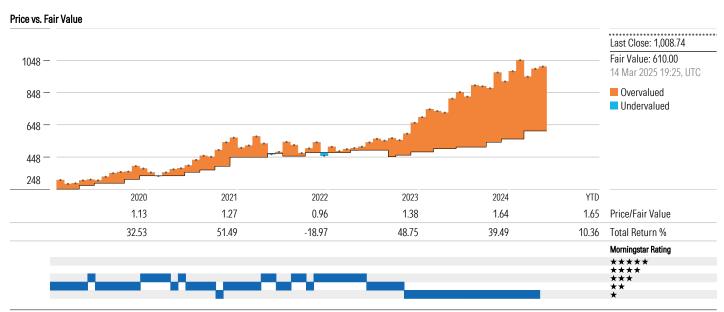
Price/FVE **Economic Moat**<sup>™</sup> **Equity Style Box** ESG Risk Rating Assessment<sup>1</sup> Fair Value Estimate Market Cap Uncertainty **Capital Allocation** 447.56 USD Bil Wide ( Large Blend Medium Exemplary **@@@@** 1.008.74 USD 610.00 USD 1.65 29 May 2025 7 May 2025 05:00, UTC 29 May 2025 14 Mar 2025 19:25, UTC



Total Return % as of 29 May 2025. Last Close as of 29 May 2025. Fair Value as of 14 Mar 2025 19:25, UTC.

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#### Important Disclosure

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The primary analyst covering this company does not own its stock.

The ESG Risk Rating Assessment is a representation of Sustainalytics' ESG Risk Rating.

# Costco Earnings: Market Share Gains Look Impressive, but Investors Baking in Overzealous Assumptions

Analyst Note Noah Rohr, Equity Analyst, 30 May 2025

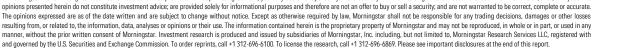
@ Morningstar 2025. All Rights Reserved, Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and

Costco's revenue improved by 8% in its fiscal third quarter 2025, underpinned by 5.7% comparable sales growth (8% excluding gas and currency) and modest store growth. Operating margin expanded 20 basis points to 4.0% and adjusted EPS grew by 13% to \$4.28. Membership renewal rate exceeded 90%.

Why it matters: Costco's financial marks remain the envy of the retail industry as the firm's treasure hunt experience and attractive price points yielded strong sales growth. The retailer looks poised to continue taking market share even amid a precarious economic environment.

- ► Comparable sales in the US grew by 7.9%, led by a 5.5% uptick in traffic. Comp growth outpaced peers such as Sam's Club (up 6.7%), Walmart US (up 4.5%), Target (down 3.8%), and BJ's (up 3.9%). Share gains should persist as Costco adds members and increases existing customers' spending.
- ➤ Sundries, fresh food, and nonfood categories all enjoyed comparable sales growth in the midsingle digits or better. We're unsurprised by the strong performance in high-frequency food categories, but remain impressed by the firm's ability to drive demand for discretionary products.

**The bottom line:** We plan to raise our \$610 fair value estimate on wide-moat Costco by a low-single-digit percentage due to the time value of money. We remain optimistic about the firm's growth prospects, but think shares, trading at 55 times our estimate for fiscal 2025 earnings, look overvalued.





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Sector Industry Consumer Defensive

Discount Stores

#### **Business Description**

Costco operates a membership-based, no-frills retail model predicated on offering a select product assortment in bulk quantities at bargain prices. The firm avoids maintaining costly product displays by keeping inventory on pallets and limits distribution expenses by storing its inventory at point of sale in the warehouse. Given its frugal cost structure, the firm is able to price its merchandise below that of competing retailers, driving high sales volume per warehouse and generating strong profits on thin margins. Costco operates over 600 warehouses in the United States and has over 60% share in the domestic warehouse club industry. Internationally, Costco operates another 280 warehouses, primarily in Canada, Mexico, Japan, and the UK.

- ► We expect Costco to take market share over the ensuing decade, but think investors are overlooking the potential for greater store cannibalization and slower membership gains in the US, which will likely make it difficult for the firm to consistently exceed its historical pace of growth.
- ▶ Management noted that one-third of its US sales are sourced internationally and less than 10% from China. We expect Costco to shift its supply chain to mitigate potential tariff impacts but acknowledge that higher prices could still weigh on discretionary sales.

#### Business Strategy & Outlook Noah Rohr, Equity Analyst, 14 Mar 2025

Although Costco operates in a cutthroat retail industry where competitive advantages are difficult to manifest and omnichannel penetration is growing from the likes of Amazon and Walmart, we believe it has a unique edge due to its loyal membership base, meticulous cost management, and impressive scale.

Costco emphasizes a frugal cost structure, evidenced by its no-frills shopping environment and limited product assortment. It avoids maintaining costly product displays, limits internal distribution costs by storing inventory at point of sale in its warehouses, and offers a concentrated product assortment of about 4,000 stock-keeping units per warehouse, resulting in more streamlined product procurement. With impressive cost management and unmatched sales volume per warehouse, Costco's fixed-cost leverage is magnified as its selling, general, and administrative margin of 9%-10% is well below the roughly 20% of most competing retailers like Walmart and Target. Costco's resonating value proposition of bargain prices on quality items in bulk quantities successfully drives loyal consumers to its vast physical warehouses, resulting in steady membership growth and an impressive 90% renewal rate (93%) in the US and Canada) from its 78 million global members, despite membership fees that rise typically every five or six years.

While competition shows little sign of abating, we believe Costco is poised to continue driving traffic to its stores. About two thirds of its core product sales (excluding fuel and ancillary businesses) are food and grocery items, which we view as less susceptible to omnichannel penetration due to the poor unit economics of delivering low-margin bulk items to consumers' homes. We also view the warehouse club model as difficult to replicate due to the vast scale needed to leverage fixed real estate costs. With a commanding industry position—more than 60% share of the domestic warehouse club industry, per Euromonitor—and unique business model, Costco has a value proposition that supports profitable topline growth domestically and abroad, in our opinion.

#### **Bulls Say** Noah Rohr, Equity Analyst, 14 Mar 2025

- ► Costco has a proven formula for successfully translating its operations across borders and faces minimal direct competition abroad, implying a long runway of growth prospects.
- ▶ With unmatched scale and plentiful consumer data, Costco's pricing and value proposition remain



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#### Competitors



superior relative to competing retailers and should be difficult to replicate.

► Since inception, Costco has driven robust shareholder returns through prudent organic reinvestments in price and warehouse expansion, and we don't think it will veer from this course.

Bears Say Noah Rohr, Equity Analyst, 14 Mar 2025

- ► As Costco reaches a point of maturity in its US and Canadian markets, its cost leverage may show signs of deterioration.
- ► Costco has lagged competing retailers when it comes to digital innovation and omnichannel fulfillment, which could cause customers to favor retailers such as Walmart and Amazon that have prioritized the digital customer experience in recent years.
- ► Costco's return on invested capital may be weighed down in the future as new stores cannibalize sales from existing warehouses.



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#### **Economic Moat** Noah Rohr, Equity Analyst, 14 Mar 2025

We believe Costco warrants a wide economic moat rating underpinned by a cost advantage and intangible assets. As the nation's third-largest retailer, with over \$250 billion in global sales trailing only the likes of wide-moats Walmart and Amazon, Costco will continue to churn out excess economic returns over the next two decades, in our opinion.

Despite operating in a cutthroat retail industry where customer switching costs are virtually nonexistent and alternative shopping channels are plentiful, Costco differentiates itself by boasting a membershipbased shopping model and diligently managing costs, allowing it to offer low-priced goods in bulk quantities. The retailer has a loyal consumer base consisting of 76 million paid members at the end of fiscal 2024 and an impressive 90% global renewal rate (93% in the US and Canada), driving consistent transaction volume at its warehouses. Costco's membership fee revenue (which has grown by over 7% on average during the past decade) accounts for over half of the firm's operating income and allows the retailer to profitably operate on low product margins. We estimate Costco's operating margin on unit sales is around 1.5%-2.0%. The firm keeps its costs in check by providing a no-frills shopping experience and maintaining close relationships with its product suppliers. Contrary to most retailers, Costco limits internal distribution costs by storing most of its inventory at point of sale in its vast warehouses—it operated 890 warehouses globally at the end of fiscal 2024 with an average size of about 146,000 square feet—allowing the firm to leverage its fixed real estate costs. Costco also sells a concentrated portfolio of about 4,000 stock-keeping units at its warehouses, a stark contrast to competing retailers such as Walmart and Target that sell around 140,000 and 80,000 SKUs per store, respectively, resulting in more streamlined supply chain operations and seamless product procurement. Given the firm's frugal cost structure, Costco's SG&A margin of 9%-10% falls well below the typical 20% that competing retailers tend to operate with. Furthermore, Costco's burgeoning sales volume, growing private-label penetration—Kirkland Signature constitutes over one fourth of net sales—and robust supplier relationships provide the retailer with both a deep collection of consumer data and intricate knowledge of the cost structure of its product lines. These combination of these factors allows Costco to meticulously negotiate prices with suppliers while diligently managing consumer preferences.

