

Costco Wholesale

Capitalism Done Right: Analysis and Modeling of Costco Wholesale Corp.

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Section 1: Overview of Costco

Sub-Section 1: Business Model

i. Money Generation

Costco Wholesale Corp. [COST (U.S.: Nasdaq)] is a global membership-based warehouse giant retailer focused on providing low prices on a limited range of products. Costco generates revenue from the sale of merchandise, and the collection of membership fees. Merchandise sales include foods and sundries, non-foods, fresh foods, and warehouse ancillary. As for memberships, Costco offers two tiers, the standard Gold Star tier at \$65 per year that provides access to Costco's warehouses, and the more premium Executive tier at \$130 per year that includes 2% cashback on purchases. Merchandise sales as a revenue source has very thin margins, whereas the membership revenue has near 100% margins.

ii. Operation

- The no selection- higher efficacy tradeoff

Costco's inventory strategy focuses on offering a carefully selected range of high-quality products with each warehouse carrying approximately 3,700 to 4,000 SKUs (Stock Keeping Units). This is in contrast to the more mainstream supermarkets where SKU count would be north of 16,000, which basically means more options. Costco intentionally takes this away and does the selection itself. This may be inconvenient for some, but it leads to meaningfully lower number of suppliers, making in-depth direct negotiations much more feasible, leading to better pricing and more efficient inventory management.

- No-frills design

Other than cost of merchandise, running Costco is fairly low cost due to its basic functional layouts requiring minimal maintenance, palletized displays reducing unpacking and shelving cost (**Figure 1a**), and self-service models lowering employee headcount.

- Cross-Docking

Unlike conventional retail with dedicated storage facilities, Costco operates a logistical practice called cross-docking where inventory is immediately transferred from incoming shipments to outbound trucks for delivery to warehouses (**Figure 1b**). This eliminates the need for storage facilities and allow merchandise to be immediately ready for sale leading to higher inventory turnover.

iii. Kirkland

The Kirkland brand, Costco's private-label line that is known for high quality, contributes more than \$50 billion in sales representing ~25%-30% of total sales. Before committing to the Kirkland vertical integration, Costco studies whether doing so would lead to lower product prices for customers.

iv. Controlled Margins

Costco makes an intentional decision to limit their mark-ups to 10-15%, which leads to thin gross margin. In another words, they have a target margin, and do not seek higher margins on the sale of merchandise. In fact, when input prices drop, Costco subsequently drops product prices for their customers. Jim Senegal, former CEO of Costco, has a great quote on this. "You could raise the price of a bottle of ketchup to \$1.03 instead of \$1.00, and no one would know. Raising prices just three percent would add 50 percent to our pre-tax income. Why not do it? It's like heroin. You do it a little bit and you want a little more."

v. Strong employee focus

Costco pays their employees significantly higher wages than the industry. For instance, the average hourly wage of Costco's employees is \$30, as opposed to \$19.50 for Walmart's. In addition, Costco has a culture of promoting within, where almost all of their executive team have basically been there for over 25 years. Both facts result in Costco enjoying substantially lower employee turnover rates than industry.

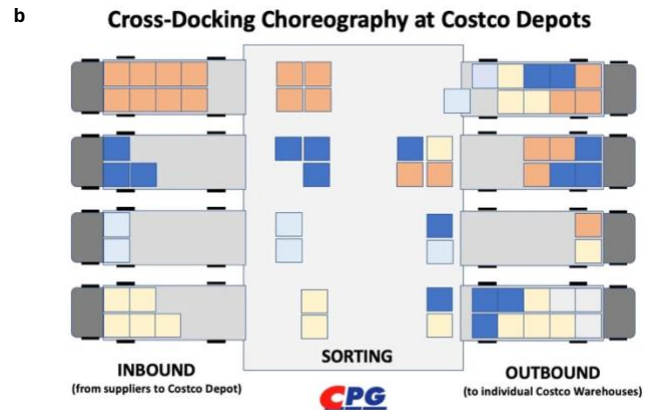


Figure 1a, Costco warehouse in China with merchandise stacked on pallets that display products and also functions as a shipping container (AOL 2024), **Figure 1b**, graphical illustration of the cross-docking process where suppliers trucks would offload merchandise that is immediately sorted and loaded into Costco warehouses, with no intermediate storage facilities (Club Store Packaging, 2020).

Sub-Section 2: Financials

In fiscal year 2024, Costco achieved \$254 billion of revenue, up 5% from \$242 billion in the prior year (**Table 1**). Growth in revenue seems to continue normalizing to single digits from the post-pandemic high-growth phase of double digits (**Table 2**). Costco's margins are fairly constant with 2024 showing only 30bps increase in operating and net margins (**Table 2**). Although this may seem like a tiny increase in margins, it had large implications due to Costco's massive sales figure leading the company's bottom line to grow by 17% to \$7.4 billion in 2024 (**Table 1**).

Income Statement (in millions USD)	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Net Sales (Merchandise)	163,220	192,052	222,730	237,710	249,625
Membership fees	3,541	3,877	4,224	4,580	4,828
Revenue	166,761	195,929	226,954	242,290	254,453
Operating Income	5,435	6,708	7,793	8,114	9,285
Net Income	4,059	5,079	5,915	6,292	7,367

Table 1, Selected figures from the Costco's income statement

Key Ratios	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
YoY Revenue growth	9.2%	17.5%	15.8%	6.8%	5%
Gross Margin*	11.20%	11.13%	10.48%	10.57%	10.92%
Operating Margin	3.3%	3.4%	3.4%	3.3%	3.6%
Net Margin	2.4%	2.6%	2.6%	2.6%	2.9%
YoY Net Income growth	9.6%	25.1%	16.5%	6.4%	17.1%

Table 2, Key ratios. *Gross income excludes membership fees.

As of September 1st 2024, Costco has about 76 million paid members. The company have been growing its membership base with an average annual rate of 7.2% during the last 5 years. This is important because membership fees are key to Costco's profitability. With almost 100% margins, membership fees help support the company's relatively thin gross margin of approximately 11% (**Table 2**), which are notably lower than their retail competitors such as Walmart, with gross margins around 24%. (More on competitors in **Section 2**)

Sub-Section 3: Geography

As of September 1st, 2024, there are 890 Costco warehouses across 15 countries. 81% of which are located in the U.S. and Canada (**Figure 2a**) that have comprised 86% of net sales in 2024 (**Figure 2b**). Within the U.S., Sales from California operation alone made up 27% of U.S. net sales in 2024. This highlights the dependence on the north America market, and particularly California.

In addition, Costco plans to expand its presence in established and new international markets by opening 25-30 warehouse a year.

