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Section A

Industry analysis and FCFF on Costco Wholesale Corp

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ABSTRACT

This report evaluates Costco Wholesale Corporation by examining both the dynamics of the warehouse-club industry and the company's financial fundamentals. Through an analysis of competitive forces, global retail trends, and Costco's business model, we assess how well the market reflects the company's underlying performance. Using a Discounted Free Cash Flow to Firm (FCFF) valuation that incorporates adjustments to operating earnings, cost of capital, and long-term growth expectations, we estimate an intrinsic value that exceeds the current market price by 28.07%. Our findings suggest that Costco's steady cash generation, loyal membership base, and disciplined expansion strategy position the company for long-term value creation that is not fully recognized in its current valuation. As a result, we conclude with a buy recommendation.

Introduction

Costco has built one of the most distinctive and durable models in modern retailing. With its membership-based system, curated product selection, and commitment to low prices, the company has created a shopping experience that consistently drives high renewal rates and strong customer loyalty. At the same time, the broader retail environment is being reshaped by shifting consumer habits, inflation pressures, supply-chain redesign, and increasing global competition. These forces influence not only operational decisions but also the long-term value investors can expect from companies in the sector.

This paper aims to evaluate Costco's position within this changing landscape and determine whether the company's current market valuation aligns with its true economic worth. To do so, we begin by examining the structure of the warehouse-club industry: its major participants, key drivers of performance, life-cycle stage, and sensitivity to macroeconomic fluctuations. We then analyze Costco's role within this environment, focusing on the operational choices, competitive advantages, and financial characteristics that shape its performance.

The core of this report is a detailed Discounted Free Cash Flow to Firm (FCFF) valuation. We adjust Costco's accounting numbers for leases and capital investments, estimate a bottom-up beta to compute the cost of equity, and calculate a firm-wide cost of capital. We project cash flows through a high-growth period and into perpetuity to arrive at an estimate of the company’s intrinsic value. Our analysis ultimately indicates that Costco is undervalued by 28.07%, highlighting the company’s resilience and long-term potential despite operating in a mature and highly competitive industry.

Part 1 - Industry Analysis

Overview of the industry

Costco Wholesale Corp. operates in the retail industry, specifically within the membership-based wholesale/club retail sector. The wholesale and retail industry deals with selling goods and services to consumers or in bulk to businesses. Costco focuses on bulk sales through a membership model.

For the industry samples it was necessary to find companies that represent the revenue sectors of Costco. In 2025, 98.07% of Costco's revenue came from sales while 1.93% of it came from membership fees.

Two samples were created, one representing sales and one representing membership fees. The sales sample contains wholesalers and retailers that have wide product categories, centering on food and groceries. An effort was made for all aspects of Costco's product categories to be represented, even smaller ones like gas & auto and health & pharmacy. Retailers with low profit margins were prioritized over ones with larger profit margins. The membership sample includes companies that take a significant portion of their revenue from memberships like Amazon and Netflix. These have a higher bottom up beta and give a bigger industry average than the sales sample as they contain mostly tech companies with more growth and volatility.

72.68% of Costco revenue comes from the US, 13.42% from Canada and 13.9% from other international sources. The samples are therefore more precise if they contain mostly US companies. There are many US tech companies that use a membership model, which makes it easy to make a US sample. As there are a limited number of US wholesalers, companies from other regions, mostly Europe, were included in the sales sample increasing diversification.

Industry's Main Product

Costco has a wide product catalog and the largest product category by revenue is groceries & food. Other product categories are household essentials, electronics & appliances, clothing & accessories, home & furniture, health & pharmacy, gas & auto, seasonal & special items, services such as travel packages insurance, Costco visa credit card, photo printing and others.

The Main Players & Market Concentration of the Industry

Costco operates as an international chain of membership warehouses with operations in multiple different countries like the United States, Canada, the United Kingdom, Puerto Rico, Korea, Taiwan, Japan, Mexico, Spain, and Australia. We will look at the key players in the United States and Canada.

The key players in this industry include companies such as Costco, Walmart Inc., Loblaw Companies Limited, Amazon, Best Buy Co, Staples, Target Corporation, The Kroger co, Trader Joe's co, Walgreens Boots Alliance Inc and The Home Depot Inc.

The Canadian membership-based/wholesale club retail industry is highly concentrated; indeed, Costco generates more than half of total revenue with 61.1%, followed by Walmart Inc. with 17.2% and Loblaw Companies Limited with 9.2%. The remaining 12.5% of the market is shared among other competitors (IBISWorld, 2025). Regarding market segmentation, households' earnings of more than $50,000 contribute the largest share of revenue at 49.7% ($43.1 billion), households earning of $50,000 or less account for 31.7% ($22.4 billion), and business customers make up 18.6% ($13.1 billion) (IBISWorld, 2025). In the US, the company accounts for 25% of total industry revenues while Walmart accounts for 62%, the remaining shared among other competitors. In Canada, the industry is currently valued at 70.6 billion dollars and expected to reach 72.22 billion dollars by 2030. In the United States on the other hand, the industry is valued at 768,3 billion dollars currently and expected to reach 783 billion dollars by 2030 (IBISWorld, 2025).

Costco Supply Chain

1. Procurement & Sourcing

Costco's procurement approach is built around a direct sourcing model that eliminates intermediaries and enables the company to negotiate directly with manufacturers. This strategy significantly reduces per-unit acquisition costs and allows Costco to maintain its aggressive low-price structure, with typical markups around 14–15%. By sourcing directly and leveraging high inventory turnover, Costco reduces its cost of goods sold (COGS), improving EBIT margins and, by extension, boosting both free cash flow to the firm (FCFF) and return on capital (ROC). The operational efficiency achieved through this model ties directly into Costco's ability to sustain a lean cost structure while delivering consistent profitability.

The company's supplier network is diverse, spanning global consumer goods manufacturers like Procter & Gamble and Nestlé, agricultural producers supplying perishable goods such as produce, dairy, and meat, and contract manufacturers who produce Costco's Kirkland Signature line. These partnerships allow Costco to manage product quality and negotiate favourable volume-based pricing. Geographically, Costco sources from several key regions. China remains a major supplier for electronics and home goods, while South Korea contributes to the electronics and appliance categories. Mexico provides a logistical advantage for perishables due to its proximity to the U.S., and Vietnam and India offer cost-effective alternatives for apparel and textiles. However, these sourcing choices expose Costco to risks including foreign exchange volatility, transportation cost fluctuations, and geopolitical instability. Still, the company's scale gives it substantial bargaining power, mitigating many of these risks. The Kirkland Signature brand, in particular, enhances Costco's differentiation and margin control, reinforcing its competitive position.

2. Inventory Management & Warehousing:

Costco's inventory management philosophy emphasizes lean operations, built on a limited product assortment of roughly 3,700 SKUs per warehouse. This is a fraction of the SKU count seen in traditional big-box competitors like Walmart, enabling operational simplicity and high volume per item. The result is an exceptionally high inventory turnover rate, which contributes to efficient use of working capital and minimizes the reinvestment required to sustain revenue growth. This lean strategy directly supports Costco's strong FCFF profile and is a key element of its financial efficiency.

