, depreciation and amortization costs, Net Working Capital (NWC) and investments in fixed assets (CAPEX).

The FCFF is best suited for companies with stable leverage levels, since it can be very difficult to estimate future Debt issues and repayments.

When using FCFF, the appropriate discount rate should reflect the composite cost of financing from all sources of capital, which is the Weighted Average Cost of Capital (WACC)

Equation 2: Free Cash Flow to Firm

$$FCFF = EBIT \times (1 - t) + \text{Depreciation\&Amortization} - \Delta NWC - CAPEX$$

Where,

t = Marginal corporate income tax rate

ΔNWC = Increase in Net Working Capital

CAPEX = Capital expenditures for fixed assets

2.3.2 Free Cashflow to Equity (FCFE)

The Free Cashflow to Equity is the sum of the cashflows to the Equity holders, meaning it must account for debt payments as well as reinvestments needed for future growth.

The FCFE is used to distribute Dividends, however the FCFE is often larger than the dividends. One reason for this is that companies prefer to keep the dividends stable throughout the years, while the earnings can vary across periods. Keeping the dividends lower than the FCFE allows the company to pay the same level of dividends even if the FCFE decreases.

When using FCFE, the appropriate discount rate should only reflect the cost of equity financing, which is the Cost of Equity.

Equation 3: Free Cash Flow to Equity

$$FCFE = \text{Net Income} + \text{Depreciation\&Amortization} - \Delta NWC - CAPEX + \text{Net Borrowing}$$

Where,

Net Borrowing = New Debt issued – Debt repayments

It is also possible to derive the FCFE from the FCFF, by removing the value of the Debt claims from the Firm value.

Equation 4: From FCFF to FCFE

$$FCFE = FCFF - \text{Interest} \times (1 - t) + \text{Net Borrowing}$$

2.4 Inputs for DCF Model

2.4.1 Weighted Average Cost of Capital (WACC)

The discount rate compensates investors for risk, with the Weighted Average Cost of Capital (WACC) commonly used as it reflects both equity and debt costs. WACC also factors in the tax benefits of interest deductions, offering simplicity by consolidating financial considerations into a single rate for easier decision-making.

WACC is calculated by taking the weighted average of the required rates of return on debt and equity, based on their respective proportions in the firm's capital structure.

Equation 5: Weighted Average Cost of Capital

$$WACC = \frac{D}{D+E} Kd(1 - T) + \frac{E}{D+E} Ke$$

Where,

E = Market Value of Equity

D = Market Value of Debt

Kd = Cost of Debt

Ke = Cost of Equity

T = Tax rate

2.4.2 Cost of Equity

The cost of equity is the rate of return that the company's shareholders require for their investment. It is usually higher than the cost of debt, due to the greater risk, as the company has a contractual obligation to repay its debt to its creditors.

The most commonly used method to calculate the cost of equity of a company is the Capital Asset Pricing Model (CAPM). The CAPM takes into consideration a Risk free rate (Using long-maturity government bonds yields as a proxy), the Market Risk Premium (the difference between the expected return of the market and the risk free rate), and the Beta, which is a measure of systematic risk, gauging the tendency of the return of a stock to move in parallel with the return of the market as a whole.

Equation 6: Capital Asset Pricing Model

$$CAPM = Rf + \beta(MRP)$$

Where,

Rf = Risk Free Rate

β = Stock sensitivity to the Market returns

MRP = Expected return of the Market – Risk Free Rate

While CAPM is widely used for calculating the cost of equity due to its simplicity, the Fama-French model (1992) offers a more complex alternative. It incorporates three factors: the Market Risk Premium, the outperformance of small-cap over large-cap companies (SMB), and high book-to-market over low book-to-market companies (HML).

Equation 7: Fama & French 3 factor model

$$Ke = Rf + \beta_1(MRP) + \beta_2(SMB) + \beta_3(HML)$$

Despite the existence of these more complex models, the CAPM has been found to be a good estimator for the cost of equity. Its simplicity to not only compute, but also to explain and understand makes it an extremely valuable method and therefore I will use the CAPM in my calculations for Ke .

2.4.3 Cost of Debt

The cost of debt is the effective rate a company pays on its borrowed funds. It is determined by considering three factors: the risk-free rate, the company's default spread, and the tax advantage associated with debt (since interest payments are tax-deductible, reducing the company's overall tax liability).

Equation 8: Pre-Tax Cost of Debt

$$Pre\ tax\ cost\ of\ debt = Rf + Default\ spread$$

Equation 9: After-Tax Cost of Debt

$$After\ tax\ cost\ of\ debt = Pre\ tax\ cost\ of\ debt \times (1 - T)$$

The default spread is the difference between the yields of a corporate bond and the yields of a government bond with the same maturity. This difference exists because corporate bonds have a higher default risk than government bonds. For publicly listed companies, such as Walmart, the default risk is estimated from its Credit Rating.

2.4.4 Terminal Value

When valuing a business, it is assumed that the company will continue to exist in perpetuity. Given that it is impossible to estimate future cash flows period by period forever, the common approach is to estimate future cash flows for the next three to ten years and then calculate a terminal value, representing the value of the company beyond this forecast period. The terminal value is crucial to any DCF valuation, since it capitalizes all future cash flows to perpetuity, it represents the bulk of the total valuation of the company.

The Terminal Value can be calculated using the constant-growth model. This model assumes that the business will grow at a constant rate into perpetuity

Equation 10: Terminal Value

$$\text{Terminal Value} = \frac{FCFF_1}{WACC - g}$$

Where,

$FCFF_1$ = Expected FCFF for the year after the forecast period

g = Constant growth rate

$WACC$ = Weighted Average Cost of Capital

The Terminal Value cannot be applied arbitrarily as it assumes a business in a steady state, with all transitional effects concluded, ensuring that financial ratios remain reasonable. The Return on Capital (ROC) is expected to match the Cost of Capital over time due to competitive pressures, making WACC a good ROC benchmark. Analysts must choose a steady-state growth rate that is realistic; it cannot exceed the economy's expected growth, as this would imply the business eventually surpassing the global economy. Typically, this rate is slightly below GDP growth, with long-term inflation (2-3%) serving as a proxy for mature companies in stable economies.

2.5 Adjusted Present Value model (APV)

The APV model is another widely accepted approach to valuation. While in the WACC approach, the discount rate incorporates both equity and debt financing effects, the APV approach first estimates the value of the firm assuming full-equity financing, and then includes the benefits and costs of debt financing. Debt financing creates tax benefits but also increases the firm's bankruptcy risk and costs. (Damodaran 2006)

This approach is especially useful when valuing companies that don't have a stable capital structure. The greatest advantages of the APV approach lie in its transparency and flexibility, allowing the analyst to easily identify the components that create or destroy value, and to easily adapt changes in the leverage ratio into the valuation.

The APV relies on the principle of value additivity, meaning splitting a business into pieces, valuing each piece separately, and then adding them back up. (Luehrman 1997)

Equation 11: APV value of the business

Value of business = Value of business with 100% equity financing + Present value of Expected Tax Benefits of Debt – Expected Bankruptcy Costs

2.5.1 Value of unlevered firm

The value of the unlevered firm can be obtained by discounting the expected FCFF at the unlevered cost of equity.

Equation 12: Terminal value of unlevered firm

$$TV_u = \frac{FCFF_0(1 + g)}{r_u - g}$$

Where,

$FCFF_0$ = Current after tax operating cash flow to firm

r_u = Unlevered cost of equity

g = Expected growth rate

2.5.2 Expected value of tax benefits

The second step of this approach is the calculation of the expected tax benefits for a given level of debt, which is a function of the tax rate of the firm.

Equation 13: Value of tax benefits

$$\text{Value of tax benefits} = \sum_{t=1}^{t=\infty} \frac{\text{Tax rate}_t \times \text{Interest rate}_t \times \text{Debt}_t}{(1 + r)^t}$$

There are different points of view regarding how to calculate the tax benefits. Cooper and Nyborg (2006) argue that the tax benefits should be the Present Value of the tax savings, discounted at the cost of debt. On the other hand, Fernandez (2004) argued that the tax benefits should be computed as the difference between the value of the levered firm, with the tax savings, and the value of the same firm without leverage.

2.5.3 Value of Bankruptcy costs

The final step of this approach is to evaluate the effect of a certain level of debt on the default risk of the firm and on its expected bankruptcy costs

Equation 14: Expected Bankruptcy cost

$$PV \text{ of expected bankruptcy cost} = \pi_a \times BC$$

Where,

π_a = Probability of default after additional debt

BC = Present Value of expected bankruptcy cost

This step involves the greatest estimation problem, as neither the probability of default nor the bankruptcy costs can be estimated directly. The probability of default can be estimated based on a credit rating, using the empirical estimates of default for each rating. The bankruptcy costs can be estimated (with a considerable error margin) from studies that looked at the magnitude of this cost in actual bankruptcies. (Damodaran 2006)

2.6 Dividend Discount Model

When investors buy stock in a publicly traded company, they can expect to receive cashflows in two different ways: Receiving dividends during the holding period, and the expected price of the stock at the end of the holding period. Since the expected price is also determined by the future dividends, the value per share is the present value of dividends in perpetuity (Damodaran 2006)

Equation 15: Dividend Discount Model

$$\text{Value per share of stock} = \sum_{t=1}^{t=\infty} \frac{E(DPS_t)}{(1 + k_e)^t}$$

Where,

$E(DPS_t)$ = Expected dividends per share in period t

k_e = Cost of Equity

To estimate the expected dividends, assumptions about future growth rates in earnings and payout ratios are necessary. The cost of equity can be calculated using the Capital Asset Pricing Model (CAPM).

While there are many different approaches to the DDM model, I will focus on the two main ones, the Gordon Growth Model and the Two-Stage DDM.

2.6.1 Gordon Growth Model

The Gordon Growth Model is applicable to firms in the steady-state, growing at a stable rate, as the model's underlying assumption is that the dividends will grow at a fixed rate in perpetuity.

Similar to the terminal value in the Free Cash Flow DCF method, since this model forecasts dividends into perpetuity, the growth rate must not exceed the growth rate of the overall economy. Additionally, the model implies that earnings will grow at the same rate as dividends. If earnings grow at a slower rate, dividends will eventually surpass earnings, which is unsustainable. Conversely, if earnings grow at a faster rate, the payout ratio will eventually converge to zero, which is also unrealistic.

Equation 16: Gordon Growth Model

$$\text{Value of stock} = \frac{D_1}{K_e - g}$$

Where,

D_1 = Expected dividends next period

K_e = Cost of Equity

g = Expected growth rate in perpetuity

2.6.2 Two-Stage DDM

The two stage Dividend Discount Model is an extension of the Gordon Growth Model. This model allows for an initial phase where the growth rate is not stable and a second phase where the growth rate is stable. Generally, the growth rate in the first phase is higher than the stable rate, however it is possible to use a lower growth rate in the first phase to account for companies that are expected to have lower growth for a few years until reverting to a stable growth.

The value of equity can then be computed as the sum of the Present Value of the expected dividends during the initial phase and the present value of the price at the end of the initial phase (Which is obtained with the Gordon growth model)

Equation 17: Two-stage Dividend Discount Model

$$\text{Value of stock} = \sum_{t=1}^{t=n} \frac{E(DPS_t)}{(1 + K_e)^t} + \frac{P_n}{(1 + K_e)^n}$$

Where,

P_n = Price at the end of initial phase

$E(DPS_t)$ = Expected dividends per share in period t

K_e = Cost of Equity

2.7 Excess Return Models

In the Excess Return valuation model, cash flows are divided into normal return cash flows and excess return cash flows. Normal return cash flows represent the risk-adjusted required return, which could be the cost of capital or cost of equity. Any cash flows that exceed or fall short of this required return are considered excess returns. (Damodaran 2006)

Equation 18: Excess return model

Value of Business = Capital invested in Firm + PV of excess return cashflows from existing
and future projects

Firms that have positive excess return cash flows will trade at market values above their book values, while firms that have negative excess return cash flows will trade at market values below their book values.

2.7.1 Economic Value Added (EVA)

Damodaran (2006) defines EVA as a measure of the surplus value created by an investment or a portfolio of investments. It is calculated as the product of the excess return on an investment and the capital invested in that investment.

Equation 19: Economic Value Added

$$EVA = (ROIC - \text{Cost of Capital}) \times \text{Capital Invested}$$

To estimate the Capital Invested, analysts should use book value instead of market value. This is because the market value also considers expected future growth of the capital, and as such is not a good proxy for the value of the capital currently invested. However, it must be noted that the book value also reflects accounting choices over time, and as such requires adjustments. The older the firm, the more extensive and complex these adjustments need to be.

The Cost of Capital, on the other hand, similarly to the DCF valuations, should use market values of Debt and equity.

Damodaran (2006) makes a connection between EVA and Net Present Value of a project, since the NPV of a project is the PV of the economic value added by that project.

Equation 20: Net Present Value

$$NPV = \sum_{t=1}^{t=n} \frac{EVA_t}{(1 + WACC)^t}$$

This connection links the firm's value to the economic value it adds.

Equation 21: Value of the firm

$$\begin{aligned} \text{Firm Value} = & \text{Capital invested}_{\text{Assets in place}} + \sum_{t=1}^{t=\infty} \frac{EVA_{\text{Assets in place}}}{(1 + WACC)} \\ & + \sum_{t=1}^{t=\infty} \frac{EVA_{\text{Future projects}}}{(1 + WACC)} \end{aligned}$$

The EVA model effectively demonstrates how a company generates profit, however using book values for capital invested and the necessary adjustments makes it a complex process prone to inaccuracies.

2.8 Relative Valuation

Relative valuation is a significantly different approach from DCF models. While DCF models aim to estimate the intrinsic value of a business based on its future cash flows, relative valuation does not attempt to determine intrinsic value. Instead, it assesses a business's value by comparing it to the market prices of similar businesses. It's widely used due to its simplicity and speed but should complement other methods for a comprehensive valuation rather than replace them.

There are three essential steps in Relative Valuation: Finding comparable companies that are priced by the market, scaling the market prices to a common variable, and adjusting for differences across the companies. (Damodaran 2006)

2.8.1 Comparable Firms

Damodaran (2006) defines a comparable firm as a firm with cash flows, growth potential, and risk similar to the firm being valued. A firm does not need to be in the same industry or sector in order to be comparable, although in industries with a large number of publicly listed firms there is an assumption that they mostly share the same risk, growth and cash flow profiles.

2.8.2 Multiples

Multiples are financial metrics that express the market value of a company relative to a key performance indicator.

Figure 1: Multiples by valuation approach

Equity Values	Enterprise Values
Dividend Yield	Free Cash Flow Yield
Price to Earnings ratio	EV/EBIT
Price to Book Value	EV/EBITDA
Price to Sales	EV/Sales

Source: Goldman Sachs "All roads lead to Rome"

Fernandez (2001) found that Price-to-Earnings ratios and EV/EBITDA multiples are the most popular among analysts. Goedhart, Koller, and Wessels (2005) identified four principles for using multiples correctly: selecting peers with similar ROIC and growth prospects, using forward-looking multiples, focusing on enterprise value multiples, and adjusting EV/EBITDA for non-operating items.

However, while convenient, market multiples have limitations:

- Multiples can be deceptively simple. Multiples should not be a way to avoid thinking about the long-term economics of a business.
- Market multiples are subject to market misvaluations, different accounting policies and can be impacted by business cycles
- Firms within the same industry may vary in business risk, revenue structure and growth prospects, making choosing comparable firms a challenging process
- Different multiples can suggest conflicting conclusions

2.9 Conclusion: Valuation models for Walmart

The models discussed above are just a few of the many available for valuing a company. Each model has its own strengths, weaknesses, and specific assumptions.

In my valuation of Walmart, I selected a combination of the DCF model using the WACC as the discount rate, along with a Relative Valuation using comparable multiples, to provide a comprehensive and balanced analysis.

The DCF model is ideal for Walmart due to its stable capital structure and consistent cash flow. Using WACC as the discount rate incorporates both equity and debt costs, accurately reflecting the company's risk and return. This approach effectively captures Walmart's

intrinsic value by projecting and discounting future cash flows. However, DCF alone may miss market sentiment or Walmart's industry position. To address this, I supplement it with Relative Valuation using comparable multiples, offering a market-based perspective. This dual approach provides a comprehensive valuation, balancing intrinsic worth with market alignment, offering a clearer and more robust assessment of Walmart's value.

3. Company Overview

Walmart Inc. is a multinational retail corporation that operates a chain of hypermarkets, discount department stores and grocery stores. It was founded by Sam Walton in 1962, and has grown to become one of the largest and most influential retailers in the world.