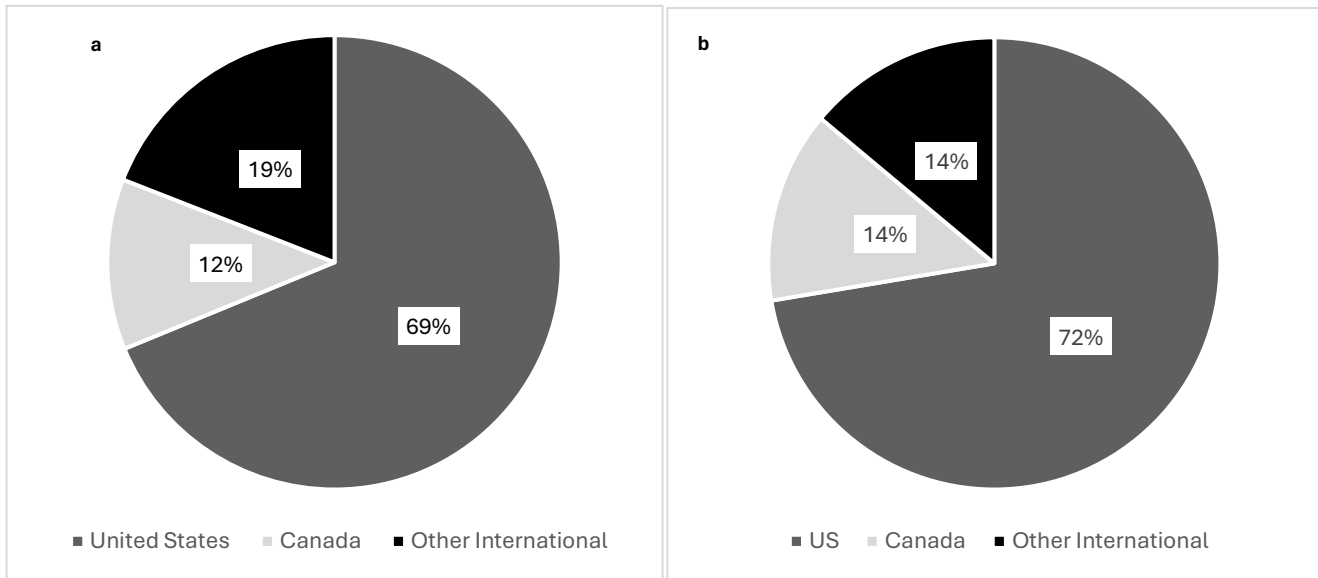


Figure 2a, Geographical distribution of Costco warehouses, Figure 2b, geographical distribution of net sales

Section 2: Competitive Positioning

To better understand Costco, analysis of key industry-specific metrics across competitors is needed. Costco lists Walmart, Target, Kroger, Amazon, and BJ as direct competitors. Membership-warehouse Clubs like Sam's Club, and BJ's are more comparable than others due to the similarity in business model.

Sub-Section 1: Efficiency Metrics

Asset Turnover Ratio

Costco has the highest asset turnover ratio amongst its wholesales competitors with 3.5 compared to 3 for BJ's and 2.5 for Sam's Club. Kroger leads traditional retailers with ratio that is on par with Costco whereas Target and Walmart perform lowest among the pack. (**Table 3**)

Sales per ft²

Costco scores highest amongst membership-based competitors with \$1942 per squared ft, compared to Walmart's Sam's Club and BJ's Wholesale Club, with \$1074 and \$728 per squared ft, respectively. Of note, with the exception of Kroger, traditional retailers score significantly lower sales per ft² as opposed to wholesale membership retailers. (**Table 3**)

Days Inventory Outstanding

Costco turns over its inventory every 29 days, ahead of all of its competitors except for Kroger (**Table 3**), likely due to the high proportion of perishable goods in its inventory necessitating quicker turnover. Costco's management often say that they are able to completely sell their inventory before having to pay for it.

Revenue per Employee

Revenue per employee looks at overhead utilization in revenue generation. Here too, Costco scores highest with \$766,741 in revenue per employee (**Table 3**), likely due to the no-frills, self-service approach.

Shrinkage

Retail shrinkage refers to the loss of inventory that can occur due to various factors such as external and internal theft, administrative errors, supplier fraud, or damage. Costco achieves comparatively very low inventory shrinkage likely due to loyal membership base and satisfied employees.

	Asset Turnover	Sales per ft2	Days Inventory Outstanding	Revenue per Employee	Shrinkage
Costco	3.5	1,942	29	766,741	0.1%
Walmart' Sam's Club	2.5	1074	-	-	1.6% industry average
BJ's Wholesale Club*	3	728	32	574,942	
Walmart	2.4	610	42	306,018	
Target	2.3	438	60	254,947	
Kroger	3.5	834	22	362,413	

Table 3. Comparison in key efficiency metrics across Costco's competitors.

*There is uncertainty on the total square footage

Sub-Section 2: Profitability metrics

Gross margin

Costco has the lowest gross margins amongst competition. This is deliberate as Costco self-imposes a cap on its markup of 15%. This is compensated via the membership income.

Net margin

Costco's net profit margin (~2.9%) is heavily supported by membership fees, which have near-100% margins. Target (~4%), on the other hand, achieves higher net margins through premium pricing

	Gross margin*	Net margin
Costco	11.9%	2.9%
Walmart' Sam's Club	-	-
BJ's Wholesale Club*	16.2%	1.8%
Walmart	24.7%	2.4%
Target	27.7%	4%
Kroger	22%	1.5%

Table 4. Comparison in key profitability metrics across Costco's competitors.

Section 3: Financial Performance Overview

Income Statement (in millions USD)	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Net sales (merchandise)	163,220	192,052	222,730	237,710	249,625
Membership fees	3,541	3,877	4,224	4,580	4,828
Total Revenue	166,761	195,929	226,954	242,290	254,453
Merchandise Costs	(144,939)	(170,684)	(199,382)	(212,586)	(222,358)
SG&A	(16,387)	(18,537)	(19,779)	(21,590)	(22,810)
Operating Income	5,435	6,708	7,793	8,114	9,285
Interest Expense	(160)	(171)	(158)	(160)	(169)
Interest Income	92	143	205	533	624
Income before taxes	5,367	6,680	7,840	8,487	9,740
Provision for income taxes	(1,308)	(1,601)	(1,925)	(2,195)	(2,373)
Net Income	4,059	5,079	5,915	6,292	7,367

Table 5, Costco Wholesale statement of income

Sub-Section 1: Revenue

Costco's revenue increased from \$166.7 billion in 2020 to \$254.4 billion in 2024 (**Table 5**), representing 53% increase in revenue through the period.

i. Net sales (Merchandise sales)

Costco's core business is based on merchandise sales, categorized into the following (**Figure 3**):

- **Foods and sundries** (including dry grocery, candy, cooler, freezer, deli, liquor, and tobacco)
- **Non-foods** (including major appliances, electronics, health and beauty aids, hardware, garden, sporting goods, tires, toys, Office supplies, furniture, and jewelry)
- **Fresh foods** (including meat, produce, service deli, and bakery).
- **Warehouse Ancillary** (includes gasoline, pharmacy, optical, food court, hearing aids, and tire installation), and **Other Businesses** (includes e-commerce, business centers, and travel).

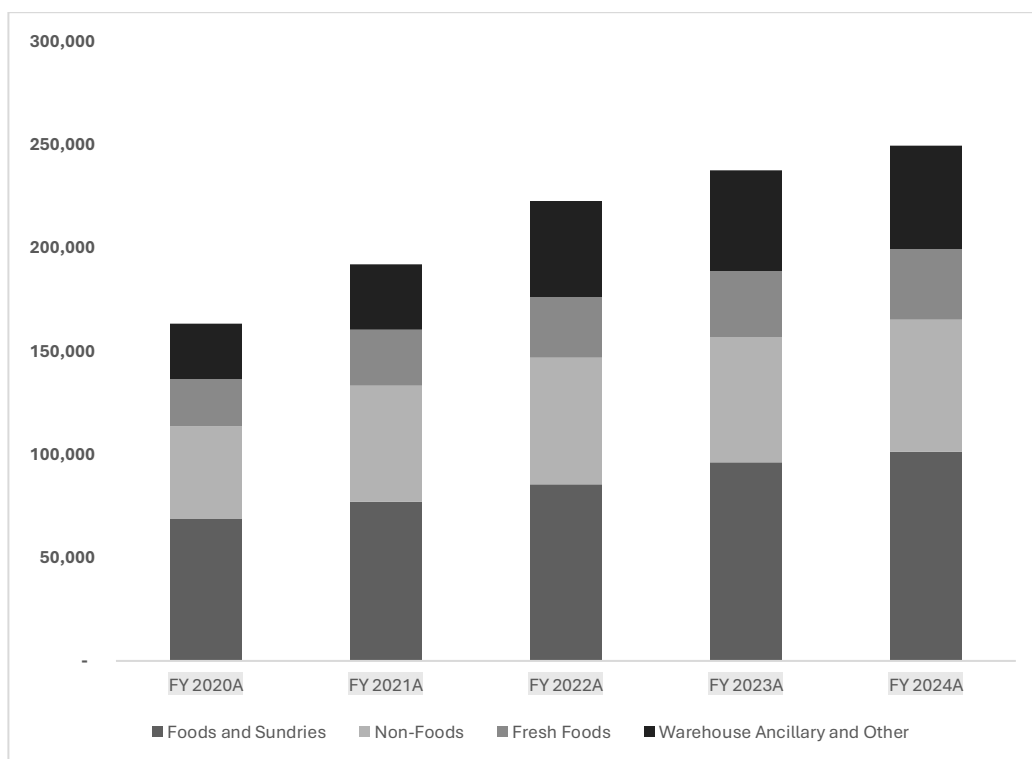


Figure 3, Net sales by category during lookback period

○ **Growth in net sales (merchandise sales)**

Coming out of the pandemic, Costco saw a surge in merchandise sales of 17.7%, and 16% in 2021 and 2022, respectively. Afterwards, growth reverted to single digit levels (**Table 6**). Looking at the subcategories, Foods and Sundries display more persistent growth compared to other categories that show a more pandemic controlled trend (**Table 6**).