In typical flywheel fashion, management utilizes its membership fees and low-cost retail model to keep unit sales prices lower than competing retailers'. Consumers are attracted to the Costco banner (prompting a brand-driven intangible asset) due to the brand's resonating promise of bulk products at low prices (a result of the firm's cost advantage), driving traffic and sales volume to Costco's warehouses. As sales volume increases, Costco leverages its fixed costs over a larger top-line base, allowing it to reduce its unit selling prices even further while remaining profitable. By further reducing its unit sale prices, Costco reinforces the flywheel by attracting more consumers to its stores. In



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essence, Costco's brand intangible asset and its cost advantage are interdependent and together drive unmatched scale that allows Costco to persistently price items below smaller competitors. Given that Costco's advantage is augmented by a growing top line, the firm frequently stresses the importance of driving more unit volume through its warehouses. As evidence of the flywheel dynamic, Costco has a long history of increasing its membership count per warehouse. We estimate that Costco has over 80,000 global members per store, up from about 58,000 in 2010 and 70,000 in 2020.

With Costco's business model predicated on driving significant unit volume per warehouse, the firm's net sales per square foot—over \$2,000 in fiscal 2024—far surpasses that of traditional retailers and grocers such as Walmart (about \$600), Target (\$450), and Kroger (\$830). Costco's domestic sales per square foot has also long outpaced its most formidable warehouse club competitor, Sam's Club (\$1,075), with Costco extending its lead over the past decade. Despite both retailers operating around 600 domestic stores and managing a similar amount of retail square footage, Costco's \$184 billion in fiscal 2024 domestic sales equates to a commanding 60% market share among the domestic warehouse club industry, according to Euromonitor, well outpacing Sam's Club's 32% share. We attribute some of Costco's dominance to the firm's ability to attract more affluent consumers relative to its rival. In 2016, Sam's Club estimated that its shoppers had an average household income of about \$80,000, well below Costco's \$120,000, according to Fortune. While both brands tout value by offering low prices on bulk items, buying in bulk inherently drives a higher average ticket per transaction than shopping at supermarkets or traditional discount retailers, likely making the warehouse club model more feasible for higher-income consumers. We think that Costco's more affluent consumer base has likely contributed to the firm's impressive growth and top-line lead over its warehouse club rival.

Despite burgeoning online competition, we believe that Costco's product mix partially insulates the retailer from digital disruption. Nearly two thirds of Costco's core merchandise sales (excluding fuel and other ancillary businesses) comprise food and grocery items, which tend to be a high-frequency category that we view as less susceptible to online penetration.

Costco's operating profit has followed the impressive sales growth, with domestic operating profit per square foot of \$70 far outpacing Sam's Club's \$27. This is evidence of how strong unit sales can quickly materialize into leveraging the retailer's existing cost base. Given the reinforcing flywheel between high sales volume and low price in the warehouse club industry, we believe Costco's unmatched unit scale is difficult to replicate and allows the firm to continue offering an enticing low-price value proposition to consumers while delivering strong profits.

Even though we tend to be skeptical of a retailer's ability to translate across borders due to the difficulty of adapting to diverse cultural preferences and managing dynamic geopolitical environments, Costco has seemingly found international markets to be lucrative as its operations have scaled. In Canada, where the retail market is largely settled, Costco is the nation's fourth-largest food retailer, according to



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the United States Department of Agriculture, helping drive a 10-year average return on invested capital of over 30% in its Canadian segment. Despite operating in a mature market, Costco's Canadian operations have delivered average comparable sales growth (excluding fuel and currency effects) of nearly 8% since 2015.

In other international markets, we estimate Costco has delivered an average ROIC of about 17%, versus 21% domestically, and average comparable sales growth of nearly 8% over the past decade. We think that Costco's international success has come as a result of limited warehouse club competition in countries that the firm enters and a methodical strategy to expansion. In our view, while the retail industry tends to be highly competitive irrespective of the country, international expansion is more lucrative when a retailer offers a sufficiently differentiated business model from what currently exists, as Costco does. According to Euromonitor, Costco has 54% global share in the warehouse club industry and owns the entire market in Japan, the UK, and Australia. The firm also holds 62% of the warehouse club market in South Korea and 30% in Mexico (behind Sam's Club with 65% share). As such, Costco tends to attract a unique set of consumers in a given country where there is minimal—if any—direct competition from a business model perspective. We believe that Costco has also displayed an impressive ability to tailor its product offerings to match consumer preferences in different countries.

Rather than aggressively pursuing new markets, Costco tends to slowly roll out international locations, a strategy we commend. Given the warehouse club model is nascent in many international markets, customer adoption can take some time before accelerating. Management highlighted this dynamic in 2013, citing that renewal rates often start around 70% (sometimes lower in Asian markets) before gradually climbing over the following years as the Costco brand garners additional merit. We also believe that Costco has been more methodical with its international expansion due to its resounding success in the US and Canada. We think Costco will more aggressively pursue international opportunities in the coming years as robust growth in its developed markets slowly abates. With its differentiated business model and sound expansion strategy, we expect Costco to continue delivering strong results abroad, supporting its competitive prowess.

#### Fair Value and Profit Drivers Noah Rohr, Equity Analyst, 14 Mar 2025

We are raising our fair value estimate to \$610 per share from \$560 following strong fiscal 2025 second-quarter results. Costco's growth trajectory remains the envy of the retail industry with companywide comparable sales growth of 9%, underpinned by a 6% uptick in traffic and 3% growth in average ticket. Operating margin expanded 10 basis points to 3.6% due to an improvement in gross margin and operating leverage. The increase in our fair value estimate mainly stems from an uptick in our 2034 operating margin forecast to 4.9% (from 4.5%), as we think the firm's resounding scale and cost advantage should translate into a continued gross margin benefit over time. Our fair value estimate implies a forward fiscal 2025 price/earnings multiple of 33 times.



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Over our 10-year explicit forecast, we expect Costco to deliver top-line growth in the US that modestly exceeds our expectation for 4.0% growth in retail sales at warehouse clubs and superstores. We surmise that Costco's top line will be driven by mid-single-digit comparable sales growth as the firm attracts a larger share of consumers' wallets, low-single-digit growth in membership count, and modest warehouse expansion throughout the country. Although the firm operates over 600 warehouses in the US already, the domestic retail market appears conducive for absorbing additional warehouse club penetration, guiding our expectation for Costco to open around 12-15 new locations per year in the near term before shifting its expansion priorities to international markets. We expect Costco's domestic business to show considerable margin improvement over the next several years as we model operating margin of nearly 5% by the end of our explicit forecast period. The margin improvement should stem from further fixed SG&A cost leverage and gross margin expansion as the firm flexes its cost advantage. With Canada's retail market boasting a similar degree of maturity to the US, we expect Costco's Canadian operations to follow a similar trajectory to their US counterpart.

Internationally, we believe Costco has a strong runway for potential growth. Contrary to most retailers, Costco has seemingly developed a successful formula for cross-border expansion, driving pronounced growth in its top line. Given that the warehouse club concept is rather nascent in the majority of international markets, we think the firm's success thus far comes primarily as a result of its differentiated retail model and ability to tailor product offerings to match consumer preferences. As such, Costco occasionally sees insatiable consumer demand upon immediate opening of its stores in international markets—the firm shut down its Shanghai location on the first day amid an inundating crowd. Despite a resounding response from most countries, we estimate that Costco's membership renewal rate at new international locations likely takes several years before climbing to the upper 80s to 90% range. As such, we expect international renewal rates at existing warehouses to show continued improvement over time and believe Costco is well positioned to grow its net sales at a pace that exceeds its rate of future store openings as the firm gradually consumes a larger share of customer's wallets. We expect management to gradually accelerate its pace of international store openings (excluding Canada) to 15 per year in the back half of our explicit forecast as the retailer reaches a more saturated level in its home market, helping drive low-double-digit international revenue growth. From a margin perspective, we expect Costco's international operating margin to land around 4%-4.5% as the firm leverages its fixed costs over a growing top line.

