COSTCO: Value at Wholesale

STOCK PRICE (5/2/2018): $194.00 **RECOMMENDATION: BUY**

	BEAR	BASE	BULL
PRICE TARGET	114.0	222.10	250.0
% UPSIDE	-41%	14%	29%

Investment Summary

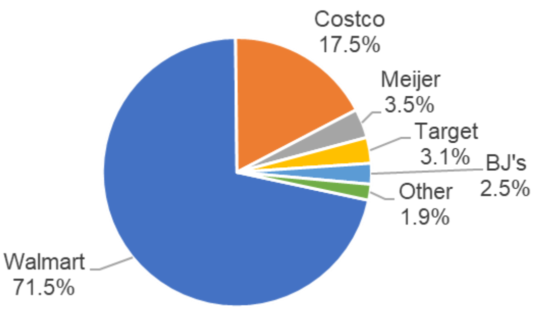
Costco, a leading global retail wholesaler, will continue its long track record of strong performance and represents an attractive long opportunity for investors today. Despite the gloom surrounding traditional bricks-and-mortar retailers over the disruptive impact of e-commerce, Costco will remain resilient and, over a 2-year time frame, I expect long investors to benefit from robust returns resulting from:

- Immense earnings stability provided by the company's **annual membership model**. Strong customer loyalty enables pricing power and renewal traction into the foreseeable future.
- International expansion and **China in particular** should support margins and require only modest capital outlays, though membership model may play less of a role.
- The advent of **e-commerce platforms are more of an opportunity than a threat** as the expanded distribution channels and consolidation of market share towards larger players offsets the disruption potential from new entrants such as Amazon.

Market Overview

Costco operates in an industry that is highly competitive on price, merchandise quality and selection, convenience, distribution strategy, and customer service. In addition to other warehouse and supercenter operators, Costco competes with global, national and regional wholesalers and traditional retailers. These non-supercenter competitors include supermarkets, online retailers, department/specialty stores, among others. The company's most significant competitors include Sam's Club (Wal-Mart) and BJ's Wholesale Club in the warehouse club segment as well as Target, Kroger, and Amazon.com with respect to general merchandise retail competitors.

The warehouse clubs & supercenter space is a $460 billion market alone. Unlike more traditional retail, these companies achieve cost savings by leveraging economies of scale through offering products in bulk or charging membership fees paid by each customer (warehouse clubs). Walmart and Costco dominate this industry with Wal-Mart and Costco at 71.5% and 17.5% respectively.



Due to the low-cost, high-value products offered by warehouse clubs and supercenters, the industry typically performs well regardless of the macroeconomic climate. However, when businesses and consumers are healthier, they do visit these stores more frequently and spend more per visit. Despite solid overall industry growth, sharp declines in global crude oil prices over the last several years has been a headwind to revenue growth as many industry operators, including Costco, retail fuel at on-site gas stations. Despite this negative impact on top-line growth, the decline in oil had a positive impact on industry profit margins from lower transportation costs as these retail operators typically buy in bulk and source a substantial amount of goods from foreign manufacturers.

Going forward, overall industry revenue should grow largely in line with the broader economy. Steadily rising disposable income levels as well as strong consumer confidence and corporate profit margins will also be supportive. However, as with other retail segments, the industry faces a threat from increasing online competition as operators like Amazon continue to expand. Despite this threat, consumer demand remains high and should sustain expected growth.

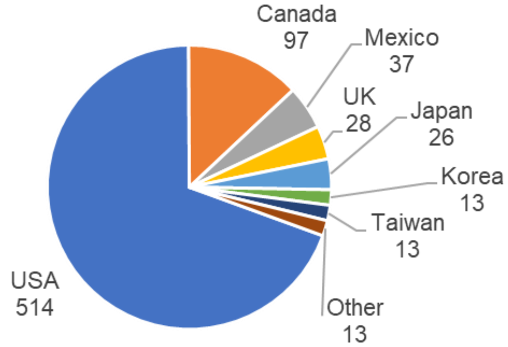
Company Overview

Founded in 1976, Costco operates as a wholesale retail club with a distinctive annual membership model which sets it apart from other traditional retailers such as JC Penney and Target. Deriving its revenues from annual membership fees, Costco has been able to compete aggressively on price and has become known for providing a variety of high quality, nationally available and private-label merchandise at the lowest prices available in the market. Sales take place either at one of Costco's 741 warehouse stores globally or online via Costco.com.