A cornerstone of Costco's warehousing model is its cross-docking system. Goods are delivered to regional depots and are quickly sorted and transferred to retail warehouses, bypassing traditional long-term storage. This minimizes labor, handling, and shrinkage costs, improving gross and operating margins. Costco warehouses themselves are optimized for both storage and retail use. Their minimalist design reduces complexity and fixed operating costs, enhancing Costco's ability to scale operations with minimal incremental investment. This streamlined format contributes to operating leverage and supports the company's consistent profitability even during economic fluctuations.

In valuation terms, Costco's approach to inventory and warehousing translates into lower net working capital and reduced capital intensity. These efficiencies drive higher FCFF and support sustainable long-term growth with a lower reinvestment rate. Compared to industry peers, Costco's inventory turnover ratios demonstrate superior asset utilization, reinforcing its advantage in operational execution and financial performance.

3. Distributions & Logistics

Costco operates a hub-and-spoke distribution model, utilizing regional depots and consolidation centers to manage the flow of goods to its warehouses. Rather than owning and operating a full logistics network, Costco relies on third-party providers for trucking, rail, and ocean freight services. This outsourcing strategy gives Costco the flexibility to adjust contracts and respond to changing market conditions without the burden of maintaining a large fleet.

The logistics system is designed for scale and efficiency. With fewer distribution nodes and high-volume shipments, Costco can achieve shorter lead times and lower per-unit shipping costs. These efficiencies support margin stability and allow the company to remain competitive even in economic downturns. The lean distribution network also reduces overhead and improves overall supply chain responsiveness. While distribution exposes Costco to certain risks such as port congestion, fuel price volatility, and labor strikes, the company's operational model helps buffer these impacts. Additionally, exposure to tariffs and foreign exchange fluctuations in import-heavy categories introduces some variability, but these factors are acknowledged in broader macroeconomic sections of the project and are thus only briefly mentioned here.

Costco's cost structure is sensitive to commodity and fuel price fluctuations, particularly in food and transportation. However, the company's scale and long-term supplier agreements mitigate many of these pressures. While these sensitivities contribute to moderate cyclicality in certain product segments, they are addressed more comprehensively in other parts of the report, particularly in the industry and macroeconomic analysis.

4. Sales & Memberships

A crucial component of Costco's supply chain loop is its membership model, which provides a stable revenue stream that underpins the company's entire low-margin retail operation. Membership fees, which account for only a small percentage of total revenue, contribute disproportionately to Costco's operating income. With renewal rates consistently exceeding 90%, these fees offer a predictable and recurring source of cash flow. This stability allows Costco to invest confidently in its procurement and warehousing networks, further reinforcing its operational efficiency.

Costco's customer base consists of bulk-buying households, small businesses such as restaurants and offices, and an expanding segment of online shoppers. This diversified and volume-driven customer profile supports Costco's ability to negotiate long-term contracts with suppliers and to manage logistics effectively. Predictable demand patterns enable the company to optimize its inventory planning, supplier scheduling, and freight coordination, further driving down costs.

The structure of Costco's sales model strengthens its supply chain performance across the board. High, consistent volume allows Costco to commit to vendor quantities with confidence, which in turn reduces per-unit costs and allows the company to maintain its competitive pricing. From a valuation standpoint, the reliability of Costco's cash flows and its ability to operate efficiently at scale contribute to a lower cost of capital. This combination of stable revenues, low operational risk, and strong execution helps justify the company's premium valuation relative to peers.

Industry Key External Business Drivers

Costco is a company that relies on its ability to attract and retain members, maintain competitive prices, and manage a highly efficient supply chain, all of which directly impact its revenues and profitability. Some key external factors playing important roles in Costco's operations and strategic decisions are:

Political and legal factors:

Costco operates in a regulated retail environment, and its prices and operations are affected by trade policies, tariffs, and import/export rules. Higher tariffs make imported goods more expensive, which can affect profits and membership prices. Labor laws, such as minimum wages, working hours, and benefits, influence staffing costs and flexibility. Taxes affect profits and how much the company can invest in expansion. Stable governments make it easier to open stores and manage supply chains, while political instability can cause disruptions.

Economic factors:

As a retail warehouse company, Costco's performance depends on consumer purchasing power, income, and employment. During economic downturns, people tend to buy in bulk to save money, while in good times they spend more freely. Inflation and interest rates affect both Costco's costs and how much customers spend. Currency changes can make imported goods more expensive. To handle these pressures, Costco focuses on a low-price, high-volume model that attracts cost-conscious shoppers in all economic conditions.

Social factors:

Demographics, lifestyle, and culture play a big role in the bulk retail industry. Families and middle-income households are the main customers, and their shopping habits affect product demand and membership growth. Attitudes toward loyalty programs and subscription-style memberships influence customer retention. Changes in preferences, like more demand for organic, sustainable, or health-focused products, affect the types of products offered and how stores organize them.

Technological factors:

Technology drives efficiency and customer experience in the retail industry. The growth of e-commerce and improved internet capabilities allow retailers to combine in-store shopping with online ordering. Mobile apps and improved payment systems make shopping easier and faster. Automation in warehouses, inventory, and logistics lowers costs and helps keep prices competitive. Data analytics also helps forecast demand, optimize stock levels, and reduce waste.

Environmental factors:

Environmental factors are becoming more important in the bulk retail industry. Climate change can disrupt supply chains, especially for food and other perishable products. Customers and regulators are also pushing for more sustainable practices, such as responsible sourcing, eco-friendly packaging, and energy-efficient operations. Adapting to these pressures helps retailers stay compliant and meet customer expectations.

Industry's Degree of Operating Leverage

[Calculations can be found in the Excel]

The firms that were chosen to calculate the industry's degree of operating leverage reflect both aspects of Costco's business, the warehouse club & membership revenue models. The inputs were taken for the period of 2023-2025 (TTM for applicable companies).

Table 1 - Operating Leverage Comparison: Costco vs. Industry

Industry Degree of Operating Leverage	2023	2024	2025 (TTM)
Mean	-33.14	2.84	-0.94
Median	1.00	2.61	1.15
Costco	1.20	2.91	1.31

The table above infers that the overall industry, on average, experiences a 1-2% change in operating income for every 1% change in revenue, indicative of the capital-intensive cost structure, and exceptionally low operating margins of the industry.

Meanwhile, Costco's DOL is above median levels every single year, indicating that, despite the industry intensive capital requirements, they are seeing better levels of profitability growth alongside their growth in revenues. This can largely be attributed to their efficient management of operational costs, along with the operational margin cushion created by their membership revenues.

Industry Dynamics

Costco's business shows a mixed sensitivity to the business cycle overall, parts of their business react quite defensively, while others show variability. Because a large portion of their profits come from membership fees, slower retail spending - due to unforeseen economic downturns - has a dampened effect on their revenues. Similarly, consumers will naturally shift towards value-oriented retailers when discretionary spending is reduced, supporting Costco's bottom line & protecting them from recessions when compared to other retailers.

However, they are still liable to experience some cyclicality due to their wide variety of discretionary products available for sale. Given their high-volume, low margin sales strategy, a slowdown in these categories will have a negative impact on their bottom line, slowing their revenues as a result.