Risk and Uncertainty Noah Rohr, Equity Analyst, 14 Mar 2025

We assign Costco a Medium Morningstar Uncertainty Rating.

Costco operates in a highly dynamic retail landscape, and the proliferation of omnichannel fulfillment capabilities from competing retailers is a formidable threat to Costco's business model. While Costco has expanded its digital reach in recent years, online sales were a mere 7% of the firm's net sales



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during fiscal 2024, well below Walmart's 15% and Target's 20%. Even though we view Costco's grocery offerings as more insulated from digital competition—food items constitute nearly two thirds of core merchandise sales—Costco's general merchandise could be more susceptible to online competitors.

While Costco's frugal cost structure is a necessary element of the firm's advantage, the retailer's strategy is predicated on reinvesting profits in lower unit selling prices and driving robust sales volume through its warehouses. Costco has benefited from several years of relentless growth in the US and Canada, with combined revenue from the two countries increasing fivefold over the past two decades. However, Costco now boasts a resounding presence in both markets, likely making its prior pace of growth difficult to match. While we expect Costco to still enjoy mid-single-digit sales growth in the US and Canada, a stark slowdown may limit the firm's cost leverage and weigh on its ability to reinvest profits to hold down unit selling prices, potentially impinging on traffic trends. We also anticipate seeing more pronounced international expansion over the following decade, providing an added layer of uncertainty versus its cemented presence in developed markets.

From an environmental, social, and governance perspective, Costco faces mild risks related to ensuring high food quality and proper product governance. We suspect the threat of unreasonable wage demands or unionization efforts is minimal, especially given Costco's history of paying employees above-market rates.

#### Capital Allocation Noah Rohr, Equity Analyst, 14 Mar 2025

We award Costco an Exemplary Capital Allocation Rating, given its strong balance sheet, sound capital investments, and appropriate shareholder distributions. The firm has an impressive record of growing its sales and membership count while delivering a solid 90% renewal rate in fiscal 2024. We believe Costco's capital allocation reflects a resounding commitment to operational improvement and focus on passing cost savings on to its consumers. The retailer expanded its domestic footprint to over 600 warehouses while growing its top line in the US to \$184 billion in fiscal 2024. With a unique position in a mostly undifferentiated retail industry, the firm should continue prudently investing in price and warehouse expansion, cementing itself as the nation's third-largest retailer behind only Walmart and Amazon. We think Costco also benefits from an experienced management team, with most of its executive officers boasting long tenures with the firm. CEO Ron Vachris, who took the helm from Craig Jelinek in 2024, has four decades with the firm, and we don't expect Costco's strategy or capital allocation plans to change significantly during his tenure.

The retailer had a stellar record internationally—a rarity among most retailers. We tend to be skeptical of a retailer's ability to replicate its domestic success across borders due to the difficulty of adapting to diverse cultural preferences and managing dynamic geopolitical environments. Nonetheless, Costco boasts an impressive record in Canada, where it is as the country's fourth-largest grocery retailer despite operating only 109 stores. Costco has also grown rapidly in other international markets,



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bringing its international sales (excluding Canada) to over \$35 billion in fiscal 2024, up from a mere \$1 billion at the start of the century. We estimate that Costco has delivered an average return on invested capital of over 30% in Canada since 2013 and about 17% in other international markets, both comfortably exceeding our 7.4% estimate of its cost of capital.

Over the past decade, Costco has allocated \$33 billion to capital expenditure (45% of cumulative cash from operations and about 2% of total sales), primarily for warehouse expansion and club remodels, which we view as an appropriate use of cash. The retailer operates more than 890 warehouses globally (around 600 in the US and 109 in Canada)—an increase of over 220 stores since 2013—yielding over 80,000 members per warehouse (up from about 60,000 a decade prior). Management has approached its physical expansion in international markets (excluding Canada) rather methodically to this point, which we think is in part due to its prolonged growth in the US. We forecast Costco to add about 25 warehouses per year over the following decade, with the front half of our 10-year explicit forecast weighted toward domestic expansion and the back half geared more toward other international markets.

With a business model predicated on driving traffic to its physical warehouses, Costco has underinvested in its digital offerings, in our view. Retailers such as Walmart and Target have invested heavily in recent years to expand their omnichannel fulfillment capabilities through services such as home delivery and curbside pickup, while Costco has largely avoided offering these services due to the higher costs that come from adding fulfillment complexity. We view some degree of omnichannel competence as necessary and expect the firm to allocate additional capital toward these initiatives.

We view Costco's shareholder distributions as appropriate. The firm pays a regular dividend which has equated to an average payout ratio of about 29% over the past decade. The firm occasionally delivers excess cash via special dividends, which we expect to continue at a biennial pace; it most recently paid a special dividend of \$15 per share in January 2024. In aggregate, Costco has paid out \$28 billion in dividends to its common shareholders since fiscal 2015, or about 38% of the firm's cumulative cash from operations. Costco also distributes cash to shareholders through share repurchases, though its \$4.5 billion in cumulative repurchases over the past decade remain negligible. Given that Costco's stock price often trades at a premium to our fair value estimate, we find dividends and organic reinvestment to be a higher-yielding use of cash.

### **Analyst Notes Archive**

Costco Earnings: Attractive Merchandise and Low Prices Drive Continued Traffic Growth, Share Gains Noah Rohr, Equity Analyst, 13 Dec 2024

We plan to modestly raise our \$540 fair value estimate for wide-moat Costco following its solid fiscal 2025 first-quarter earnings release, primarily due to the time value of money. Results were mostly in



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line with our expectations as net sales expanded 7.5%, and adjusted earnings per share of \$3.82 modestly trailed our \$3.98 forecast. We continue to think that Costco's attractive merchandise assortment and vast scale should drive further market share gains and a widening cost advantage in the long run. As such, we still model 6%-7% top-line growth in the long term and a midcycle operating margin above 4% (versus 3.6% in fiscal 2024). However, we think shares look overvalued, trading at more than 50 times our forecast for fiscal 2025 EPS.Comparable sales in the US (excluding fuel) continued to impress, expanding 7.2% amid a 5% uptick in traffic. Notably, the firm's top-line growth was consistent with results from its main warehouse club competitor, Sam's Club, and continued to outpace recent comparable sales growth from wide-moat Walmart's domestic business (5.3%), no-moat Target (0.3%), and no-moat Kroger (2.3%). International results also proved admirable as comparable sales expanded 6.7% in Canada and 7.1% in other international markets. We were pleased to see management cite high-single-digit sales growth in the fresh foods category and a mid-single-digit gain in food and sundries, both comfortably outpacing the 1.3% average annual growth in food-at-home inflation from September to November 2024. Digital sales also expanded by an impressive 13%, with management citing strength across several discretionary categories, including home furnishings, jewelry, and sporting goods.

Costco Earnings: Top-Line Growth and Membership Trends Remain Enviable, but Shares Still Look Rich Noah Rohr, Equity Analyst, 27 Sep 2024

We plan to slightly raise our \$510 per share fair value estimate on wide-moat Costco as the warehouse club behemoth capped off an impressive fiscal 2024 that saw companywide comparable sales rise 6% and its operating margin expand by 30 basis points to 3.6%. We think Costco's strong results speak volumes as to its attractive product assortment and low-cost value proposition, as its strong customer loyalty (membership renewal rates remain above 90%), frugal cost structure, and \$2,000 in domestic sales per square foot (about three times that of wide-moat Walmart) remain the envy of the retail industry. While we maintain our optimistic stance regarding Costco's prospects—we model mid-singledigit percentage growth in comparable sales and continued margin expansion—we still regard shares, trading at around 50 times our fiscal 2025 EPS forecast, as significantly overvalued. Fourth-quarter comparable sales in the US expanded 6%—slightly above the 5% gain posted by rival Sam's Club—primarily due to an impressive 5.6% uptick in traffic. Costco's brand also continues to resonate internationally, where comparable sales expanded by a high-single-digit percentage. Management noted that demand was strongest in the nonfood category and pointed to double-digit percentage gains in jewelry, toys, home furnishings, and tires, which we think exhibits the firm's treasure-hunt shopping experience and breadth of offerings. We also surmise that the warehouse club retailer tends to serve an affluent customer base. Several retailers under our coverage have cited weakening demand from lowincome households while middle- and upper-income consumers remain resilient, which stands to benefit Costco. Operating margin expanded 30 basis points to 3.8% in the fourth quarter (versus our



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3.4% estimate) amid improvements in e-commerce profitability. Due to its efficient operating model and persistent price gaps, we think the firm can protect and expand its operating margin to about 4% in coming years.

