Deep Dive on Costco's unit expansion opportunity – an underappreciated long-term driver

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Our work with RBC's data science team, RBC Elements, indicates that Costco should be able to increase its US store base by *more than 400 warehouses or ~75% over time* which, at current expansion rates, enables nearly 20 years of incremental unit growth – Our RBC Elements team filtered the ~74,000 US census tracts for those with similar demographic characteristics to existing Costco locations, trying to quantify the company's expansion potential. Using 5 key filters (4 by state), back testing of our criteria predicted 21 locations out of the 28 warehouses that Costco opened in 2019 (75% hit rate), within a 15 mile radius. Interestingly, of the 7 warehouses that our models did not forecast, most were in markets with *smaller* population densities than where we had set our filters. **In our view, this likely indicates management's confidence in their ability to generate strong returns in even smaller markets than what they have historically targeted, which could effectively increase their white space opportunity even further.**

Unit expansion is an underappreciated, long-term growth driver for Costco – Costco rarely comes up in investor conversations as a "unit growth story" and, to be fair, it is not an Ollie's Bargain Outlet or Five Below situation, where they are growing units by 15%-20% annually. However, while Costco's new store opening cadence does bounce around a bit (ranging from ~2.5%-4.5%), its new store CAGR in the US has averaged ~3% over the last 10 years. **Based on our projection that the company should be able to add another 400+ warehouses in the US, we estimate the company should be able to maintain a ~3% warehouse expansion rate for the next ~20 years.**

New warehouse expansion augments the company's top-tier comp growth – Costco's core US comps (excluding FX and fuel) have ***averaged ~5.5% for the last decade***, including ~7% comps over the last 3 years. We believe it is this strong, consistent traffic and comp growth that drives COST shares. While comps will likely remain the key focus for most investors, **we view Costco's unit growth as an incremental driver for the company,** helping it further expand its total wallet share and buying scale in the US.

Costco is the ultimate "rinse and repeat" model – With one of the lowest markups in all of retail, the company constantly invests in "value" for its members. These "values"/low prices resonate strongly with consumers, driving high levels of sales/store and membership renewal rates. The company's sales growth enables it to constantly increase its buying scale (which it concentrates on ~3,800 SKUs at any one time), further lowering prices for its members. ***Rinse and repeat.***

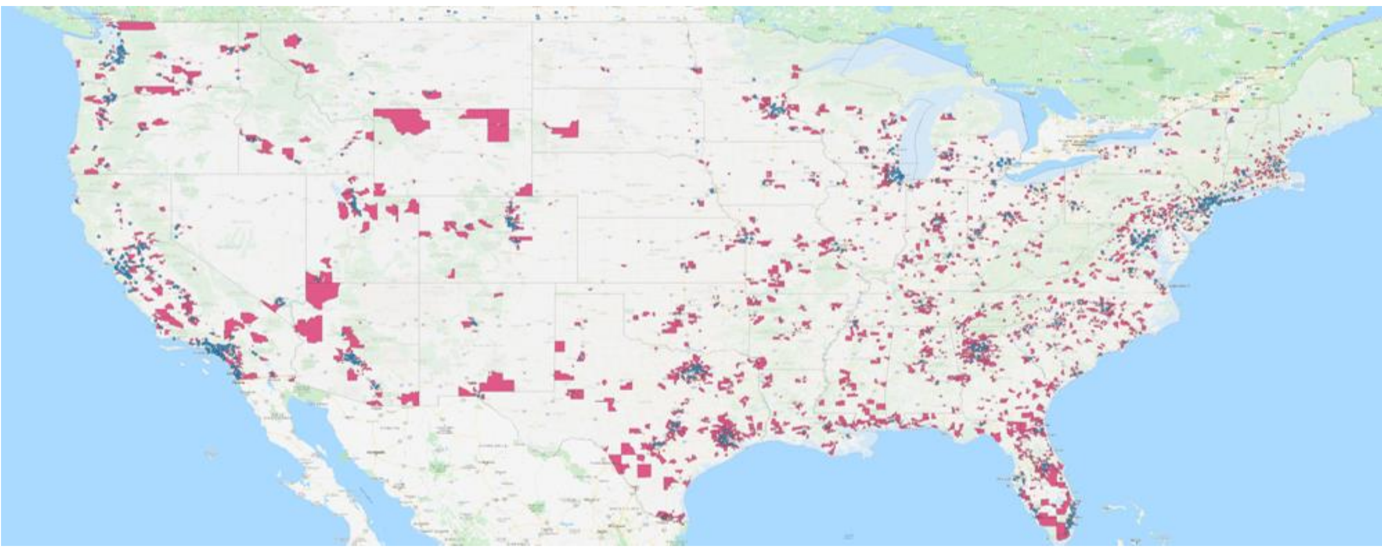
Net/net – We believe that Costco's extreme consumer value proposition, driven by its immense buying scale and razor thin markup process, makes it the ultimate rinse and repeat model. Despite its size, our proprietary research, led by our data science team RBC Elements, suggests that the company should be able to add another 400-500+ locations in the US over time, or 75%-90% above current levels. In addition, given the company's relatively small international base (~240 locations, including ~100 just in Canada) we think its overseas growth opportunity may even exceed that of the US. We believe these factors, coupled with additional productivity enhancements (including e-commerce, vertical integration and private label), provide Costco with one of the highest barriers to entry in all of retail and support the company's premium valuation.

Filtering for key real estate characteristics

Methodology – Our data science team, RBC Elements, utilized US Census Tract data along with their proprietary RBC Elements Location Intelligence Package to analyze the demographics and characteristics of areas where Costco has previously opened warehouses. The team then applied a filtering algorithm utilizing 5 different elements based on demographics/characteristics that we found for most existing warehouses. E

- **Filter 1 – Total population in an area –** We first isolated census tracts with a total population of at least 5,500 people. This enabled us to eliminate population bases that we deemed too small to support a full Costco warehouse, since Costco warehouses likely generate the highest sales per location (~$217mm in TTM revenue and ~70,000 member households) in retail. **For context, Costco's sales per store are ~4x that of an average Home Depot and even ~2.5x a Walmart Superstore (despite Walmart's size advantage of ~178,000 square feet vs. ~146,000 for an average Costco).** Thus, the stores obviously need to draw from a large enough population base to generate acceptable returns.