With its headquarters in Bentonville, Arkansas, Walmart operates over 10,000 stores in 19 countries under several names, such as Walmart in the USA and Canada, Flipkart in India and Massmart in South Africa.

Walmart's mission is to help its customers save money so they can live better, while building a sustainable future, advancing diversity, equity and inclusion and bringing communities closer together.

Walmart's commitment to affordability and convenience has made it a preferred shopping destination for millions of customers.

With an emphasis on operational efficiency and supply chain management, Walmart continues to innovate and adapt to the ever evolving retail environment, aiming to provide value to both its customers and its shareholders.

3.1 Company history

Walmart, founded by Sam Walton in 1962, began with a mission to offer the lowest prices anytime, anywhere. By 1967, the company operated 24 stores and generated \$12.7 million in sales. In 1969, it was incorporated as Wal-Mart Stores, Inc.

Walmart went public in 1970 at \$16.50 per share and was listed on the NYSE in 1972, with 51 stores and \$78 million in sales. The company opened its first distribution center and home office in Bentonville, Arkansas, in 1971, and later established the Walmart cheer in 1975 and the Walmart Foundation in 1979.

In 1980, Walmart hit \$1 billion in sales, operating 276 stores with 21,000 employees. The first Sam's Club opened in 1983, and by 1987 Walmart had installed the largest private satellite

communication system in the US, enhancing its operations through integrated voice, data and video communication. A year later, Walmart introduced the Walmart Supercenter, which combined supermarket and general merchandise.

Walmart became the US's largest retailer in 1990 and began its international expansion in 1991 by opening a Sam's Club in Mexico City. In 1993, it celebrated its first \$1 Billion sales week. The company entered Canada in 1994, China in 1996, and the UK in 1998 through acquisitions.

Walmart embraced e-commerce in 2000 with the launch of walmart.com, and by 2002, it topped the Fortune 500 list with \$220 billion in revenue. The company continued expanding globally, entering Japan in 2002. In 2005, Walmart committed to environmental sustainability, aiming to create zero waste and use only renewable energy. Walmart also introduced a \$4 generic-drug prescription program in 2006.

In the 2010s, Walmart expanded globally, opening its first store in India in 2010 and acquiring South Africa's Massmart in 2011, surpassing 10,000 retail units. Throughout the 2010s, Walmart emphasized sustainability, committing to zero waste, renewable energy, and sustainable agriculture, pledging \$2 Billion to help end hunger in the US, launching project Gigaton in 2017 to reduce greenhouse gas emissions, and pledging in 2013 to hire 100,000 honorably discharged veterans within 5 years. Walmart also focused on technological innovation, introducing Walmart Pay and acquiring e-commerce platforms like Jet.com and Flipkart.

In response to Covid-19, Walmart turned its parking lots into testing centers, and sourced Personal Protection Equipment materials. In 2021, Walmart invested in drone delivery, fintech, and autonomous vehicles, launched the Walmart GoLocal delivery service and announced plans to pay 100% of college tuition and books for US associates. In 2022 Walmart celebrated its 60th anniversary and scaled its InHome Delivery service to reach 30 million US households.

3.2 Business Model

Walmart's business model is a comprehensive system designed to maintain a competitive edge by offering low prices, made possible by having an efficient chain of operations, as well as offering a large product selection and customer-centric services. With its commitment to technology innovation and sustainability, Walmart is able to reinforce its position as a global leader in the retail industry.

Walmart's core strategy is to provide everyday low prices, instead of relying on sales and promotions. This approach is based on the belief that customers will be more loyal if they can always find lower prices rather than waiting for discounts. This strategy is backed by its significant buying power, which allows it to negotiate favorable terms with suppliers, and by a focus on minimizing costs in all aspects of its operations.

3.3 Lines of business

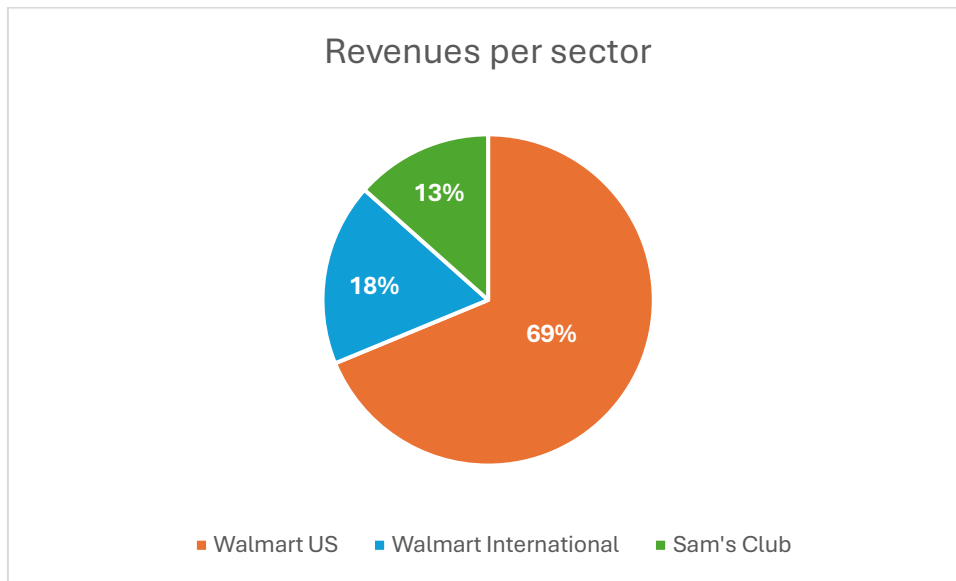
Walmart organizes its operations into three distinct sectors: Walmart U.S., Walmart International, and Sam's Club.

Walmart U.S. includes the majority of Walmart's retail operations, targeting individual consumers and families in the US seeking convenience, focusing on diverse store formats such as Supercenters, Discount stores and neighborhood markets in order to cater to as many different needs as possible.

Walmart International comprises Walmart's operations outside the US, mainly in Canada, Mexico, China and the UK. This sector tailors its approach to each international market, offering products that cater to regional and cultural preferences, often offering local brands.

Sam's Club is a membership-based warehouse club that provides products in bulk at discounted prices, operating large stores designed for both individual consumers and small businesses. Customers pay an annual fee for membership and gain access to exclusive deals and services at a discount price. Although the product range in Sam's club is more limited than in the other sectors, it is still a broad range, including groceries, electronics and household goods.

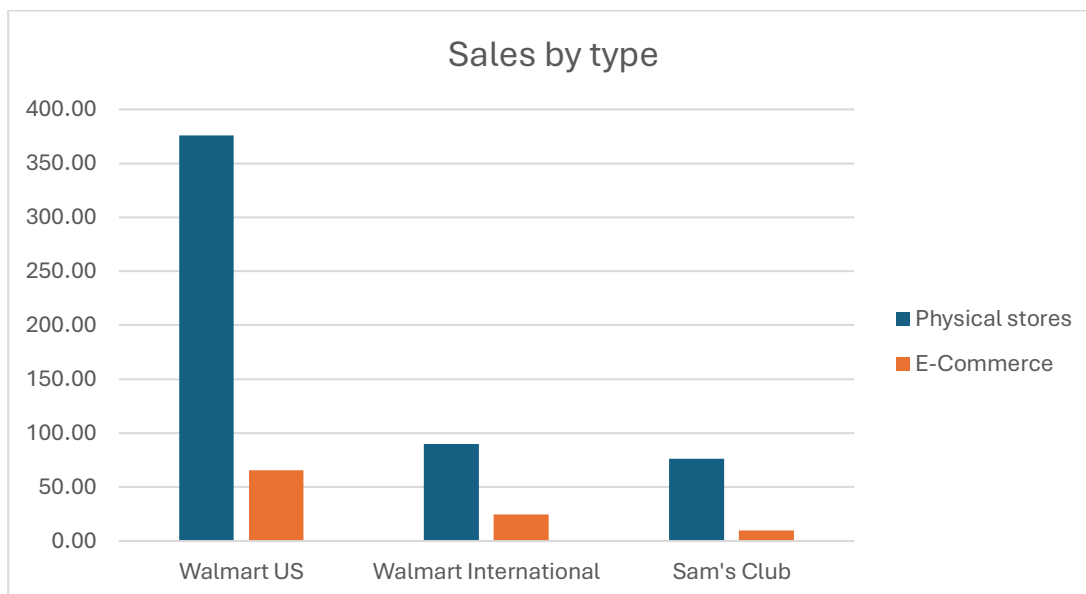
Exhibit 1: Walmart revenue by sector (2023)



Source: Walmart Earnings Release

Walmart has been investing heavily in its e-commerce strategy to enhance customer convenience and expand its market reach. This strategy includes developing a robust online marketplace and introducing innovative services such as curbside pickup and home delivery. Through strategic partnerships and acquisitions, Walmart is positioning itself as a leader in the e-commerce sector, with 15.6% of its total sales now coming from e-commerce.

Exhibit 2: Walmart sales through physical stores and e-commerce (2023)



Source: Walmart Earnings Release

Walmart currently operates over 10,000 stores worldwide. The company experienced exponential growth in its store count from 1980 through the mid-2010s, reaching a peak of

11,718 stores in 2018. However, following strategic divestments, including exits from operations in the UK and Japan, the total number of stores has since declined. These moves reflect Walmart's strategy to streamline its global footprint and focus on key markets where it sees the greatest growth potential and operational efficiency.

Exhibit 3: Evolution of number of stores



Source: Statista

These stores are split into Supercenters, Neighborhood Markets, Discount Stores and Sam’s Club in the US, as well as a multitude of different store types in the international segment.

Table 1: Store type evolution

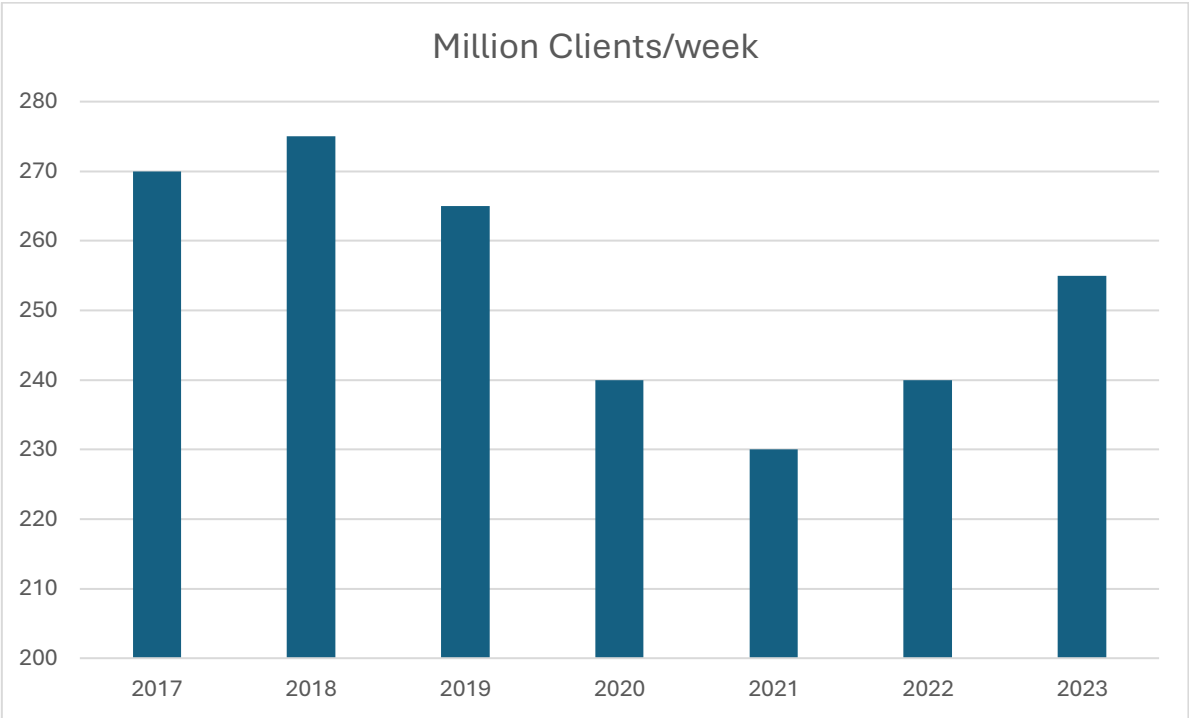
	Supercenters	Neighborhood Markets	Discount Stores	Sam's Club	Walmart International
2016	3465	667	442	655	6299
2017	3552	735	415	660	6363
2018	3561	800	400	597	6360
2019	3570	813	386	599	5993
2020	3571	809	376	599	6146
2021	3570	799	374	599	6101
2022	3573	799	370	600	5251
2023	3572	781	364	600	5305

Source: Walmart Annual Reports

Walmart’s extensive U.S. store network places 90% of Americans within 15 minutes of a location, making it a convenient choice with its wide product range and competitive prices. In 2023, Walmart served 255 million customers per week globally, up from 2022 but still below

the 2018 peak of 275 million weekly customers. The company's international presence further contributes to its vast customer base, reinforcing its role as a global retail leader.

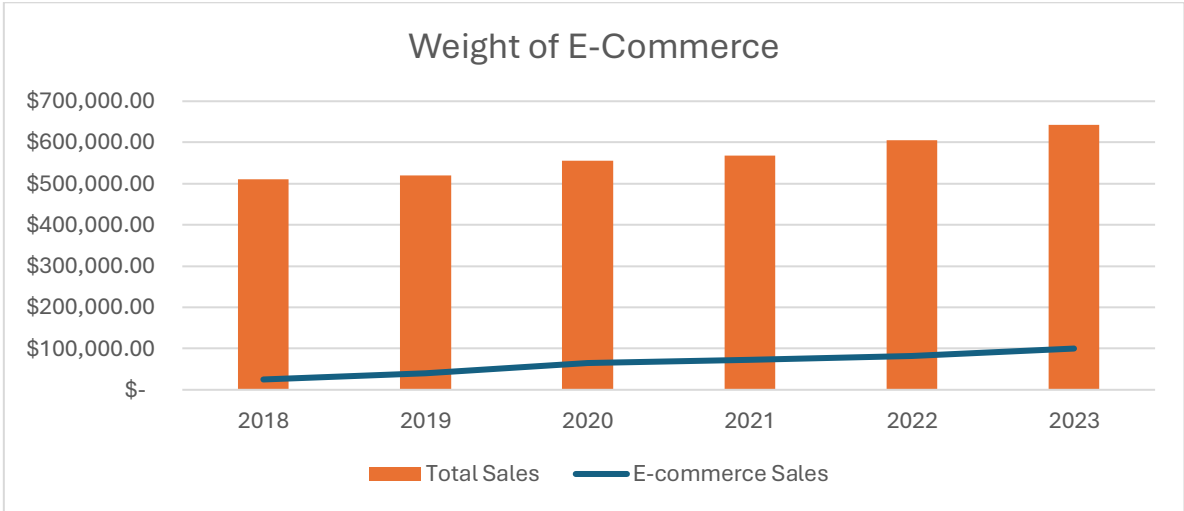
Exhibit 4: Evolution of clients served per week



Source: Walmart Annual Reports

Walmart's e-commerce investment has paid off, with online sales growing from under 5% of total sales in 2018 to over 15% in 2023. This growth reflects Walmart's strong digital adaptation, integrating online and in-store experiences. Innovations in same-day delivery, online grocery, and marketplace expansion are driving continued growth, solidifying Walmart's position as a leading digital retailer in response to shifting consumer trends.

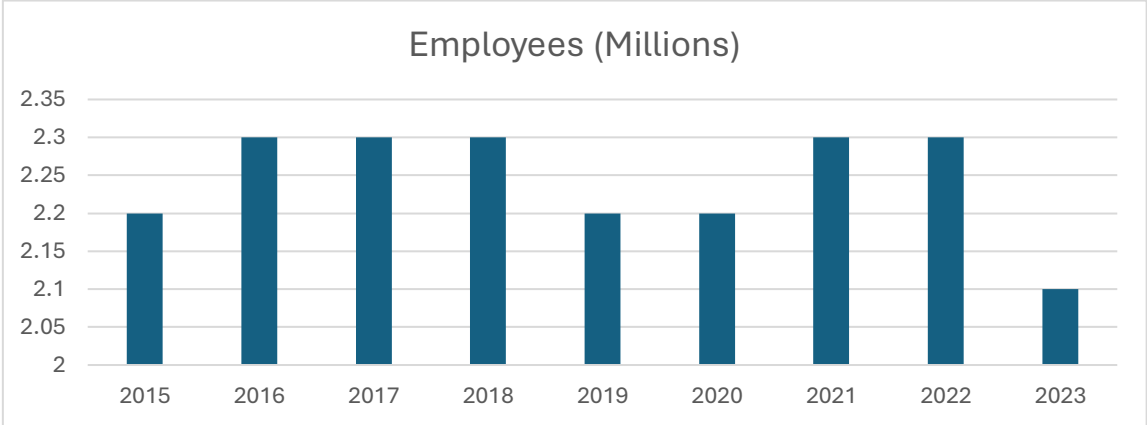
Exhibit 5: Evolution of e-commerce relative to total sales



Source: Walmart Annual Reports

As of 2023, Walmart employed approximately 2.1 million people worldwide, with 1.6 million of these employees based in the United States. This substantial number highlights Walmart's dominant presence in the U.S. retail market, where it operates as a major employer in many communities across the country. Despite the shift towards e-commerce, Walmart's employment numbers have remained stable, underscoring its importance as a major employer and its ability to adapt to changes while maintaining a strong workforce.