# Costco Earnings: Attractive Prices and Product Assortment Drive Further Traffic Gains; Shares Rich Noah Rohr, Equity Analyst, 31 May 2024

Wide-moat Costco posted impressive fiscal 2024 third-quarter results, and we plan to slightly raise our \$500 fair value estimate as we remain confident in its financial outlook. Still, we think shares are significantly overvalued. Net sales expanded 9% to over \$57 billion, underpinned by a 6.5% increase in comparable sales. Comp growth in the United States of 6% surpassed our 5% estimate amid an impressive 5.5% uptick in traffic. We also remain impressed by the firm's global merit as comp growth in Canada and other international markets landed at 7.4% and 8.5%, respectively. While several defensive retailers under our coverage have cited lackluster demand in discretionary categories, management pointed to continued growth in Costco's nonfood sales and mentioned that discretionary items were a source of strength during the quarter. This dynamic speaks to Costco's resounding lowprice value proposition and attractive treasure hunt shopping experience. We also surmise that Costco, due to its annual membership fee and bulk quantities, tends to overindex to a more affluent consumer than its competing discount retail peers. As such, we are unsurprised to see the warehouse club's top line hold up better than many competing retailers. Regarding profitability, the operating margin expanded to 3.8% during the quarter, stemming from a 10-basis point improvement in core gross margin and a 15-basis point improvement in SG&A margin. With a frugal operating structure and a prolific level of sales volume passing through each warehouse (net sales per domestic warehouse landed around \$300 million in fiscal 2023), we think Costco's cost advantage remains comfortably intact. Worldwide membership increased to 74.5 million (up 8% annually), and renewal rates remained solidly ahead of 90%. We remain encouraged by the continued increase in executive memberships, which reached 34.5 million, as we surmise executive members typically divert a larger share of their spending to Costco.

# Costco Earnings: Continued Top-Line Growth Reinforces the Retailer's Wide Moat, but Shares Look Rich Noah Rohr, Equity Analyst, 8 Mar 2024

We were impressed by wide-moat Costco's fiscal 2024 second-quarter results as the firm's attractive product assortment and low prices continued driving strong traffic through its warehouses. Net sales improved nearly 6% to over \$57 billion, driven by a robust 5.8% increase in companywide comparable sales (excluding fuel and foreign currency fluctuations). In the US, Costco's comparable sales growth of 4.8% exceeded our 3.5% forecast amid a stronger-than-expected 4.3% uptick in volume, with management citing revenue growth across each of its core merchandise categories. Internationally, comparable sales again expanded at a high-single-digit pace—9.0% in Canada and 8.2% in other



1.008.74 USD 29 May 2025

Fair Value Estimate 610.00 USD 14 Mar 2025 19:25, UTC Price/FVE Market Cap 447.56 USD Bil 1.65 29 May 2025

Wide (

**Economic Moat**™ **Equity Style Box** Large Blend Uncertainty Medium

**Capital Allocation** Exemplary

ESG Risk Rating Assessment<sup>1</sup> **@@@@** 7 May 2025 05:00, UTC

international markets—as the retailer's banner continues to garner global merit. Costco's continued top-line success and 3.5% operating margin—exceeding our 3.4% estimate as management cited tighter expense control during the quarter—translated into adjusted earnings per share of \$3.71 during the quarter, which outpaced our forecast by about 4%. We maintain that Costco's vast scale and merchandising strategy prompts an enviable cost advantage in a crowded retail environment. The firm's continued membership gains—global membership count rose 8% year over year to over 73 million—and expanding share of consumers' wallets allow the retailer to pass growing volumes through its more than 870 global warehouses, reinforcing its scale-driven cost advantage. We plan to raise our \$480 fair value estimate by a mid-single-digit percentage as we make a favorable adjustment to our near-term revenue outlook. However, we still view Costco's shares as overvalued. Costco clocked a 90.5% global renewal rate in the quarter (92.9% in the US and Canada), and management reaffirmed its commitment to opening new warehouses, with 28 planned for fiscal 2024. Despite operating over 600 warehouses in the US, we think Costco has room to add at least 100 more domestically over the next decade.

Costco Earnings: Strong Value Proposition and Loyal Member Base Drive Further Traffic Gains Noah Rohr, Equity Analyst, 15 Dec 2023

Wide-moat Costco delivered solid results during its fiscal first-quarter 2024 as the firm continued attracting customers to its warehouses. The retailer's EPS of \$3.58 exceeded our expectation by about 6% as the firm's 3.4% operating margin was up 20 basis points over the prior year and slightly outpaced our estimate due to improved profitability from gasoline sales and e-commerce. Net sales improved 6.1% to nearly \$57 billion during the quarter, driven by a 3.9% increase in company-wide comparable sales (excluding the impact from gasoline prices and foreign-exchange fluctuations) as global shopping frequency, or traffic, growth of 4.7% helped offset a 0.9% decline in the average transaction size. In the U.S., comparable sales growth moderated further from the robust pace of the prior 4 years to 2.6%. That said, a more tepid pace of spending was to be expected and we're encouraged by the firm's robust 3.6% traffic gains. Internationally, Costco continues to drive strong growth, with comparable sales expanding at a high-single-digit rate (8% in Canada and 7% in other international markets). We believe Costco is poised to grow its top- and bottom line further in future via membership gains and increasing wallet share as the firm's enticing value proposition of quality goods in bulk quantities at low prices resonates with consumers. We plan to raise our \$460 fair value estimate for Costco by a low- to mid-single-digit percentage as our long-term outlook remains intact, though we view shares as overvalued. Costco's global renewal rate exceeded 90% and its membership count reached 72 million (up 8% over the prior year), keeping it on pace to achieve our estimate of about 74 million by the end of fiscal 2024. Costco also declared a special cash dividend of \$15 per share—equating to nearly \$7 billion—to be paid out in January 2024. We view the dividend as appropriate given the firm has an impeccable financial position with \$10 billion in net cash on its balance sheet.



1,008.74 USD 29 May 2025 Fair Value Estimate
610.00 USD
14 Mar 2025 19:25, UTC

Price/FVE 1.65

Market Cap 447.56 USD Bil 29 May 2025 Economic Moat™
Wide

Equity Style Box
Large Blend

**Uncertainty** Medium Capital Allocation Exemplary ESG Risk Rating Assessment<sup>1</sup>
(1) (1) (1) (1)
7 May 2025 05:00, UTC

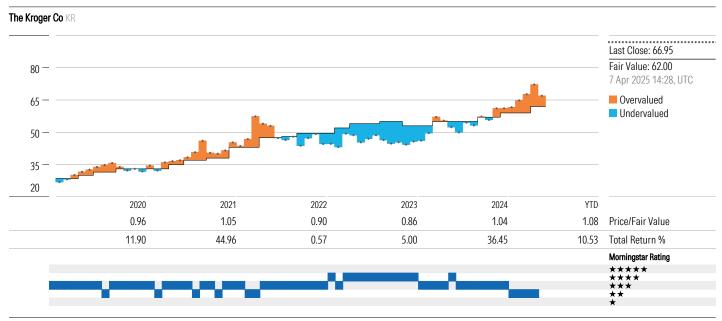
### Costco: Our Outlook and Ratings Are Unchanged as Ron Vachris to Succeed Craig Jelinek as CEO