Exhibit 1: Census tracts with a population of at least 5,500 (~18,400 out of ~74,100 total)



Source: RBC Capital Markets, RBC Elements

- **Filter 2 – Population Density –** For our remaining Filters (2-5), we applied our process ***by state,*** given the massive differentiation in size, population densities and median incomes across the US. For Filter 2, we identified the existing Costco with the lowest population density within a 10 mile radius of its location and assumed that was the minimum threshold for that particular state. For example, in the densely populated state of Massachusetts, the lowest population density within a 10 mile radius of an existing Costco is 583 people per square kilometer. As a result, for store location possibilities in MA, we used 583 as the minimum for our additional Massachusetts locations. However, in Idaho, we found that the lowest population density within a 10 mile radius of an existing Costco was 94. Therefore, we used 94 as our minimum threshold for additional warehouses in Idaho. Finally, for states where Costco currently doesn't have a physical presence, our team identified geographic locations where the population density was greater than, or equal to, the 10th percentile of all existing Costco locations (i.e., Costco already has at least 10% of its warehouses in locations with lower population densities than the ones that we identified).

E Learn more about RBC Elements on page 17.

Exhibit 2: Minimum population density by state

District of Columbia	2,208	South Dakota	245
Massachusetts	583	South Carolina	245
Oklahoma	582	Maryland	229
Delaware	576	Vermont	165
New Mexico	537	Iowa	155
New Hampshire	477	Utah	143
Kansas	453	Wisconsin	130
Kentucky	390	New York	128
Indiana	378	Arizona	120
Missouri	365	Virginia	120
Ohio	352	New Jersey	114
Nebraska	349	California	106
Texas	329	Idaho	94
Georgia	326	Michigan	88
Florida	316	Nevada	88
Illinois	313	Montana	68
Tennessee	293	Hawaii	51
Louisiana	287	Minnesota	46
North Carolina	275	Washington	37
Connecticut	266	Oregon	33
Pennsylvania	255	Alaska	26
North Dakota	248	Colorado	12
Alabama	247		

Source: RBC Capital Markets, RBC Elements

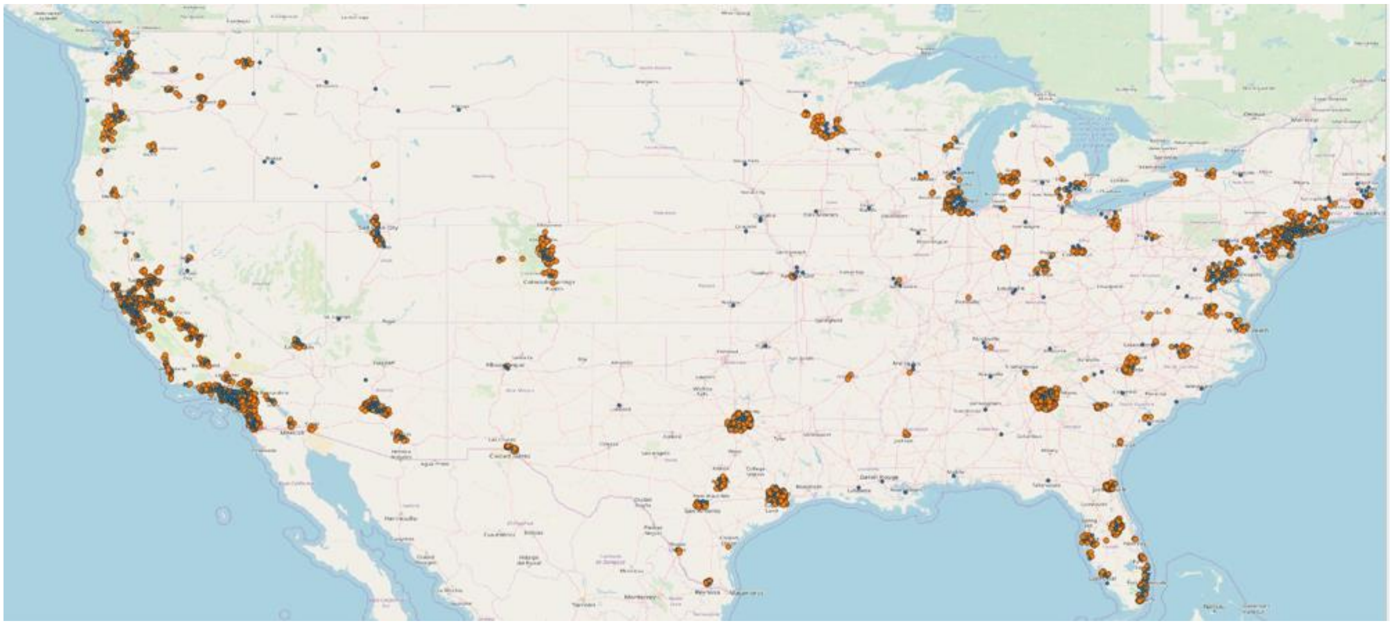
- **Filter 3 – Median Income –** We then repeated the above by-state process using Median Income within a 10 mile radius as our filter parameter. For example, in California, the lowest median income within a 10 mile radius is $43,980, so we used $43,980 as the minimum threshold for additional California sites. We then copied this process to the rest of the states in the US.