Exhibit 6: Evolution of number of employees



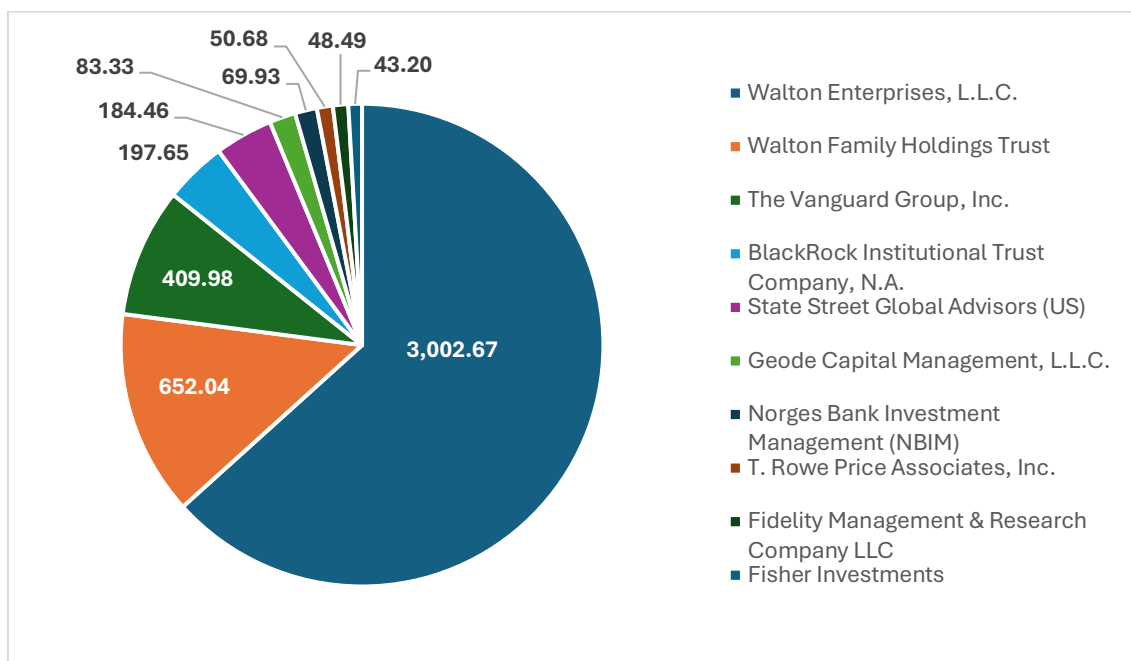
Source: Walmart Annual Report

3.4 Shareholder structure

Walmart Inc. (NYSE: WMT) has 8.04 billion shares outstanding, which can be divided into shares held by institutional investors, non-institutional corporations, insider individual investors and general public. Institutional investors own 34.97% of the outstanding shares, non-institutional corporations own 46.34%, individual insider investors own 0.9% and the general public own 17.79%

The Walton family is Walmart's largest shareholder, holding 45.44% of the outstanding shares through Walton Enterprises, LLC, and the Walton Family Holdings Trust. Following the Walton family, the Vanguard Group owns 5.10% of the shares, BlackRock holds 2.46%, and State Street Global Advisors possesses 2.29%.

Exhibit 7: Top 10 shareholders as of July 2024 (Millions of shares outstanding)



Source: Refinitiv Eikon

3.5 Stock performance

Walmart went public in 1970 with an IPO price of \$16.50 per share. Since then, Walmart's stock has exhibited a consistent and considerable positive trend, particularly during the late 1990s and from 2015 to the present.

Walmart has implemented 11 stock splits since its IPO, which has helped keep its shares accessible to a broad range of investors, contributing to increased liquidity and market participation.

During the 2000s, Walmart's stock remained relatively stable, fluctuating between \$15 and \$25 (adjusted for splits), demonstrating resilience during financial crises such as the dot-com bubble burst and the 2008 recession, typical of a retail giant. However, in the mid-2010s, the stock faced a significant decline due to increased investments in employee wages and benefits in 2015, which led to lowered earnings forecast and worried investors. Competition from e-commerce rivals like Amazon also forced Walmart to ramp up its digital investments, straining short-term profitability and causing a sharp drop in share price.

Despite these challenges, the stock has more than tripled in value over the past nine years, reflecting the success of Walmart's investments in employees, e-commerce, and technology.

The COVID-19 pandemic temporarily halted this momentum, leading to a period of stable prices rather than a sharp decline. Conversely, the Ukraine war triggered a brief drop in stock value, but Walmart's share price quickly resumed its upward trend, continuing to grow at a strong pace.

Exhibit 8: Evolution of Walmart's share price in comparison with S&P500



Source: barchart.com

3.6 Strategy for future growth

Walmart is committed to enhancing customer service and convenience through significant investments in technology and infrastructure. On January 31st, Walmart U.S. CEO John Furner unveiled an ambitious plan to build or convert over 150 stores within five years and remodel 650 stores in the U.S. and Puerto Rico. These stores will feature the “Store of the Future” concept, which includes improved layouts, expanded product selections, and advanced technologies to enhance both the customer experience and associate efficiency.

Walmart also announced the development of a network of affordable electric vehicle (EV) fast-charging stations, making EV ownership more accessible. To boost workforce incentives, Walmart will increase store managers' pay by 9% and revise the bonus program to focus on store profitability, encouraging associates to improve financial performance.

In addition to these initiatives, Walmart is pioneering drone deliveries and implementing AI to predict customer orders and optimize supply chains. The company is also enhancing the in-store shopping experience by dimming lights and turning off the sound system daily, creating a more accommodating environment for neurodiverse individuals with sensory sensitivities.

Walmart currently powers 47% of its operations with renewable energy, aiming to increase this to 50% by 2025 and 100% by 2035, an effort to appeal to environmentally conscious customers.

3.7 Industry overview

The retail industry is a vital component of the global economy, encompassing a wide range of businesses that sell goods and services to consumers. In 2023, the industry was valued at approximately \$28.8 trillion, with projections suggesting it will grow to \$31.3 trillion in 2024 (Retail Global Market Report 2024). This sector has undergone significant evolution, shaped by changing consumer behaviors, economic trends, and technological advancements.

As the world's largest retailer, Walmart sets the standard for operational efficiency, customer service, and pricing strategies, continuously innovating to remain competitive in a dynamic market

In order to properly analyze this industry, it is important to understand its various segments, such as traditional physical stores, e-commerce platforms and hybrid models.

Traditional Physical Stores

These stores allow customers to browse and purchase products in person, offering personal interaction, immediate product access, and the ability to try items before purchase. They often build strong ties with local communities by supporting local economies and events, fostering high customer loyalty. However, they face challenges such as high operating costs and competition from e-commerce. The COVID-19 pandemic negatively impacted this segment, accelerating the shift toward online shopping.

E-Commerce Platforms

E-commerce platforms enable consumers to purchase goods and services online through websites or mobile applications. This segment has seen explosive growth in recent years, as retailers are forced to adapt to the changing consumer behaviors and join this segment. E-commerce offers convenience, allowing customers to shop anytime, anywhere, and provides a broader selection of products compared to physical stores. The ability to use customer data is a significant advantage this segment provides, as it allows the personalization of shopping experiences, and the optimization of inventory management. Despite these advantages, the e-commerce platforms also face significant challenges. Cybersecurity is a big concern, for both customers and companies, and is an always developing issue, as ill-intentioned individuals or

corporations quickly adapt to security measures in place, and as such these platforms require constant development. Other challenges include logistics and delivery challenges, as well as the need for a robust customer service.

Hybrid Models

Hybrid retail models combine elements of both physical stores and e-commerce and have become increasingly popular, as retailers attempt to capitalize on the strengths of both segments. Retailers using hybrid models allow customers to transition smoothly between online and in-store shopping, by enabling customers to order online and pick up the products in the store. This model also allows retailers to use customer online data to personalize experiences, both online and offline, while maintaining the strong ties to the community that physical stores bring to keep an elevated level of loyalty. The model combines online and physical sales to meet demands, which allows even better inventory management. For large retailers, such as Walmart, which are capable of significant investment in technology and logistics, this model is key to sustaining growth and maintaining a competitive edge in the retail sector.

Each segment has unique strengths and challenges, and successful retailers like Walmart leverage a combination of these models to thrive in an ever-changing market.

3.8 Major challenges for Walmart

As a global leader in the retail industry, Walmart faces numerous challenges and risks in maintaining its competitive edge. Chief among these is the intense competition from e-commerce giants, particularly Amazon. Amazon's dominance in the e-commerce landscape puts considerable pressure on Walmart to innovate and enhance its online services continually.

The fast pace of technological advancements presents another significant challenge. Walmart must consistently integrate cutting-edge technologies such as AI, automation, cybersecurity measures, and data analytics to remain relevant and efficient. Additionally, the risk of global supply chain disruptions poses a threat to product availability, creating cost pressures and inflation that Walmart must continually manage and mitigate.

Finally, constantly changing consumer preferences represent a major challenge. Walmart must adapt its product offerings to meet evolving consumer demands while remaining agile enough to respond to latest trends and preferences swiftly. Balancing these various pressures is crucial for Walmart to sustain its position as a retail industry leader.

3.9 Main competitors

As a major retailer involved in several different segments of the industry and in different world markets, Walmart faces fierce competition in each segment, and region.

In e-commerce, its primary rival is Amazon, a dominant global online retailer. Although Amazon's partial withdrawal from China presents an opportunity for Walmart, the Chinese e-commerce giant Alibaba maintains a strong market presence and is expanding globally, posing another significant challenge.

In the membership-based warehouse club segment, Walmart's Sam's Club competes with Costco, known for its high-quality products and loyal customer base. While smaller than Walmart, Costco is expanding steadily and plans to continue this growth trajectory.

Target is one of the largest global discount retailers, competing with Walmart both online and offline, offering a broad range of products, from home goods to clothing, focusing on quality, appealing store layout and successful marketing campaigns.

In groceries, Kroger, Aldi, and Lidl are Walmart's major competitors. Kroger's loyalty programs and tech investments make it a formidable rival, while Aldi and Lidl attract budget-conscious consumers with high-quality, low-priced products.

In home improvement, Walmart competes with Home Depot and Lowe's, while in health and wellness, Walgreens and CVS are its primary competitors.

Despite this intense competition, Walmart remains the world's largest retailer. In 2023, it held an estimated 9.4% share of the U.S. retail market and approximately 2.2% of the global retail market, underscoring its dominance both domestically and internationally.

4. Valuation

As mentioned at the end of the Literary review, the valuations models chosen for the valuation of Walmart are the FCFF DCF using WACC as the discount rate, and a relative valuation model using the EV/Sales multiple. Finally, I will consider a market consensus estimate to reflect market sentiment.

To model the FCFF model, I will first project the cash flows over a horizon of three years (2024 – 2026). The main focus will be on key metrics such as revenues, operational expenses, Depreciation&Amortization costs, capital expenditures, and working capital. Following this forecast period, I will assume the company reaches a steady state and apply a terminal value,

using a stable growth rate aligned with long-term inflation expectations. Despite Walmart's status as a mature and stable company, already arguably in a steady state, I have chosen to conduct a short-term forecast to provide a more detailed and comprehensive analysis.

For the Relative Valuation model, the main focus will be the selection of a Peer Group, focused on companies from the same industry and similar cash flows, growth, and risk characteristics.

4.1 Discounted Cash Flow

4.1.1 Revenues

To forecast Walmart’s revenue, I will use a bottom-up approach, first forecasting revenues by segments (Walmart US, Walmart International, and Sam’s Club), and then aggregating the segment forecasts to get the total revenue projection.

Examining the revenue trends by segment over the past five years reveals that the U.S.-based segments — Walmart U.S. and Sam’s Club — outperformed Walmart International.

In 2019, the growth rates for the U.S. segments were the lowest, but both segments showed robust growth from 2020 to 2022. In 2023, these segments experienced more moderate growth, yet still higher compared to 2019. Importantly, the growth rates for Walmart U.S. and Sam’s Club remained positive throughout this five-year period.

In contrast, Walmart International faced more challenges. It experienced slightly negative growth in 2019 and did not fully recover in 2020, showing only modest positive growth. The segment suffered a sharp decline in growth in 2021 and exhibited minimal growth in 2022. However, in 2023, Walmart International achieved a growth rate that surpassed the other segments, indicating a potential recovery.

Table 2: Historical 5 year average growth rate per segment

5 year average growth rates by segment	
Walmart US	5.92%
Walmart International	-0.56%
Sam's Club	8.46%
Membership and other income	6.66%

Source: Own elaboration

Considering the U.S. expected GDP growth of around 2% per year until 2026, the anticipated increase in consumer spending (Forbes), and Walmart’s ongoing efforts in expansion and

innovation, it is projected that the two U.S.-based segments will continue to exhibit robust growth.

The current high inflation environment can positively impact Walmart's revenues. Thanks to its vast and efficient supply chain, as well as its pricing power, Walmart can manage inflation, allowing it to absorb costs without hurting margins and pass some increases to consumers while maintaining affordability. During inflationary periods, decreased purchasing power typically leads consumers to seek more affordable options. Historically, this shift benefits Walmart as more shoppers turn to discount retailers, increasing foot traffic and sales volumes. Furthermore, Walmart's wide product range allows it to cater to various consumer segments, even during economic downturns, capturing a larger market share as shoppers adjust to inflation.

Walmart International's recovery in 2023 suggests a positive outlook, but a single year's improvement is insufficient to confidently predict continued recovery. The challenges are significant: intense competition in the Chinese market, resistance from the Chinese government to foreign companies, low GDP growth expectations in the UK, intense competition in Europe, and global e-commerce competition from giants like Amazon and Alibaba. Additionally, Walmart lacks significant expansion plans for its international segment. Therefore, it is expected that Walmart International's growth will lag behind its U.S. counterparts in the near future.

Exhibit 9: Walmart Revenue growth, historical and estimated



Source: Own elaboration

To forecast future revenues, I calculated the five-year moving average growth rate. This approach helps smooth out anomalies, reduces volatility, and provides a more stable and reliable basis for projecting future revenues by highlighting the underlying trend.