Noah Rohr, Equity Analyst, 19 Oct 2023

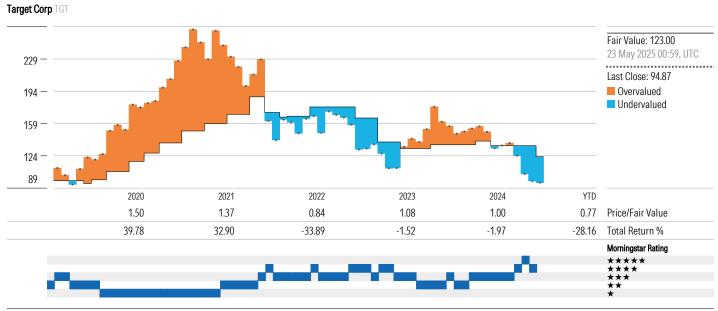
Wide-moat Costco announced CEO Craig Jelinek's intention to step down from the role at the end of the year, marking an imminent end to his impressive 12 years at the helm. Ron Vachris, Costco's current president and COO, will officially succeed Jelinek on Jan. 1, 2024. The management change does not alter our long-term outlook for Costco, and we maintain our \$460 fair value estimate and our Exemplary Capital Allocation Rating. Still, shares look overvalued to us. Vachris' appointment to the CEO role does not come as a surprise given that his promotion to president and COO in February 2022 mirrors Jelinek's own ascension to the helm more than a decade prior. Vachris is a Costco veteran with several decades of experience at the firm, which is consistent with the rest of Costco's executive suite who each boast long tenures with the company. We expect the firm to continue growing its global membership base and to capture greater spending from existing members due to its compelling merchandise assortment and low prices. Upon succeeding cofounder Jim Sinegal as CEO in January 2012, Craig Jelinek has overseen several years of resounding growth that have since culminated in Costco's status as the nation's third-largest retailer. The firm's top line grew by 170%, its market capitalization increased nearly seven-fold, and its paid members doubled to 71 million with Jelinek at the helm. Costco also expanded its physical footprint by over 250 units since 2012, bringing the firm's global warehouse count to 861 today. Jelinek will serve in an advisory role through April 2024 and will remain on Costco's board of directors. IM



#### Competitors Price vs. Fair Value



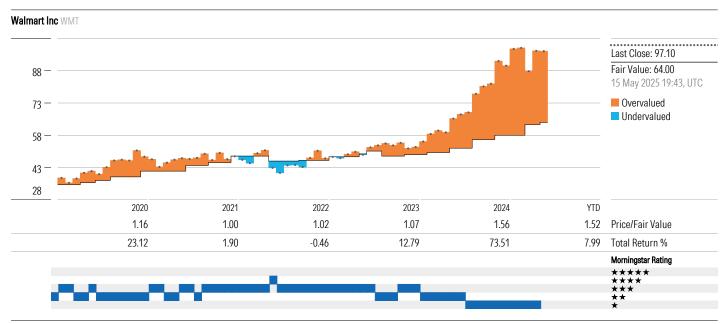
Total Return % as of 29 May 2025. Last Close as of 29 May 2025. Fair Value as of 7 Apr 2025 14:28, UTC.



Total Return % as of 29 May 2025. Last Close as of 29 May 2025. Fair Value as of 23 May 2025 00:59, UTC.



### Competitors Price vs. Fair Value



Total Return % as of 29 May 2025. Last Close as of 29 May 2025. Fair Value as of 15 May 2025 19:43, UTC.



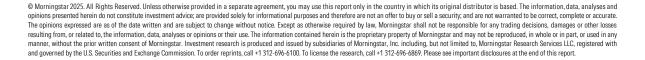
**Last Price**1,008.74 USD
29 May 2025

Fair Value Estimate 610.00 USD 14 Mar 2025 19:25, UTC Price/FVE 1.65 Market Cap 447.56 USD Bil 29 May 2025 Economic Moat™
Wide

Equity Style Box
Large Blend

Uncertainty Medium **Capital Allocation** Exemplary ESG Risk Rating Assessment<sup>1</sup>
(i) (i) (ii) (iii)
7 May 2025 05:00, UTC

Morningstar Valuation Model Summary										
Financials as of 14 Mar 2025	ı	Actual			Forecast					
Fiscal Year, ends 31 Aug	=	2022	2023	2024	2025	2026	2027	2028	2029	
Revenue (USD Mil)		226,954	242,290	254,453	278,804	300,518	322,680	345,849	373,157	
Operating Income (USD Mil)		7,793	8,114	9,285	10,452	11,547	12,700	13,930	15,372	
EBITDA (USD Mil)		9,693	10,191	11,522	12,961	14,252	15,604	17,043	18,730	
Adjusted EBITDA (USD Mil)		9,693	10,191	11,522	12,961	14,252	15,604	17,043	18,730	
Net Income (USD Mil)		5,844	6,292	7,367	8,139	9,057	9,937	10,874	11,967	
Adjusted Net Income (USD Mil)		5,844	6,292	7,167	8,139	9,057	9,937	10,874	11,967	
Free Cash Flow To The Firm (USD Mil)		2,523	5,568	4,937	6,867	7,097	8,133	8,940	9,982	
Weighted Average Diluted Shares Outstanding (Mil)		445	444	445	443	441	440	438	436	
Earnings Per Share (Diluted) (USD)		13.14	14.16	16.56	18.39	20.53	22.60	24.83	27.45	
Adjusted Earnings Per Share (Diluted) (USD)		13.14	14.16	16.11	18.39	20.53	22.60	24.83	27.45	
Dividends Per Share (USD)		3.38	3.84	4.36	4.86	5.36	5.86	6.36	6.86	
Margins & Returns as of 14 Mar 2025		Actual			Forecast					
•	3 Year Avg	2022	2023	2024	2025	2026	2027	2028	2029	5 Year Avç
Operating Margin %	3.5	3.4	3.4	3.7	3.8	3.8	3.9	4.0	4.1	3.9
EBITDA Margin % Adjusted EBITDA Margin %	_	4.3 4.3	4.2 4.2	4.5 4.5	4.7 4.7	4.7 4.7	4.8 4.8	4.9 4.9	5.0 5.0	4.8
Net Margin %	2.7	2.6	2.6	2.9	2.9	3.0	3.1	3.1	3.2	3.1
Adjusted Net Margin %	2.7	2.6	2.6	2.8	2.9	3.0	3.1	3.1	3.2	3.1
Free Cash Flow To The Firm Margin %	1.8	1.1	2.3	1.9	2.5	2.4	2.5	2.6	2.7	2.5
Growth & Ratios as of 14 Mar 2025		Actual			Forecast					
	3 Year CAGR	2022	2023	2024	2025	2026	2027	2028	2029	5 Year CAGE
Revenue Growth %	9.1	15.8	6.8	5.0	9.6	7.8	7.4	7.2	7.9	8.0
Operating Income Growth %	11.5	16.2	4.1	14.4	12.6	10.5	10.0	9.7	10.4	10.6
EBITDA Growth %	10.8	14.2	5.1	13.1	12.5	10.0	9.5	9.2	9.9	10.2
Adjusted EBITDA Growth %	10.7	14.2	5.1	13.1	12.5	10.0	9.5	9.2	9.9	10.2
Earnings Per Share Growth % Adjusted Earnings Per Share Growth %	13.7 13.7	16.6 16.6	7.7 7.7	17.0 13.8	11.0 14.1	11.6 11.6	10.1 10.1	9.9 9.9	10.6 10.6	10.6 10.6
Valuation as of 14 Mar 2025		Actual	1.1	10.0	Forecast	11.0	10.1	7.7	10.0	10.0
Talada of Trivial 2023	-	2022	2023	2024	2025	2026	2027	2028	2029	
Price/Earning		35.9	39.9	55.0	54.9	49.1	44.6	40.6	36.7	
Price/Sales		1.0	1.0	1.6	1.6	1.5	1.4	1.3	1.2	
Price/Book		10.2	10.0	16.7	15.4	17.3	13.8	15.2	12.0	
Price/Cash Flow			_			_	_	_		
EV/EBITDA		23.6	23.4	34.1	34.1	31.0	28.4	26.0	23.6	
EV/EBIT		29.3	29.4	42.4	42.3	38.3	34.8	31.8	28.8	
Dividend Yield %		0.7	0.7	0.5	0.5	0.5	0.6	0.6	0.7	
Dividend Payout % Free Cash Flow Yield %		25.7	27.1	120.1	26.4	123.5	25.9 —	114.2	25.0	
Operating Performance / Profitability as of 14 Mar 2025		Actual			Forecast					
Fiscal Year, ends 31 Aug	-	2022	2023	2024	2025	2026	2027	2028	2029	
, v										
ROA %		9.1	9.1	10.5	10.5	11.7	11.5	12.0	12.3	
ROA % ROE %		9.1 28.3	9.1 25.1	10.5 31.2	10.5 28.2	11.7 35.1	11.5 30.9	12.6 37.4	12.3 32.7	