Exhibit 3: Minimum median household income by state

District of Columbia	$90,409	Virginia	$53,195
Alaska	$81,817	North Carolina	$52,822
New Hampshire	$81,513	Nevada	$52,022
New Jersey	$72,477	Illinois	$52,015
Hawaii	$71,126	Missouri	$51,969
Delaware	$68,150	New Mexico	$51,862
Tennessee	$67,525	Kansas	$51,693
Vermont	$66,522	Indiana	$51,166
Connecticut	$64,761	Ohio	$50,332
South Dakota	$63,731	Louisiana	$50,271
Maryland	$63,656	Montana	$50,214
Colorado	$62,793	Idaho	$50,058
Oklahoma	$62,627	Michigan	$49,789
Iowa	$60,094	Georgia	$48,428
Nebraska	$59,002	Washington	$48,006
North Dakota	$58,263	South Carolina	$47,838
Utah	$57,582	Florida	$45,751
Wisconsin	$56,571	Oregon	$45,599
Massachusetts	$55,845	Alabama	$45,404
New York	$55,285	California	$43,980
Minnesota	$54,779	Texas	$42,719
Kentucky	$54,453	Arizona	$42,375
Pennsylvania	$54,408		

Source: RBC Capital Markets, RBC Elements

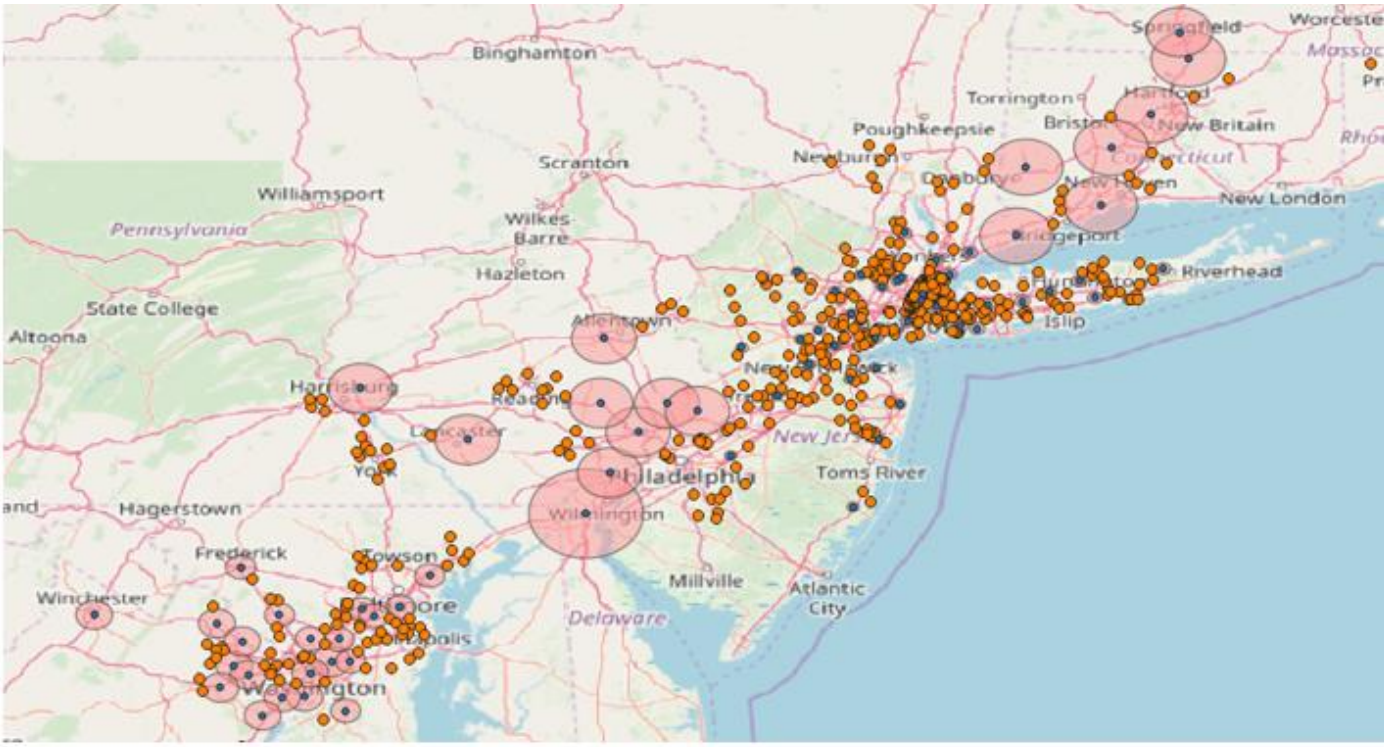
Exhibit 4: Census tracts with comparable Population Densities and Median Incomes (blue dots) to existing Costco locations (orange dots)



Source: RBC Capital Markets, RBC Elements

- **Filter 4 – Cannibalization –** Our 4th filter tried to account for excess cannibalization. Specifically, we looked at the minimum distance between the closest 2 existing Costco's in each state and classified that distance as the "buffer zone" for each potential new store location. For example, in Florida, the closest 2 Costco locations are located ~6 miles apart from one another. Our models would then eliminate any potential locations in Florida that was within 6 miles of an existing Costco. The close-up of the Northeast in Exhibit 5 below shows existing Costco locations as orange dots, while the blue dots are potential locations that passed through the first 3 filters. Then the blue dots with red radiuses also passed our "cannibalization test".

Exhibit 5: Locations with no existing Costco stores with a relevant distance (blue dots with red radiuses)



Source: RBC Capital Markets, RBC Elements

- **Filter 5 – Competition –** While we strongly suspect that Costco is very comfortable in its ability to "compete" with other warehouse operators (discussed more below), we still wanted to account for the proximity of key competitors (Sam's Club and BJ's). Similar to the by-state exercises highlighted above, we filtered for the minimum distance between Costco and the closest Sam's or BJ's in each state and eliminated any location that fell within that competition corridor. For example, in Illinois, the closest competitor to a Costco is Sam's Club, which is located ~2 miles away. Our models would then eliminate any potential location in Illinois that was within 2 miles of an existing Sam's Club or BJ's location. Obviously this is another example where we have a very wide divergence in competitive density by state, whereby the minimum distance between Costco and Sam's in Idaho is ~46 miles, but in NJ, Costco practically shares a parking lot with a BJ's, which is located just 0.6 miles away.