Table 3: 3 year forecast revenues per segment (\$ millions)

	2023 (A)	2024 (E)	2025 (E)	2026 (E)
Walmart US	\$441,817.00	\$467,973.70	\$498,584.86	\$529,252.81
Walmart International	\$114,641.00	\$113,996.26	\$113,357.88	\$112,363.98
Sam's Club	\$86,179.00	\$93,467.71	\$102,645.89	\$112,954.10
Membership and other income	\$5,488.00	\$5,853.73	\$6,332.76	\$6,992.28
Total	\$648,125.00	\$681,291.40	\$720,921.39	\$761,563.18

Source: own elaboration

Table 4: 3 year forecast revenue growth per segment (\$ millions)

Moving average 5 years	2023 (A)	2024 (E)	2025 (E)	2026 (E)
Walmart US	5.06%	5.92%	6.54%	6.15%
Walmart International	13.53%	-0.56%	-0.56%	-0.88%
Sam's Club	2.17%	8.46%	9.82%	10.04%
Membership and other income	1.48%	6.66%	8.18%	10.41%
Total	6.03%	5.12%	5.82%	5.64%

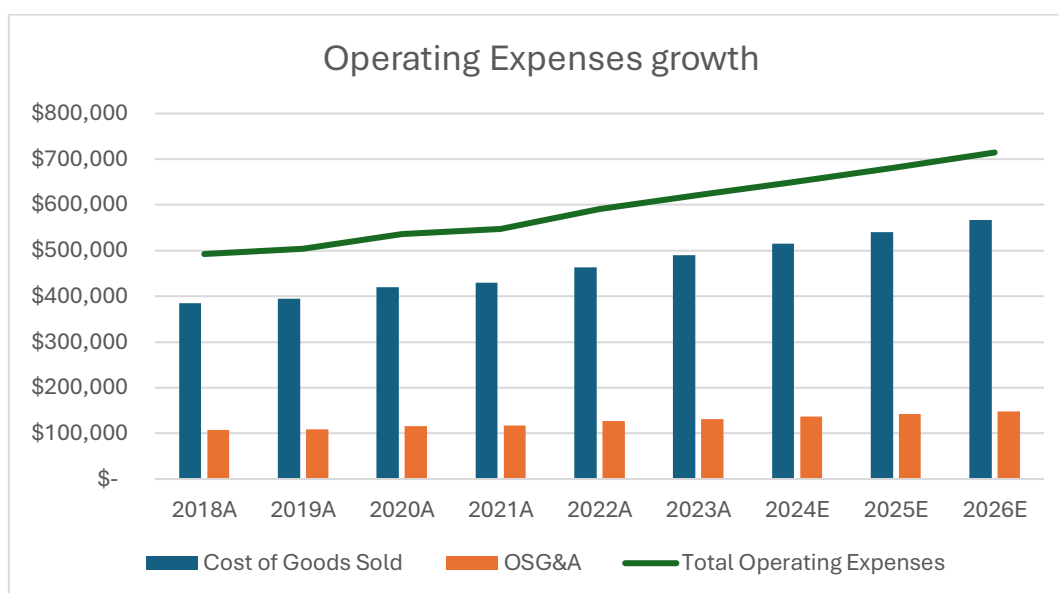
Source: own elaboration

4.1.2 Operating Expenses

Due to limited data availability, I was unable to calculate the operating expenses for each segment individually. Therefore, I will proceed with an aggregate calculation for this portion of the forecast.

Walmart's financial reports detail two main components of operating expenses: Cost of Goods Sold (COGS) and operating, selling, general, and administrative (OSG&A) expenses. Over the past five years, these components have remained stable, with COGS accounting for approximately 75% of revenues and OSG&A expenses representing around 20.5% of revenues. Given this consistent historical pattern, it is reasonable to expect that these expense elements will continue to exhibit similar behavior in the future. Therefore, I will apply the historical average growth rate to forecast the operating expenses for the projection period.

Exhibit 10: Walmart Operating Expenses growth, historical and estimated



Source: Own elaboration

Table 5: Historical 5 year average growth rate Operating Expenses

5 year average growth rates Operating Expenses	
Cost of Goods Sold	4.96%
OSG&A expenses	4.13%

Source: Own elaboration

Table 6: 3 year forecast Operating Expenses (\$ Millions)

	2023A	2024E	2025E	2026E
Cost of Goods Sold	\$ 490,142	\$ 514,441	\$ 539,944	\$ 566,712
OSG&A expenses	\$ 130,971	\$ 136,385	\$ 142,022	\$ 147,892
Total	\$ 621,113	\$ 650,825	\$ 681,966	\$ 714,604

Source: Own elaboration

4.1.3 Capital Expenditures

Capital Expenditures (CAPEX) represents the funds used by a company to acquire, upgrade and maintain physical assets, such as property, buildings, equipment and technology. These expenditures are essential for maintaining operational capacity and supporting growth.

For the CAPEX projections, I will use a percentage of projected revenues. Over the past five years, CAPEX as a percentage of revenue has consistently increased across all segments.

Given Walmart's recently announced expansion plans, this trend is expected to continue in the short term. To account for this, I will calculate the average growth rate of the CAPEX-to-

revenue ratio from the past five years and apply this growth rate to forecast the future CAPEX-to-revenue ratio for 2024. I will then calculate the 5-year moving average of the CAPEX-to-revenue ratio to smooth out anomalies, ensuring the forecasted CAPEX remains stable and reflective of longer-term trends, and apply these ratios to 2025 and 2026. Finally, for the Corporate and Support segment, due to the lack of revenue generation, I will apply the historical five-year average growth rate of 19.7%.

Table 7: Historical 5 year average CAPEX-to-Revenue Ratio growth rate

5 year average CAPEX-to-Revenue growth rates	
Walmart US	12.60%
Walmart International	3.59%
Sam's Club	10.62%

Source: Own elaboration

Table 8: 3 year projected Capex-to-Revenue ratio

	2023A	2024E	2025E	2026E
Walmart US	3.14%	3.54%	2.94%	3.09%
Walmart International	2.54%	2.63%	2.56%	2.57%
Sam's Club	1.21%	1.34%	1.09%	1.14%

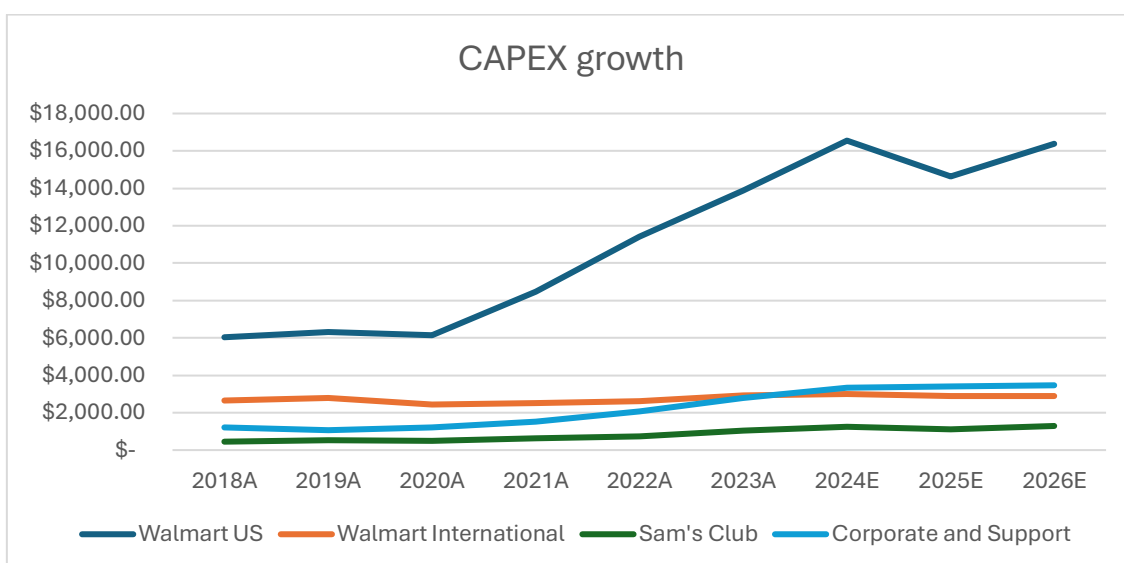
Source: Own elaboration

Table 9: 3 year forecast CAPEX (\$ Millions)

	2023A	2024E	2025E	2026E
Walmart US	\$13,877	\$16,550	\$14,649	\$16,378
Walmart International	\$2,911	\$2,999	\$2,898	\$2,891
Sam's Club	\$1,041	\$1,249	\$1,121	\$1,289
Corporate and Support	\$2,777	\$3,324	\$3,394	\$3,465
Total	\$20,606	\$24,122	\$22,061	\$24,023

Source: Own elaboration

Exhibit 11: Walmart CAPEX growth, historical and estimated



Source: Own elaboration

4.1.4 Depreciation & Amortization costs

Depreciation & Amortization (D&A) represents the systematic allocation of the cost of tangible and intangible assets over their useful lives, accounting for factors like wear and tear, usage, and obsolescence. To forecast Walmart's D&A costs, I begin by estimating the Property, Plant, and Equipment (PPE) values for the next three years, as D&A is closely tied to PPE levels.

I first analyzed the historical CAPEX/PPE ratio and observed an upward trend. To project this ratio forward, I calculated the five-year average growth rate of the CAPEX/PPE ratio, which was 13.68%. I then applied this growth rate to estimate future CAPEX/PPE ratios. Using these ratios, I calculated the projected PPE figures based on the estimated CAPEX for the coming years.

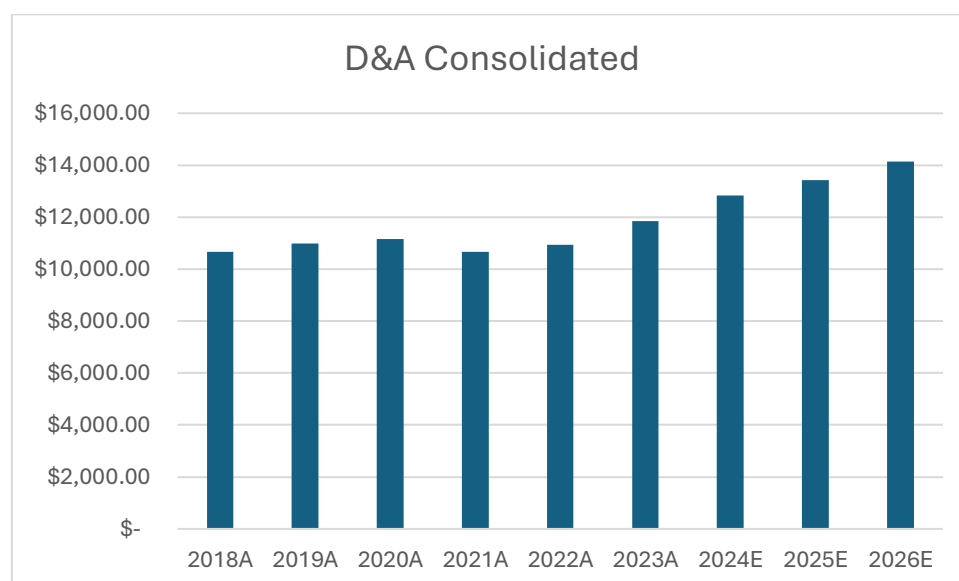
With the estimated PPE figures, I examined historical D&A/PPE ratios, noting stability in the range of 10.5% to 12% over the past five years. I used the five-year historical average of 11.07% and applied it to the estimated PPE figures to forecast D&A costs for the next three years. This method provides a systematic and data-driven approach to estimating Walmart's future D&A expenses.

Table 10: 3 year forecast PPE (\$ Millions)

	2023A	2024E	2025E	2026E
CAPEX/PPE estimated ratio	18.60%	21.14%	24.03%	27.32%
Estimated PPE	\$ 110,810.00	\$ 115,909.21	\$ 121,210.53	\$ 127,772.94
D&A/PPE Ratio	10.70%	11.07%	11.07%	11.07%
D&A Estimate	\$ 11,853.00	\$ 12,836.73	\$ 13,423.84	\$ 14,150.62

Source: Own elaboration

Exhibit 12: Walmart D&A growth, historical and estimated



Source: Own elaboration

4.1.5 Net Working Capital

Net Working Capital represents the difference between a company's current operating assets and current operating liabilities. It provides insight into a company's short-term financial health, liquidity, and operational efficiency.

To forecast Net Working Capital, an estimate of its components must be made. I will estimate these components using two methods.

I will calculate the 5-year historical average of three key working capital ratios: Days Sales Outstanding (DSO), Days Inventory Outstanding (DIO), and Days Payable Outstanding (DPO). These ratios will then be applied to projected Sales and Cost of Goods Sold (COGS) to forecast future values of Accounts Receivables, Inventories, and Accounts Payables.

Equation 23: Days Sales Outstanding

$$DSO = \left(\frac{\text{Accounts Receivable}}{\text{Sales}} \right) \times 365$$

Equation 24: Days Inventory Outstanding

$$DIO = \left(\frac{\text{Inventory}}{\text{Cost of Goods Sold}} \right) \times 365$$

Equation 25: Days Payable Outstanding

$$DPO = \left(\frac{\text{Accounts Payable}}{\text{Cost of Goods Sold}} \right) \times 365$$

Table 11: 5 years historical average Working Capital ratios

5 year average Working Capital Ratios	
Days Sales Outstanding (DSO)	4.72
Days Inventory Outstanding (DIO)	42.72
Days Payable Outstanding (DPO)	43.55

Source: Own elaboration

For the other components I will use the historical 5 year average percentage of sales, as these have remained relatively stable for the last five years.

Table 12: 5 years historical average NWC components as percentage of sales

5 years average NWC components as % of Sales	
Prepaid expenses and other	1.05%
Accrued liabilities	5.02%
Operating lease obligations due within one year	0.27%

Source: Own elaboration

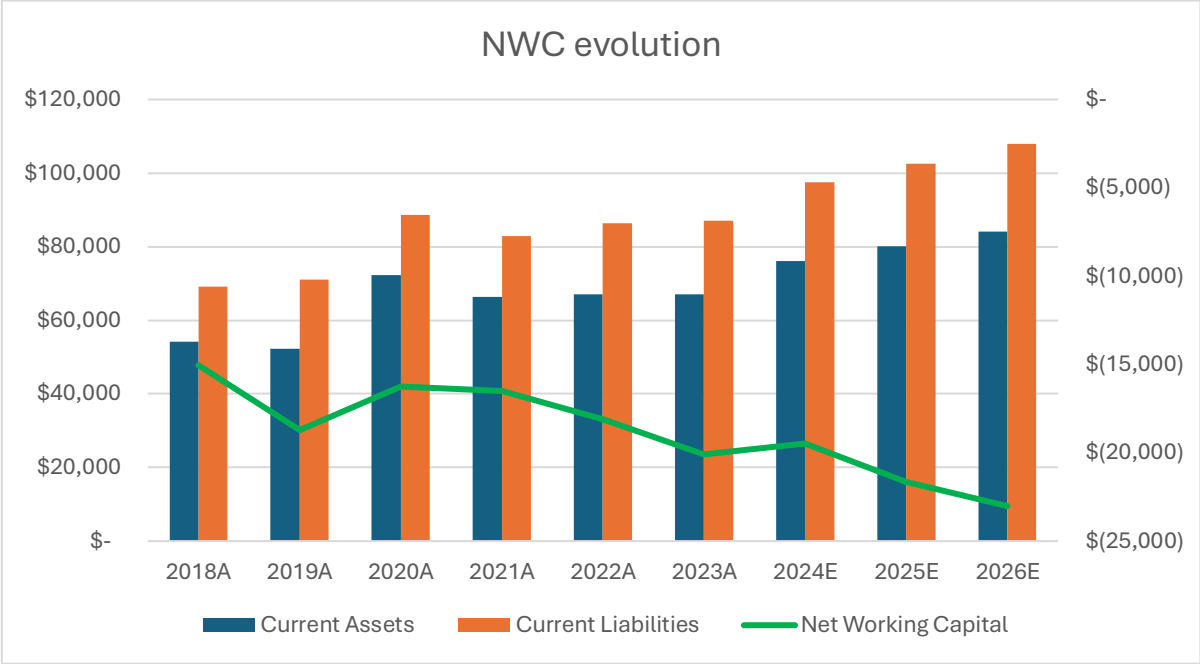
The operating lease obligations are included in the NWC calculation because Walmart reports using GAAP, where leases are expensed and as such should be included in the NWC instead of in Net Debt, as they would be under IFRS.

Table 13: 3 year forecast Net Working Capital

	2022A	2023A	2024E	2025E	2026E
Receivables, net	\$ 7,933	\$ 8,796	\$ 8,809	\$ 9,322	\$ 9,847
Inventories	\$ 56,576	\$ 54,892	\$ 60,217	\$ 63,203	\$ 66,336
Prepaid expenses and other	\$ 2,521	\$ 3,322	\$ 7,127	\$ 7,542	\$ 7,967
Current Assets	\$ 67,030	\$ 67,010	\$ 76,154	\$ 80,066	\$ 84,150
Accounts payable	\$ 53,742	\$ 56,812	\$ 61,380	\$ 64,423	\$ 67,616
Accrued liabilities	\$ 31,126	\$ 28,759	\$ 34,234	\$ 36,225	\$ 38,267
Operating lease obligations due within one year	\$ 1,473	\$ 1,487	\$ 1,817	\$ 1,923	\$ 2,031
Current Liabilities	\$ 86,341	\$ 87,058	\$ 97,431	\$ 102,571	\$ 107,915
Change in Deferred Tax Liabilities	\$ 1,214	\$ (59)	\$ 1,798	\$ 866	\$ 744
Net Working Capital	\$ (18,097)	\$ (20,107)	\$ (19,479)	\$ (21,639)	\$ (23,021)
Change in NWC		\$ (2,010)	\$ 628	\$ (2,160)	\$ (1,382)

Source: Own elaboration

Exhibit 13: Walmart NWC growth, historical and estimated



Source: Own elaboration

4.1.6 Tax rate

For a multinational company like Walmart, forecasting the future tax rate involves navigating complex and assumption-based processes. Achieving a truly comprehensive and accurate forecast requires a thorough analysis of tax laws and anticipated changes across all regions where Walmart operates.