The industry also demonstrates meaningful sensitivity to commodity prices, with a concentrated emphasis on food, gas & transportation. A large share of their sales come from the groceries and consumables category, thus a large shift in commodity prices (meat, dairy, grains, produce, etc…) will have a direct effect on their cost of goods sold. Rising fuel costs will directly impact their gas station service, as well as indirectly impacting their freight costs given their heavy reliance on global shipping & trucking for their supply chain efficiency.

Since their reputation is founded on low-price/high value, passing on the full blunt of these input increases to the consumers would undermine them; membership fees will help to somewhat offset these pressures, offering protection.

Industry Life Cycle

Based on current market data and trends, the membership-based wholesale/club retail industry, where Costco operates, is in the mature stage of its life cycle. Over the past decades, major players such as Costco, Sam's Club, and BJ's have built strong market positions, creating a concentrated and highly competitive environment (Mordor Intelligence, 2024). Growth in this stage is moderate and stable, with the industry expected to grow at a compound annual growth rate (CAGR) of 3.1% through 2025, reaching around $768.3 billion in the U.S. market (Buchko, 2025).

A key feature of a mature industry is strong competition between established companies. This is seen as major players open stores in each other's main markets and expand internationally to gain extra market share, instead of relying on new, unexplored areas (Mordor Intelligence, 2024). The U.S. market is quite crowded, which makes fast growth harder and pushes competitors to focus on attracting customers from one another (Buchko, 2025).

Innovation in the industry is now more about improving services and standing out than creating entirely new business models. Companies invest in digital tools like scan-and-go apps and e-commerce, make in-store shopping more engaging with "treasure hunt" merchandise, and offer membership perks to strengthen loyalty and encourage renewals (Mordor Intelligence, 2024). Even though growth is slower than in earlier stages, the industry stays strong thanks to its valuable offerings, especially during times of economic uncertainty and inflation (Buchko, 2025).

In summary, the warehouse club industry is firmly in the mature stage, with moderate growth, intense competition among a few leading players, a crowded market, and a focus on maintaining and increasing market share through customer experience and operational efficiency.

Industry's historical return on equity and the development (growth) of revenues

The historical return on equity (ROE) for the US warehouse club and supercenter industry averaged 15.5% over the past five years, reflecting solid profitability across large players in the sector (IBISWorld, 2025). Industry revenue grew at a 3.1% CAGR from 2020 to 2025, slightly above US GDP growth of 2% over the same period. Looking ahead, revenue growth is projected to slow to 2% CAGR from 2025 to 2030, consistent with a mature market, while U.S. GDP is expected to grow at approximately 2.11% over the next five years (Excel calculation based on FRED data).

All figures originate from the IBISWorld industry report, and together they suggest that the sector maintains stable profitability and is expected to grow broadly in line with the overall economy, offering a relevant benchmark to evaluate Costco's performance.

Industry's Competitive Environment

Key success factors for the industry's comparative advantages

The warehouse and discount retail industry is very competitive, with thin profit margins. Success depends on a few key advantages.

First, scale matters. Big retailers like Costco, which bought over $222 billion in merchandise in 2024 (Costco Wholesale Corporation, 2024), can negotiate the lowest prices from suppliers, often setting the "Costco price" as a benchmark. They also run extremely efficient supply chains, with fast-moving products, high inventory turnover, and minimal waste.

The biggest advantage, however, is the membership model. With over 90% of members renewing worldwide (Garrison Street Partners, n.d), Costco earns billions in recurring, high-margin fees. This revenue allows them to keep product prices very low (around 11-15% markup). Operational efficiency (simple warehouse layouts, low staffing costs, and strong sales per square foot) plus popular private-label brands like Kirkland Signature, reinforce customer loyalty and profitability (DamoTech, 2025).

In short, Costco's combination of loyal members, operational excellence, and massive scale creates a cycle that is very hard for competitors to copy.

Porter's Five Forces

An analysis using Porter's Five Forces shows that Costco operates in a very competitive retail market. The biggest challenges come from strong competition among existing companies, the high power of buyers, and the many substitute products available. On the other hand, the threat of new competitors is moderate, and the power of suppliers is weak.

<u>Competitive Rivalry: Strong</u>

Costco faces tough competition in a crowded market that includes major players like Walmart (and its Sam's Club stores), Target, and Amazon, as well as other local supermarkets and retail chains (Costco, 2024, p. 6). The retail market is mature, meaning it is not growing quickly, and customers can easily switch between stores because prices and products are often very similar. This strong rivalry pushes Costco to keep improving how efficiently it operates and to continue offering an excellent experience for its members.

Bargaining Power of Buyers: Strong

Customers have many shopping options and can easily compare prices online or in stores, which makes them very sensitive to price changes. Since switching to another retailer is easy and free (Costco, 2024, p. 6), Costco must constantly offer high-quality products at low prices to keep customers loyal. This effort pays off because Costco's global membership renewal rate is 90.5% (Costco, 2024, p. 7), showing strong customer satisfaction and trust.

Threat of Substitutes: Strong

Customers can buy the same types of products from supermarkets, online stores, and discount chains (Costco, 2024, p. 6). Because switching is easy and there is many options, Costco must stand out by offering unique products and experiences. The company does this through its popular Kirkland Signature brand, special product deals, and a better in-store shopping experience that encourages members to keep coming back.

Threat of New Entrants: Low to Moderate

Starting a large retail warehouse business like Costco requires a lot of money to build stores, buy inventory, and set up logistics and supply chains. New companies also need economies of scale to match Costco's low prices (Mordor Intelligence, 2024). Costco's strong reputation and loyal customer base, built over many years, make it very hard for new firms to compete effectively.

Bargaining Power of Suppliers: Weak

Costco has strong negotiating power because of its huge size and buying volume, with net sales of $242 billion in 2024 (Costco, 2024, p. 33). The company works with a large number of suppliers, which prevents any single supplier from having much control. In fact, many suppliers rely heavily on Costco for sales. Costco also buys most of its products directly from manufacturers, which cuts out middlemen and reduces supplier power even more (Costco, 2024, p. 5).

In summary, Costco operates in a highly competitive market with strong rivalry, powerful buyers, and many substitutes, which puts pressure on prices and performance. However, the threat of new entrants is limited due to high costs and scale requirements, and supplier power is weak because Costco's size gives it strong negotiating leverage. Overall, despite intense competition, Costco's scale, efficiency, and loyal membership base help it maintain a strong position in the retail industry.

Global Context and the Road Ahead

The Globalization Effect on This Industry

Globalization has made a significant impact on the warehouse-club and membership-based wholesale retail sector by enabling global expansion into over 25 countries and creating intricate worldwide supply chains. This model allows for direct sourcing from manufacturers across the globe, achieving economies of scale and maintaining low prices, a critical advantage as 55% of consumers prioritize the lowest price (Costco Annual Report, 2024; Mordor Intelligence, 2024). The industry model now operates in markets such as Japan, South Korea, Mexico, Spain, and Australia, supported by rising household income and urbanization which supported bulk purchasing and value-orientated retail formats (Costco Annual Report, 2024; Mordor Intelligence, 2024).