Exhibit 6: Minimum distance to competitor by state

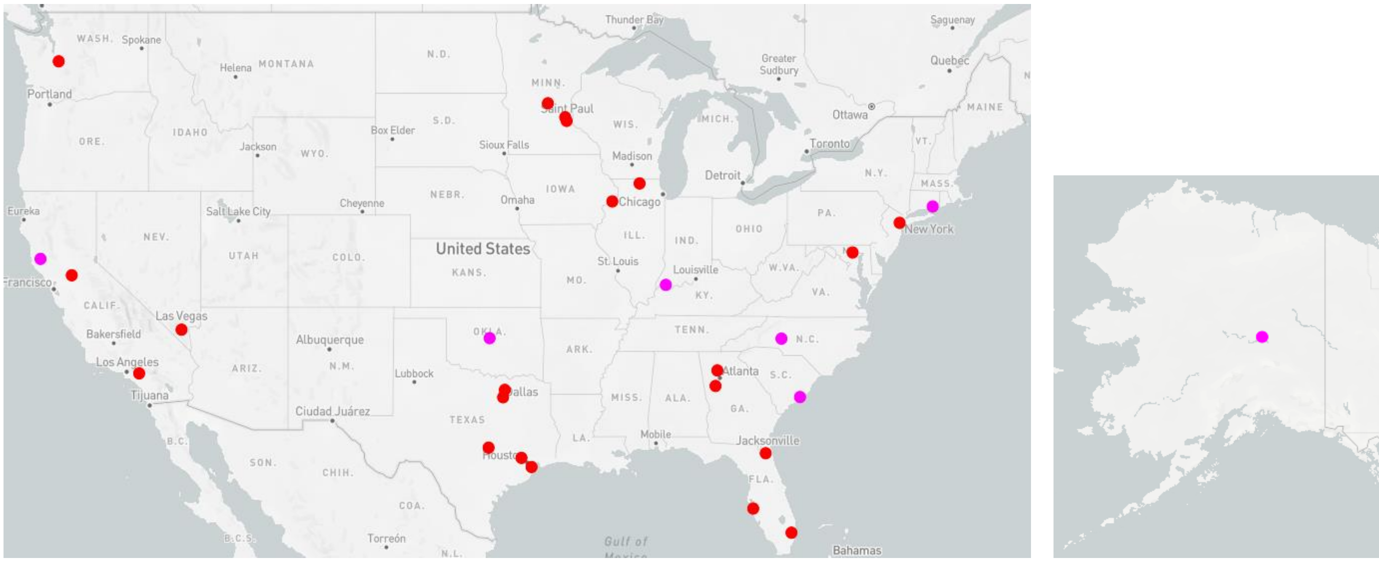
Costco to Sam's Club				Costco to BJ's			
State	Min Distance	State	Min Distance	State	Min Distance	State	Min Distance
Alaska	1,225.69	Minnesota	1.10	Hawaii	4,437.41	Illinois	229.90
Washington	282.14	Tennessee	1.04	Alaska	2,478.10	Kentucky	215.99
Oregon	233.52	New Jersey	0.78	Oregon	1,918.35	Louisiana	182.01
Idaho	45.59	Pennsylvania	0.78	California	1,716.70	Indiana	124.09
Delaware	32.08	Missouri	0.73	Washington	1,693.75	Tennessee	116.95
Massachusetts	24.42	Michigan	0.67	Nevada	1,681.66	Vermont	74.55
Vermont	20.03	Indiana	0.52	Idaho	1,491.33	Alabama	56.04
District of Colum	14.91	Alabama	0.42	Utah	1,489.16	South Carolina	17.65
Iowa	5.39	South Carolina	0.40	Arizona	1,438.23	District of Colum	6.55
New York	4.69	Maryland	0.40	Montana	1,285.88	North Carolina	4.40
Connecticut	4.35	Arizona	0.39	New Mexico	1,190.04	Delaware	2.70
Oklahoma	3.29	Georgia	0.39	Colorado	1,140.41	Georgia	1.94
Louisiana	2.81	North Carolina	0.36	Puerto Rico	1,075.28	Ohio	1.88
Nebraska	2.61	Texas	0.35	North Dakota	744.30	New Hampshire	1.80
Hawaii	2.42	Ohio	0.32	South Dakota	694.12	Maryland	1.25
Montana	2.04	Florida	0.27	Nebraska	671.15	Pennsylvania	0.98
Kentucky	2.01	Colorado	0.24	Kansas	646.62	Michigan	0.96
Illinois	1.88	Puerto Rico	0.24	Oklahoma	635.75	New York	0.83
Nevada	1.82	California	0.22	Texas	498.01	Massachusetts	0.69
New Hampshire	1.80	Virginia	0.22	Minnesota	488.34	Connecticut	0.62
South Dakota	1.68	New Mexico	0.19	Missouri	447.48	New Jersey	0.56
North Dakota	1.67	Kansas	0.18	Iowa	434.95	Florida	0.19
Wisconsin	1.43	Utah	0.18	Wisconsin	241.88	Virginia	0.02

Note: Distance in miles.
Source: RBC Capital Markets, RBC Elements, US Census

Our filtering methodology yielded strong predictive capabilities; 75% hit rate on recent openings

In conjunction with RBC Elements, we back tested the above filters/methodology on the warehouses that Costco opened in the US in 2019. **Of the 28 stores that Costco opened, 21 of the warehouses were within 15 miles of the locations identified by our filtering algorithm – a 75% hit rate.** We believe these results suggest that the criteria that Costco typically uses for its warehouse site selection is relatively similar to the methodologies that we have utilized. Namely, total population, population density, median incomes and proximity of both other Costco locations and that of direct competitors. We suspect that other factors such as co-location partners and highway access may also play a modest role. **Nevertheless, we believe that our 75% hit is statistically significant and a strong enough indicator that we can then extrapolate our findings to assess the company's future expansion potential.**

Exhibit 7: Opened warehouses in 2019 – predicted (red dots) vs. missed (purple dots) locations – 75% hit rate