Growth in Merchandise sales	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Foods and Sundries	15.1%	12.6%	10.8%	12.3%	5.5%
Non-Foods	8.9%	24.9%	9.2%	-0.4%	5.1%
Fresh Foods	16.3%	17.1%	8.6%	8.3%	7.0%
Warehouse Ancillary and Other	-7.1%	19.1%	46.9%	4.8%	2.6%
Net Sales (Merchandise)	9.3%	17.7%	16.0%	6.7%	5.0%

Table 6, Costco net sales (merchandise) growth

In fiscal year 2024, growth in net sales (merchandise) was 5.03% (**Table 6**), which can be decoupled into two drivers:

- (1) Growth that is driven by increases in the number of warehouses (**Table 7**), and
- (2) Growth in same store sales (**Table 8**).

(1) Growth in size		FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Average warehouse count	units	789	805	827	850	876
Average floor space*	(MM of ft)	115.9	118.3	121.5	124.9	128.7
Growth in average size	(%)	2.14%	2.09%	2.67%	2.78%	3.06%

Table 7, growth in warehouse count (size).

*Average floor space per warehouse is 147 (000s of ft2)

(2) Growth in sales/ft2		FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Merchandise sales (cash)*	(MM)	163,433	192,330	222,970	237,949	249,910
Average floor space	(MM of ft)	115.9	118.3	121.5	124.9	128.7
Net sales/ft2	USD	1,410	1,625	1,835	1,905	1,942
Growth in sales/ft2	(%)	7.05%	15.27%	12.92%	3.83%	1.91%

Table 8, Sales/ft2 and growth in sales/ft2

*Considers change in accrued reward

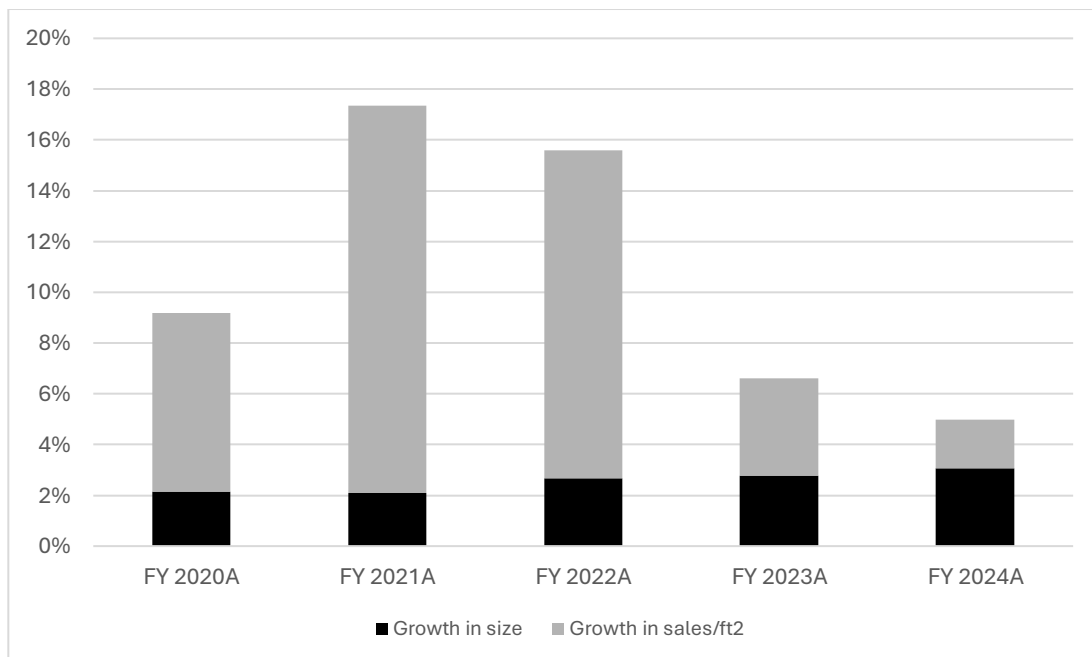


Figure 4, decomposition of net sales growth

The above breakdown (**Figure 4**) shows that the more aggressive warehouse opening, 29 new openings in 2024 as opposed to 23 in 2023, was the main contributor to the growth figure. The other component, growth in sales/ft2, a proxy to track same store sales, has dropped to 1.91% from 3.83% in the prior year.

○ Margins

Costco's margins are driven by several key factors. First, net sales (merchandise) inherently exhibit thin margins, around 11% (**Table 2**) due to the self-imposed mark-up cap. Second, since gasoline sales account for 12% of net sales (merchandise), the gross margin is affected by fluctuations in gasoline prices. Third, the increasing penetration of the Kirkland Signature brand, Costco's private label brand, contributes to higher margins due to its higher profitability compared to other national brands.

ii. Membership fees

The membership model is what makes Costco special. For our purposes, Costco offers two tiers of memberships, the *Gold Star Membership* for \$65 per year that provides access to Costco's warehouses, and the *Executive Membership* for \$130 per year, which includes a 2% reward certificates on purchases that can be used for in-store purchases at Costco or redeemed for cash, capped at \$1,250 annually. Although the membership revenue figure is relatively tiny compared to the net sales (merchandise) figure (**Table 5**), it is key to understanding Costco's profitability because it accounts for approximately 65% of Costco's bottom line due to its near-100% margins.

As of fiscal year 2024, Costco has total of 76.2 million paid members, around 46.5% of which are *Executive Members* (**Figure 5**). *Executive Membership* penetration has been increasing and is expected to continue doing so. This is great because executive members shop the most, accounting for 73.3% of net sales (merchandise) in 2024.