Costco sells merchandise across 6 main categories:

- Foods (dry, packaged, groceries)
- Sundries (snacks, beverages, cleaning supplies)
- Hardlines (appliances, electronics, health, etc.)
- Fresh Foods (meat, produce, deli, bakery)
- Softlines (apparel, small appliances)
- Ancillary (gas stations, pharmacy)

The company's ancillary businesses provide expanded products and services that are designed to encourage members to visit its stores more frequently. At the end of FY2017, Costco operated 536 gas stations. In addition, Costco has been significantly growing its online businesses in recent years which offers customers additional products and services even beyond what is available in its warehouses. These operations include the e-commerce, business delivery, and travel segments, but at this point availability of each varies by country outside of the U.S. and Canada. The company currently operates e-commerce websites in all countries except Japan, Australia, Spain, Iceland, and France. As is evident, the company has a truly global footprint with 227 of its 741 stores



located outside the U.S. The countries with the largest presence outside of the U.S. are Canada (97), Mexico (37), the U.K. (28), Japan (26), Korea (13), and Taiwan (13). Overall, foreign operations accounted for 27% of FY2017 sales.

Business Strategy

Costcos's strategy is to provide its members with a broad range of high-quality merchandise while offering prices that are consistently lower than its competitors. In order to accomplish this goal, Costco's business model places an emphasis on large sales volumes, while costs are managed by bulk-purchasing, smart inventory practices, and private label branding.

First and foremost, Costco's no-frills warehouse format yields cost efficiencies through requiring bulk purchasing. They limit items to fast-selling models, sizes, and colors and carry an average of approximately 3,800 SKUs per warehouse which is significantly less than other broadline retailers. Shoppers are able to capitalize on the bulk-buy discounts of retail, while Costco is better able to leverage volume pricing with suppliers.

Costco also uses smart inventory practices to lower costs further. Costco employs a centralized hub-and-spoke delivery system between stores to reduce delivery costs. The warehouse-themed stores themselves are also much easier and cheaper to stock and maintain than traditional store shelves. Costco's limited product selection further reduce excess inventory and unsold goods, while the company's strict controls of the entrances and exits help decrease leakage typical of other retail operations.

Costco has also invested significantly in the development of its private label brand, Kirkland Signature. As a result, Kirkland has become known for their high quality at prices that are generally lower than those for similar national brand products. This has enabled the company to differentiate its merchandise offerings with the added benefit of further supporting higher margins.

Thus, Costco is positioned to solve a key friction for retail consumers between the desire for high quality and an aversion to high costs. This model has proven to be highly popular with customers, who have become renowned for their loyalty; annual renewal rates have averaged at 90% since 2010 despite there being very few hurdles to cancellation and opt-in renewable program. This allows Costco to weather cyclical downturns far more comfortably that traditional retailers and enabled the stock price to rise at a rate consistently ahead of the S&P 500 index over the long run. That being said, conditions in the retail sector have forced Costco to raise membership fees in 2017 but this has not, as yet, sparked a material decline in renewal rates.

Costco's largest geographical market undoubtedly remains the United States although the company has an established history of international growth. Price Club, one of two companies that merged to form Costco in 1993, opened its first international warehouse in Mexico City in 1992. Since then, the firm has opened operations in 9 other international markets and is currently looking to follow Wal-Mart into the Chinese retail space.

The most important driver of Costco's profitability is sales growth, particularly growth in comparable sales (sales from warehouses open for more than one year). Comparable sales growth is achieved through two methods: increasing shopping frequency from new and existing members and secondarily the amount they spend on each visit. The company's membership format and ability to control costs are integral parts of its business model and are also significant drivers of financial performance. Importantly, the company has managed to produce strong, steady improvement across all key sales metrics over the past year and a half. In FY2017, net sales increased 9% to $126B billion, membership fee revenue rose 8% to $2.85 billion, and net income rose 14% to $2.68 billion.