This model allows for direct sourcing from manufacturers across the globe, achieving economies of scale and maintaining low prices, a critical advantage as 55% of consumers prioritize the lowest price.

However, this global integration also creates vulnerability. Recent US tariff hikes under President Trump imposed an average 10% tariff on imported consumer goods, increasing costs across categories like electronics, appliances, and furniture. Reports from Reuters (2025) and the Federal Reserve Bank of Richmond (2025) note that large U.S. retailers, including warehouse-club operators, were forced to renegotiate supplier contracts and absorb part of the additional costs to preserve their low-price image. These tariff-driven pressures highlight how political decisions in one country can ripple through the globally connected retail industry.

Despite these risks, globalization remains central to the industry's performance. It enables cost advantages through large-scale sourcing and provides access to growing customer markets. Moreover, the membership-fee model offers a steady revenue stream that cushions profitability when import costs fluctuate. Overall, globalization has made the warehouse-club industry more efficient and far-reaching, but also more exposed to trade tensions and geopolitical instability that directly influence input costs and pricing strategies.

The Futures Outlook for the Industry

As mentioned earlier, the industry is expected to reach 783 and 72.22 billion dollars in the United States and Canada respectively by 2030 (IBISWorld, 2025). This growth is explained in part by technology, demand shifts, and increasing competition.. Changes in the CAD/USD exchange rate will continue to impact Costco's import costs and profits in Canada (Barhat, 2024). One solution would be to adopt flexible pricing strategies which presents a challenge for Costco as the brand is built on providing customers with quality goods and services at the lowest possible prices.

One of the most significant shifts in the industry is linked to new strategies to face competition which are closely intertwined with technology. Indeed, competitors like Walmart are aggressively expanding their delivery and curbside pickup; thus, Costco's will have to use new retail strategies to remain relevant. Companies are adopting robotics, and technologies like AI which streamlines operations (Bowman, 2020). Costco has the capital to invest in these technologies which will help improve efficiency, inventory management, and customer service. Costco’s future optics relies on their ability to incorporate those new technologies required to be competitive.

To go further, demographic shifts will also represent an opportunity. Indeed, the aging population for instance increases demand for pharmaceuticals, a strong category of product for Costco (The Retirement Group, n.d.). Moreover, increasing immigration will also increase demand for diverse products and Costco's ability to adapt its product lines to those demographic shifts will be a key competitive advantage.

Costco’s customer loyalty gives them an advantage, but the competitive intensity from Walmart and other competitors coupled with the need to adapt to e-commerce represent the most significant challenges and opportunities (Ecommerce North America, 2025)

Part II - Costco Analysis

Costco's Competitiveness

Costco's Respective Core Businesses

Membership Fees

Costco's most profitable activity lies in its membership model. Although membership fees account for only a small portion of total revenue, they represent the majority of the company's operating profit. According to Management Consulted, membership fees make up roughly 2% of total revenue but contribute about 73% of gross profit, making them the key profit engine of Costco's business model. The subscription structure, with renewal rates consistently exceeding 90%, provides a stable and predictable stream of income while fostering strong customer retention.

Merchandise and Ancillary Services

The foundation of Costco's revenue remains its merchandise sales and complementary in-warehouse services. As reported by Investopedia, the company generates most of its revenue from sales across various product categories such as food, sundries, fresh produce, and non-food items. Additional services—including gasoline stations, pharmacies, tire centers, and optical departments—contribute incremental revenue and increase member traffic. Despite deliberately low margins, these operations reinforce Costco's low-price value proposition and help drive membership growth over time.

Kirkland Signature

Another essential pillar of Costco's operations is its private-label brand, Kirkland Signature. This line has become a major component of the company's overall sales and brand identity. By offering products that match or exceed the quality of national brands at lower prices, Kirkland enhances Costco's reputation for value and strengthens customer loyalty. As noted in a ResearchGate case study, Kirkland's success not only boosts revenue but also differentiates Costco from other warehouse clubs and traditional retailers, consolidating its competitive position in the market.

Costco's Respective Main Products

Costco's product offering can be classified in multiple different categories. One is Foods and Sundries including dry grocery, candy, cooler, freezer, deli, liquor, and tobacco. The second one is Non-Foods which includes major appliances, small electronics, health and beauty aids, hardware, lawn and garden, sporting goods, tires, toys and seasonal, office supplies, automotive, stamps, apparel, furniture, housewares and more. The third one is Fresh Foods such as meat, produce, service deli, and bakery. Moreover, there is also warehouse ancillary with gasoline, pharmacy, optical, food court, hearing aids, and tire installation. Finally, other Businesses such as e-commerce, which sell products and services that complement warehouse operations

Costco's Competitive Advantage

Costco's main advantage comes from its low prices, membership model and strong customer loyalty. By selling quality products in bulk at low prices, Costco attracts customers who want to save money by still buying in large numbers. Its membership system also creates steady income and keeps people coming back to them. Because members pay to join, they are more likely to stay loyal and shop often. In a market where many stores compete on price, Costco's large size, efficient operations, and loyal members give it a strong position.

Financial Ratios

[Calculations can be found in the Excel]

Profitability

The 11,02% ROA means that for every $1 of assets, Costco generated approximately $0.1102 of Net Income in 2025, indicating that the company is effectively using its assets to generate profits.

The 21.39% Return on Invested Capital (ROIC) for Costco in 2025 indicates an efficient use of its capital base. This means that for every dollar invested in the business Costco generated approximately $0.2139 in after-tax operating profit (NOPAT).

We performed a 5-factor DuPont Analysis to analyze ROE and found Costco's Return on Equity (ROE) for 2025 to be approximately 30.69%

Table 2 - DuPont Analysis (Using a small sample)

DuPont Analysis	COSTCO	INDUSTRY
NET INCOME/ INCOME BEFORE TAX	0.7486596413	0.769369096
INCOME BEFORE TAX/ EBIT	1.041895406	0.8845786407
EBIT/SALES	0.0384680933	0.07155434647
SALES/ TOTAL AVERAGE ASSETS	3.674021643	1.880413964
AVERAGE TOTAL ASSETS/ AVERAGE EQUITY	2.783503202	3.650473008

After performing the 5 factor DuPont Analysis, we can see that the company's Tax Burden is approximately 0.7487. This ratio is slightly lower than the industry ratio of 0.7695, which indicates that Costco has a slightly higher effective tax rate than its industry peers; therefore, a higher portion of pre-tax profit goes to taxes.

Costco’s EBIT margin of 0.0385 is lower than industry average of 0.0716. The company operates on very thin margins (3.85¢ per dollar of sales). The company relies on high sales volume and membership fees for its profitability, offering low prices to increase customer loyalty. Costco generates a lesser amount of operating profit per dollar of revenue than the average firm in its industry

Costco's interest burden ratio of 1.0419 indicates it has minimal interest costs. The industry average of 0.8846 shows that the typical firm uses about 11.5% of its EBIT to cover interest costs. Costco has a more efficient and conservative financial structure regarding debt than the average firm.

The company’s financial leverage is approximately 2.7835*Equity. It is significant, but not an excessive debt usage. Moreover, it is lower than the industry average of 3.6505 indicating that the average company in the industry has a more debt-heavy capital structure, but Costco uses less debt to fund its operation.