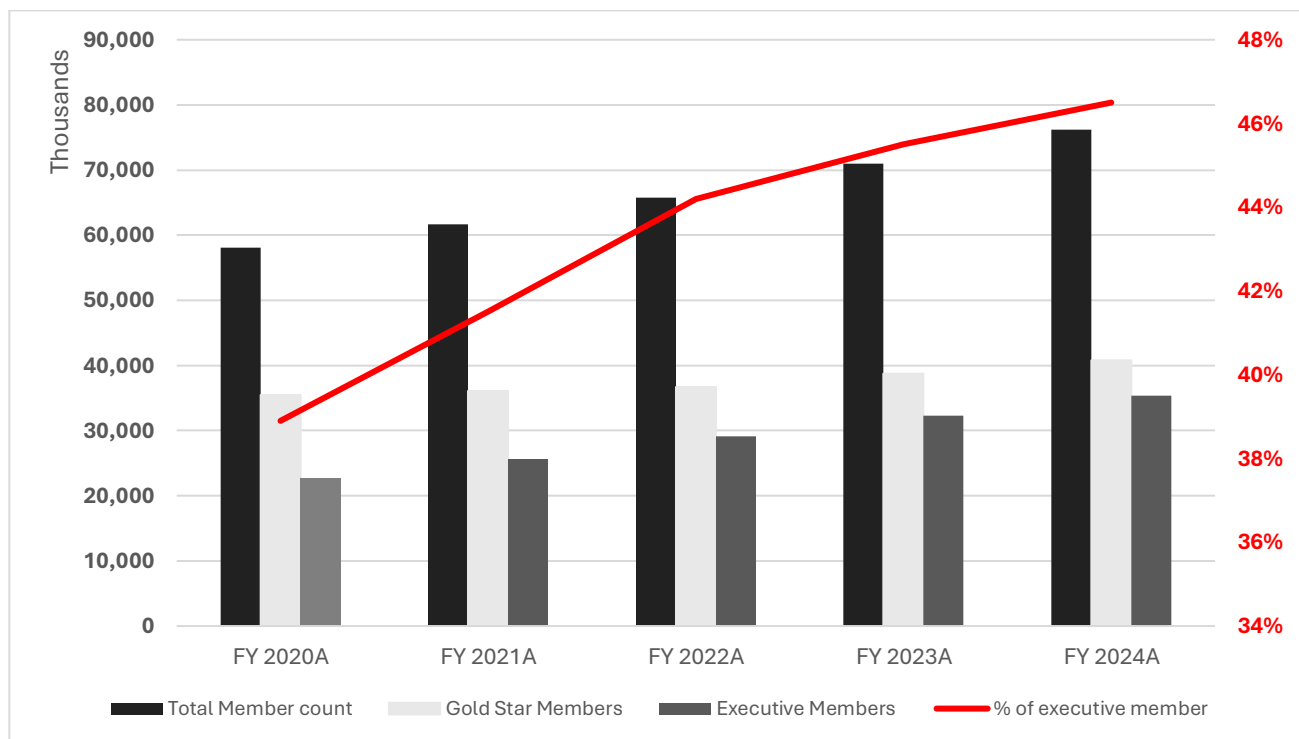


Figure 5, Membership base

In **Table 9**, Gold Star Equivalent (GSE) is meant to standardize membership types by converting *Executive Members*, who pay twice the fee, into an equivalent number of *Gold Star Members*. The point of this is to provides a metric for analyzing membership trends. This approach is going to be useful for modeling in section 5.

Memberships (in thousands)	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Gold Star Equivalents (GSEs)	80,700	87,300	94,900	103,300	111,600

Table 9, A time series of the number of Costco members by type

Significant to any membership model is the retention rate. Costco reports very high membership retention rates; more than 90% membership retention in the U.S. and Canada. For context, streaming services, on average, retain around 60-70% of their members every year.

To add to that, according to Numerator (2024), Costco customer base contains more of the affluent high-income individuals compared to competitor retailers (**Figure 6**). Both facts can be used to say that the ability of Costco to generate the cash flow it does is robust and more recession-proof.

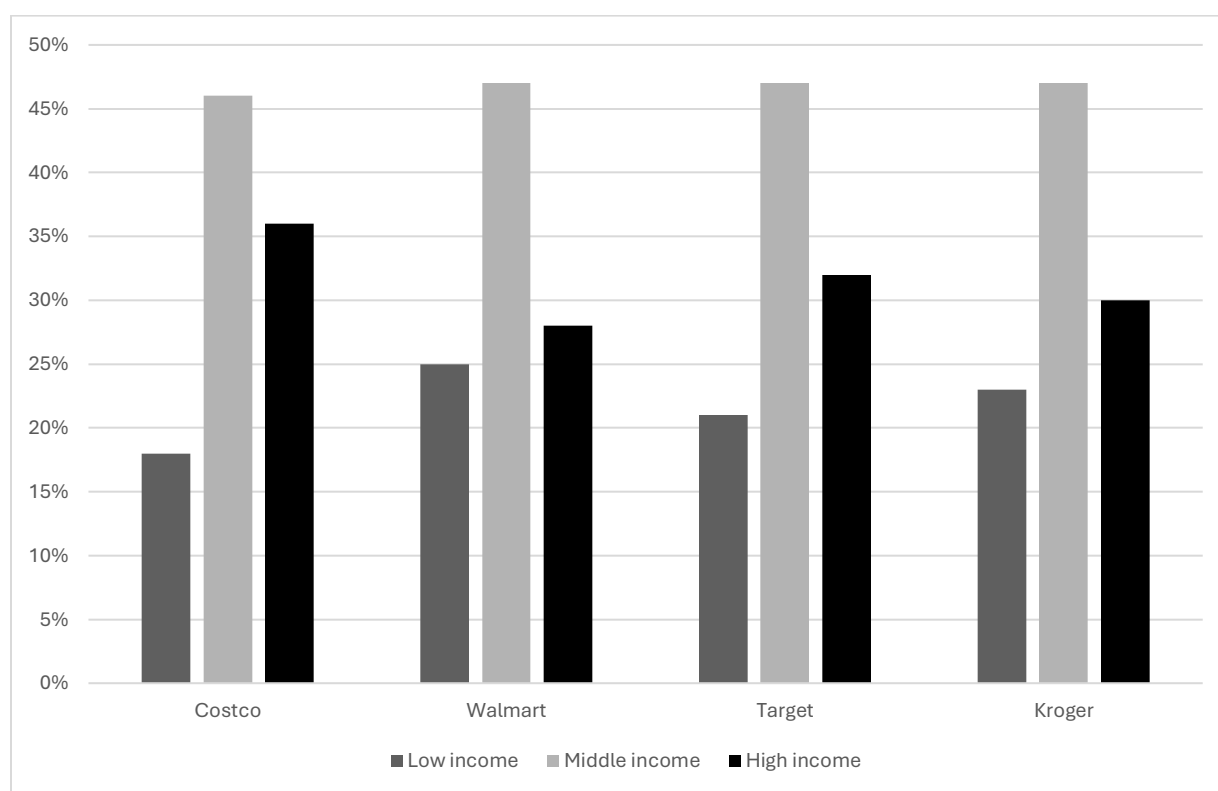


Figure 6, illustrates the proportion of net sales attributed to low-income, middle-income, and high-income households for Costco, Walmart, Target, and Kroger (Data is based on Numerator 2024)

○ Growth in membership fees

Growth in membership fees was around 5.4% in 2024 (**Table 10**). Membership fees are function of membership price and quantity of membership sold.

Income Statement (in millions USD)	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Membership fees	3,541	3,877	4,224	4,580	4,828
Growth in membership fees	5.6%	9.5%	9.0%	8.4%	5.4%

Table 10, Membership fees as a line item, and annual growth in membership fees during the lookback period.

▪ Price

Costco raised their membership prices in September 2024 (beginning of FY2025). Now, the \$60 Gold Star Membership costs \$65, and the \$120 Executive Membership costs \$130. The effect of this is expected to be reflected in the financial statements of FY2025 and FY2026. There is a complication, however, as there is a variation in membership prices in different countries (Section 5- Sub-Section 2-iii contains more extended discussion on membership prices).

▪ Quantity

Average growth in the number of Gold Star Equivalents (GSEs) was 8.43% in 2024 (**Table 11**). Similar to understanding growth in net sales (merchandise), growth in member count is a function of:

- (1) Growth in the number of warehouses (**Table 12**), and
- (2) Comparable growth, (growth that is driven by additional memberships at existing locations, rather than new locations).

		FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Average GSEs	(000s)	77,700	84,000	91,100	99,100	107,450
Total Growth in Average GSEs count	(%)	6.73%	8.11%	8.45%	8.78%	8.43%

Table 11, average Gold Star Equivalents, and annual growth in average Gold Star Equivalents.

		FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Warehouse count (beg)	units	782	795	815	838	861
Warehouse openings	units	13	20	23	23	29
Warehouse count (ending)	units	795	815	838	861	890
Warehouse growth	(%)	0.83%	1.26%	1.41%	1.37%	1.68%

Table 12, growth in warehouse count

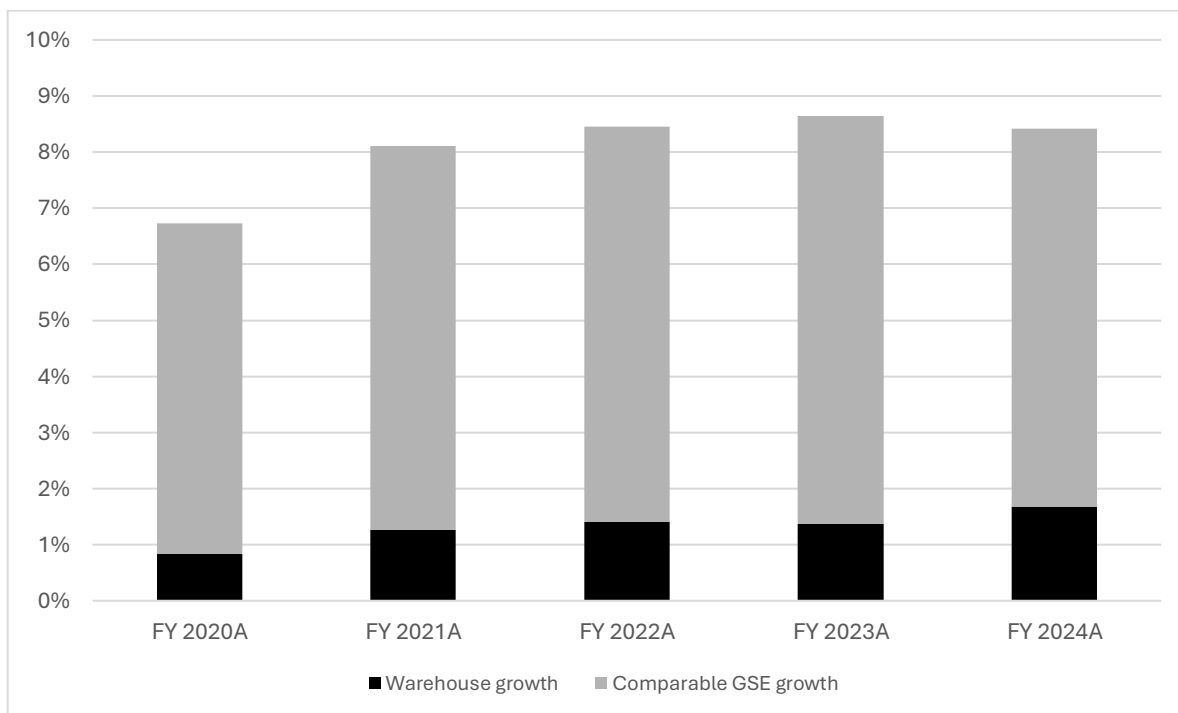


Figure 7, decomposition of GSE growth

Implied comparable growth saw a slight decline in 2024 leading to lower overall growth in GSEs in 2024 (8.43%) as compared to 2023 (8.78%) (**Figure 7**). This is of similar trend to growth in net sales (merchandise) where we saw the growth in openings offset lower same-store growth.

Sub-Section 2: Costs

Costco is good at controlling its costs. The company has been able to maintain a fairly constant gross margin of around 11% (**Table 13**). In addition, there seems to be economies of scale in relation to sales, general and admin (SG&A) expenses inferred from the declining expenditure as a percentage of net sales from 2020 through to 2022 (**Table 14**). The subsequent increase in SG&A as a % of net sales in 2023 and 2024 is due to large wage increases across all employees in the company.

Merchandise Cost	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Net Sales	163,220	192,052	222,730	237,710	249,625
Merchandise cost	(144,939)	(170,684)	(199,382)	(212,586)	(222,358)
Gross income	18,281	21,368	23,348	25,124	27,267
Gross margin	11.20%	11.13%	10.48%	10.57%	10.92%

Table 13, Costco's gross income calculated as net sales less merchandise cost. Gross margin also calculated in relation to net sales

Sales, General and Admin expense	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
SG&A Expense	15,080	16,387	18,537	19,779	21,590
Net Sales	163,220	192,052	222,730	237,710	249,625
SG&A as a % of net sales	10.04%	9.65%	8.88%	9.08%	9.14%

Table 14, Costco's SG&A as a percentage of net sales

Sub-Section 3: Interest

i. Interest Expense

Costco's debt issues are listed in **Table 15**, all of which are fixed rate and non-amortizing, except for the other long-term debt (Japanese debt). Interest expense is relatively small figure for Costco with interest coverage ratio of around 55.

Debt Issues	Coupon	Due	Principal	Coupon in million \$
1 3.00% Senior Notes	3.00%	May 2027	1,000	30.00
2 1.375% Senior Notes	1.375%	June 2027	1,250	17.19
3 1.60% Senior Notes	1.60%	April 2032	1,750	28.00
4 1.75% Senior Notes	1.75%	April 2032	1,000	17.50
5 Other long-term debt (Japanese)	1.030%	2032	919	9.05
Total				102

Table 15, Costco's debt issues

ii. Interest Income

Costco has been enjoying the high-interest rate environment yielding around \$624 million in interest income from its massive cash position (**Table 16**), which constituted around 8.5% of net income in 2024 (**Table 17**). Since Costco parks the majority of its cash in short-term fixed-income low-risk instruments, their return on cash going forward is a function of the path on interest rates.

Cash position in millions USD	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Interest income	92	143	205	533	624
Average Cash	11,375	12,740	11,612	13,142	13,189
Implied interest rate	0.78%	0.32%	0.53%	3.58%	4.04%

Table 16, Costco's interest income

In millions USD	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Interest income	92	143	205	533	624
Net income	4,059	5,079	5,915	6,292	7,367
Interest income as % of net income	2.3%	2.8%	3.5%	8.5%	8.5%

Table 17, interest income as a % of net income

Sub-Section 4: Net income

The double-digit growth in net income in 2021 and 2022 has been driven by a surge in sales/ft2 (**Figure 4**). However, net income lagged in 2023, likely due to post-pandemic normalization of sales/ft2 (**Figure 4**), and 10bps YoY contraction in operating margins (**Table 2**). Double digit growth resumed in 2024 due to 30 bps YoY increase in operating margin (**Table 2, Table 18**). For a company like Costco that operates on high revenue volume, 30bps change in operating margin has massive impact on the bottom line.

	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
YoY Net Income growth	9.6%	25.1%	16.5%	6.4%	17.1%

Table 18, net income growth

Section 4: Avenues of growth

Warehouse expansion

Costco plans to continue expanding by opening 25-30 new warehouses annually, including in international markets like Asia and Europe, diversifying its revenue base. Costco reports that their international operations yield higher margins than the domestic ones due to lower labor cost and little membership warehouse competition.

E-commerce

Costco is gradually strengthening its e-commerce platform to complement its warehouse model, though it trails competitors like Amazon in this area. It is worth noting that Costco reports that the E-commerce business has lower margins than the warehouse operation.

Kirkland brand

Kirkland products generally earn higher margins than national brands. Costco expect to see increasing penetration of the Kirkland brand.

Advertisement business

Costco is aiming to leverage its membership base and data to get into the advertisement business. With insights into member spending habits and product preferences, Costco can deliver targeted, personalized ads through its website, app, and in-store channels. This strategy allows Costco to collaborate with suppliers on promotions, drive additional revenue, and enhance its digital presence.