Investment Thesis 1: The Membership Program

A majority of Costco's new income comes from its membership fees. There is some market concern that Costco's membership fee pricing power may not sustain given newfound alternatives (Amazon Prime) and thus renewal rates could suffer. This concern stems from the fact that membership growth is decelerating and the main driver for the current year's EPS growth was due to a raise in membership fees This concern is overstated for a few reasons.

Costco's membership program has enjoyed extreme levels of customer loyalty over the years, allowing the retailer to offer products at razor-thin margins and pass through price hikes without protest (proven again this year). Not even the Great Recession could put a dent in Costco's membership base. Costco's renewal rates hover around 90%. Costco accomplishes this by sending its "cash back" rewards checks annually to member with their renewable forms. While the renewal process is opt-in, Costco doesn't forget to reminder its customers the savings their membership brings.

Costco earns their customer loyalty by actually delivering on its promise to deliver high quality products at the best prices. Even as much of the retail industry struggles to compete with Amazon, Costco continues to remain price competitive, and Costco's shoppers continue to shop offline to take advantage of these prices.

Costco is also diversifying its revenue mix. While the membership fee continues to represent a large portion of Costco's earnings, this percentage has steadily decreased over time. This is in large part due to Costco's push toward its private label Kirkland brand. Due to its higher margins, Kirkland is increasingly becoming a more important part of Costco's profits. Further revenue expansion will be realized as Costco expands internationally.

Investment Thesis 2: China as a Growth Engine

There is some market concern that Costco's international expansion will be risky because of different consumer behavior, and geopolitical risk such as government intervention and FX exposure. This fear is unwarranted, though, due to Costco's current success in China and the vastness of the Chinese market.

China's middle class is the largest in the world, and still growing. China's upper middle class is expected to make up 54% of urban private households by by the year 2022. This is an increase from 14% in 2012. This is a great environment for Costco to capitalize on, as the upper middle class is its core demographic in the U.S.

Costco has already had limited success in China. Domestic retail giants have had mixed results in China as they fail to embrace Chines shopping habits. Costco has already had successful pilot operations in the country, though. In 2014, Costco opened up an online store on TMall Global. Sales greatly exceeded expectations. Costco even set a Guiness World Record for tons of nuts shipped in a day in 2015. As of this year, Costco has expanded its partnership and opened an online presence on the domestic version of TMall. Furthermore, Costco has announced plans to build a brick and mortar store in Shanghai.

Costco's international margins are higher than its domestic business. Expansion in China will certainly increase this effect. Chinese consumers have a higher willingness to pay for foreign goods over domestic products. Costco already benefits from this pricing premium on their online Chinese stores. If Costco can just match Walmart's presence in the country, Costco's EPS could grow by 12.9%.

Investment Thesis 3: Is E-Commerce a Threat or an Opportunity?

The market views that E-Commerce is a structural growth story that is both expanding the pie and stealing share from traditional brick-and-mortar. Costco's customer base is thus similarly expected to transition towards online purchasing, threatening both the membership value proposition and creating the opportunity for share losses. The major arguments can be classified into the following 3 aspects:

a. **Costco vs. Amazon**: The two companies attract consumers with similar behavior - customers have proved willingness to pay a membership fee to gain access to bargain prices.
b. **Customer Demographic**: The largest demographic group of Costco is 65+ years old, who prefer to shop in the traditional way. As years go by, an increasing number of consumers are likely to adopt e-commerce.
c. **Fears in Grocery Area:** Competition from Amazon due to the acquisition of Whole Foods Market.

Once again, I find the market's concerns to be exaggerated.

E-commerce is disrupting traditional brick-and-mortar retail, but COST stands to benefit from the transition. The disruptive potential of e-commerce (and, more specifically, Amazon) is a common acknowledgement in the market today. The incumbent retailers and their established brick-and-mortar network of stores are the victims of a transition from spending in-person to spending online. While diminished prospects have weighed on the group's valuations broadly, I believe the market has effectively taken a risk-averse hatchet to multiples without regard to nuances that may support specific players, namely COST. As larger incumbents pivot towards their own e-commerce platforms, demand is increasingly consolidating towards the larger players in the industry; Amazon certainly holds the dominant position, but the company faces retaliation from Wal-Mart, Costco and the like. Ultimately, I view COST as well-positioned to benefit from a shift towards e-commerce as its online platform retains loyal customers and attracts new visitors.