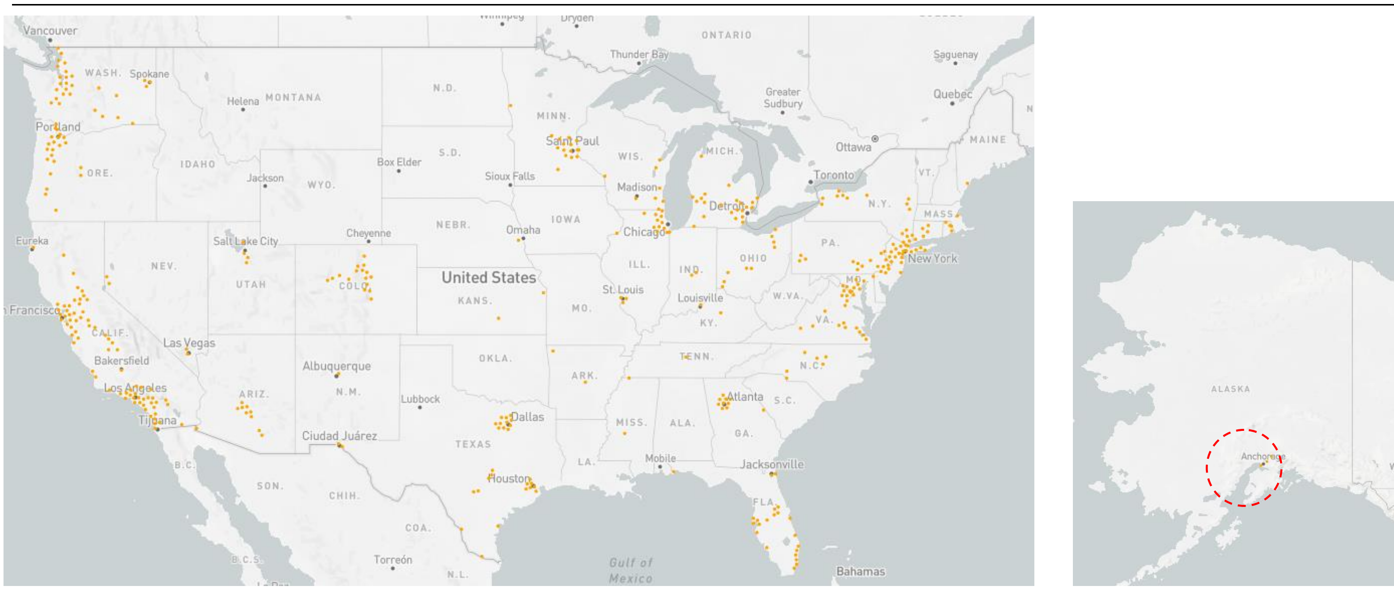


Source: RBC Capital Markets, RBC Elements

Costco has a new warehouse opportunity in 400+ locations in the US – 75% higher than today’s levels

Using the filters we established above and analyzing the ~18,400+ census tracks with over 5,500 people, **we have identified 403 additional locations for potential Costco warehouses or ~75% more than today’s base of 547. Further, based on the company’s ~3% new warehouse CAGR in the US, we estimate the company could continue to expand at a similar rate for the next ~20 years.**

Exhibit 8: RBC Elements has identified a ~400+ new warehouse expansion opportunity for Costco



Source: RBC Capital Markets, RBC Elements

Could 400 new warehouses be conservative? We think so

Our 75% hit rate still means that we had "filtered out" 25% of the warehouses that they actually opened in FY19 – While we believe that the thresholds we established for new stores were reasonably conservative, we used them because they were within the ***parameters already established by Costco in each state that it currently operates.*** However, while our predictive work had a ~75% hit rate on new warehouses that the company opened in FY19, it also means that 25% (7 of the 28) of the warehouses that they actually opened had been *filtered out from the thresholds we had established.* Specifically, 6 of the 7 locations that we had "filtered out" were in markets with lower population densities than where we had set our "minimum density" limits. In our view, this suggests that management likely expects to generate strong sales growth and returns in even smaller/less dense markets than what it has traditionally targeted.

Confident in competitive positioning – In addition, 3 of those same 6 stores also had another warehouse competitor in closer proximity than the barriers that we had previously set. In our view, this further indicates the company's confidence in its ability to compete and gain share against its direct competitors. **In other words, 3 of the 7 locations that the company opened in FY19 that didn't make it through our filter algorithms were BOTH in smaller/less dense markets than the ones we had identified AND had a direct competitor closer than what it previously had in that particular state.**

500+ doesn't seem unreasonable – As highlighted above, using the filters and parameters we established – *all of which were key characteristics of existing Costco locations in each state* – we still identified over 400 additional potential Costco sites. Nevertheless, since the company opened 30%+ more stores than what our models would have predicted (7 in markets that we ruled out vs. the 21 that we were able to identify), then it would suggest that new store openings could potentially increase our identified base by 120-130 units (30% more than the 400 we have identified), potentially representing 500+ warehouses over time or nearly double today's base.

Exhibit 9: Warehouses missed by our filtering criteria

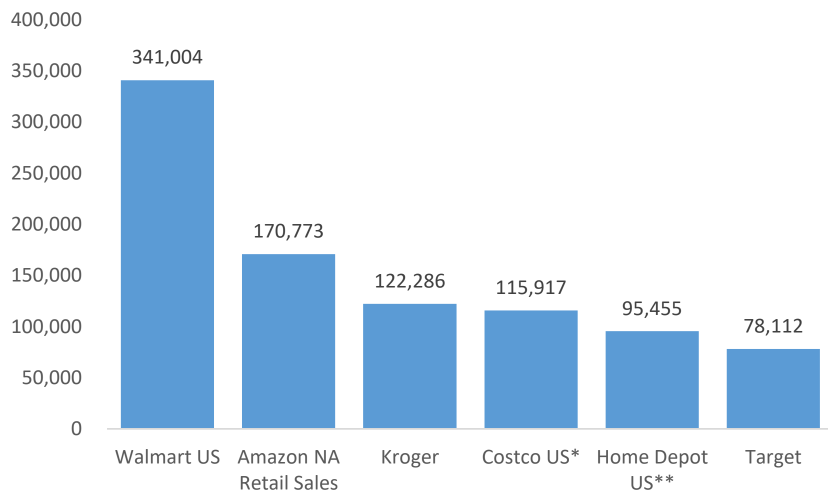
State	Reason not hit
Alaska	Median income not larger than state min
California	Population density not larger than state min
Connecticut	Population density not larger than state min
Indiana	Population density not larger than state min Sam's Club within established radius
North Carolina	Population density not larger than state min Sam's Club and BJ's within established radius
Oklahoma	Median income not larger than state min Population density not larger than state min Existing Costco and Sam's Club and within established radius
South Carolina	Median income not larger than state min Population density not larger than state min Existing Costco within established radius

Source: RBC Capital Markets, RBC Elements

Invest in "value"; drive customer loyalty/total sales growth; rinse and repeat

Strong comp growth and membership model remain the key drivers to Costco's growth algorithm – As we have previously highlighted, we view Costco as the ultimate "rinse and repeat" model. As one of the biggest retailers in the US (~$116 billion in the US and ~$165 billion at the enterprise level, thus behind only Walmart, Amazon and Kroger), Costco has greater buying scale than the vast majority of its competitors. Further, since the company concentrates its buying power on only ~3,800 SKUs at one time (with a treasure hunt exercise in some categories), we would argue that it likely has the strongest buying power in all of retail for many products.