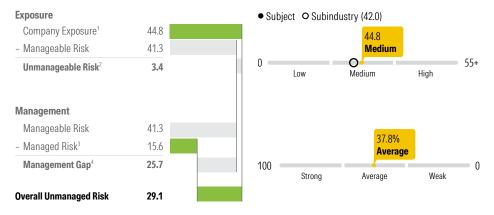


<b>Last Price</b> 1,008.74 USD 29 May 2025	Fair Value Estimate 610.00 USD 14 Mar 2025 19:25, UTC	Price/FVE 1.65	<b>Market Cap</b> 447.56 US 29 May 2025	USD Bil 😈 Wide		Equity Styl Larg		<b>Uncertainty</b> Medium	Capital Allocation Exemplary	ESG Risk Rating Assessment <sup>1</sup> (D (		
Financial Leverage (F	Reporting Currency)			Actual			Forecast					
Fiscal Year, ends 31 Aug				2022	2023	2024	2025	2026	2027	2028	2029	
Debt/Capital %				3.8	3.5	2.1	1.8	1.7	1.6	1.6	1.5	
Assets/Equity				3.1	2.8	3.0	2.7	3.0	2.7	3.0	2.7	
Net Debt/EBITDA				-0.2	-0.6	-0.2	-0.6	-0.2	-0.5	-0.2	-0.5	
Total Debt/EBITDA				0.9	0.9	0.7	0.4	0.4	0.3	0.3	0.3	
EBITDA/ Net Interest E				-206.2	-27.3	-25.3	-32.4	-38.5	-41.6	-45.2	-49.9	
Forecast Revisions a	s of 14 Mar 2025			2025			2026		2027			
<b>Prior data</b> as of 23 Dec 2				Curre		Prior	Cı	ırrent	Prior	Curren	t	Prior
Fair Value Estimate Ch	nange (Trading Currer	ncy)		610.00		562.67		_				
Revenue (USD Mil)				278,8	304	254,453	30	0,518	275,205	322,68	0	296,257
Operating Income (US	D Mil)			10,4	152	9,285	1	1,547	10,351	12,70	0	11,416
EBITDA (USD Mil)				12,9	961	11,522	1	4,252	12,691	15,60	4	13,934
Net Income (USD Mil)				8,1	139	7,167		9,057	8,209	9,93	7	9,013
Earnings Per Share (D	iluted) (USD)			18	.39	16.56		20.53	18.55	22.60	0	20.44
Adjusted Earnings Per	Share (Diluted) (USD	)		18	.39	16.11	:	20.53	18.55	22.6	0	20.44
Dividends Per Share (	USD)			4	.86	4.36		5.36	4.86	5.86	6	5.36
Key Valuation Driver	<b>s</b> as of 14 Mar 2025			Discounted Cas	sh Flow Val	uation as o	f 14 Mar 202	5				
Cost of Equity %			7.5									USD Mil
Pre-Tax Cost of Debt %	6		5.3	Present Value S	tage l							69,596
Weighted Average Cos	st of Capital %		7.4	Present Value S	tage II							69,882
Long-Run Tax Rate $\%$			25.0	Present Value S	tage III							120,014
Stage II EBI Growth Ra			6.5	<b>Total Firm Value</b>								259,492
Stage II Investment Ra	ate %		20.0									
Perpetuity Year 20			20	Cash and Equiva	alents							9,906
Additional estimates and scenarios available for download at https://pitchbook.com/.				Debt								5,897
				Other Adjustme Equity Value	nts							-1,235 <b>262,266</b>
				Projected Dilute	d Shares							442
				Fair Value per Sh								610.00



**Last Price Fair Value Estimate** Price/FVE Market Cap **Economic Moat**™ **Equity Style Box Capital Allocation** ESG Risk Rating Assessment<sup>1</sup> Uncertainty 447.56 USD Bil Wide ( Large Blend Medium Exemplary **@@@@** 1.008.74 USD 610.00 USD 1.65 29 May 2025 29 May 2025 14 Mar 2025 19:25, UTC 7 May 2025 05:00, UTC

#### **ESG Risk Rating Breakdown**



- ► Exposure represents a company's vulnerability to ESG risks driven by their business model
- ► Exposure is assessed at the Subindustry level and then specified at the company level
- ► Scoring ranges from 0-55+ with categories of low, medium, and high-risk exposure
- ► Management measures a company's ability to manage ESG risks through its commitments and actions
- ► Management assesses a company's efficiency on ESG programs, practices, and policies
- ► Management score ranges from 0-100% showing how much manageable risk a company is managing

#### ESG Risk Rating Assessment<sup>5</sup>













ESG Risk Rating is of May 07, 2025. Highest Controversy Level is as of May 08, 2025. Sustainalytics Subindustry: Food Retail. Sustainalytics provides Morningstar with company ESG ratings and metrics on a monthly basis and as such, the ratings in Morningstar may not necessarily reflect current Sustainalytics' scores for the company. For the most up to date rating and more information, please visit: sustainalytics.com/esg-ratings/

#### **ESG Risk Rating** 29.12 Medium Negligible Low Medium High Severe

ESG Risk Ratings measure the degree to which a company's value is impacted by environmental, social, and governance risks, by evaluating the company's ability to manage the ESG risks it faces.

1. A company's Exposure to material ESG issues 2. Unmanageable Risk refers to risks that are inherent to a particular business model that cannot be managed by programs or initiatives 3. Managed Risk = Manageable Risk multiplied by a Management score of 37.8% 4. Management Gap assesses risks that are not managed, but are considered manageable 5. ESG Risk Rating Assessment = Overall Unmanaged Risk = Management Gap plus Unmanageable Risk

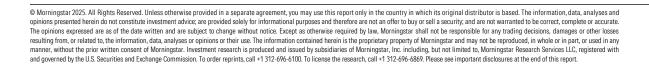
Peer Analysis 07 May 2025	Peers are selected f	Peers are selected from the company's Sustainalytics-defined Subindustry and are displayed based on the closest market cap values						
Company Name	Exposure		Management		ESG Risk Rating			
Costco Wholesale Corp	44.8   Medium	0 55+	37.8   Average	100 0	29.1   Medium	0 — 40+		
The Kroger Co	48.0   Medium	0 55+	48.7   Average	100 0	26.4   Medium	0 — 40+		
Walmart Inc	45.4   Medium	0 — 55+	48.4   Average	100 0	25.1   Medium	0 — 40+		
Target Corp	33.8   Low	0 — 55+	50.3   Strong	100 0	18.1   Low	0 — 40+		
BJ's Wholesale Club Holdings Inc	45.8   Medium	0 55+	39.9   Average	100 0	28.9   Medium	0		



### **Appendix**

### Historical Morningstar Rating

Costco Who	olesale Corp C	OST <b>29 May 20</b> 2	25 21:19, UTC								
Dec 2025	Nov 2025	Oct 2025	Sep 2025	Aug 2025	Jul 2025	Jun 2025	May 2025	Apr 2025	Mar 2025	Feb 2025	Jan 2025
—	—	—	—	—	—	—	★	★	★	★	★
Dec 2024	Nov 2024	Oct 2024	Sep 2024	Aug 2024	Jul 2024	Jun 2024	May 2024	Apr 2024	Mar 2024	Feb 2024	Jan 2024
★	★	★	★	★	★	★	★	★	★	★	★
Dec 2023	Nov 2023	Oct 2023	Sep 2023	Aug 2023	Jul 2023	Jun 2023	May 2023	Apr 2023	Mar 2023	Feb 2023	Jan 2023
★	★★	★★	★★	★★	★★	★★★	★★★	★★★	★★★	★★★	★★★
Dec 2022	Nov 2022	Oct 2022	Sep 2022	Aug 2022	Jul 2022	Jun 2022	May 2022	Apr 2022	Mar 2022	Feb 2022	Jan 2022
★★★	★★	★★★	★★★	★★	★★	★★★	★★★	★★	★★	★★	★★
Dec 2021	Nov 2021	Oct 2021	Sep 2021	Aug 2021	Jul 2021	Jun 2021	May 2021	Apr 2021	Mar 2021	Feb 2021	Jan 2021
★★	★	★★	★★	★★	★★	★★★	★★	★★★	★★★	★★★	★★★
Dec 2020	Nov 2020	Oct 2020	Sep 2020	Aug 2020	Jul 2020	Jun 2020	May 2020	Apr 2020	Mar 2020	Feb 2020	Jan 2020
★★	★★	★★	★★	★★	★★	★★★	★★	★★	★★	★★	★★
The Kroger	Co KR 29 May	2025 21:19, UTC	)								
Dec 2025	Nov 2025	Oct 2025	Sep 2025	Aug 2025	Jul 2025	Jun 2025	May 2025	Apr 2025	Mar 2025	Feb 2025	Jan 2025
—	—	—	—	—	—	—	★★	★★	★★	★★	★★★
Dec 2024	Nov 2024	Oct 2024	Sep 2024	Aug 2024	Jul 2024	Jun 2024	May 2024	Apr 2024	Mar 2024	Feb 2024	Jan 2024
★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★
Dec 2023	Nov 2023	Oct 2023	Sep 2023	Aug 2023	Jul 2023	Jun 2023	May 2023	Apr 2023	Mar 2023	Feb 2023	Jan 2023
★★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★★	★★★	★★★	★★★
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Dec 2020	Nov 2020	Oct 2020	Sep 2020	Aug 2020	Jul 2020	Jun 2020	May 2020	Apr 2020	Mar 2020	Feb 2020	Jan 2020
★★★	★★★	★★★	★★★	★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★
Target Corp	TGT 29 May 20	025 21:22, UTC									
Dec 2025	Nov 2025	Oct 2025	Sep 2025	Aug 2025	Jul 2025	Jun 2025	May 2025	Apr 2025	Mar 2025	Feb 2025	Jan 2025
—	—	—	—	—	—	—	★★★	★★★★	★★★★	★★★	★★★
Dec 2024	Nov 2024	Oct 2024	Sep 2024	Aug 2024	Jul 2024	Jun 2024	May 2024	Apr 2024	Mar 2024	Feb 2024	Jan 2024
★★★	★★★	★★★	★★★	★★	★★	★★★	★★	★★	★★	★★	★★★
Dec 2023	Nov 2023	Oct 2023	Sep 2023	Aug 2023	Jul 2023	Jun 2023	May 2023	Apr 2023	Mar 2023	Feb 2023	Jan 2023
★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★
Dec 2022	Nov 2022	Oct 2022	Sep 2022	Aug 2022	Jul 2022	Jun 2022	May 2022	Apr 2022	Mar 2022	Feb 2022	Jan 2022
★★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★	★★	★★	★★
Dec 2021	Nov 2021	Oct 2021	Sep 2021	Aug 2021	Jul 2021	Jun 2021	May 2021	Apr 2021	Mar 2021	Feb 2021	Jan 2021
★★	★	★	★	★	★	★	★	★	★	★	★
Dec 2020	Nov 2020	Oct 2020	Sep 2020	Aug 2020	Jul 2020	Jun 2020	May 2020	Apr 2020	Mar 2020	Feb 2020	Jan 2020
★	★	★	★		★★	★★	★★	★★	★★★	★★★	★★