Amazon is a force to be reckoned with. Amazon has proven that it is an "Everything Store," leveraging its endless shelf space to offer an incredibly wide breadth of products. Moreover, the company continues to expand into new verticals such as over-the-counter pharmacy, dental supplies, and automotive parts. By layering in an increasingly wider offering, the e-commerce platform improves its value proposition for customers in relation to the existing retail base. Brick-and-mortar incumbents are struggling to address this threat given the physical constraints of their existing store networks. Sunk capital costs underpin deteriorating returns on capital and physical expansions remain expensive. To the extent demand continues to shift towards this new online distribution channel, brick-and-mortar retailers must find a way to address Amazon's disruption.

Brick-and-mortar loses broadly, but there are nuances. Though incumbents are struggling to find a way to address Amazon with the existing network of assets, the pressures are not felt equally, and some players are adapting better than others. Specifically, smaller retailers are seeing more dramatic share losses than larger retailers as demand consolidate towards scale. While the same structural challenges face both contingents, players that benefit from scale are leveraging cost advantages to insulate themselves. Conversely, smaller mom-and-pop's are failing to provide the same product breadth, accessibility, and low pricing that Amazon and e-commerce offers.

Larger incumbents are fighting back with e-commerce platforms of their own. While larger players may be insulated somewhat from the broader brick-and-mortar woes, they acknowledge the forthcoming pressure from an Amazon of ever-increasing scale. As such, most players have rolled out their own e-commerce platforms. These platforms typically display the suite of store-keeping units (SKUs) offered in-store with the option of delivery or scheduled pick-up. While the players sometimes don't benefit from the same product breadth as Amazon, many of the retailers retain cost advantages that allow them to price below competition. COST has done just this with its Costco.com domain. The website offers the same limited set of SKUs as carried in the warehouse network and rewards members with deep discounts in excess of competition. While it is early days for the offering, recent months have shown immense growth of 40%+, nearly twice that of the broader market, suggesting share capture albeit off of a small base.

COST stands to benefit from e-commerce and the market fails to acknowledge this. As a larger incumbent, COST's positioning somewhat insulates it from the broader brick-and-mortar structural pressures created by the e-commerce transition. Moreover, the company's compelling economics and sticky membership program underpin a value proposition that is difficult to replicate for online competition, particularly as COST rolls out its own online offering. To the extent that demand continues to consolidate towards larger players in the industry and COST retains its cost advantage and loyal membership program, I believe e-commerce represents more of an opportunity than a threat for the company.

Valuation Methodology

A continuation of historical compounding and a discount to intrinsic value underpin COST's favourable risk-reward. I believe COST has 20%+ upside to share prices and incremental returns from a ~3% annual dividend yield over the next two years. I arrive at this target valuation of $222 per share using a sum-of-the-parts approach consisting of tangible asset liquidation and a CLV perspective on the membership program. With roughly $50B of value being derived from each source, COST has an intrinsic value of ~$100B by YE19 relative to its current enterprise value of ~$85B.

I calculate a ~$50B liquidation value, suggesting ~40% downside in an absolute worst-case scenario. As a means of gauging downside to shares, I performed a liquidation analysis on the existing balance sheet. Based on the given line items, I apply realizable value assumptions that nets out to ~90% for current assets and ~80% for PP&E. I also capitalize SG&A costs by 2-3 years and adjust for debt of ~$6.7B. This nets out to a replacement value of $59B or an equity share of ~$52B (roughly 40% downside from current levels).

When accounting for the incremental ~$50B value of the membership program, YE19 intrinsic value falls closer to ~$100B in aggregate. On top of a liquidation scenario, I assess the intrinsic value of the membership program. To do this, I have taken a customer lifetime value (CLV) approach. Costco's loyal customers typically pay $65 annually in membership dues and tend to stay with the program for ~7 years. When applying this framework to the existing customer base and including an assumption for growth given the historical ~6% annual member growth, I arrive at a value of ~$50B. This is additive to the ~$50B liquidation value and nets out to ~$100B in intrinsic value overall.