In the last five years, Walmart's effective tax rate has fluctuated primarily due to the separation, disposal, and wind-down of business operations. These activities, which involve restructuring or closing parts of its business, led to one-time costs or gains, notably increasing the tax rate in 2020 and 2022. Excluding these one-time impacts, the effective tax rate has remained relatively stable, with a five-year historical average of 25.8%.

To estimate the short-term future effective tax rate, I will use the historical average of 25.8%, excluding one-time impacts. This approach offers a stable estimate grounded in historical context and smooths out the effects of extraordinary events from past years. Additionally, Walmart's 2024 first-quarter earnings report aligns with this estimate, projecting a tax rate between 25% and 26%.

Table 14: Historical Effective Tax Rate

	2023	2022	2021	2020	2019
US statutory tax rate	21.0%	21.0%	21.0%	21.0%	21.0%
US state income taxes, net of federal income tax benefit	3.0%	3.1%	2.8%	2.9%	2.2%
Income taxed outside the US	0.1%	1.1%	-1.5%	-0.1%	-1.0%
Separation, disposal, and wind-down of certain business operations	0.0%	6.3%	0.5%	7.1%	0.0%
Valuation Allowance	1.2%	1.7%	4.4%	2.3%	2.3%
Net impact of repatriated international earnings	-0.4%	-0.4%	-0.3%	-0.4%	0.4%
Federal tax credits	-1.5%	-1.3%	-1.1%	-0.9%	-0.8%
Enacted change in tax laws	0.0%	0.0%	0.0%	0.0%	-1.9%
Change in unrecognized tax benefits	0.6%	0.3%	0.2%	0.8%	2.5%
Other, net	1.5%	1.8%	-0.6%	0.6%	-0.3%
Effective Income tax rate	25.5%	33.6%	25.4%	33.3%	24.4%

Source: Walmart Form 10-K

4.1.7 Free Cashflow to Firm

Having forecasted each of the key metrics required to calculate the Free Cash Flow to the Firm (FCFF), I can now proceed to project the FCFF for the next three years using the formula outlined in the literature review.

Table 15: 3 years forecast Free Cashflow to Firm (\$ millions)

	2023A	2024E	2025E	2026E
Revenues	\$ 648,125	\$ 681,291	\$ 720,921	\$ 761,563
Operating Expenses	\$ 621,113	\$ 650,825	\$ 681,966	\$ 714,604
EBIT	\$ 27,012	\$ 30,466	\$ 38,955	\$ 46,959
Unlevered Taxes	\$ 5,578	\$ 7,860	\$ 10,050	\$ 12,115
Net Operating Profit After Taxes	\$ 21,434	\$ 22,606	\$ 28,905	\$ 34,844
Depreciation & Amortization	\$ 11,853	\$ 12,837	\$ 13,424	\$ 14,151
CAPEX	\$ 20,606	\$ 24,122	\$ 22,061	\$ 24,023
Changes in Net Working Capital	\$ (2,010)	\$ 628	\$ (2,160)	\$ (1,382)
Free Cash Flow to Firm	\$ 14,691	\$ 10,692	\$ 22,428	\$ 26,353

Source: Own elaboration

4.1.8 Cost of Capital

Walmart's capital structure comprises both equity and debt. To determine the overall Cost of Capital, I will first calculate the Cost of Equity and the Cost of Debt separately. Subsequently, I will apply a weighted average based on Walmart's capital structure to arrive at the Weighted Average Cost of Capital (WACC).

4.1.8.1 Cost of Equity

To obtain the Cost of Equity, I will employ the Capital Asset Pricing Model (CAPM), which requires three inputs, the Risk Free Rate, the Beta, and the Market Risk Premium.

Given that Walmart is a multinational company with the majority of its operations based in the United States, I have chosen to use the yield on a 10-year Treasury bond as a proxy for the Risk-Free Rate. According to the Federal Reserve Economic Data (FRED) as of January 31, 2024, the 10-year Treasury yield is 3.99%.

For the Beta, I used the value provided by Refinitiv Eikon. This Levered Beta is calculated over a 5-year period using a least squares linear regression line with monthly closing prices. According to this method, Walmart's Beta is 0.5.

The Market Risk Premium was sourced from Damodaran's academic website, which provides the implied market risk premium for equities. For 2023, the Market Risk Premium is estimated to be 4.60%.

The below table summarizes the inputs used to estimate the Cost of Equity, applying Equation 6 to reach the Cost of Equity:

Table 16: Cost of Equity via CAPM

Cost of Equity	
Risk Free Rate	3.99%
Levered Beta	0.50
Market Risk Premium	4.60%
Cost of Equity	6.29%

Source: Refinitiv Eikon, Damodaran, FRED

4.1.8.2 Cost of Debt

To calculate the pre-tax Cost of Debt, I employed the Yield to Maturity (YTM) approach. Walmart's 10-K form provides a summary of its outstanding notes and their average YTM. As the YTM of the bonds denominated in Euro, Sterling and Yen were not converted to US Dollars in Walmart's report, I have adjusted them by calculating the spread between the reported YTM and the risk-free rate for each currency, and then applying this spread to the corresponding USD risk-free rate. The reported YTM is calculated using a weighted average for each debt category, based on year-end balances and year-end interest rates.

Table 17: Debt structure

	Maturity dates	Amount	Average Rate	Adjusted Rate
U.S. Dollar denominated	2025-2054	\$ 34,527.00	3.7%	3.7%
Euro denominated	2027-2030	\$ 1,789.00	4.0%	5.8%
Sterling denominated	2031-2039	\$ 3,412.00	5.4%	5.6%
Yen denominated	2025-2028	\$ 677.00	0.4%	4.1%

Source: Walmart 10-K Form

I calculated a weighted average adjusted rate of the outstanding notes, arriving at a pre-tax Cost of Debt of 3.96%. Applying Equation 9, I estimated Walmart’s after-tax Cost of Debt to be 2.97%.

4.1.9 Weighted Average Cost of Capital

Having calculated the Cost of Debt and Cost of Equity, the remaining required inputs for WACC are the market value of debt, the market value of equity and the marginal tax rate.

When calculating WACC, the marginal tax rate should be used instead of the effective tax rate. The marginal tax rate reflects the tax rate applicable to the next dollar of income and more accurately represents the tax savings that the company can achieve through the interest tax shield. To calculate the Marginal Tax Rate applicable to Walmart, I researched the Corporate Income Tax rates for each of the major countries where Walmart operates: the USA, Canada, Mexico, and China. Additionally, I calculated the average Corporate Income Tax rate for all other countries where Walmart operates. I then applied a weighted average, using the proportion of net sales from each region to determine an overall Marginal Tax Rate. This calculation resulted in a Marginal Tax Rate of 25%. This rate is similar to the effective tax rate that Walmart paid in 2023, suggesting that it is a valid and reliable figure for the Marginal Tax Rate.

To calculate the market value of debt, I added the Short-Term Borrowings as well as short term and long term Finance Leases to the Fair Value of outstanding notes provided in the form 10-K, resulting in a market value of debt of \$45,743 million.

Table 18: Market Value of Debt (\$ million)

Market Value of Debt	
Fair Value outstanding notes	\$ 38,431.00
Short-term borrowings	\$ 878.00
Finance lease obligations due within one year	\$ 725.00
Long-term finance lease obligations	\$ 5,709.00
Market Value of Debt	\$ 45,743.00

To determine the market value of equity, I assume the market efficiently incorporates all available information. Therefore, I will use Walmart’s closing share price as of May 16, 2024, which was \$64.65, and multiply it by the total number of outstanding shares (8.04 billion). This results in a market value of equity of \$520,691.10 million.

Applying Equation 5, a value for the WACC can be estimated:

Table 19: Weighted Average Cost of Capital

Cost of Capital		
Market Value of Equity	\$	520,691.10
Market Value of Debt	\$	45,743.00
Equity/Enterprise Value		91.92%
Debt/Enterprise Value		8.08%
Cost of Equity		6.29%
Pre-Tax Cost of Debt		3.96%
Marginal Tax Rate		25.00%
After-Tax Cost of Debt		2.97%
WACC		6.02%

Source: Own elaboration

4.1.10 Terminal Value

The final and most critical component of the DCF analysis is the estimation of the Terminal Value, which represents the majority of the valuation and relies heavily on the selection of a terminal growth rate assumed to remain constant in perpetuity.

To estimate the terminal growth rate, I calculated the 5-year historical average of the US Treasury 10-year bond yields. The YTM of 10 year T-bonds incorporate the market's expectations of future inflation and real interest rates, hence they provide a reasonable estimate of the long term nominal growth rate of the economy. Given the current high inflation and uncertainty regarding future inflation rates, this approach helps mitigate current volatility, ensuring a growth rate that is reasonable, aligned with expected US GDP growth, which historically has been between 2% and 3%, and the long-term inflation targets of central banks.

Therefore, the terminal growth rate I will use is 2.36%, which is conservative yet reflective of long-term economic fundamentals. This method is appropriate for Walmart due to its mature market position and stable growth trajectory.

By applying this growth rate to the projected FCFF for 2026, I derive the FCFF for the steady state.

Table 20: Terminal Value

Terminal Value (\$ million)		
FCFF Steady State	\$	26,974.75
WACC		6.02%
Terminal Growth Rate		2.36%
Terminal Value	\$	737,015.14

Source: Own elaboration

4.1.11 Valuation

Having obtained the terminal value, the short-term forecasts for FCFF, and the appropriate discount rate, I can now estimate Walmart's Enterprise Value. To derive the share price, I will subtract Net Debt (Book Value of Debt minus Cash) from the Enterprise Value to obtain the Equity Value.

Table 21: DCF Valuation (\$ million)

	Valuation (\$ million)	New valuation date
2024 projected FCFF	\$	10,692.17
PV of 2025 projected FCFF	\$	21,154.70
PV of 2026 projected FCFF	\$	23,445.07
PV of terminal value	\$	618,461.99
Enterprise Value	\$	673,753.93
Net debt	\$	152,183.00
Equity Value	\$	521,570.93

Source: Own elaboration

The calculated Equity Value represents the value as of January 2025. However, to compare it with the financial report projecting the price for May 2025, I must account for the time difference. Therefore, I applied the Cost of Equity for 4 months to capitalize the present value to May, resulting in an Equity Value of \$532,284.95 million. Dividing this by the number of outstanding shares yields a projected share price of \$66.09.

4.1.12 Sensitivity analysis

When valuing a company, it is important to perform a sensitivity analysis, in order to predict possible unexpected shocks. To perform this analysis, I will take the two most variables with the most impact in the DCF valuation, Terminal growth rate and WACC, and apply a variation of 10%, to see the impact on the share price.

Table 22: Sensitivity analysis (Prices in \$)

	4.88%	5.42%	6.02%	6.62%	7.28%
2.86%	134	102	78	63	50
2.60%	118	91	71	58	47
2.36%	106	83	66	54	44
2.12%	95	76	61	50	41
1.91%	88	71	58	48	39

Source: Own elaboration

With the WACC on the top row, and the terminal growth rate on the left column.

As expected, the price share grows with the increase in the growth rate, and decreases with an increase in the WACC. From this analysis it is also possible to conclude that a variation in the WACC has a higher impact on the share price than a variation in the growth rate

The best case scenario is obtained with a 20% increase in the growth rate and 20% decrease in the WACC, reaching a share price of \$134. On the other hand, the worst case scenario is observed in a case where there is a 20% decrease in the growth rate and 20% decrease in the WACC, getting a share price of \$39.

4.2 Relative Valuation

4.2.1 Peer group selection

Walmart operates as a retail giant across various sectors, requiring a nuanced approach to valuation. To accurately capture the diverse nature of its business, I employed a Sum-of-Parts approach, which involves separating Walmart's business segments, valuing each individually, and then aggregating them. This approach ensures that industry alignment, growth, risk, and cash flow profiles are all considered for comparability.

Walmart's business was divided into two main segments: Sam's Club and Walmart. Due to the unavailability of specific data for Walmart International, I assumed it mirrors the sector contributions of Walmart US and combined them to represent Walmart's overall revenues.

Walmart's operations were further broken down into four sectors: Groceries, General Merchandise, Health and Wellness, and E-commerce. Each sector was compared to relevant peer companies within the same industries, ensuring a comprehensive benchmark.

To capture the broader retail dynamics Walmart operates within, two multi-sector companies were selected. The final valuation integrates a weighted average of the Sum-of-Parts analysis and valuation multiples from these multi-sector peers, ensuring that Walmart's sector-specific performance and overall strategy are accurately reflected.

Sam's Club

Costco Wholesale Corporation and BJ's Wholesale Club Holdings are comparable to Sam's Club due to their similar membership-based models, which create consistent revenue streams and foster customer loyalty.

Costco has seen a five-year revenue growth of 11.43%, and BJ's has achieved 9.16%, both of which are comparable to Sam's Club's 8.43%. These growth rates are in line with industry trends, reflecting steady demand in the wholesale sector.

Walmart's overall Beta of 0.5 can be compared to Costco's 0.77 and BJ's 0.27, indicating a similar market risk profile. Moreover, the profitability metrics such as ROA, Operating Margin, and Net Margins for Costco and BJ's align closely with Walmart, highlighting operational efficiency and financial discipline across these leading retail companies. Geographically, Sam's Club and Costco are primarily U.S.-focused but have limited international operations, while BJ's is exclusively U.S.-based.

Strategically, all three companies focus on price-sensitive consumers, offering bulk products with a similar pricing and inventory management approach.

These alignments in growth, risk, profitability, and market reach as well as strategic similarities reinforce the suitability of Costco and BJ's as comparables for Sam's Club.

Groceries

Kroger and Albertsons serve as relevant comparisons for Walmart's Groceries segment. Kroger's five-year revenue growth of 4.41% and Albertsons' 5.59% are slightly lower than Walmart's 7.52%, indicating Walmart's superior ability to leverage its scale and supply chain efficiencies.

Their Betas—0.47 for Kroger and 0.49 for Albertsons—are close to Walmart's 0.5, signaling similar market risk profiles. In terms of profitability, Kroger's ROE and Net Margin align closely with Walmart, while Albertson's ROA, Operating Margin, and Net Margin are also comparable. Additionally, the liquidity ratios of Kroger and Albertsons are comparable to those of Walmart, reflecting similarities that demonstrate the comparable financial health and operational efficiency of these companies

Although Kroger and Albertsons operate exclusively in the U.S., Walmart's grocery operations, while predominantly U.S.-focused, also have an international presence.

Walmart, Kroger, and Albertsons all compete in the highly competitive U.S. grocery market, targeting a broad customer base with a mix of value and premium offerings. Their strategies in pricing, inventory management, and customer engagement are largely similar, and the alignment in financial and operational metrics makes Kroger and Albertsons strong comparables for Walmart's grocery segment.

General Merchandise

Best Buy is an appropriate comparison for Walmart's General Merchandise segment due to its focus on consumer electronics, which significantly overlaps with Walmart's offerings. Best Buy's modest five-year revenue growth of 0.58% reflects the competitive and mature nature of this market compared to Walmart's 2.59%.

While Best Buy's Beta of 1.46 suggests higher sensitivity to market fluctuations than Walmart's 0.5, other metrics such as liquidity ratios and CAPEX/Sales ratios indicate similar operational efficiency. Additionally, Best Buy's ROA, Operating Margin, and Net Margin closely mirror Walmart's, demonstrating its effective resource management and cost control

Best Buy's operations in the U.S., Canada, and Mexico align with Walmart's significant presence in these regions, making Best Buy a relevant benchmark for evaluating Walmart's performance in the general merchandise space. The alignment in operational efficiency and Capital allocation strategies, despite differences in growth rates and risk profiles, justifies the selection of Best Buy as a comparable.

Health and Wellness

For Walmart's Health and Wellness segment, Walgreens Boots Alliance and CVS Health Corporation are suitable comparables, as they both operate extensive networks of pharmacies and health-related services, aligning closely with Walmart's offerings in this segment.

Walgreens has experienced a five-year revenue growth of 1.29%, while CVS has seen a much higher growth rate of 13.33%, driven by strategic acquisitions and expansions into health services. In comparison, Walmart's Health and Wellness segment has grown by 9.06%, placing it between Walgreens and CVS.

The Beta for Walgreens is 0.71, and for CVS is 0.54, both close to Walmart's overall Beta of 0.5, indicating similar market risk profiles. Walgreens and CVS also share similar liquidity ratios with Walmart, reflecting comparable financial stability and operational efficiency.