Walmart Ir	nc WMT 29 May	2025 21:21, UT	С								
Dec 2025	Nov 2025	Oct 2025	Sep 2025	Aug 2025	Jul 2025	Jun 2025	May 2025	Apr 2025	Mar 2025	Feb 2025	Jan 2025
—	—	—	—	—	—	—	★	★	★	★	★
Dec 2024	Nov 2024	Oct 2024	Sep 2024	Aug 2024	Jul 2024	Jun 2024	May 2024	Apr 2024	Mar 2024	Feb 2024	Jan 2024
★	★	★	★	★	★★	★★	★★	★★	★★	★★	★★★
Dec 2023	Nov 2023	Oct 2023	Sep 2023	Aug 2023	Jul 2023	Jun 2023	May 2023	Apr 2023	Mar 2023	Feb 2023	Jan 2023
★★★	★★★	★★	★★	★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★
Dec 2022	Nov 2022	Oct 2022	Sep 2022	Aug 2022	Jul 2022	Jun 2022	May 2022	Apr 2022	Mar 2022	Feb 2022	Jan 2022
★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★	★★★
Dec 2021	Nov 2021	Oct 2021	Sep 2021	Aug 2021	Jul 2021	Jun 2021	May 2021	Apr 2021	Mar 2021	Feb 2021	Jan 2021
★★★	★★★	★★★	★★★	★★	★★★	★★★	★★	★★	★★★	★★★	★★
Dec 2020	Nov 2020	Oct 2020	Sep 2020	Aug 2020	Jul 2020	Jun 2020	May 2020	Apr 2020	Mar 2020	Feb 2020	Jan 2020



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#### Overview

At the heart of our valuation system is a detailed projection of a company's future cash flows, resulting from our analysts' research. Analysts create custom industry and company assumptions to feed income statement, balance sheet, and capital investment assumptions into our globally standardized, proprietary discounted cash flow, or DCF, modeling templates. We use scenario analysis, indepth competitive advantage analysis, and a variety of other analytical tools to augment this process. Moreover, we think analyzing valuation through discounted cash flows presents a better lens for viewing cyclical companies, high-growth firms, businesses with finite lives (e.g., mines), or companies expected to generate negative earnings over the next few years. That said, we don't dismiss multiples altogether but rather use them as supporting cross-checks for our DCF-based fair value estimates. We also acknowledge that DCF models offer their own challenges (including a potential proliferation of estimated inputs and the possibility that the method may miss shortterm market-price movements), but we believe these negatives are mitigated by deep analysis and our longterm approach.

Morningstar's equity research group ("we," "our") believes that a company's intrinsic worth results from the future cash flows it can generate. The Morningstar Rating for stocks identifies stocks trading at a discount or premium to their intrinsic worth—or fair value estimate, in Morningstar terminology. Five-star stocks sell for the biggest risk adjusted discount to their fair values, whereas 1-star stocks trade at premiums to their intrinsic worth.

Four key components drive the Morningstar rating: (1) our assessment of the firm's economic moat, (2) our estimate of the stock's fair value, (3) our uncertainty around that fair value estimate and (4) the current market price. This process ultimately culminates in our singlepoint star rating.

#### 1. Economic Moat

The concept of an economic moat plays a vital role not only in our qualitative assessment of a firm's long-term investment potential, but also in the actual calculation of our fair value estimates. An economic moat is a structural feature that allows a firm to sustain excess profits over a

long period of time. We define economic profits as returns on invested capital (or ROIC) over and above our estimate of a firm's cost of capital, or weighted average cost of capital (or WACC). Without a moat, profits are more susceptible to competition. We have identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

Companies with a narrow moat are those we believe are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which we have very high confidence that excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. The longer a firm generates economic profits, the higher its intrinsic value. We believe low-quality, no-moat companies will see their normalized returns gravitate toward the firm's cost of capital more quickly than companies with moats.

When considering a company's moat, we also assess whether there is a substantial threat of value destruction, stemming from risks related to ESG, industry disruption, financial health, or other idiosyncratic issues. In this context, a risk is considered potentially value destructive if its occurrence would eliminate a firm's economic profit on a cumulative or midcycle basis. If we deem the probability of occurrence sufficiently high, we would not characterize the company as possessing an economic moat.

#### 2. Estimated Fair Value

Combining our analysts' financial forecasts with the firm's economic moat helps us assess how long returns on invested capital are likely to exceed the firm's cost of capital. Returns of firms with a wide economic moat rating are assumed to fade to the perpetuity period over a longer period of time than the returns of narrow-moat firms, and both will fade slower than no-moat firms, increasing our estimate of their intrinsic value.

Our model is divided into three distinct stages:

#### Stage I: Explicit Forecast

In this stage, which can last five to 10 years, analysts make full financial statement forecasts, including items such as revenue, profit margins, tax rates, changes in workingcapital accounts, and capital spending. Based on these projections, we calculate earnings before interest,

after taxes (EBI) and the net new investment (NNI) to derive our annual free cash flow forecast.

#### Stage II: Fade

The second stage of our model is the period it will take the company's return on new invested capital—the return on capital of the next dollar invested ("RONIC")-to decline (or rise) to its cost of capital. During the Stage II period, we use a formula to approximate cash flows in lieu of explicitly modeling the income statement, balance sheet, and cash flow statement as we do in Stage I. The length of the second stage depends on the strength of the company's economic moat. We forecast this period to last anywhere from one year (for companies with no economic moat) to 10-15 years or more (for wide-moat companies). During this period, cash flows are forecast using four assumptions: an average growth rate for EBI over the period, a normalized investment rate, average return on new invested capital (RONIC), and the number of years until perpetuity, when excess returns cease. The investment rate and return on new invested capital decline until a perpetuity value is calculated. In the case of firms that do not earn their cost of capital, we assume marginal ROICs rise to the firm's cost of capital (usually attributable to less reinvestment), and we may truncate the second stage.

#### Stage III: Perpetuity

Once a company's marginal ROIC hits its cost of capital, we calculate a continuing value, using a standard perpetuity formula. At perpetuity, we assume that any growth or decline or investment in the business neither creates nor destroys value and that any new investment provides a return in line with estimated WACC.