Exhibit 10: Total 2019 US sales for select major retailers



*Calendarized
**Estimated
Source: Company reports and RBC Capital Markets estimates

Unmatched buying scale magnified by extremely low mark-up structure – We think that Costco's extremely low markup structure may just be the most under-appreciated aspect of the company's model. In addition to being able to "buy better" than most, if not all of their competitors, Costco also operates on one of the lowest GM structures in retail. Excluding their membership fees, the company operates on ~11%-12% GMs, **which implies it only marks-up its goods by ~12%-13%!** This is in sharp contrast to even low-margin grocers and Walmart, which typically target GMs of 25%-27% and thus need to mark up their inventory by 35%-40% to achieve this level of GM. **This mark-up gap enables Costco to have a 20%+ price advantage on a same SKU basis even before factoring in relative buying power/scale**.

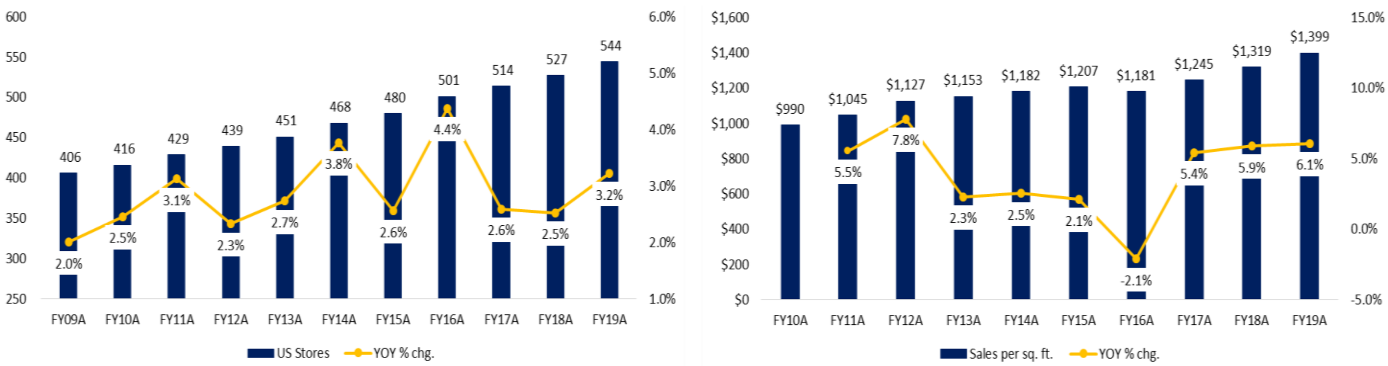
Exhibit 11: Annual grocery industry gross margins vs. Costco

	Costco	Avg. Grocer
Invoice	$100	$100
Mark-up	12%	37%
Resale	$112	$137
Profit	$12	$37
GM%	11%	27%

Source: Company reports and RBC Capital Markets estimates

Rinse and repeat – As a result, we believe the combination of the company's nearly unmatched buying power and one of the lowest mark-up structures in all of retail enables Costco to continually invest in very strong "value"/price for its members. This value proposition keeps existing members coming back (90%+ renewal rate) and further expands its membership base (+~4%-4.5% annual growth over the last 3 years). This productivity cycle has led to continual increases in sales per square foot, total consumer wallet share and further increases to its buying power which enables even better pricing…rinse and repeat.

Exhibit 12: Costco US store and sales/sq. ft. growth – FY09A-FY19A



Source: Company Reports and RBC Capital Markets

Membership model is the tool used to keep mark-ups to a minimum – We estimate membership fees generate nearly 70% of EBIT, and this high-margin revenue stream provides the profit subsidy that enables Costco to offer its extreme value proposition to its members. The company's "membership fees" are fairly minimal, at $60 for a basic membership or $120 for an "Executive" membership (Executive members get 2% cash back at the end of the year, implying that members are better off signing up for an Executive membership at just $3,000 in annual purchase volume). Interestingly, even at this fairly low membership fee level, MFI (Membership Fee Income) typically generates ~70% of EBIT, implying that the company is operating this very large $160b sales operation at just a 1% operating margin, excluding MFI.

Exhibit 13: Profit subsidy; membership EBIT contribution

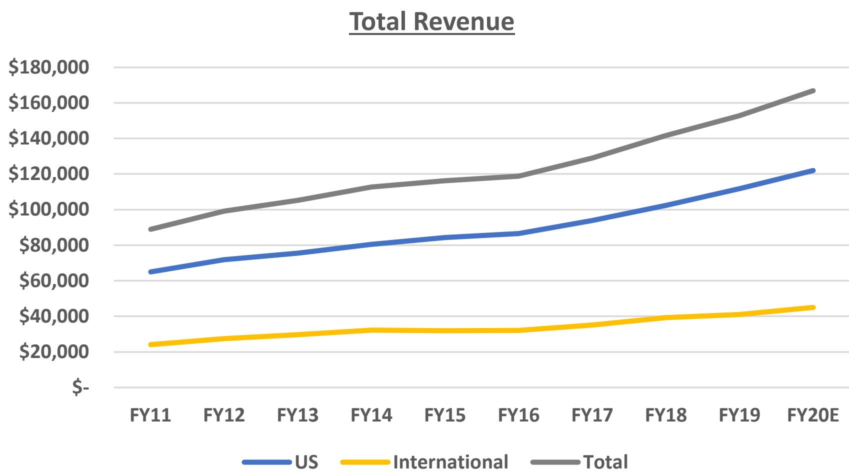
Membership EBIT Contribution	2013A	2014A	2015A	2016A	2017A	2018A	2019A
Net Sales Ex-Membership	$102,870.0	$110,212.0	$113,666.0	$116,073.0	$126,172.0	$138,434.0	$149,351.0
Operating Income	$3,053.0	$3,220.0	$3,624.0	$3,672.0	$4,060.5	$4,480.0	$4,903.0
Membership Fees	$2,286.0	$2,428.0	$2,533.0	$2,646.0	$2,853.0	$3,142.0	$3,352.0
Membership % of EBIT	74.9%	75.4%	69.9%	72.1%	70.3%	70.1%	68.4%
EBIT $ Ex-Membership	$767.0	$792.0	$1,091.0	$1,026.0	$1,207.5	$1,338.0	$1,551.0
EBIT % Ex-Membership	0.7%	0.7%	1.0%	0.9%	1.0%	1.0%	1.0%