Costco's asset turnover ratio of 3.6746 is nearly double the industry average of 1.8804. Costco generates $3.67 in sales for every $1 of assets it owns, compared to just $1.88 for the average industry firm reflecting fast-inventory-turnover business and efficient warehouse use.

Overall, Costco's ROE of 30.68% is high and driven primarily by operational efficiency. The main cause is the high asset turnover, they generate massive sales volume from assets, which compensates for the low-profit margins. Costco EVA in 2025 is approximately 5,198,316,022. It represents the company’s true economic profit after accounting for the cost of capital. The number being positive means that Costco is creating shareholder value.

Turnover ratios

The Total Asset Turnover ratio is 3.6740. It measures how efficiently a Costco uses all of its assets to generate sales. For every $1 Costco has in total assets, it generates $3.67 in revenue.

Fixed Asset Turnover is 8.8581. It measures how efficiently Costco uses its fixed assets to generate sales. For every $1 Costco has in fixed assets, it generates $8.85 in sales.

Inventory turnover is 13.0504: It measures how efficiently the company uses its inventory. Costco sold and replaced its inventory roughly 13 times.

Company Financing

Interest Burden of 1.0419 earning more in interest income than the amount paid in interest expenses on debt.

With a times interest earned of 67.42, Costco could use its current earnings to cover its interest payments 67 times over.

Overall Costco is not overexposed to debt related risk. Indeed, after looking at Damodaran's Ratings, Interest Coverage Ratios and spread table, we can see that Costco falls in the large non-financial service firms with a rating of AAA and a spread of 0.45% (Damodaran. 2025).

Table 3 - Interest Coverage, Credit Rating, and Default Spread

For large non-financial service firms

If interest coverage ratio is			
>	*≤ to*	*Rating is*	*Spread is*
-100000	0.199999	D2/D	19.00%
0.2	0.649999	C2/C	15.50%
0.65	0.799999	Ca2/CC	10.10%
0.8	1.249999	Caa/CCC	7.28%
1.25	1.499999	B3/B-	4.42%
1.5	1.749999	B2/B	3.00%
1.75	1.999999	B1/B+	2.61%
2	2.2499999	Ba2/BB	1.83%
2.25	2.49999	Ba1/BB+	1.55%
2.5	2.999999	Baa2/BBB	1.20%
3	4.249999	A3/A-	0.95%
4.25	5.499999	A2/A	0.85%
5.5	6.499999	A1/A+	0.77%
6.5	8.499999	Aa2/AA	0.60%
8.50	100000	Aaa/AAA	0.45%

Liquidity

With a Current ratio 1.0343: Current assets cover about 1.03 times the amount of current liabilities. When looking at the average measurement of industry peers, we can see that Costco's ratio is slightly lower than the average firm, but not by much.

With a Quick ratio of 0.4982: Costco can cover 49.82% of its current liabilities with its Cash and cash equivalents.

With a Cash ratio of 0.4119 Costco can cover 41.19% of its current liabilities with its Cash and cash equivalents. Although it can be said from the cash ratio and other liquidity ratios that the company lacks liquidity, it is important to note that they use their cash for growth and operations rather than letting it sit idle.

Where does Costco stand against its peers?
We compared Costco's ratios with some of the other companies in the sample and obtained the following results.

Table 4 - Comparison of ratios with the industry (Using a small sample)

COSTCO	0.3068616679	0.0384680933	67.42207792	2.783503202	3.674021643	0.41187884	1.0342783
SAMPLE	**ROE**	**EBIT/SALES**	**Interest coverage ratio**	**AVERAGE TOTAL ASSETS/ AVERAGE EQUITY**	**SALES/ TOTAL AVERAGE ASSETS**	**cash ratio**	**current ratio**
WMT US Equity	0.2146988337	0.04350829753	10.75806452	2.738573787	2.623528359	0.09356622215	0.822682846
TGT US Equity	0.2911951029	0.05223054257	13.54257908	4.026087266	1.884039779	0.2289533151	0.9353334295
DLTR US Equity	0.1846685266	0.08322991267	13.6	3.60192197	0.8638741009	0.1463445882	1.060715825
L CN Equity	0.1988201879	0.06395253548	4.75274056	3.489578326	1.528043176	0.1792997961	1.236233855
KR US Equity	0.2680816819	0.026161783	8.553333333	5.186651242	2.853405223	1.028578852	0.9581555834
ACI US Equity	0.1477961336	0.1932743645	4.251838667	2.353916723	0.4928222921	0.3590838793	1.644168542
BJ US Equity	0.3232714465	0.03852298957	15.0354563	4.156581743	2.917184818	0.0111567029	0.7414756113
AVERAGE	0.2326474162	0.07155434647	10.07057321	3.650473008	1.880413964	0.2924261936	1.056966527

Costco's Return on Equity (ROE) of 30.69% is significantly higher than the industry average of 23% demonstrating a greater ability to generate profits from shareholder investments. This is important because their EBIT to Sales margin is only 3.8% and is also below the industry average, indicating that their profitability is not from high pricing but from other efficiencies.

The company stands out the most with its asset turnover ratio of 3.67, nearly double the industry average of 1.88. This highlights their operational model strategy with high sales volume and low margin strategy.

Furthermore, Costco exhibits a solid liquidity. While their current ratio of 1.03 is lower than the the industry average of 1.06, their cash ratio of 0.41 surpasses the peer average of 0.29. This indicates a good capacity to cover short-term obligations without problem.

Costco's financial leverage ratio of 2.78 is lower than the industry average of 3.65, thus indicating a conservative use of debt. This is highlighted by the high interest coverage ratio of 67.42, which exceeds the industry average of 10.07. This means Costco's earnings are 67 times its interest expense, which indicates a very strong financial safety and profitability.

Costco's financial strength lies in their operational efficiency and financial management, which fuels their return on equity and positions them as a top industry player.

The same comparison analysis was done with a larger sample and all the calculations can be found on the excel file.

Costco's future prospects

[Calculations can be found in the Excel]

We use five years of monthly adjusted closing prices for Costco's stock to look at the company's short-term price changes and make a two-year forecast. We use adjusted prices instead of raw closes because they take into account dividends and stock splits, which means they show the real return that a shareholder has made over time. This is in line with the goal of valuing equity based on total economic return instead of just price appreciation.

We calculate monthly log returns from this 5-year period as follows:

$$\mathbf{r_t = \ln(P_t / P_{t-1})},$$

where P_t is the closing price for month t after adjustments. Log returns are better because they can be added over time and fit with the continuous compounding framework used in option pricing and GBM-type models, which we learned about in class. Then, the sample mean of the monthly log returns ($\bar{r}$) and their sample standard deviation (σ_monthly) are used to figure out the annual drift and annual volatility:

$$\textbf{annual drift } \mu = 12 \times \bar{r}$$

The annual volatility σ is equal to the square root of 12 times σ_monthly.