The company's long-dated track record for compounding should continue with ~15% IRR ahead. COST has historically returned ~15% annually in addition to a 2-3% dividend yield. This impressively consistent compounding has yields phenomenal returns over the years and I fully expect this to continue. With roughly 30% total upside of the next two years, I anticipate an IRR of ~15%, in-line with historical figures. The IRR sources value evenly across three categories: Earnings Yield, Operating Growth, and Financial Leverage.

If things were to materially improve from my expectations, there could be another ~15% upside in a Bull case. While I do not model this in the base case, I apply a scenario analysis to gauge incremental upside in the event my estimates are beaten over the next two years. Specifically, I apply ~1% incremental sales growth, 10bps of incremental gross margin expansion, and ~0.5% incremental net store additions. The outcome implies 10-15% upside to my EPS estimates and a similar impact to the price target ($250 in a Bull case or ~35% upside from here).

Overall, I see 25%+ total return over the next two years with a target price of $222. With a $222 PT based on a sum-of-the-parts analysis, I see 20%+ upside to share prices and a 2-3% dividend yield. This yields a 25%+ total return over the next two years or a comparable ~15% IRR.

Risks to the Thesis

Competitive brick and mortar landscape. Big-box retailers like Walmart and Target are improving their shopping experience and responding to changing consumer preferences by offering different products, shifting to fresh and organic foods, and driving down prices. Additionally, other warehouse club peers and discount chains continue to expand in North America and put pressure on Costco's largest market. (US is about ~80% of Costco's footprint)

E-Commerce Disruption. Intensifying competition from e-retailers such as Amazon and Jet.com (Walmart subsidiary) pose a risk to the traditional retail model and may weigh on traffic flow over time**.** Additionally, Amazon's acquisition of Whole Foods introduces a new avenue of pressure on the brick and mortar retailing. While I believe Costco is positioned well to take advantage of e-commerce, Amazon's competitive advantage in online retail distribution may be too difficult to match.

Membership Program Economics Deteriorate. Costco's members are very loyal, but this loyalty could change should Costco fail to be the cheapest provider of products. As alternative programs and distributions channels become more appealing, Costco's historically robust renewable rates could become in jeopardy. Additionally, Costco's pattern of membership price hikes every five years or so could face customer adversity in future iterations

Operating Leverage Amplifies Discounting Risk. COST is operationally very leveraged, in its effort to drive down prices. While prices have fallen across the industry, COST has been somewhat insulated due its lower prices. However, if market prices were to fall below Costco's lowest offering, then Costco's financial difficulty will be amplified by its immense operating leverage

International Expansion Risks. Aside from exposure to foreign exchange risk, geopolitical risks exist in relation to political or economic instability from a foreign location. Costco could also face difficulty in adapting to differing cultural differences / consumer behaviors. If these hurdles cause international investments to not be profitable, Costco's larger operation could be threatened due to its thin gross margins.

New Store Opening Cannibalization. COST has opened over 100 clubs in the last five years and is expected to continue to expand through new store openings. Much like when a competitor opens, new stores can temporarily detract customer traffic and sales from other nearby stores. While unit expansion typically represents a growth opportunity, maturing markets could be at-risk of cannibalization over time.

Conclusion

While any investment carries risk, I believe the market exaggerates Costco's exposure to traditional retail trends. Costco has continued to deliver unbeatable prices and stellar investment returns. I believe Costco is well positioned to continue to capitalize on consumers who are more cost conscious, whether online or off.

Appendix

Valuation (Part 1)

Intrinsic / Private Market Value		
Replacement Value of the Assets		
Assets	**% Realized**	**Value**
Cash and Cash Equivalents	100%	$4,546
Short-term Investments	100%	$1,233
Receivables, Net	95%	$1,360
Merchandise Inventories	80%	$7,867
LIFO Reserve		*$0*
Other Current Assets	50%	$435
Total Current Assets	89%	$15,441
PP&E	80%	$14,529
Other Assets	0%	$0
Capitalized SG&A (2-3 Years)		$28,950
Total Assets		$58,920
Total Debt		$6,659
Fair Market Value		$6,753
Equity Share of Asset Replacement Value		$52,167