Source: Company reports and RBC Capital Markets estimates

Buying scale + extremely thin markups (subsidized by MFI) = elite comp growth – Outside of a modest slowdown in FY16 and FY17 due to membership disruptions when the company shifted its credit card portfolio to Visa from American Express, Costco has posted very strong/consistent comp growth for the last decade – despite its growing size (Costco will likely exceed $160b in enterprise revenue in FY20). In addition, comps have further accelerated over the last 3 years as its credit card disruptions ebbed, the company's value proposition continued to improve (an ongoing theme) and as an expanding economy (pre Covid-19) fueled higher sales activity.

Exhibit 14: Annual comps and revenue, FY11-FY20E

Annual Comps Ex-Fuel and FX										
	FY11	**FY12**	**FY13**	**FY14**	**FY15**	**FY16**	**FY17**	**FY18**	**FY19**	**FY20E**
US	5.0%	6.0%	6.0%	5.0%	6.0%	3.0%	3.7%	7.4%	6.4%	9.1%
International	10.0%	8.0%	6.0%	7.0%	7.0%	6.0%	4.2%	5.5%	5.4%	9.5%
Total	6.0%	6.0%	6.0%	6.0%	7.0%	4.0%	3.8%	6.8%	6.1%	9.3%



Source: Company reports and RBC Capital Markets estimates

Incremental growth opportunities

Rapidly growing e-commerce business isn't the margin drag that it is for most other retailers – Today, the vast majority of retailers essentially have the same offering on-line as they do in their stores (albeit the offering tends to be larger on-line than what most companies can carry in their stores). However, because of legacy issues with pricing/shipping and Amazon's continual share growth, many large retailers have essentially moved to a uniform pricing structure (same price for a SKU in-store or on-line) even as shipping fees, to help subsidize shipping costs, have largely been competed away in most sectors. This means that most retailers are selling the exact same product on-line as they are in the stores, but at a much higher cost, since the retailers are generally eating the incremental shipping costs and, for ship-from-store operations, the additional labor required to pick and pack the widget.

Marches to its own drummer – Costco tends to have a different strategic focus for its e-commerce business than most other retailers. Costco isn't afraid to march to their own drummer. After years of essentially eschewing (bonus points for SAT word!) e-commerce given the potentially damaging effects to warehouse traffic (i.e., almost all other initiatives by Costco were designed to enhance traffic, from the food court, to ear/eyeglass service to gas stations), Costco really only started to embrace e-commerce as a legitimate sales channel a few years ago. To help avoid the earnings dilutive effects of e-commerce growth that hampers so many other retailers (and due to the late infrastructure build out that most other retailers have already embarked on), most of the company's earlier e-commerce efforts were effectively drop-shipped from their vendor partners. Ironically, management estimates that their margins were actually higher through this channel than through their boxes, as lower labor costs (didn't really have to touch or move the product within their network) more than offset lower GMs on the drop-shipped goods.

Product differentiation through different selling channels – In addition, even today, most of Costco's on-line offering is differentiated from its warehouse offering. This greatly reduces the conundrum most other retailers have faced by trying to sell the exact same SKU on-line and in the store, but not be able to charge for shipping due to competitive pressures. However, there has been more overlap over the last 1-2 years as the company's e-commerce platform/offering has matured.

Working with Instacart/recent acquisition of Innovel – Due to its late start and need to keep costs tight, the company does not have the delivery infrastructure of companies like Amazon or Walmart. So it has partnered with companies like Instacart to help it provide same day grocery delivery. Further, the company purchased Innovel in March 2020 for $1bn, to help bolster its fast growing e-commerce business, particularly for last mile delivery of bulkier, big-ticket items. Innovel has coverage capabilities of 100% of continental US zip codes and offers 24- to 48-hour delivery capabilities for ~85% of households. Given Costco's forte in offering customers "bulk" product, we believe that Innovel can further augment its growth rate in e-commerce. Innovel can also help Costco capture a greater portion of "white goods" sales (e.g., refrigerators, washers, dryers) that customers may have previously passed up due to the difficulty in taking such products out of a warehouse.

Vertical integration enables lower costs and, potentially, higher quality – Costco opened its first, relatively small beef plant several years ago and has since continued to build out various vertical capabilities/infrastructure. At this point, the company has several large plants processing beef, hot dogs, cookie dough and croissants among other items. One of the company's biggest vertical investments (and current expense drags) is the large chicken plant that it has built and is still ramping. The goal is to reach the ability to raise/process ~2.2mm chickens/week (its rotisserie chicken offering arguably has a cult-like following amongst its members). The company is also in the process of creating a produce offering. Importantly, in our view, the more the company builds out these kinds of vertical integration capabilities, the more efficient it becomes and the more it can control the process and quality.