Geographically, Walgreens operates internationally, while CVS is U.S.-focused, with Walmart's Health and Wellness segment benefiting from Walmart's broader international presence.

The similarities in liquidity, market risk, and financial metrics support the selection of Walgreens and CVS as comparables for Walmart's Health and Wellness segment, despite the difference in growth rates.

E-commerce

Amazon and Alibaba are primary comparables for Walmart's e-commerce segment due to their global leadership in online retail. Over the past five years, Amazon has grown by 20.2% and Alibaba by 19.89%, while Walmart's e-commerce segment has outpaced both with a growth rate of 33.7%. This highlights Walmart's rapid expansion in the digital space, leveraging its extensive physical presence and supply chain capabilities.

Amazon's Beta of 1.17 and Alibaba's 0.31 contrast with Walmart's 0.5, reflecting different risk levels. Amazon's debt-to-equity ratio is comparable to Walmart's, reflecting similar leverage levels, while Alibaba's CAPEX/Sales ratio aligns with Walmart's investment in infrastructure to support its e-commerce growth.

Amazon and Alibaba both exhibit similar ROA figures to Walmart, with Amazon also showing a comparable ROE. This alignment in Return on Assets and Return on Equity highlights these companies' effective resource management and ability to generate consistent returns in a highly competitive global market.

Amazon and Alibaba serve as relevant comparables for Walmart's e-commerce segment due to their global reach, strong revenue growth, and significant investments in technology and logistics. Despite differences in market risk and financial structures, the similarities in strategic focus and operational metrics provide a strong basis for benchmarking Walmart's performance in the rapidly evolving e-commerce landscape.

Multi-Sector

Target and Dollar Tree serve as strong comparables for evaluating Walmart's overall business. Target's five-year revenue growth rate of 7.62% and Dollar Tree's 6.06% both outpace Walmart's 4.75%.

Target's Beta of 1.25 and Dollar Tree's 0.9 reflect slightly different risk profiles compared to Walmart's 0.5, however, both Target and Dollar Tree share similar Interest Coverage and Quick Ratios with Walmart, indicating strong financial health and operational efficiency.

Both Target and Dollar Tree exhibit Operating Margins similar to Walmart, with Target also aligning closely in terms of ROA and Net Margin. These parallels suggest that all three companies operate with comparable efficiency in managing costs relative to sales. Target's parallel ROA and Net Margin with Walmart further indicate that it not only manages its resources effectively but also converts sales into net income at a rate akin to Walmart.

Geographically, Target operates solely within the U.S., while Dollar Tree has expanded into Canada. Walmart has a broader geographic reach, however, its North American focus aligns with Target's and Dollar Tree's geographical reach.

Target's growth has been driven by focusing on enhancing the in-store experience and integrating digital sales channels. Dollar Tree, on the other hand, focuses on the value segment, attracting cost-conscious consumers through its low-price point strategy. Walmart combines a value-driven strategy with broad product offerings and a strong digital presence.

The alignment in financial metrics, growth, as well as market and strategic positioning makes Target and Dollar Tree valuable benchmarks for assessing Walmart's performance in the competitive retail landscape.

By comparing Walmart's various segments to these industry peers, it is clear that despite some differences, there are significant similarities in growth, risk profiles, and strategic focuses that validate the selection of these companies as comparables. These comparisons provide a solid framework for evaluating Walmart's performance across its business segments, offering insights into how Walmart measures up against its competitors in each area.

Table 23: Peer group

	EV	EBITDA	Sales	EV/EBITDA	EV/Sales
Sam's Club					
Costco	\$ 228,477	\$ 10,191	\$ 242,290	22.42	0.94
BJ's Wholesale Club Holdings	\$ 9,355	\$ 1,042	\$ 19,969	8.98	0.47
Groceries					
Kroger	\$ 43,523	\$ 6,290	\$ 150,039	6.92	0.29
Albertsons Companies	\$ 20,207	\$ 4,108	\$ 79,238	4.92	0.26
General Merchandise					
Best Buy	\$ 16,021	\$ 2,650	\$ 43,452	6.05	0.37
Health and Wellness					
Walgreens	\$ 39,617	\$ 5,416	\$ 139,081	7.31	0.28
CVS Health Corp	\$ 151,943	\$ 19,532	\$ 357,776	7.78	0.42
e-commerce					
Amazon	\$ 1,569,308	\$ 67,819	\$ 574,785	23.14	2.73
Alibaba	\$ 136,633	\$ 25,186	\$ 131,350	5.43	1.04
Multi-sector					
Target	\$ 79,400	\$ 8,610	\$ 107,412	9.22	0.74
Dollar Tree	\$ 32,962	\$ 2,482	\$ 30,604	13.28	1.08

Source: Refinitiv Eikon, Own elaboration

To calculate the weight of each sector, I used a 5-year historical average because the contributions were relatively stable. For e-commerce, where historical contributions have consistently grown, I considered the upward trend to adjust the weight accordingly.

By balancing historical averages with recent trends and strategic insights, I aim to provide a comprehensive and realistic forecast, capturing the essence of Walmart's diverse operations and future potential.

Table 24: Revenues by Sector and Segment

	Weights	Revenues	Online Revenues	Physical store Revenues
Walmart US + International	87%	\$581,969.97	\$99,807.85	\$482,162.12
Grocery	59.80%	\$348,022.56	\$59,685.87	\$288,336.69
General Merchandise	27.77%	\$161,634.69	\$27,720.35	\$133,914.34
Health and Wellness	12.43%	\$72,312.72	\$12,401.63	\$59,911.09
Sam's Club	13%	\$93,467.71	\$16,029.71	\$77,437.99
e-commerce	17.15%	\$115,837.56	\$115,837.56	-

Source: Own elaboration

4.2.2 Multiple valuation

To obtain Walmart's valuation, I applied the EV/Sales multiple to each segment's contribution to the 2024 forecasted Net Sales. For the two multi-sector companies, I applied the multiple to the total Net Sales forecast.

The result of this calculation is Walmart's Enterprise Value for January 2025. From this figure, I subtracted the Net Debt (assumed to be the same as in 2023 for simplicity) to obtain the Equity Value. To align this value with the financial report projecting the price for May 2025, I capitalized the Equity Value for two months using the Cost of Equity as the discount rate, reaching the price of \$67.70.

Table 25: Relative Valuation

Relative Valuation EV/Sales	
Sum of parts	\$ 465,069.02
Target multiple	\$ 499,823.88
Dollar Tree multiple	\$ 729,472.69
Average	\$ 564,788.53
Net Debt	\$ 30,538.00
Equity Value	\$ 534,250.53
Cost of Equity	6.29%
Equity Value May 25	\$ 545,225.00
Price per share May 25	67.70

Source: Own elaboration

4.3 Consensus estimate

The recommendations from various analysts reflect market sentiments and offer valuable insights into the valuations used in this dissertation. The average target price set by these analysts for May 2025 was \$69.

4.4 Conclusion

Applying different valuation methodologies yielded similar share prices. The DCF analysis resulted in a share price of \$66.09, while the relative valuation indicated a slightly higher price of \$67.70. The analyst's consensus was \$69. The average of these three results is \$67.60. The similar results suggest that both the FCF DCF method, using the WACC as the discount rate, and the Multiple valuation are suitable. I will consider the average price as the final valuation to encompass a balanced perspective from all methodologies.

Walmart's price on May 16th, 2024, was \$64.65. Based on my valuation, the estimated price for May 2025 is \$67.60, indicating a potential upside of 4.56%.

5. Comparison with BNPP financial report

BNP Paribas' financial report projects Walmart's price in May 2025 to be \$72, which is relatively close to my projections. BNPP derived this price using a sum-of-the-parts analysis. They applied a 16.5x EV/EBITDA multiple to the 2025 estimated Walmart US EBITDA of \$27.7 billion and a 18x EV/EBITDA multiple to the 2025 estimated Sam's Club EBITDA of \$3.1 billion. BNPP's report does not clarify how they calculated these multiples. Additionally, they included the Enterprise Value associated with Walmart International to arrive at a consolidated Enterprise Value. After deducting Net Debt, they applied a 7% discount rate to determine the final price.

It is important to note that BNPP used a multiples valuation to reach its target price using the EV/EBITDA multiple, while this dissertation used both a DCF and multiples valuation, where the multiple used was EV/Sales. However, both valuations employed by this dissertation resulted in lower prices when compared to BNPP's.

BNPP estimated lower values for total revenues compared to this dissertation, as well as slightly lower SG&A costs. Consequently, their estimates for EBIT and EBITDA were also lower than those forecasted in this dissertation. BNPP's depreciation and amortization (D&A) estimates were higher than my forecast, but BNPP did not estimate CAPEX or Net Working Capital.

Table 26: Comparison between BNPP and Dissertation's forecasts (\$ million)

		2024	2025	2026
Walmart US Net Sales	BNPP	\$ 456,218	\$ 472,185	\$ 488,712
	Dissertation	\$ 467,974	\$ 498,585	\$ 529,253
Walmart International Net Sales	BNPP	\$ 125,382	\$ 133,532	\$ 142,211
	Dissertation	\$ 113,996	\$ 113,358	\$ 112,364
Sam's club Net Sales	BNPP	\$ 88,840	\$ 92,731	\$ 96,787
	Dissertation	\$ 93,468	\$ 102,646	\$ 112,954
Membership and other income	BNPP	\$ 6,165	\$ 6,426	\$ 6,695
	Dissertation	\$ 5,854	\$ 6,333	\$ 6,992
Total Revenues	BNPP	\$ 676,604	\$ 704,873	\$ 734,405
	Dissertation	\$ 681,291	\$ 720,921	\$ 761,563
EBIT	BNPP	\$ 29,723	\$ 32,488	\$ 35,364
	Dissertation	\$ 30,466	\$ 38,955	\$ 46,959
D&A	BNPP	\$ 12,764	\$ 13,880	\$ 15,091
	Dissertation	\$ 12,721	\$ 13,356	\$ 14,151
EBITDA	BNPP	\$ 42,486	\$ 46,368	\$ 50,455
	Dissertation	\$ 43,187	\$ 52,311	\$ 61,110

Source: BNPP Financial Report, Own elaboration

6. Conclusion

Walmart, a retail giant operating across various sectors and regions, continues to solidify its position as a global leader through continuous expansion, innovation, and investment in technology.

To provide a comprehensive and reasonable price expectation for May 2025, I employed multiple valuation methods. By using two distinct valuation methodologies and incorporating market sentiment via analyst consensus, I derived three estimated prices ranging from \$66 to \$69, with an average price of \$67.60. The similarity between the DCF valuation and the average price suggests that the assumptions and estimates used were reasonable. The alignment with analyst consensus predicted price further supports the credibility of the valuation.

Given an upside potential of 4.56%, the recommendation for Walmart is a HOLD.

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8. Appendix

Appendix 1: Income Statement (FY2018-FY2023)

Income Statement Information	2024	2023	2022	2021	2020	2019
Net sales	\$ 642,637	\$ 605,881	\$ 567,762	\$ 555,233	\$ 519,926	\$ 510,329
Membership and other income	\$ 5,488	\$ 5,408	\$ 4,992	\$ 3,918	\$ 4,038	\$ 4,076
Total revenues	\$ 648,125	\$ 611,289	\$ 572,754	\$ 559,151	\$ 523,964	\$ 514,405
Costs and expenses:						
Cost of sales	\$ 490,142	\$ 463,721	\$ 429,000	\$ 420,315	\$ 394,605	\$ 385,301
Operating, selling, general and administrative expenses	\$ 130,971	\$ 127,140	\$ 117,812	\$ 116,288	\$ 108,791	\$ 107,147
Operating income	\$ 27,012	\$ 20,428	\$ 25,942	\$ 22,548	\$ 20,568	\$ 21,957
Interest:						
Debt	\$ 2,259	\$ 1,787	\$ 1,674	\$ 1,976	\$ 2,262	\$ 1,975
Finance lease	\$ 424	\$ 341	\$ 320	\$ 339.00	\$ 337	\$ 371
Interest income	\$ (546)	\$ (254)	\$ (158)	\$ (121)	\$ (189)	\$ (217)
Interest, net	\$ 2,137	\$ 1,874	\$ 1,836	\$ 2,194	\$ 2,410	\$ 2,129
Loss on extinguishment of debt	\$ -	\$ -	\$ 2,410	\$ -	\$ -	\$ -
Other (gains) and losses	\$ 3,027	\$ 1,538	\$ 3,000	\$ (210)	\$ (1,958)	\$ 8,368
Income before income taxes	\$ 21,848	\$ 17,016	\$ 18,696	\$ 20,564	\$ 20,116	\$ 11,460
Provision for income taxes	\$ 5,578	\$ 5,724	\$ 4,756	\$ 6,858	\$ 4,915	\$ 4,281
Consolidated net income	\$ 16,270	\$ 11,292	\$ 13,940	\$ 13,706	\$ 15,201	\$ 7,179
Consolidated net income attributable to noncontrolling interest	\$ (759)	\$ 388	\$ (267)	\$ (196)	\$ (320)	\$ (509)
Consolidated net income attributable to Walmart	\$ 15,511	\$ 11,680	\$ 13,673	\$ 13,510	\$ 14,881	\$ 6,670
Net income per common share:						
Basic net income per common share attributable to Walmart	5.76	4.29	4.90	4.77	5.22	2.28
Diluted net income per common share attributable to Walmart	5.74	4.27	4.87	4.75	5.19	2.26
Weighted-average common shares outstanding:						
Basic	2,692.00	2,724.00	2,792.00	2,831.00	2,850.00	2,929.00
Diluted	2,703.00	2,734.00	2,805.00	2,847.00	2,868.00	2,945.00
Dividends declared per common share	2.28	2.24	2.20	2.16	2.12	2.08

Appendix 2: Segmented Revenues (FY2018-FY2023)

Segmented Revenues	2024	2023	2022	2021	2020	2019
Walmart US	\$ 441,817	\$ 420,553	\$ 393,247	\$ 369,963	\$ 341,004	\$ 331,666
Walmart International	\$ 114,641	\$ 100,983	\$ 100,959	\$ 121,360	\$ 120,130	\$ 120,824
Sam's Club	\$ 86,179	\$ 84,345	\$ 73,556	\$ 63,910	\$ 58,792	\$ 57,839
Membership and other income	\$ 5,488	\$ 5,408	\$ 4,992	\$ 3,918	\$ 4,038	\$ 4,076

Appendix 3: 5-Year average segmented growth (FY2019-FY2023)

Segmented Revenues growth rates	2024	2023	2022	2021	2020	5-Year Average
Walmart US	5.06%	6.94%	6.29%	8.49%	2.82%	5.92%
Walmart International	13.53%	0.02%	-16.81%	1.02%	-0.57%	-0.56%
Sam's Club	2.17%	14.67%	15.09%	8.71%	1.65%	8.46%
Membership and other income	1.48%	8.33%	27.41%	-2.97%	-0.93%	6.66%

Appendix 4: Balance Sheet (FY2023-FY2018)