Based on our data, this method shows that Costco's annual drift has been about 18.5% over the past five years. This means that the average monthly log return is about $\bar{r} \approx 0.185 / 12 \approx 0.0154$, or about 1.5% per month when compounded continuously. We then put these parameters into a deterministic Geometric Brownian Motion (GBM) trend model for the price of the stock:

$$\mathbf{P(t) = P_0 \cdot \exp(\mu \cdot t)},$$

where P_0 is the most recent price, μ is the annual drift, and t is the number of years. For this question, we are purposefully leaving out the random shock term (the $\sigma\sqrt{t}\cdot Z$ part of full GBM) and only looking at the trend part. This is because the goal is to show how short-term trends work, not to show how path-by-path volatility works. We set the forecast horizon to exactly two years and break it up into 24 monthly steps to get a smooth projected path.

The model is based on standard finance assumptions: monthly returns are independent and identically distributed, they are roughly normal, and Costco's drift and volatility will stay the same for the next two years. These assumptions are in line with what we've learned in class and give us a way to connect past performance to current price expectations.

Base Case (μ = 18.5%)

The base case assumes that the annual growth rate will stay at 18.5%, which is the historical drift. This value comes straight from the data, as explained above.

$\mu\_base = 12 \times \bar{r} \approx 18.5\%$.

This scenario assumes that Costco will keep running the same way it has for the past five years: membership renewal rates will stay above 90%, prices will be disciplined with markups of about 14–15%, and the supply chain will be very efficient, allowing for high inventory turnover. It also fits with the bigger picture in our report, which shows that Costco's business model is structurally defensive. The company has been able to grow its earnings and cash flows through different macro environments by charging membership fees and getting goods at low prices. With this base drift, the deterministic GBM formula says that the expected price will change by about a factor of

$\exp(\mu\_base \cdot 2) \approx \exp(0.185 \times 2) \approx \exp(0.37) \approx 1.45$,

This means that the stock should be about 45% higher in two years if things stay the same as they have been recently.

Case for the Bull (μ = 23%)

In the bull case, we raise the annual drift to 23%, which is about 4.5 percentage points higher than the base case. This means that the growth rate goes up by about 24% (23% / 18.5% ≈ 1.24). This is not random; it shows a situation where several good drivers, which were talked about in earlier parts of the project, come together at the same time:

Revenue growth: demand is stronger than expected because the company is still expanding its warehouses, especially in international markets like Asia and Europe, and e-commerce and delivery partnerships are becoming more common.

Margins: A small increase in margins due to operating leverage, which spreads fixed costs over more sales, and a higher Kirkland penetration, which improves gross margins.

Macroeconomic environment: a more favorable setting with lower interest rates or financing costs and low inflation, which increases real consumer spending and lowers Costco's cost of capital.

Supply chain stability: freight, fuel, and foreign exchange rates have stayed stable compared to the extreme changes that happened in 2021–2022. This has let Costco fully take advantage of its buying power. The pace of expansion is speeding up with more warehouse openings and new formats (like new markets and extra services) that bring in more money.

Investor sentiment: a "risk-on" environment in the stock market, which has caused some high-quality defensive growth stocks like Costco to trade at higher multiples.

The bull drift means that, mathematically, there is a two-year scaling factor of

$$\exp(\mu\_bull \cdot 2) = \exp(0.23 \times 2) = \exp(0.46) \approx 1.59,$$

So, in the bull case, the price is expected to be about 59% higher than it is now after two years. This is in line with a world where Costco not only keeps doing well, but also gets more value from its supply chain and membership model by raising fees, increasing the number of items per warehouse, and getting into more countries.

As we stressed in the presentation, Costco's business model is economically defensive. Membership fees and a well-run supply chain protect the company from losses during recessions. That means that when things are going well, more of the upside can build on itself. This is why a bull market should have a higher drift than the historical average.

Bear Case (μ = 12%)

In the bear case, we cut the yearly drift to 12%, which is about 35% lower than the base drift (12% / 18.5% ≈ 0.65). This is meant to show a macro- and cost-pressured environment, but not a change in the way Costco does business.

<u>These are the assumptions:</u>

Revenue growth: still positive, but slower because people are being more careful and some categories are getting weaker.

Margins: margin compression due to higher input costs (fuel, freight, certain commodities) and a potentially stronger U.S. dollar affecting import costs.

Macroeconomic environment: a less favorable setting with ongoing inflation, higher real rates, or the risk of a recession, which makes people feel less positive about spending money.

Supply chain stability: more frequent or long-lasting problems with shipping lanes, fuel price spikes, or currency fluctuations, which raise Costco's costs even if its relative position stays strong. The pace of growth is slower because warehouses are opening later or projects are being put off while management waits for better visibility and focuses on capital discipline.

Investor mood: more "risk-off" markets, which lower the price-to-earnings ratios of stocks around the world, including Costco.

We purposely keep μ_bear positive at 12%, even though these are the assumptions we make. This is the main point of the rest of the report: Costco's membership model and well-run supply chain make it more stable than cyclical. Membership fees are a steady source of income with a high profit margin that helps keep earnings steady even when the economy is bad. Because of this, the company is unlikely to have a structurally negative expected return, but it will probably grow more slowly.

The two-year scaling factor is μ_bear.

$\exp(\mu\_bear \cdot 2) = \exp(0.12 \times 2) = \exp(0.24) \approx 1.27$,

So, even in the bear case, the price is still expected to be about 27% higher than it is now after two years, but it is still much lower than the base and bull paths.

The three drift values can be mapped directly into the six assumption categories:

<u>Revenue growth</u>

Bull: above-trend revenue growth from accelerated warehouse openings and higher same-store sales.

Base: revenue grows in line with its recent 5-year trend, driven by stable volume and modest price/mix.

Bear: revenue still grows, but at a slower pace due to cautious consumer behavior.

<u>Margins</u>

Bull: slight margin expansion from operating leverage and higher Kirkland penetration.

Base: margins remain broadly stable; Costco maintains discipline on markups and cost control.

Bear: margin tightening from higher fuel, freight, and FX costs, partially offset by Costco’s scale.

Macroeconomic environment

Bull: rate cuts or easier monetary conditions, lower inflation, strong labor markets.

Base: broadly stable macro environment; no major shocks.

Bear: elevated or volatile inflation, higher real rates, or recession risk weighing on consumer spending.

Supply chain stability

Bull: relatively smooth global logistics, with costs normalized versus pandemic-era spikes.

Base: normal volatility, but no structural disruptions.

Bear: more frequent or severe disruptions in shipping, fuel prices, or FX rates.

Costco expansion plans

Bull: accelerated global expansion, faster unit growth, and incremental services (online, delivery, ancillary).

Base: steady expansion in line with management's recent pace.

Bear: selective or delayed expansion, with more conservative capital allocation.