Section 5: Financial Model

Sub-Section 1: Results

Income Statement

Income Statement (in millions USD)		FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A	FY 2025E	FY 2026E	FY 2027E	FY 2028E	FY 2029E
Revenue											
Net sales	149,351	163,220	192,052	222,730	237,710	249,625	270,382	293,148	318,644	347,063	378,803
Membership fees	3,352	3,541	3,877	4,224	4,580	4,828	5,701	6,743	7,577	8,350	9,196
Total Revenue	152,703	166,761	195,929	226,954	242,290	254,453	276,084	299,892	326,220	355,413	387,999
Operating Expenses											
Merchandise Costs	(144,939)	(170,684)	(199,382)	(212,586)	(222,358)	(222,358)	(241,018)	(261,312)	(284,038)	(309,371)	(337,664)
SG&A	(16,387)	(18,537)	(19,779)	(21,590)	(22,810)	(22,810)	(24,025)	(25,615)	(27,371)	(29,299)	(31,418)
Operating Income		5,435	6,708	7,793	8,114	9,285	11,040	12,965	14,811	16,743	18,916
Other Income (Expenses)											
Interest Expense	(160)	(171)	(158)	(160)	(169)	(169)	(132)	(131)	(119)	(60)	(59)
Interest Income	92	143	205	533	624	624	595	552	693	817	902
Income before taxes		5,367	6,680	7,840	8,487	9,740	11,504	13,387	15,386	17,500	19,759
Provision for income taxes	(1,308)	(1,601)	(1,925)	(2,195)	(2,373)	(2,373)	(2,867)	(3,337)	(3,835)	(4,362)	(4,925)
Net Income	3,704	4,059	5,079	5,915	6,292	7,367	8,636	10,050	11,551	13,138	14,834
Non-Controlling Interest		(57)	(72)	(71)	-	-	-	-	-	-	-
Net Income attributable to Costco		4,002	5,007	5,844	6,292	7,367	8,636	10,050	11,551	13,138	14,834
Weighted-Average Share Count (basic) (000s)		442,297	443,089	443,651	443,854	443,914	443,974	444,034	444,094	444,154	444,214
Weighted-Average Share Count (diluted) (000s)		443,901	444,346	444,757	444,452	444,759	444,819	444,879	444,939	445,000	445,060
EPS											
Basic	USD	9.05	11.30	13.17	14.18	16.60	19.45	22.63	26.01	29.58	33.39
Diluted	USD	9.02	11.27	13.14	14.16	16.56	19.41	22.59	25.96	29.52	33.33

Table 19, Income statement for Costco. 2025-2029 figures are modeled

Cash Flow Statement

Cash Flow Statement (in millions USD)	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A	FY 2025E	FY 2026E	FY 2027E	FY 2028E	FY 2029E
Cash flow from operating activities										
Net Income	4,059	5,079	5,915	6,292	7,367	8,636	10,050	11,551	13,138	14,834
Depreciation and amortization	1,645	1,781	1,900	2,077	2,237	2,405	2,590	2,779	2,972	3,171
Non-cash lease expense	194	286	377	412	315	-	-	-	-	-
Stock-based compensation	619	665	724	774	818	875	936	1,001	1,071	1,146
Other non-cash operating activities	146	144	39	495	(9)	161	(35)	(40)	(46)	(53)
Changes in operating assets and liabilities										
Merchandise inventories	(791)	(1,892)	(4,003)	1,228	(2,068)	(1,565)	(1,702)	(1,906)	(2,124)	(2,373)
Account payable	2,261	1,838	1,891	(382)	1,938	1,630	1,772	1,985	2,213	2,471
Other operating assets and liabilities	728	1,057	549	172	741	1,404	1,331	1,328	1,458	1,607
Net cash provided by operating activities	8,861	8,958	7,392	11,068	11,339	13,547	14,942	16,697	18,682	20,803
Cash flow from investing activities										
Additions to PP&E	(2,810)	(3,588)	(3,891)	(4,323)	(4,710)	(4,644)	(4,737)	(4,832)	(4,928)	(5,027)
Other investing activities	(1,081)	53	(24)	(649)	301	-	-	-	-	-
Net cash from investing activities	(3,891)	(3,535)	(3,915)	(4,972)	(4,409)	(4,644)	(4,737)	(4,832)	(4,928)	(5,027)
Cash flow from financing activities										
Change in debt	929	(53)	(753)	(93)	(571)	(103)	(76)	(4,500)	-	(150)
Share repurchase	(196)	(496)	(439)	(676)	(700)	(774)	(818)	(875)	(936)	(1,001)
Dividends	(1,479)	(5,748)	(1,498)	(1,251)	(9,041)	(2,197)	(2,497)	(2,838)	(9,876)	(3,668)
Revolver										
Financing lease payments		(67)	(176)	(291)	(137)					
Other financing activities	(401)	(124)	(1,417)	(303)	(315)	(399)	(427)	(457)	(489)	(523)
Net cash from financing activities	(1,147)	(6,488)	(4,283)	(2,614)	(10,764)	(3,473)	(3,818)	(8,670)	(11,301)	(5,342)
Forex effects	70	46	(249)	15	40					
Net change in cash	3,893	(1,019)	(1,055)	3,497	(3,794)	5,430	6,387	3,195	2,453	10,434
Cash beginning balance	8,384	12,277	11,258	10,203	13,700	9,906	15,336	21,723	24,918	27,371
Cash ending balance	12,277	11,258	10,203	13,700	9,906	15,336	21,723	24,918	27,371	37,805

Table 20, Cash flow statement for Costco. 2025-2029 figures are modeled

Balance Sheet

	CHECK	CHECK	CHECK	CHECK	CHECK	CHECK	CHECK	CHECK	CHECK	CHECK
Balance Sheet (in millions USD)	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A	FY 2025E	FY 2026E	FY 2027E	FY 2028E	FY 2029E
Current Assets										
Cash and cash equivalents	12,277	11,258	10,203	13,700	9,906	15,336	21,723	24,918	27,371	37,805
Short-term investments	1,028	917	846	1,534	1,238	1,238	1,238	1,238	1,238	1,238
Receivables, net	1,550	1,803	2,241	2,285	2,721	2,947	3,195	3,473	3,783	4,129
Merchandise inventories	12,242	14,215	17,907	16,651	18,647	20,212	21,914	23,820	25,944	28,317
Other Current Assets	1,023	1,312	1,499	1,709	1,734	1,878	2,036	2,213	2,411	2,631
Total current assets	28,120	29,505	32,696	35,879	34,246	41,611	50,107	55,663	60,747	74,120
Other Assets										
PP&E	21,807	23,492	24,646	26,684	29,032	31,271	33,418	35,471	37,427	39,283
Operating lease right-of-use assets	2,788	2,890	2,774	2,713	2,617	2,617	2,617	2,617	2,617	2,617
Other long-term assets	2,841	3,381	4,050	3,718	3,936	3,837	3,968	4,113	4,273	4,452
Total assets	55,556	59,268	64,166	68,994	69,831	79,336	90,109	97,863	105,064	120,472
Current Liabilities										
Accounts payable	14,172	16,278	17,848	17,483	19,421	21,051	22,823	24,808	27,021	29,492
Accrued salaries and benefits	3,605	4,090	4,381	4,278	4,794	5,144	5,484	5,860	6,273	6,726
Accrued member rewards	1,393	1,671	1,911	2,150	2,435	2,778	3,152	3,563	4,015	4,512
Deferred membership fees	1,851	2,042	2,174	2,337	2,501	3,067	3,523	3,885	4,279	4,712
Other Current Liabilities	3,728	4,561	5,611	6,254	6,210	6,726	7,293	7,927	8,634	9,424
Revolving debt	-	-	-	-	-	-	-	-	-	-
Total current liabilities	24,749	28,642	31,925	32,502	35,361	38,766	42,276	46,043	50,222	54,866
Other liabilities										
Debt	7,609	7,491	6,557	6,458	5,897	5,794	5,718	1,218	1,218	1,068
Long-term operating lease liabilities	2,558	2,642	2,482	2,426	2,375	2,375	2,375	2,375	2,375	2,375
Other long-term liabilities	1,935	2,415	2,555	2,550	2,576	2,638	2,733	2,838	2,952	3,078
Total liabilities	36,851	41,190	43,519	43,936	46,209	49,572	53,102	52,474	56,767	61,387
Equity										
Common stock/PIC	6,702	7,035	6,886	7,342	7,831	8,307	8,816	9,361	9,944	10,567
AOCI	(1,297)	(1,137)	(1,829)	(1,805)	(1,828)	(1,828)	(1,828)	(1,828)	(1,828)	(1,828)
Retained earnings	12,879	11,666	15,585	19,521	17,619	23,285	30,019	37,856	40,182	50,346
Total Costco shareholder equity	18,284	17,564	20,642	25,058	23,622	29,764	37,007	45,389	48,297	59,085
Non-controlling interest	421	514	5	-	-	-	-	-	-	-
Total equity	18,705	18,078	20,647	25,058	23,622	29,764	37,007	45,389	48,297	59,085
Total liabilities and equity	55,556	59,268	64,166	68,994	69,831	79,336	90,109	97,863	105,064	120,472

Table 21, Balance sheet for Costco. 2025-2029 figures are modeled

Sub-Section 2: Key modeling assumptions

i. Annual growth in warehouse count

Table 22 details the assumptions in regard to warehouse openings. Costco guided that they plan to open 25-30 warehouses per year. Based on the latest conference call, they plan to open 26 new locations and relocate 3 warehouses in fiscal year 2025. Otherwise, I have assumed a mid-point of 27 new locations, and 2 relocations per year as a base case.