Balance Sheet Information	2024	2023	2022	2021	2020	2019
Cash and cash equivalents	\$ 9,867	\$ 8,625	\$ 14,760	\$ 17,741	\$ 9,465	\$ 7,722
Receivables, net	\$ 8,796	\$ 7,933	\$ 8,280	\$ 6,516	\$ 6,284	\$ 6,283
Inventories	\$ 54,892	\$ 56,576	\$ 56,511	\$ 44,949	\$ 44,435	\$ 44,269
Prepaid expenses and other	\$ 3,322	\$ 2,521	\$ 1,519	\$ 20,861	\$ 1,622	\$ 3,623
Total current assets	\$ 76,877	\$ 75,655	\$ 81,070	\$ 90,067	\$ 61,806	\$ 61,897
Property and equipment, net	\$ 110,810	\$ 100,760	\$ 94,515	\$ 92,201	\$ 105,208	\$ 104,317
Operating lease right-of-use assets	\$ 13,673	\$ 13,555	\$ 13,758	\$ 13,642	\$ 17,424	\$ -
Finance lease right-of-use assets, net	\$ 5,855	\$ 4,919	\$ 4,351	\$ 4,005	\$ 4,417	\$ -
Property under capital lease and financing obligations, net	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,078
Goodwill	\$ 28,113	\$ 28,174	\$ 29,014	\$ 28,983	\$ 31,073	\$ 31,181
Other long-term assets	\$ 17,071	\$ 20,134	\$ 22,152	\$ 25,598	\$ 16,567	\$ 14,822
Total assets	\$ 252,399	\$ 243,197	\$ 244,860	\$ 252,496	\$ 234,495	\$ 219,295
Current liabilities:						
Short-term borrowings	\$ 878	\$ 372	\$ 410	\$ 224	\$ 575	\$ 5,225
Accounts payable	\$ 56,812	\$ 53,742	\$ 55,261	\$ 49,141	\$ 46,973	\$ 47,060
Accrued liabilities	\$ 28,759	\$ 31,126	\$ 26,060	\$ 37,966	\$ 22,296	\$ 22,159
Accrued income taxes	\$ 307	\$ 727	\$ 851	\$ 242	\$ 280	\$ 428
Long-term debt due within one year	\$ 3,447	\$ 4,191	\$ 2,803	\$ 3,115	\$ 5,362	\$ 1,876
Operating lease obligations due within one year	\$ 1,487	\$ 1,473	\$ 1,483	\$ 1,466	\$ 1,793	\$ -
Finance lease obligations due within one year	\$ 725	\$ 567	\$ 511	\$ 491	\$ 511	\$ -
Capital lease and financing obligations due within one year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 729
Total current liabilities	\$ 92,415	\$ 92,198	\$ 87,379	\$ 92,645	\$ 77,790	\$ 77,477
Long-term debt	\$ 36,132	\$ 34,649	\$ 34,864	\$ 41,194	\$ 43,714	\$ 43,520
Long-term operating lease obligations	\$ 12,943	\$ 12,828	\$ 13,009	\$ 12,909	\$ 16,171	\$ -
Long-term finance lease obligations	\$ 5,709	\$ 4,843	\$ 4,243	\$ 3,847	\$ 4,307	\$ -
Long-term capital lease and financing obligations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,683
Deferred income taxes and other	\$ 14,629	\$ 14,688	\$ 13,474	\$ 14,370	\$ 12,961	\$ 11,981
Commitments and contingencies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Redeemable noncontrolling interest	\$ 222	\$ 237	\$ -	\$ -	\$ -	\$ -
Equity:						
Common stock	\$ 805	\$ 269	\$ 276	\$ 282	\$ 284	\$ 288
Capital in excess of par value	\$ 4,544	\$ 4,969	\$ 4,839	\$ 3,646	\$ 3,247	\$ 2,965
Retained earnings	\$ 89,814	\$ 83,135	\$ 86,904	\$ 88,763	\$ 83,943	\$ 80,785
Accumulated other comprehensive loss	\$ (11,302)	\$ (11,680)	\$ (8,766)	\$ (11,766)	\$ (12,805)	\$ (11,542)
Total Walmart shareholders' equity	\$ 83,861	\$ 76,693	\$ 83,253	\$ 80,925	\$ 74,669	\$ 72,496
Noncontrolling interest	\$ 6,488	\$ 7,061	\$ 8,638	\$ 6,606	\$ 6,883	\$ 7,138
Total equity	\$ 90,349	\$ 83,754	\$ 91,891	\$ 87,531	\$ 81,552	\$ 79,634
Total liabilities, redeemable noncontrolling interest, and equity	\$ 252,399	\$ 243,197	\$ 244,860	\$ 252,496	\$ 236,495	\$ 219,295

Appendix 5: Cash Flow Statement (FY2023-FY2018)

Cashflow Statement Information	2024	2023	2022	2021	2020	2019
Consolidated net income	\$ 16,270	\$ 11,292	\$ 13,940	\$ 13,706	\$ 15,201	\$ 7,179
Adjustments to reconcile consolidated net income to net cash provided by operating activities:						
Depreciation and amortization	\$ 11,853	\$ 10,945	\$ 10,658	\$ 11,152	\$ 10,987	\$ 10,678
Net unrealized and realized (gains) and losses	\$ 3,193	\$ 1,683	\$ 2,440	\$ (8,589)	\$ (1,886)	\$ 3,516
Losses on disposal of business operations	\$ -	\$ -	\$ 433	\$ 8,401	\$ 15	\$ 4,850
Asda pension contributions	\$ -	\$ -	\$ -	\$ -	\$ (1,036)	\$ -
Deferred income taxes	\$ (175)	\$ 449	\$ (755)	\$ 1,911	\$ 320	\$ (499)
Loss on extinguishment of debt	\$ -	\$ -	\$ 2,410	\$ -	\$ -	\$ -
Other operating activities	\$ 2,642	\$ 1,919	\$ 1,652	\$ 1,521	\$ 1,981	\$ 1,734
Changes in certain assets and liabilities, net of effects of acquisitions and dispositions:						
Receivables, net	\$ (797)	\$ 240	\$ (1,796)	\$ (1,086)	\$ 154	\$ (368)
Inventories	\$ 2,017	\$ (528)	\$ (11,764)	\$ (2,395)	\$ (300)	\$ (1,311)
Accounts payable	\$ 2,515	\$ (1,425)	\$ 5,520	\$ 6,966	\$ (274)	\$ 1,831
Accrued liabilities	\$ (1,324)	\$ 4,393	\$ 1,404	\$ 4,623	\$ 186	\$ 183
Accrued income taxes	\$ (468)	\$ (127)	\$ 39	\$ (136)	\$ (93)	\$ (40)
Net cash provided by operating activities	\$ 35,726	\$ 28,841	\$ 24,181	\$ 36,074	\$ 25,255	\$ 27,753
Cash flows from investing activities:						
Payments for property and equipment	\$ 20,606	\$ (16,857)	\$ (13,106)	\$ (10,264)	\$ (10,705)	\$ (10,344)
Proceeds from the disposal of property and equipment	\$ 250	\$ 170	\$ 394	\$ 215	\$ 321	\$ 519
Proceeds from disposal of certain operations, net of divested cash	\$ 135	\$ -	\$ 7,935	\$ 56	\$ 833	\$ 876
Payments for business acquisitions, net of cash acquired	\$ (9)	\$ (740)	\$ (359)	\$ (180)	\$ (56)	\$ (14,656)
Other investing activities	\$ (1,057)	\$ (295)	\$ (879)	\$ 102	\$ 479	\$ (431)
Net cash used in investing activities	\$ (21,287)	\$ (17,722)	\$ (6,015)	\$ (10,071)	\$ (9,128)	\$ (24,036)
Cash flows from financing activities:						
Net change in short-term borrowings	\$ 512	\$ (34)	\$ 193	\$ (324)	\$ (4,656)	\$ (53)
Proceeds from issuance of long-term debt	\$ 4,967	\$ 5,041	\$ 6,945	\$ -	\$ 5,492	\$ 15,872
Repayments of Long term debt	\$ (4,217)	\$ (2,689)	\$ (13,010)	\$ (5,382)	\$ (1,907)	\$ (3,784)
Premiums paid to extinguish debt	\$ -	\$ -	\$ (2,317)	\$ -	\$ -	\$ -
Dividends paid	\$ (6,140)	\$ (6,114)	\$ (6,152)	\$ (6,116)	\$ (6,048)	\$ (6,102)
Purchase of Company stock	\$ (2,779)	\$ (9,920)	\$ (9,787)	\$ (2,625)	\$ (5,717)	\$ (7,410)
Dividends paid to noncontrolling interest	\$ (763)	\$ (444)	\$ (424)	\$ (434)	\$ (555)	\$ (431)
Purchase of noncontrolling interest	\$ (3,462)	\$ (827)	\$ -	\$ -	\$ -	\$ -
Sale of subsidiary stock	\$ 716	\$ 66	\$ 3,239	\$ 140	\$ 52	\$ -
Other financing activities	\$ (2,248)	\$ (2,118)	\$ (1,515)	\$ (1,376)	\$ (960)	\$ (629)
Net cash used in financing activities	\$ (13,414)	\$ (17,039)	\$ (22,828)	\$ (16,117)	\$ (14,299)	\$ (2,537)
Effect of exchange rates on cash, cash equivalents and restricted cash	\$ 69	\$ (73)	\$ (140)	\$ 235	\$ (69)	\$ (438)
Net increase (Decrease) in cash, cash equivalents and restricted cash	\$ 1,094	\$ (5,993)	\$ (4,802)	\$ 10,121	\$ 1,759	\$ 742
Change in cash and cash equivalents reclassified from (to) assets held for sale	\$ -	\$ -	\$ 1,848	\$ (1,848)	\$ -	\$ -
Cash, cash equivalents and restricted cash at beginning of year	\$ 8,841	\$ 14,834	\$ 17,788	\$ 9,515	\$ 7,756	\$ 7,014
Cash, cash equivalents and restricted cash at end of year	\$ 9,935	\$ 8,841	\$ 14,834	\$ 17,788	\$ 9,515	\$ 7,756
Supplemental disclosure of cash flow information:						
Income taxes paid	\$ 5,879	\$ 3,310	\$ 5,918	\$ 5,271	\$ 3,616	\$ 3,982
Interest paid	\$ 2,519	\$ 2,051	\$ 2,237	\$ 2,216	\$ 2,464	\$ 2,348

Appendix 6: 3-year projection Income Statement

Income Statement Information	2027E	2026E	2025E	2024A	2023A	2022A	2021A	2020A
Net sales	\$ 754,571	\$ 714,589	\$ 675,438	\$ 642,637	\$ 605,881	\$ 567,762	\$ 555,233	\$ 519,926
Membership and other income	\$ 6,992	\$ 6,333	\$ 5,854	\$ 5,488	\$ 5,408	\$ 4,992	\$ 3,918	\$ 4,038
Total revenues	\$ 761,563	\$ 720,921	\$ 681,291	\$ 648,125	\$ 611,289	\$ 572,754	\$ 559,151	\$ 523,964
Costs and expenses:								
Cost of sales	\$ 566,712	\$ 539,944	\$ 514,441	\$ 490,142	\$ 463,721	\$ 429,000	\$ 420,315	\$ 394,605
Operating, selling, general and administrative expenses	\$ 147,892	\$ 142,022	\$ 136,385	\$ 130,971	\$ 127,140	\$ 117,812	\$ 116,288	\$ 108,791
Operating income	\$ 46,959	\$ 38,955	\$ 30,466	\$ 27,012	\$ 20,428	\$ 25,942	\$ 22,548	\$ 20,568
Interest:								
Debt	\$ 1,930	\$ 1,938	\$ 1,992	\$ 2,259	\$ 1,787	\$ 1,674	\$ 1,976	\$ 2,262
Finance lease	\$ 460	\$ 435	\$ 411	\$ 424	\$ 341	\$ 320	\$ 339.00	\$ 337
Interest income	\$ (442)	\$ (365)	\$ (333)	\$ (546)	\$ (254)	\$ (158)	\$ (121)	\$ (189)
Interest, net	\$ 1,947	\$ 2,007	\$ 2,070	\$ 2,137	\$ 1,874	\$ 1,836	\$ 2,194	\$ 2,410
Loss on extinguishment of debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,410	\$ -	\$ -
Other (gains) and losses	\$ 1,822	\$ 1,282	\$ 2,294	\$ 3,027	\$ 1,538	\$ 3,000	\$ (210)	\$ (1,958)
Income before income taxes	\$ 43,190	\$ 35,666	\$ 26,102	\$ 21,848	\$ 17,016	\$ 18,696	\$ 20,564	\$ 20,116
Provision for income taxes	\$ 11,143	\$ 9,202	\$ 6,734	\$ 5,578	\$ 5,724	\$ 4,756	\$ 6,858	\$ 4,915
Consolidated net income	\$ 32,047	\$ 26,464	\$ 19,368	\$ 16,270	\$ 11,292	\$ 13,940	\$ 13,706	\$ 15,201
Consolidated net income attributable to noncontrolling interest	\$ (447)	\$ (396)	\$ (444)	\$ (759)	\$ 388	\$ (267)	\$ (196)	\$ (320)
Consolidated net income attributable to Walmart	\$ 31,600	\$ 26,068	\$ 18,923	\$ 15,511	\$ 11,680	\$ 13,673	\$ 13,510	\$ 14,881
Net income per common share:								
Basic net income per common share attributable to Walmart	4.05	3.29	2.35	5.76	4.29	4.90	4.77	5.22
Diluted net income per common share attributable to Walmart	4.03	3.28	2.34	5.74	4.27	4.87	4.75	5.19
Weighted-average common shares outstanding:								
Basic	7,803	7,919	8,054	2,692	2,724	2,792	2,831	2,850
Diluted	7,840	7,958	8,094	2,703	2,734	2,805	2,847	2,868
Dividends declared per common share	1.91	1.54	1.23	2.28	2.24	2.20	2.16	2.12

Appendix 7: 3-year projection Balance Sheet

Balance Sheet Information	2027E	2026E	2025E	2024A	2023A	2022A	2021A	2020A
Cash and cash equivalents	\$ 15,220	\$ 14,407	\$ 13,615	\$ 9,867	\$ 8,625	\$ 14,760	\$ 17,741	\$ 9,465
Receivables, net	\$ 9,847	\$ 9,322	\$ 8,809	\$ 8,796	\$ 7,933	\$ 8,280	\$ 6,516	\$ 6,284
Inventories	\$ 66,336	\$ 63,203	\$ 60,217	\$ 54,892	\$ 56,576	\$ 56,511	\$ 44,949	\$ 44,435
Prepaid expenses and other	\$ 7,967	\$ 7,542	\$ 7,127	\$ 3,322	\$ 2,521	\$ 1,519	\$ 20,861	\$ 1,622
Total current assets	\$ 99,370	\$ 94,474	\$ 89,769	\$ 76,877	\$ 75,655	\$ 81,070	\$ 90,067	\$ 61,806
Property and equipment, net	\$ 127,773	\$ 121,211	\$ 115,909	\$ 110,810	\$ 100,760	\$ 94,515	\$ 92,201	\$ 105,208
Operating lease right-of-use assets	\$ 12,996	\$ 13,099	\$ 13,684	\$ 13,673	\$ 13,555	\$ 13,758	\$ 13,642	\$ 17,424
Finance lease right-of-use assets, net	\$ 5,774	\$ 5,381	\$ 4,986	\$ 5,855	\$ 4,919	\$ 4,351	\$ 4,005	\$ 4,417
Property under capital lease and financing obligations, net	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Goodwill	\$ 26,280	\$ 26,742	\$ 27,429	\$ 28,113	\$ 28,174	\$ 29,014	\$ 28,983	\$ 31,073
Other long-term assets	\$ 17,623	\$ 18,653	\$ 17,852	\$ 17,071	\$ 20,134	\$ 22,152	\$ 25,598	\$ 16,567
Total assets	\$ 289,816	\$ 279,558	\$ 269,630	\$ 252,399	\$ 243,197	\$ 244,860	\$ 252,496	\$ 234,495
Current liabilities:								
Short-term borrowings	\$ 1,819	\$ 1,722	\$ 1,628	\$ 878	\$ 372	\$ 410	\$ 224	\$ 575
Accounts payable	\$ 67,616	\$ 64,423	\$ 61,380	\$ 56,812	\$ 53,742	\$ 55,261	\$ 49,141	\$ 46,973
Accrued liabilities	\$ 38,267	\$ 36,225	\$ 34,234	\$ 28,759	\$ 31,126	\$ 26,060	\$ 37,966	\$ 22,296
Accrued income taxes	\$ 628	\$ 595	\$ 562	\$ 307	\$ 727	\$ 851	\$ 242	\$ 280
Long-term debt due within one year	\$ 4,635	\$ 4,621	\$ 4,147	\$ 3,447	\$ 4,191	\$ 2,803	\$ 3,115	\$ 5,362
Operating lease obligations due within one year	\$ 2,031	\$ 1,923	\$ 1,817	\$ 1,487	\$ 1,473	\$ 1,483	\$ 1,466	\$ 1,793
Finance lease obligations due within one year	\$ 730	\$ 691	\$ 653	\$ 725	\$ 567	\$ 511	\$ 491	\$ 511
Capital lease and financing obligations due within one year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total current liabilities	\$ 115,728	\$ 110,200	\$ 104,420	\$ 92,415	\$ 92,198	\$ 87,379	\$ 92,645	\$ 77,790
Long-term debt	\$ 35,842	\$ 36,356	\$ 35,982	\$ 36,132	\$ 34,649	\$ 34,864	\$ 41,194	\$ 43,714
Long-term operating lease obligations	\$ 12,976	\$ 12,967	\$ 12,955	\$ 12,943	\$ 12,828	\$ 13,009	\$ 12,909	\$ 16,171
Long-term finance lease obligations	\$ 6,072	\$ 5,604	\$ 5,347	\$ 5,709	\$ 4,843	\$ 4,243	\$ 3,847	\$ 4,307
Long-term capital lease and financing obligations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deferred income taxes and other	\$ 18,037	\$ 17,293	\$ 16,427	\$ 14,629	\$ 14,688	\$ 13,474	\$ 14,370	\$ 12,961
Redeemable noncontrolling interest	\$ -	\$ -	\$ -	\$ 222	\$ 237	\$ -	\$ -	\$ -
Equity:								
Common stock	\$ 771	\$ 783	\$ 794	\$ 805	\$ 269	\$ 276	\$ 282	\$ 284
Capital in excess of par value	\$ 5,386	\$ 5,143	\$ 4,862	\$ 4,544	\$ 4,969	\$ 4,839	\$ 3,646	\$ 3,247
Retained earnings	\$ 97,534	\$ 94,107	\$ 92,335	\$ 89,814	\$ 83,135	\$ 86,904	\$ 88,763	\$ 83,943
Accumulated other comprehensive loss	\$ (11,188)	\$ (11,065)	\$ (11,368)	\$ (11,302)	\$ (11,680)	\$ (8,766)	\$ (11,766)	\$ (12,805)
Total Walmart shareholders' equity	\$ 92,503	\$ 88,968	\$ 86,623	\$ 83,861	\$ 76,693	\$ 83,253	\$ 80,925	\$ 74,669
Noncontrolling interest	\$ 8,658	\$ 8,171	\$ 7,875	\$ 6,488	\$ 7,061	\$ 8,638	\$ 6,606	\$ 6,883
Total equity	\$ 101,161	\$ 97,139	\$ 94,498	\$ 90,349	\$ 83,754	\$ 91,891	\$ 87,531	\$ 81,552
Total liabilities, redeemable noncontrolling interest, and equity	\$ 289,816	\$ 279,558	\$ 269,629	\$ 252,399	\$ 243,197	\$ 244,860	\$ 252,496	\$ 236,495