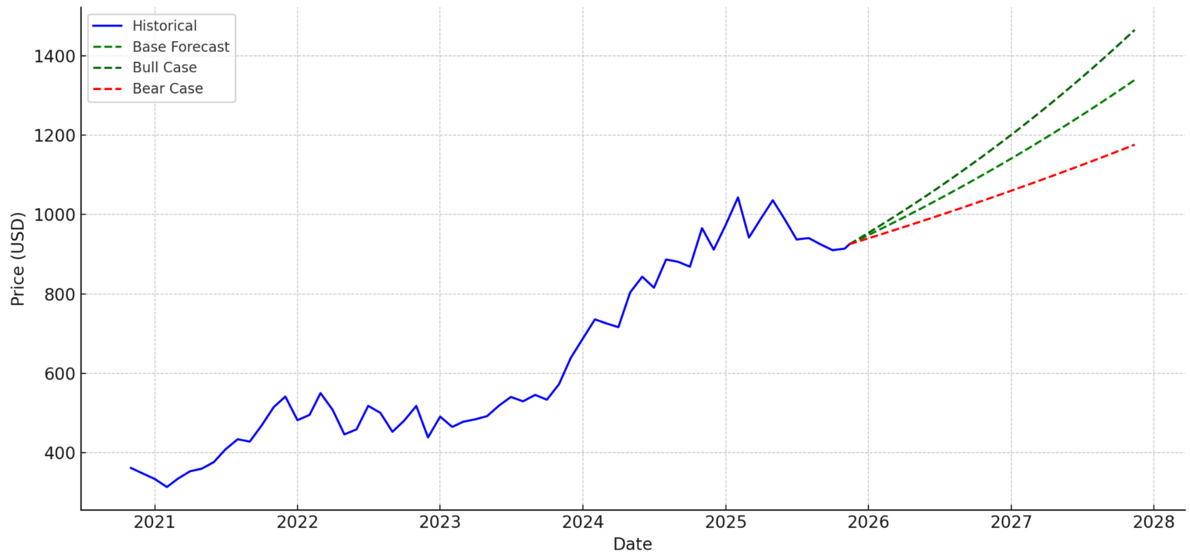
Investor sentiment

Bull: "risk-on" markets that reward quality growth and allow some multiple expansion.

Base: neutral sentiment; multiples around historical averages.

Bear: "risk-off" environment, with some multiple compression even for defensive names.

Graph 1 - Stock Price : Historical & Forecast Scenarios



The chosen drifts (23%, 18.5%, and 12%) are therefore not just ad-hoc numbers, but quantitative summaries of these qualitative assumptions, anchored to the historical drift and adjusted up or down depending on how these six drivers play out.

Discounted Free Cash Flow Model (DFCF)

To calculate Costco's discounted free cash flow to firm (FCFF) value, we start by outlining key assumptions that guide the valuation.

Cost of Debt

We began by calculating Costco's current cost of debt. This was derived using the current U.S. 10-Year Treasury Note yield of 4.067%, which represents the risk-free rate. We then added the ICE BofA AA U.S. Corporate Index Option-Adjusted Spread (0.48%) as Costco's company default spread, consistent with its A2/AA credit rating and U.S. corporate debt profile. Since Costco operates entirely within the United States—a mature and stable market—the country default spread is assumed to be 0%. These inputs result in a pre-tax cost of debt of 4.547%.

Free Cash Flow to Firm ($FCFF_0$)

Based on Costco's 2025 annual report, we calculated the current year's free cash flow to the firm ($FCFF_0$) by adjusting for operating leases and confirming there were no R&D capitalizations required. Starting with an EBIT of $10,383,000 thousand, we made adjustments for operating leases to arrive at an adjusted EBIT of $10,519,600 thousand. After applying Costco's marginal tax rate of 25.87%, we obtained an after-tax EBIT of $7,797,806.66 thousand.

We then added depreciation and amortization ($2,426,000 thousand), subtracted CapEx ($5,498,000 thousand), and accounted for the change in non-cash working capital (-$411,000 thousand). The resulting $FCFF_0$ is $5,136,806.66 thousand, representing Costco's current year free cash flow available to all investors.

Table 5 - Current Year FCFF for Costco Wholesale

(amounts in thousands)	
EBIT	$10,383,000.00
Effective Tax Rate	25.1340%
Risk free rate	4.0670%
Company Default spread	0.48%
Country Default Spread	0.00%
pre-tax Cost of Debt	**4.5470%**
Current Operational Lease expense	$271,000.00
Life of the Operational Lease	20
Unadjusted Book Value of Debt	$5,805,000.00
Current R&D Expense	0
Amortizable Life for the R&D	0
Adjusted EBIT (Due to OL & R&D)	$10,519,600.00
Final Adjustment on EBIT (1-T)	**$7,875,599.96**
Capital expenditure	$5,498,000.00
Depreciation & Amortization	$2,426,000.00
Adjustement on CapEx	$3,072,000.00
Inventory n-1	18,647,000.00
Inventory n	18,116,000.00
A/R n-1	$2,721,000.00
A/R n	$3,203,000.00
A/P n-1	$19,421,000.00
A/P n	$19,783,000.00
Non Cash NWC n-1	1,947,000.00
Non Cash NWC n	1,536,000.00
change in NWC	-411,000.00
FCFF	$5,214,599.96

Country Risk Premium

To find Costco's country risk premium, we used the revenue weighted approach. Costco and Bloomberg both report the revenue weight as the United States, Canada, and Other countries. This made it difficult for us to determine the real revenue weight for the rest of the countries that Costco operates in. To solve this, we decided to compare the number of stores in each of the other countries to find an estimated revenue weight for the remaining countries. Once we had all the weights, we used NYU's calculations of country risk premiums as a reference. We computed a revenue weighted country risk premium of 0.16639% for Costco.

Table 6 - Revenue Weighted CRP

Country	CDS	Weight (revenue)	Weighted CRP
United states	0.00%	72.40%	0.00%
Canada	0.00%	13.70%	0.00%
Mexico	2.54%	3.33%	0.0847%
Japan	0.94%	2.93%	0.0275%
The United Kingdom	0.80%	2.36%	0.0189%
South Korea	0.66%	1.54%	0.0102%
Australia	0.00%	1.22%	0.00%
Taiwan	0.80%	1.14%	0.0091%
China	0.94%	0.57%	0.0053%
Spain	2.13%	0.41%	0.0087%
France	0.80%	0.16%	0.0013%
New Zealand	0.00%	0.08%	0.00%
Sweden	0.00%	0.08%	0.00%
Iceland	0.94%	0.08%	0.0008%
Total		**100.00%**	**0.16639%**

WACC

The industry average beta was calculated using the Bloomberg overridable raw betas of industry samples for membership and sales. These are unlevered using the average net debt to equity ratios and the average effective tax rates. We then weighted the revenue portions from sales (98.07%) and membership (1.93%) to find Costco's unlevered beta. The weighted average unlevered beta is levered with Costco's 25% marginal tax rate and their net debt to equity ratio of 0%. After relevering the beta, we computed Costco's levered bottom-up beta as 0.4563

Cost of equity was found through the beta adjusted operation CRP method. Using the risk-free rate of 4.067%, bottom up beta 0.4563, mature ERP of 4.33%, and CRP of 0.1664%, we computed the Cost of equity to be 6.092%. Cost of debt is the one found for FCFF (4.547%). The market value of equity ($409,976,954,400.00) is the share price ($925.08) multiplied by the number of shares outstanding (443,180,000.00). The market value of debt ($7,355,121,420) was found by computed using the book value of debt ($5,713,000,000), cost of debt (4.547%), interest expense (154,000,000), and the average maturity of outstanding bonds (3.958 years). By setting the book value of debt to future value, interest expense to payment, average time to maturity to number of periods, and using the cost of debt as the rate, we can compute the present value to find the market value of debt. We then added the present value of the Operating Lease to find an adjusted market value of debt of $8,030,429,383.