Cost of Capital	
Debt Weighting	37.5%
Cost of Debt	3.3%
Statutory Tax Rate	35%
Equity Weighting	62.5%
Cost of Equity	9.0%
Cost of Capital	**6.4%**

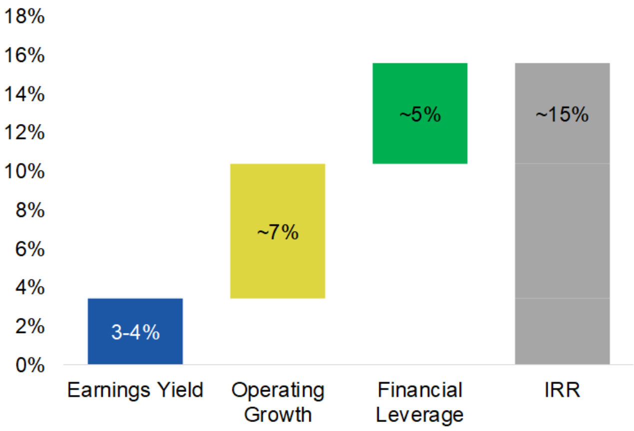
Customer Lifetime Value Walk-Up	
Customer Lifetime Value	
Reference Year:	*FY2019*
Membership Fees ($M)	$3,456
Gold Card Members ('000s)	43,426
Business Members ('000s)	12,150
Total Paid Members	55,576
Annual per Member ($/P)	$64.00
Annual per Member ($/P, End Tenure)	$64.00
Forecast CAGR	*0.0%*
Average Tenures (Years)	6.7
Renewal Rate	85.0%
Perpetuity Tenure (Years)	-
Replacement-Implied Tenure (Years)	0.0
Customer Lifetime Value ($, Individual)	$427
Customer Growth Rate	5.5%
Discount Rate	6.4%
Growth Multiplier	2.0x
Customer Lifetime Value (Existing, $M)	$23,714
Customer Lifetime Value (Growth, $M)	$23,507
Total Customer Lifetime Value	**$47,221**
Equity Share of Replacement Value	$52,167
Total Earnings Power Value	**$99,388**

Valuation (Part 2)

Valuation Overview			
Valuation Year:	*FY2019*	*FY2019*	*FY2019*
	Bear	**Base**	**Bull**
Price Target	$114.00	$222.00	$250.00
Current Price	$185.13	$185.13	$185.13
% Upside	-38%	20%	35%

Comparables Valuation			
P/E	17.5x	34.2x	38.5x
PEG	2.5x	4.9x	5.5x
P/B	3.8x	7.4x	8.4x
FCF Yield	4.9%	2.5%	2.2%
EV/EBITDA	8.7x	16.5x	18.5x
FY2019 EPS	**$7.05**	**$7.05**	**$7.05**
Same Store Sales (-1% / 0% / +1%)	-$0.37	$0.00	$0.37
Store Growth (-0.5% / 0% / +0.5%)	-$0.19	$0.00	$0.19
Gross Margin (-0.1pp / 0pp / +0.1pp)	-$0.33	$0.00	$0.33
FY2019 Adjusted EPS	**$6.15**	**$7.05**	**$7.94**
Applied P/E	18.5x	31.5x	31.5x
Market Capitalization	**$50,096**	**$97,555**	**$109,859**
Short-term and Long-term Debt	$7,332	$7,332	$7,332
Minority Interest	$301	$301	$301
Cash and Cash Equivalents	$4,501	$4,501	$4,501
Enterprise Value	**$52,626**	**$100,085**	**$112,389**

We Forecast an Annual IRR of 15%+ Ahead



	FY2017	FY2018E	FY2019E	FY2020E	FY2021E
Current Valuation					
P/E	30.5x	28.5x	26.3x	25.2x	24.1x
PEG	2.2x	4.1x	3.2x	5.7x	5.4x
P/B	7.4x	6.2x	6.6x	5.6x	6.0x
FCF Yield	5.2%	5.2%	5.2%	3.6%	3.9%
Dividend Yield	4.8%	1.1%	5.0%	1.4%	5.2%
EV/EBITDA	15.4x	13.9x	12.9x	12.3x	11.8x
EV/Invested Capital	7.1x	6.2x	6.3x	6.1x	5.4x