	FY 2025E	FY 2026E	FY 2027E	FY 2028E	FY 2029E
Warehouse openings	26	27	27	27	27
Relocations	3	2	2	2	2

Table 22, Warehouse openings assumption

ii. Net sales (merchandise)

Forecast of merchandise revenue depends on (1) growth in sales/ft2, and (2) new warehouse openings; this relationship is discussed in Section 3-Sub-Section1-i (growth in sales). Looking at **Table 23**, a subjective judgment has to be made as there does not seem to be a clear figure or trend. The double-digit growth in 2021 and 2022 is likely a pandemic effect. I will make the choice and choose pre-pandemic growth of 5.03% and incrementally grow it by 30bps (**Table 24**).

	FY 2019A	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Growth in sales/ft2	5.03%	7.05%	15.27%	12.92%	3.83%	1.91%

Table 23, growth in sales/ft2 in the lookback period

	FY 2025E	FY 2026E	FY 2027E	FY 2028E	FY 2029E
Growth in sales/ft2	5.03%	5.33%	5.63%	5.93%	6.23%
Increment/year	0.30%				

Table 24, assumed growth in sales/ft2 in the forecast period

iii. Membership revenue

Membership revenue is based on realized price and quantity sold:

▪ For price:

Costco raised their membership price in September 2024 (beginning of FY2025). Now the \$60 Gold Star Membership costs \$65, and the \$120 Executive Membership costs \$130. Modeling membership revenue may seem easy as we already know the number of members in each type. However, price vary across countries, i.e. the Gold Star Membership costs 65 USD in the U.S., and 65 CAD in Canada, which obviously are not equal.

Thus, modeling is not straightforward. Anyhow, the calculated average implied price per Gold Star Equivalent GSE as of 2024 is \$50.87. This price is forecasted to grow by:

- (1) 1.69% a year, based on the 5-year average annual growth rate in the implied price per GSE, and
- (2) 8.33% representing the price hike which will affect fiscal year 2025 and 2026 (**Table 25**).

Membership revenue	FY 2025E	FY 2026E	FY 2027E	FY 2028E	FY 2029E
Fee per GSE	53.89	57.08	58.05	59.03	60.03
Average 5-year growth rate in GSE	1.69%				
FY 2025 Price increase	8.33%				

Table 25, forecast of implied price per GSE

▪ For quantity:

As discussed in Section 3-Sub-Section 1- ii (growth in membership fees), future membership count is a function of new warehouse openings and growth in existing warehouses (comparable growth). The former is based on assumptions addressed in Section 5-Sub-Section 2- The latter is forecasted to be a constant 6.98%, based on the 4-year average comparable GSE growth (**Table 26**). Both are summed to provide the total growth in GSE count in (**Table 27**).

		FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Comparable GSE growth	(%)	5.90%	6.85%	7.04%	7.27%	6.74%
						6.98%

Table 26, comparable growth in GSE during the lookback period

	FY 2025E	FY 2026E	FY 2027E	FY 2028E	FY 2029E
Warehouse growth	1.46%	1.47%	1.43%	1.39%	1.35%
4-year average comparable GSE growth	6.98%	6.98%	6.98%	6.84%	6.98%
Total GSE growth	8.44%	8.45%	8.41%	8.24%	8.33%

Table 27, total growth in GSE count

iv. Merchandise cost

Costco's gross margins (**Table 28**) fluctuate within a very tight window (10.48%-11.20%) during the lookback period. It is assumed that the average gross margin of 10.86% is maintained throughout the forecast period.

	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Gross Margin	11.20%	11.13%	10.48%	10.57%	10.92%

Table 28, Costco's gross margins during the lookback period.

v. SG&A

In Section 3-Sub-Section 2, economies of scale relating to SG&A was inferred. During the 5-year lookback period, SG&A as a percentage of sales dropped from 10.10% of net sales in 2019 to 9.14% in 2024, a total of 96 bps, around 20 bps a year. Thus, we forecast SG&A expense as a percentage of net sales to continue dropping by 15bps per year (**Table 29**).

SG&A expense	FY 2024A	FY 2025E	FY 2026E	FY 2027E	FY 2028E	FY 2029E
%Net sales	9.03%	8.89%	8.74%	8.59%	8.44%	8.29%
Decline/year	0.15%					

Table 29, forecast of sales, general, and admin expense as a percentage of sales.

vi. CAPEX

Table 30 shows the number of historical warehouse openings and relocations, which can be used to calculate CAPEX required per warehouse. Looking at the table, there does not seem to be a mean reverting level nor a clear trend, so I made a subjective judgment and chose the 2024 average CAPEX/ warehouse figure of 157 million per warehouse. This is forecasted to grow at the rate of inflation of 2% (**Table 31**).

	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
CAPEX	2,810	3,588	3,891	4,323	4,710
Warehouse openings	13	20	23	23	29
Relocations	3	2	3	3	1
Total	16	22	26	26	30
Average CAPEX/ Warehouse opening	176	163	150	166	157

Table 30, CAPEX per warehouse during the lookback period

CAPEX per warehouse	FY 2024A	FY 2025E	FY 2026E	FY 2027E	FY 2028E	FY 2029E
CAPEX/ warehouse	157	160.14	163.34	166.61	169.94	173.34
Inflation	2%					

Table 31, Forecasted CAPEX per warehouse.

vii. Debt and interest

In terms of debt, there is no clarity on the capital structure that Costco is targeting. I made a simplifying assumption that there will be no issuance within the forecast period.

As discussed in Section 3-Sub-Section3-ii, interest income has contributed significantly to the bottom line. Going forward, the cash interest rate (return on cash) is forecasted based on the Fed December 2024 Summary of Economic Projections, as shown in **Table 32**.

CAPEX per warehouse	FY 2025E	FY 2026E	FY 2027E	FY 2028E	FY 2029E
Cash interest rate	3.90%	3.40%	3.10%	3.00%	3.00%

Table 32, Forecasted return on cash.

viii. Income tax

The 3-year average effective tax rate of 24.9% was used to compute the tax expense.

ix. Equity

▪ Stock-based compensation

It is assumed that the growth rate in stock-based compensation is tied closely to the growth rate in members. This makes sense because the growth rate in members is related to the growth in warehouses that in turn is tied to the growth rate in headcount. Thus, stock-based compensation expense is forecasted to grow at the 4-year average comparable GSE growth rate of 6.98% (**Table 26**)

▪ Share count

It is assumed that weighted average basic share count is going to grow by the 2024 growth rate of 0.014%. In addition, it assumed that the diluted count would grow at the 2024 ratio of diluted over basic count of 0.19% (**Table. 33, Table 34**).

	FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Weighted-Average share count (basic)	442,297	443,089	443,651	443,854	443,914
growth		0.18%	0.13%	0.05%	0.014%
Weighted-Average share count (diluted)	443,901	444,346	444,757	444,452	444,759
Diluted count over basic count		0.284%	0.249%	0.135%	0.190%

Table 33, analysis of growth of share count during the lookback period

	FY 2025E	FY 2026E	FY 2027E	FY 2028E	FY 2029E
Growth in weighted-average share count	0.014%	0.014%	0.014%	0.014%	0.014%
Weighted average diluted over basic	0.190%	0.190%	0.190%	0.190%	0.190%

Table 34, Forecast of share count, basic and diluted

■ Dividends

It is assumed that dividends will grow at the three-year average growth rate of 13.66% (**Table 35**).