Appendix 8: 3-year projection Cashflow Statement

Cashflow Statement Information	2027E	2026E	2025E	2024A	2023A	2022A	2021A	2020A
Consolidated net income	\$ 32,047	\$ 26,464	\$ 19,368	\$ 16,270	\$ 11,292	\$ 13,940	\$ 13,706	\$ 15,201
Adjustments to reconcile consolidated net income to net cash provided by operating activities:								
Depreciation and amortization	\$ 14,151	\$ 13,424	\$ 12,837	\$ 11,853	\$ 10,945	\$ 10,658	\$ 11,152	\$ 10,987
Net unrealized and realized (gains) and losses	\$ 6,807	\$ 6,556	\$ 4,036	\$ 3,193	\$ 1,683	\$ 2,440	\$ (8,589)	\$ (1,886)
Losses on disposal of business operations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 433	\$ 8,401	\$ 15
Asda pension contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,036)
Deferred income taxes	\$ 193	\$ 748	\$ 524	\$ (175)	\$ 449	\$ (755)	\$ 1,911	\$ 320
Loss on extinguishment of debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,410	\$ -	\$ -
Other operating activities	\$ 3,751	\$ 3,217	\$ 2,925	\$ 2,642	\$ 1,919	\$ 1,652	\$ 1,521	\$ 1,981
Changes in certain assets and liabilities, net of effects of acquisitions and dispositions:								
Receivables, net	\$ (526)	\$ (512)	\$ (13)	\$ (797)	\$ 240	\$ (1,796)	\$ (1,086)	\$ 154
Inventories	\$ (3,133)	\$ (2,985)	\$ (5,325)	\$ 2,017	\$ (528)	\$ (11,764)	\$ (2,395)	\$ (300)
Accounts payable	\$ 3,194	\$ 3,043	\$ 4,568	\$ 2,515	\$ (1,425)	\$ 5,520	\$ 6,966	\$ (274)
Accrued liabilities	\$ 2,042	\$ 1,991	\$ 5,475	\$ (1,324)	\$ 4,393	\$ 1,404	\$ 4,623	\$ 186
Accrued income taxes	\$ 34	\$ 33	\$ 255	\$ (468)	\$ (127)	\$ 39	\$ (136)	\$ (93)
Net cash provided by operating activities	\$ 58,560	\$ 51,978	\$ 44,648	\$ 35,726	\$ 28,841	\$ 24,181	\$ 36,074	\$ 25,255
Cash flows from investing activities:								
Payments for property and equipment	\$ (24,023)	\$ (22,061)	\$ (24,122)	\$ (20,606)	\$ (16,857)	\$ (13,106)	\$ (10,264)	\$ (10,705)
Proceeds from the disposal of property and equipment	\$ 316	\$ 272	\$ 251	\$ 250	\$ 170	\$ 394	\$ 215	\$ 321
Proceeds from disposal of certain operations, net of divested cash	\$ 226	\$ 559	\$ 380	\$ 135	\$ -	\$ 7,935	\$ 56	\$ 833
Payments for business acquisitions, net of cash acquired	\$ (291)	\$ (422)	\$ (269)	\$ (9)	\$ (740)	\$ (359)	\$ (180)	\$ (56)
Other investing activities	\$ (73)	\$ (100)	\$ (647)	\$ (1,057)	\$ (295)	\$ (879)	\$ 102	\$ 479
Net cash used in investing activities	\$ (23,844)	\$ (21,752)	\$ (24,407)	\$ (21,287)	\$ (17,722)	\$ (6,015)	\$ (10,071)	\$ (9,128)
Cash flows from financing activities:								
Net change in short-term borrowings	\$ 97	\$ 95	\$ 750	\$ 512	\$ (34)	\$ 193	\$ (324)	\$ (4,656)
Proceeds from issuance of long-term debt	\$ 5,113	\$ 5,337	\$ 6,386	\$ 4,967	\$ 5,041	\$ 6,945	\$ -	\$ 5,492
Repayments of Long term debt	\$ (5,583)	\$ (8,511)	\$ (5,165)	\$ (4,217)	\$ (2,689)	\$ (13,010)	\$ (5,382)	\$ (1,907)
Premiums paid to extinguish debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,317)	\$ -	\$ -
Dividends paid	\$ (14,906)	\$ (12,215)	\$ (9,897)	\$ (6,140)	\$ (6,114)	\$ (6,152)	\$ (6,116)	\$ (6,048)
Purchase of Company stock	\$ (8,701)	\$ (9,417)	\$ (1,430)	\$ (2,779)	\$ (9,920)	\$ (9,787)	\$ (2,625)	\$ (5,717)
Dividends paid to noncontrolling interest	\$ (1,395)	\$ (1,124)	\$ (900)	\$ (763)	\$ (444)	\$ (424)	\$ (434)	\$ (555)
Purchase of noncontrolling interest	\$ -	\$ -	\$ -	\$ (3,462)	\$ (827)	\$ -	\$ -	\$ -
Sale of subsidiary stock	\$ 118	\$ 86	\$ 244	\$ 716	\$ 66	\$ 3,239	\$ 140	\$ 52
Other financing activities	\$ (4,522)	\$ (3,692)	\$ (2,931)	\$ (2,248)	\$ (2,118)	\$ (1,515)	\$ (1,376)	\$ (960)
Net cash used in financing activities	\$ (29,780)	\$ (29,441)	\$ (12,944)	\$ (13,414)	\$ (17,039)	\$ (22,828)	\$ (16,117)	\$ (14,299)
Effect of exchange rates on cash, cash equivalents and restricted cash	\$ 21	\$ (68)	\$ (59)	\$ 69	\$ (73)	\$ (140)	\$ 235	\$ (69)
Net increase (Decrease) in cash, cash equivalents and restricted cash	\$ 4,956	\$ 716	\$ 7,238	\$ 1,094	\$ (5,993)	\$ (4,802)	\$ 10,121	\$ 1,759
Change in cash and cash equivalents reclassified from (to) assets held for sale	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,848	\$ (1,848)	\$ -
Cash, cash equivalents and restricted cash at beginning of year	\$ 17,889	\$ 17,173	\$ 9,935	\$ 8,841	\$ 14,834	\$ 17,788	\$ 9,515	\$ 7,756
Cash, cash equivalents and restricted cash at end of year	\$ 22,846	\$ 17,889	\$ 17,173	\$ 9,935	\$ 8,841	\$ 14,834	\$ 17,788	\$ 9,515
Supplemental disclosure of cash flow information:								
Income taxes paid	\$ 9,725	\$ 8,328	\$ 6,848	\$ 5,879	\$ 3,310	\$ 5,918	\$ 5,271	\$ 3,616
Interest paid	\$ 2,709	\$ 2,609	\$ 2,571	\$ 2,519	\$ 2,051	\$ 2,237	\$ 2,216	\$ 2,464

Appendix 9: 5-year average Operating Expenses

Operating Expenses	2023	2022	2021	2020	2019	5-year average
COGS growth	5.70%	8.09%	2.07%	6.52%	2.41%	4.96%
OSG&A growth	3.01%	7.92%	1.31%	6.89%	1.53%	4.13%

Appendix 10: CAPEX/Revenue Ratios

CAPEX as % of revenue	2024	2023	2022	2021	2020
Walmart US	3.14%	2.72%	2.16%	1.66%	1.85%
Walmart International	2.54%	2.60%	2.47%	2.01%	2.33%
Sam's Club	1.21%	0.86%	0.85%	0.76%	0.89%

Appendix 11: 5-year average CAPEX/Revenue Ratios

CAPEX/Revenue ratio growth	2024	2023	2022	2021	2020	5-year average
Walmart US	15.62%	26.06%	30.05%	-10.51%	1.79%	12.60%
Walmart International	-2.32%	5.10%	23.22%	-13.91%	5.87%	3.59%
Sam's Club	40.14%	1.93%	10.74%	-14.49%	14.78%	10.62%

Appendix 12: D&A 5-year average ratios

D&A Ratios	2024	2023	2022	2021	2020	5-year average
CAPEX/PPE Ratio	18.60%	16.73%	13.87%	11.13%	10.18%	
CAPEX/PPE Ratio growth	11.15%	20.65%	24.56%	9.41%	2.61%	13.68%
D&A/PPE Ratio	10.70%	10.86%	11.28%	12.10%	10.44%	11.07%

Appendix 13: 5-year average Net Working Capital items

Net Working Capital Items	2024	2023	2022	2021	2020	5-Year Average
Days Sales Outstanding (DSO)	4.95	4.74	5.28	4.25	4.38	4.72
Days Inventory Outstanding (DIO)	40.88	44.53	48.08	39.03	41.10	42.72
Days Payable Outstanding (DPO)	42.31	42.30	47.02	42.67	43.45	43.55
Prepaid expenses and other as % of sales	0.51%	0.41%	0.27%	3.73%	0.31%	1.05%
Accrued liabilities as % of sales	4.44%	5.09%	4.55%	6.79%	4.26%	5.02%
Operating lease obligations due within one year as % of sales	0.23%	0.24%	0.26%	0.26%	0.34%	0.27%

Appendix 14: Peer Group financials

Peer group Financials	Debt (BV)	Equity (BV)	EBIT	Interest Expense	Net Income
Costco	\$ 43,936	\$ 25,058	\$ 8,114	\$ (310)	\$ 6,292
BJ's Wholesale Club Holdings	\$ 5,219	\$ 1,459	\$ 814	\$ 62	\$ 524
Kroger	\$ 38,904	\$ 11,601	\$ 3,165	\$ 441	\$ 2,169
Albertsons Companies	\$ 23,474	\$ 2,748	\$ 2,329	\$ 492	\$ 1,296
Best Buy	\$ 11,914	\$ 3,053	\$ 1,727	\$ 52	\$ 1,240
Walgreens	\$ 68,306	\$ 28,322	\$ 2,033	\$ 580	\$ (3,561)
CVS Health Corp	\$ 173,092	\$ 76,636	\$ 15,132	\$ 2,658	\$ 8,368
Amazon	\$ 325,979	\$ 201,875	\$ 36,913	\$ 233	\$ 30,437
Alibaba	\$ 90,333	\$ 154,093	\$ 17,288	\$ (1,640)	\$ 11,035
Target	\$ 41,924	\$ 13,432	\$ 5,809	\$ 502	\$ 4,138
Dollar Tree	\$ 14,710	\$ 7,313	\$ 1,614	\$ 107	\$ (998)
Walmart	\$ 162,050	\$ 90,349	\$ 27,012	\$ 2,137	\$ 16,270

Peer group Financials	Total Assets	Current Assets	Current Liabilities	Inventories	CAPEX	Net Sales
Costco	\$ 68,994	\$ 35,879	\$ 33,583	\$ 16,651	\$ 4,323	\$ 242,290
BJ's Wholesale Club Holdings	\$ 6,678	\$ 1,794	\$ 2,468	\$ 1,455	\$ 467	\$ 19,548
Kroger	\$ 50,505	\$ 12,948	\$ 16,058	\$ 7,105	\$ 3,904	\$ 150,039
Albertsons Companies	\$ 26,221	\$ 6,288	\$ 7,458	\$ 4,945	\$ 2,031	\$ 79,238
Best Buy	\$ 14,967	\$ 7,897	\$ 7,909	\$ 4,958	\$ 795	\$ 43,452
Walgreens	\$ 96,628	\$ 15,503	\$ 24,535	\$ 8,257	\$ 2,117	\$ 139,081
CVS Health Corp	\$ 249,728	\$ 67,858	\$ 79,189	\$ 18,025	\$ 3,031	\$ 356,623
Amazon	\$ 527,854	\$ 172,351	\$ 164,917	\$ 33,318	\$ 52,729	\$ 574,785
Alibaba	\$ 244,426	\$ 104,270	\$ 58,378	\$ 3,526	\$ 4,596	\$ 131,350
Target	\$ 55,356	\$ 17,498	\$ 19,304	\$ 11,886	\$ 4,806	\$ 105,803
Dollar Tree	\$ 22,024	\$ 6,133	\$ 4,697	\$ 5,113	\$ 2,108	\$ 30,604
Walmart	\$ 252,399	\$ 76,877	\$ 92,415	\$ 54,892	\$ 20,606	\$ 648,125

Appendix 15: Peer group ratios

	Walmart	Costco	BJ's Wholesale Club	Kroger	Albertsons Companies
Beta	0.50	0.77	0.27	0.47	0.49
Debt to Equity (BV)	1.79	1.75	3.58	3.35	8.54
Interest coverage	12.64	26.17	13.11	7.18	4.73
Credit Rating	AA	A+	BB+	BBB	BB+
Operating Cash flow	\$ 35,726	\$ 11,068	\$ 719	\$ 6,788	\$ 2,660
Free Cash flow	\$ 15,120	\$ 6,745	\$ 252	\$ 2,884	\$ 628
Current Ratio	0.83	1.07	0.73	0.81	0.84
Quick Ratio	0.24	0.57	0.14	0.36	0.18
CAPEX/Sales	0.03	0.02	0.02	0.03	0.03
5 year average Revenue growth	4.75%	11.43%	9.16%	4.41%	5.59%
ROE	18.01%	25.11%	35.89%	18.70%	47.17%
ROA	6.45%	9.12%	7.84%	4.29%	4.94%
Operating Margin	4.17%	3.35%	4.17%	2.11%	2.94%
Net Margin	2.51%	2.60%	2.68%	1.45%	1.64%

	Walmart	Best Buy	Walgreens	CVS Health Corp	Amazon	Alibaba	Target	Dollar Tree
Beta	0.50	1.46	0.71	0.54	1.17	0.31	1.25	0.90
Debt to Equity (BV)	1.79	3.90	2.41	2.26	1.61	0.59	3.12	2.01
Interest coverage	12.64	33.21	3.51	5.69	158.42	10.54	11.57	15.11
Credit Rating	AA	BBB+	BBB-	BBB	AA-	A+	A	BBB
Operating Cash flow	\$ 35,726	\$ 1,470	\$ 2,259	\$ 13,426	\$ 84,946	\$ 25,483	\$ 8,621	\$ 2,685
Free Cash flow	\$ 15,120	\$ 675	\$ 142	\$ 10,395	\$ 32,217	\$ 20,887	\$ 3,815	\$ 577
Current Ratio	0.83	1.00	0.63	0.86	1.05	1.79	0.91	1.31
Quick Ratio	0.24	0.37	0.30	0.63	0.84	1.73	0.29	0.22
CAPEX/Sales	0.03	0.02	0.02	0.01	0.09	0.03	0.05	0.07
5 year average Revenue growth	4.75%	0.58%	1.29%	13.33%	20.20%	19.89%	7.62%	6.06%
ROE	18.01%	40.62%	-12.57%	10.92%	15.08%	30.81%	30.81%	-13.65%
ROA	6.45%	8.28%	-3.69%	3.35%	5.77%	4.51%	7.48%	-4.53%
Operating Margin	4.17%	3.97%	1.46%	4.24%	6.42%	13.16%	5.49%	5.27%
Net Margin	2.51%	2.85%	-2.56%	2.35%	5.30%	8.40%	3.91%	-3.26%