Because a dollar earned today is worth more than a dollar earned tomorrow, we discount our projections of cash flows in stages I, II, and III to arrive at a total present value of expected future cash flows. Because we are modeling free cash flow to the firm—representing cash available to provide a return to all capital providers—we discount future cash flows using the WACC, which is a weighted average of the costs of equity, debt, and preferred stock (and any other funding sources), using expected future proportionate long-term, market-value weights.

### 3. Uncertainty Around That Fair Value Estimate

Morningstar's Uncertainty Rating is designed to capture the range of potential outcomes for a company's intrinsic value. This rating is used to assign the margin of safety required before investing, which in turn explicitly drives our stock star rating system. The Uncertainty Rating is aimed at identifying the confidence we should have in assigning a fair value estimate for a given stock.

Our Uncertainty Rating is meant to take into account anything that can increase the potential dispersion of future

### **Morningstar Equity Research Star Rating Methodology**



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outcomes for the intrinsic value of a company, and anything that can affect our ability to accurately predict these outcomes. The rating begins with a suggested rating produced by a quantitative process based on the trailing 12-month standard deviation of daily stock returns. An analyst overlay is then applied, with analysts using the suggested rating, historical rating data, and their own knowledge of the company to inform them as they make the final Uncertainty Rating decision. Ultimately, the rating decision rests with the analyst. Analysts take into account many characteristics when making their final decision, including cyclical factors, operational and financial factors such as leverage, companyspecific events, ESG risks, and anything else that might increase the potential dispersion of future outcomes and our ability to estimate those outcomes.

Our recommended margin of safety—the discount to fair value demanded before we'd recommend buying or selling the stock—widens as our uncertainty of the estimated value of the equity increases. The more uncertain we are about the potential dispersion of outcomes, the greater the discount we require relative to our estimate of the value of the firm before we would recommend the purchase of the shares. In addition, the Uncertainty Rating provides guidance in portfolio construction based on risk tolerance.

Our Uncertainty Ratings are: Low, Medium, High, Very High, and Extreme.

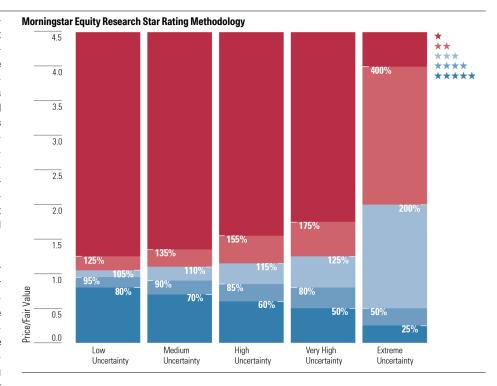
	Margin of Safety							
Qualitative Analysis Uncertainty Ratings	****Rating	<b>★</b> Rating						
Low	20% Discount	25% Premium						
Medium	30% Discount	35% Premium						
High	40% Discount	55% Premium						
Very High	50% Discount	75% Premium						
Extreme	75% Discount	300% Premium						

Our uncertainty rating is based on the interquartile range, or the middle 50% of potential outcomes, covering the 25th percentile–75th percentile. This means that when a stock hits 5 stars, we expect there is a 75% chance that the intrinsic value of that stock lies above the current market price. Similarly, when a stock hits 1 star, we expect there is a 75% chance that the intrinsic value of that stock lies below the current market price.

#### 4. Market Price

The market prices used in this analysis and noted in the report come from exchange on which the stock is listed which we believe is a reliable source.

For more details about our methodology, please go to https://shareholders.morningstar.com



#### **Morningstar Star Rating for Stocks**

Once we determine the fair value estimate of a stock, we compare it with the stock's current market price on a daily basis, and the star rating is automatically re-calculated at the market close on every day the market on which the stock is listed is open. Our analysts keep close tabs on the companies they follow, and, based on thorough and ongoing analysis, raise or lower their fair value estimates as warranted.

Please note, there is no predefined distribution of stars. That is, the percentage of stocks that earn 5 stars can fluctuate daily, so the star ratings, in the aggregate, can serve as a gauge of the broader market's valuation. When there are many 5-star stocks, the stock market as a whole is more undervalued, in our opinion, than when very few companies garner our highest rating.

We expect that if our base-case assumptions are true the market price will converge on our fair value estimate over time generally within three years (although it is impossible to predict the exact time frame in which market prices may adjust).

Our star ratings are guideposts to a broad audience and individuals must consider their own specific investment goals, risk tolerance, tax situation, time horizon, income needs, and complete investment portfolio, among other factors

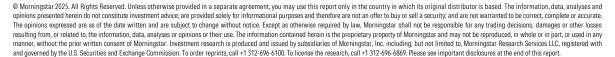
The Morningstar Star Ratings for stocks are defined below:

- \*\*\*\*
   We believe appreciation beyond a fair risk adjusted return is highly likely over a multiyear time frame. Scenario analysis developed by our analysts indicates that the current market price represents an excessively pessimistic outlook, limiting downside risk and maximizing upside potential.
- ★★★★ We believe appreciation beyond a fair risk-adjusted return is likely.
- ★★★ Indicates our belief that investors are likely to receive a fair risk-adjusted return (approximately cost of equity).
- ★★ We believe investors are likely to receive a less than fair risk-adjusted return.
- ★ Indicates a high probability of undesirable risk-adjusted returns from the current market price over a multiyear time frame, based on our analysis. Scenario analysis by our analysts indicates that the market is pricing in an excessively optimistic outlook, limiting upside potential and leaving the investor exposed to Capital loss.

#### **Other Definitions**

**Last Price:** Price of the stock as of the close of the market of the last trading day before date of the report.

Capital Allocation Rating: Our Capital Allocation (or Stewardship) Rating represents our assessment of the quality of management's capital allocation, with particular emphasis on the firm's balance sheet, investments,





and shareholder distributions. Analysts consider companies' investment strategy and valuation, balance sheet management, and dividend and share buyback policies. Corporate governance factors are only considered if they are likely to materially impact shareholder value, though either the balance sheet, investment, or shareholder distributions. Analysts assign one of three ratings: "Exemplary", "Standard", or "Poor". Analysts judge Capital Allocation from an equity holder's perspective. Ratings are determined on a forward looking and absolute basis. The Standard rating is most common as most managers will exhibit neither exceptionally strong nor poor capital allocation.

Capital Allocation (or Stewardship) analysis published prior to Dec. 9, 2020, was determined using a different process. Beyond investment strategy, financial leverage, and dividend and share buyback policies, analysts also considered execution, compensation, related party transactions, and accounting practices in the rating.

Capital Allocation Rating: Our Capital Allocation (or Stewardship) Rating represents our assessment of the quality of management's capital allocation, with particular emphasis on the firm's balance sheet, investments, and shareholder distributions. Analysts consider companies' investment strategy and valuation, balance sheet management, and dividend and share buyback policies. Corporate governance factors are only considered if they are likely to materially impact shareholder value, though either the balance sheet, investment, or shareholder distributions. Analysts assign one of three ratings: "Exemplary", "Standard", or "Poor". Analysts judge Capital Allocation from an equity holder's perspective. Ratings are determined on a forward looking and absolute basis. The Standard rating is most common as most managers will exhibit neither exceptionally strong nor poor capital allocation.

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Sustainalytics ESG Risk Rating Assessment: The ESG Risk Rating Assessment is provided by Sustainalytics; a Morningstar company.

Sustainalytics' ESG Risk Ratings measure the degree to which company's economic value at risk is driven by environment, social and governance (ESG) factors.

Sustainalytics analyzes over 1,300 data points to assess a company's exposure to and management of ESG risks. In other words, ESG Risk Ratings measures a company's unmanaged ESG Risks represented as a quantitative score.

Unmanaged Risk is measured on an open-ended scale starting at zero (no risk) with lower scores representing less unmanaged risk and, for 95% of cases, the unmanaged ESG Risk score is below 50.

Based on their quantitative scores, companies are grouped into one of five Risk Categories (negligible, low, medium, high, severe). These risk categories are absolute, meaning that a 'high risk' assessment reflects a comparable degree of unmanaged ESG risk across all subindustries covered.

The ESG Risk Rating Assessment is a visual representation of Sustainalytics ESG Risk Categories on a 1 to 5 scale. Companies with Negligible Risk = 5 Globes, Low Risk = 4, Medium Risk = 3 Globes, High Risk = 2 Globes, Severe Risk = 1 Globe. For more information, please visit sustainalytics.com/esg-ratings/

Ratings should not be used as the sole basis in evaluating a company or security. Ratings involve unknown risks and uncertainties which may cause our expectations not to occur or to differ significantly from what was expected and should not be considered an offer or solicitation to buy or sell a security.

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