		FY 2020A	FY 2021A	FY 2022A	FY 2023A	FY 2024A
Special Dividend	USD			10		15
Q1	USD	0.65	0.7	0.79	0.9	1.02
Q2	USD	0.65	0.7	0.79	0.9	1.02
Growth rate		7.69%	12.86%	13.92%	13.33%	13.73%
Q3	USD	0.7	0.79	0.9	1.02	1.16
Q4	USD	0.7	0.79	0.9	1.02	1.16

Table 35, analysis of growth of dividends

Section 6: Sensitivity analysis

Key variable in forecasting Costco is new warehouse openings. More openings mean more sales and more members. Costco provides guidance that they are aiming to open 25-30 warehouse per year.

We can see a significant difference EPS depending on the implementation of the expansion plan. An EPS of 33.86 is forecasted in 2029 if Costco were to open 30 new warehouse per year as opposed to an EPS of 32.71 if were to open 22 per year (**Figure 8**).

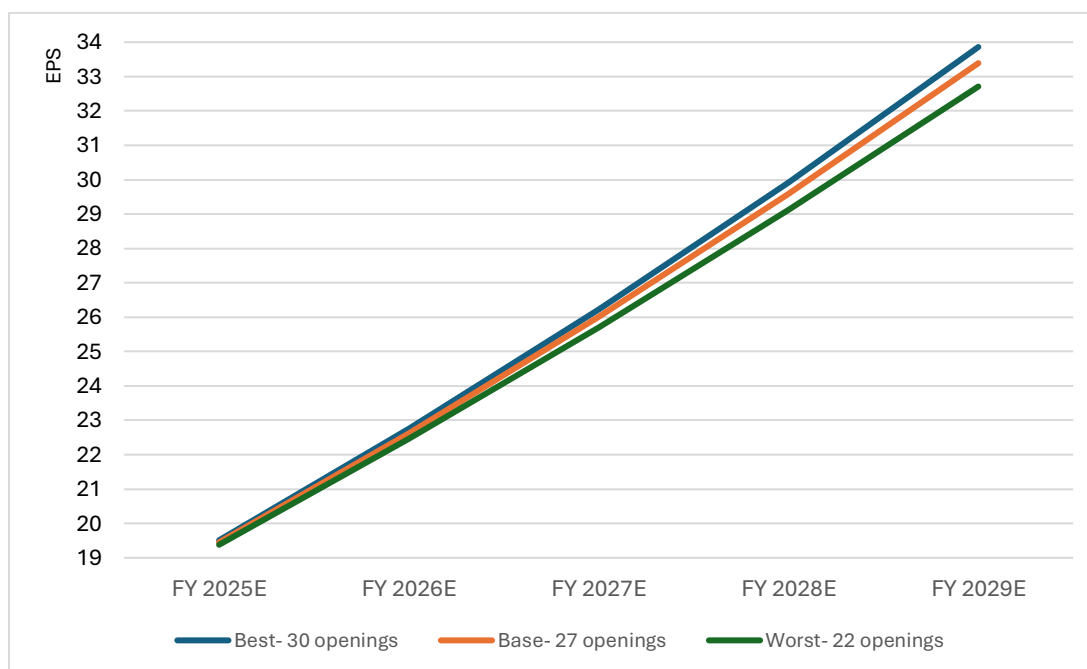


Figure 8, Sensitivity analysis based on future warehouse openings

Section 7: Risks

Dependency on U.S. and Canada

U.S. and Canada operations comprises more than 80% of net sales and operating income in 2024. Meaning any disruptions to these operations is likely material to Costco's profitability

Geopolitical challenges related to expanding in China

Costco's growth strategy depends to a large extent on their success in new markets, such as China. Increasing U.S.- China geopolitical tension might act as an impairment to the Costco growth story.

Maintaining strong membership base

Costco is enjoying growth in membership base, increasing Executive members penetration, and high membership renewal rates. This fact combined with membership fees constituting more than 60% of Costco's bottom line makes member/customer satisfaction of utmost importance. Thus, damage to member trust can be detrimental to profitability

Disruption due to natural disasters or catastrophic events

Natural disasters, such as wildfires and earthquakes, pose a significant risk to Costco's operations. This risk is particularly pronounced in California, which generates a disproportionately high percentage of the company's sales and is increasingly experiencing severe and frequent natural disasters

Fluctuations in foreign exchange rates

Costco's international operations are increasing as a proportion of all operations. This exposes Costco to currency translation risk.

Section 8: Valuation

Costco stock price has been doing particularly well during 2024, gaining around 45% (**Figure 9**). Costco's multiples are stretched, now trading at north of 50 P/E ratio, on par with Nvidia. Also, the company trades at twice the EV/Revenue multiple of the wholesale retailing industry (Stockcircle, n.d.). This is not going to be a long section as I am not going to do a DCF. It is clear that Costco does not have the growth story Nvidia has, so investors must be paying premium for something else. It may be the robustness of the membership base, or many of the other things talked about in this report. I read this a little while back from *Barron's*, Trivariate analysts noted, "While we can certainly appreciate many merits of Costco's unique business model, it strikes us as a lofty increase in valuation for a business whose top-line growth isn't materially different than it has been historically," (Barron's, December 2024).

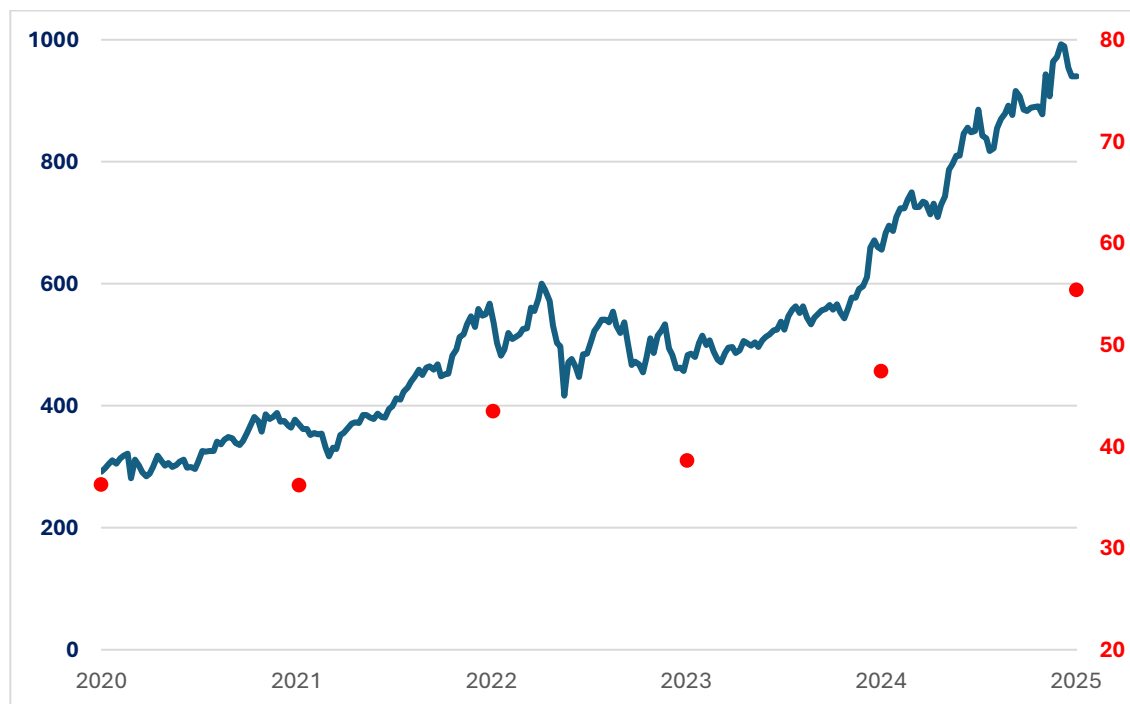


Figure 9, Costco stock performance along with data points of P/E ratios from year start.

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Section 10: Disclosure

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