Using the WACC formula and multiplying the cost of debt by the marginal tax rate the weighted average cost of capital is found at 6.07%.

Growth

Since Costco is a moderate growth company, stable growth is calculated by taking the risk-free rate (4.067%) and adding 1% to it, giving a stable growth rate of 5.067%. A high growth period of 5 years is used with a high growth rate of 7.229%. The high growth rate is linearly reduced towards the stable growth rate in year six. This is done to reduce the aggressiveness of the growth towards a moderate level. Year one growth rate is 7.229%, year two is 6.797%, year three is 6.364%, year four is 5.932%, year five is 5.499% and the year six stable growth rate is 5.067%.

Each growth rate is applied to the FCFF0 ($5,214,599.96) to find FCFF1 ($5,591,553.88), FCFF2 ($5,971,581.26), FCFF3 ($6,351,618.10), FCFF4 ($6,728,378.74) and FCFF5 ($7,098,396.75). They are then discounted using WACC (6.052%) and summed up, for a present value of FCFFs of $26,517,174.48.

Terminal Value (TV)

The Terminal Value (TV) represents the present value of all future cash flows beyond the forecast period, starting after Year 5, assuming the company enters a stable, perpetual growth phase. Since it is impossible to predict cash flows indefinitely, we use the Perpetual Growth Model, also known as the Gordon Growth Model, to estimate this value.

To calculate the TV, we first grow the Year 5 free cash flow (FCFF) by the chosen stable growth rate of 5.067%, resulting in an end of fifth year FCFF of $6,687,326.15. We then divide this figure by the difference between the Weighted Average Cost of Capital (WACC) and the stable growth rate, giving a Terminal Value of $678.67 million. This amount represents the value of all future cash flows from Year 6 onwards, measured at the end of Year 5.

To express the Terminal Value in present-day terms, we discount it back five years using the WACC, which results in a present value of $505.89 million. This analysis shows that the Terminal Value makes up a significant portion of the total enterprise value, which is typical for established, stable companies like Costco with predictable long-term growth. The selected stable growth rate of 5.067% is slightly higher than the risk-free rate of 4.067%, but it is still reasonable because it is below the nominal long-term growth rate of the economy.

Table 7 - Costco Wholesale Terminal Value (TV) and Present Value of TV

TERMINAL VALUE		
High-growth period	5 years	
FCFF at year 5	$6,364,820.68	FCFF*(1+stable g)
Growth rate high-growth period g1	7.2288%	
	0.43%	
g stable	5.0670%	
WACC	6.052%	
Numerator:	$6,687,326.15	
Denominator	0.985%	
TV	$678,668,373.94	
PV TV	**$505,889,803.67**	(in Thousands)

Firm Value

The total Enterprise Value of Costco is calculated by summing the present value of the Free Cash Flows during the high-growth period and the present value of the Terminal Value.

Enterprise Value=PV(High-Growth FCFFs)+PV(Terminal Value)

Using the previously calculated figures:

- Present Value of High-Growth FCFFs: $26,517,174.48
- Present Value of Terminal Value: $505,889,803.67

Enterprise Value = $26,517,174.48 + $505,889,803.67 = $532,406,978.15

Therefore, the estimated Enterprise Value for Costco Wholesale Corporation is approximately $532.41 billion.

Comparing our calculated Fundamental Equity Value of $525.05 billion to the current Market Capitalization of $409.98 billion indicates that Costco Wholesale Corporation's stock is significantly undervalued.

Specifically, the market price implies an undervaluation of approximately 28.07%. This suggests that, based on our discounted cash flow model, Costco's intrinsic value is substantially higher than its current market value, presenting a potentially attractive investment opportunity.

Table 8 - Costco Wholesale Entreprise Value

Entreprise Value						
	FCFF0	FCFF1	FCFF2	FCFF3	FCFF4	FCFF5
Value	$5,214,599.96	$5,591,553.88	$5,971,581.26	$6,351,618.10	$6,728,378.74	$7,098,396.75
PV	$5,214,599.96	$5,272,446.44	$5,309,439.45	$5,325,046.03	$5,318,988.87	$5,291,253.69
Sum	$26,517,174.48					
Entreprise Value	$532,406,978.15	(in Thousands)				

Conclusion

Our DCF model suggests that Costco is undervalued by 28.07%, but this estimate depends strongly on the assumptions we made about long-term growth and the cost of capital. Different analysts using different approaches arrive at different conclusions. For example, Simply Wall St., which uses a DCF built on earnings forecasts, finds that Costco may actually be overvalued by about 30%. This contrast shows that valuation is never a precise number; it is a range that changes depending on the assumptions behind the model.

Part of the reason the market prices Costco higher than some valuations is that investors place a premium on its defensive business model. Its stable membership revenue, strong brand, and proven resilience in downturns make the company especially attractive to long-term investors, which helps explain its premium valuation.

To test how solid our estimate is, we ran a sensitivity analysis by adjusting the two most critical inputs: the high-growth rate (g) and the WACC. We applied multipliers of 96%, 98%, 102%, and 104% to the base assumptions for both variables, recalculating the entire DCF model, including the declining growth path and TV, for each scenario.

The results show that Costco's stock seems undervalued across all reasonable scenarios. The undervaluation ranges from a small 0.65% in the most conservative case (lower growth, higher WACC) to a large 62.23% in the most optimistic case (higher growth, lower WACC). This means that our base case estimate of 28.07% undervaluation is realistic and supported by the sensitivity test.

Table 9 - Sensitivity Analysis for Costco DCF: WACC vs High-Growth OI Rate

	WACC				
High Growth period Rate (g1)		5.85%	5.97%	6.21%	6.33%
	-6.94%	-62.14%	-40.04%	-9.96%	0.74%
	-7.09%	-62.20%	-40.07%	-9.98%	0.71%
	-7.37%	-62.21%	-40.12%	-10.03%	0.67%
	-7.52%	-62.23%	-40.14%	-10.05%	0.65%

A major reason our valuation is higher than more conservative models is because our assumptions lean optimistic in key areas. We assume:

- A relatively high perpetual growth rate (risk-free rate + 1%)
- A full five-year high-growth period before stabilizing
- Continued strong margins and membership renewal
- A relatively low WACC based on a bottom-up beta.

More conservative models would assume slower long-term growth, shorter high-growth periods, margins that drift closer to the industry average, and a higher discount rate. All of these would naturally produce a lower valuation. Our model instead reflects a belief that Costco can maintain its competitive advantages longer than the average retailer.

Overall, the wholesale retail industry remains defensive and resilient, especially during downturns, when consumers often trade down to lower-cost options like Costco. The company's steady membership income, loyal customer base, and strong operating model support continued long-term growth.

Taking our results together: the DCF, the sensitivity analysis, and Costco's durable business fundamentals, we maintain a Buy recommendation. The stock appears undervalued relative to our projections, and Costco's strength makes it well-positioned for long-term performance.

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