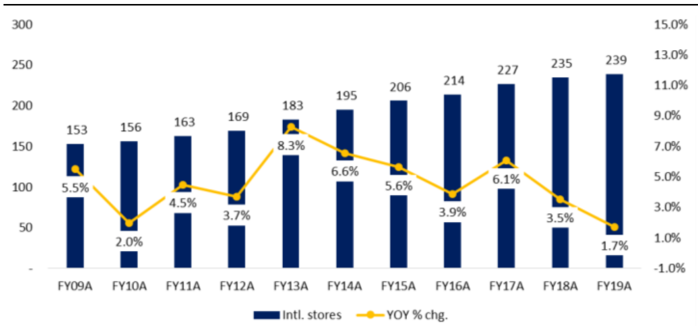
A different approach to Private Label – For most retailers, private label means "entry level product". If a consumer can't afford the branded product that they really want, say Tide detergent, they may need to step down to the store brand, which will typically be lower priced than the branded goods for most items. Even in auto parts, it's usually the "good" with the good, better, best offering. However, this is where Costco once again veers away from the crowd. The company doesn't have dozens of different private label brands (one for women's clothing, one for kids, one for consumables, etc.) like many other retailers. Rather, it consolidates the vast majority of its private label offerings under the Kirkland name brand (roughly 30% of total sales). Further, it doesn't position Kirkland as the entry level brand in its offerings. Rather, Costco targets developing the highest quality product that it can and then driving the price as low as possible (the order of these two goals matters). For example, trusted battery manufacturer Duracell makes Kirkland batteries (which sell for ~33% less per battery than the national brand), and many people rave over its wines and vodka. The point is that, while Kirkland is Costco's "private label" brand, Kirkland product tends to be very high quality and then the company targets the price point to maximum "value" to its members. There is a reason why there are literally thousands of Kirkland products on Amazon's Marketplace, being hocked by other resellers.

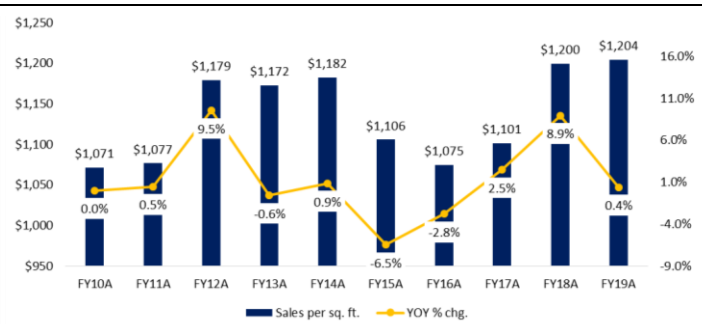
"Value" resonates across most countries/cultures; future margin opportunity

Slightly faster unit growth rate today outside of the US – Costco has been opening international stores at a modestly quicker pace in international markets (~4.5% CAGR) than it has in the US (~3%) over the last decade. As we have detailed above, we believe that Costco could potentially increase its US warehouse base by 400-500 locations or ~75%-90% from current levels. However, today Costco only has ~240 locations outside of the US, including ~100 in less densely populated Canada. While getting enough real estate for a Costco location can be a challenge in certain geographies, **we believe that the company's international expansion opportunity may ultimately be even larger than what it has in the US.**

Strong sales volumes; China could be particularly lucrative – While the average warehouse in the US generates ~$217mm in annual sales on a TTM basis, Costco's international locations generate ~83% of the same sales volume (~$180mm) despite smaller population densities in many countries, including Canada. Further, Costco has talked about how some of its biggest volume venues are overseas. In addition, we think that China could be a particularly lucrative opportunity for the company. Costco entered China in late August 2019 with a single warehouse, but initial demand was so strong, the company had to close the store 4 hours early on its first day for safety purposes. For context, a typical warehouse will have ~70,000 member households, with some high volume locations getting to 100,000-120,000 over time. However, in the initial 4 months of opening, Costco's Shanghai location had signed up over 200,000 members – literally double many high volume US venues. **We believe these results further support our view that "value" resonates well across the globe.**

Exhibit 15: Costco International store and sales/sq. ft. growth – FY09A-FY19A





Source: Company Reports and RBC Capital Markets

Higher margins outside of the US - While unusual, Costco generates higher margins from its International operations than it does in the US. For example, Costco's International operations generate EBIT margins of ~4%, while its US margins tend to be in the 2.7%-2.8% range, whereas Walmart's International margins were ~100bps lower than its US business even before the dilutive impact of Flipkart. While the margin gap admittedly isn't massive for Costco, this is a low margin business where basis points matter, implying a notable potential impact to profitability if the channel mix shifts towards the International operations over time.

Exhibit 16: COST and WMT – US vs. International margins

	FY16	FY17	FY18	FY19	FY20
Costco US	2.7%	2.8%	2.7%	2.7%	2.8%
Costco International	4.2%	4.2%	4.3%	4.1%	4.2%
Margin gap (bps)	(150)	(140)	(160)	(140)	(140)
Walmart US	6.6%	5.8%	5.4%	5.2%	5.2%
Walmart International	4.4%	4.5%	4.4%	4.0%	3.1%
Margin gap (bps)	220	130	100	120	210

Note: FY20 is actual for Walmart, estimated for Costco. Source: Company reports and RBC Capital Markets estimates

ESG efforts

The company has maintained a commitment to environmental, social and governance issues since it first opened in 1983. From historically paying employees more than the industry standard (and helping set them up for retirement through annual 401(k) enrollment and company contributions) to actively trying to minimize its carbon footprint and reduce food waste, ESG efforts appear to be a central focus of Costco's management team. Data compiled by RBC Capital Markets, LLC's Sara Mahaffy, US Equity Strategist & ESG Specialist, shows that 14% of actively managed ESG funds own COST in their portfolio, ranking it #8 among all S&P 500 Consumer Staples companies and in the 2nd decile within the entire S&P 500 universe (and in the company of names like GIS and KO). Further, 27% of passive/quant managed ESG funds own COST, which ranks it as #19 among Consumer Staples names in the S&P 500 and within the 6th decile of the entire S&P 500.

Exhibit 17: ESG fund ownership of S&P 500 Consumer Staples names

Top 20 S&P 500 Consumer Staples Ranked By Fundamental / Active ESG Fund Ownership as of 1Q20					
Ticker	Company Name	sector	Industry	Popularity in Fundamental / Active ESG Funds: % Funds Own	Decile Ranking Within Entire S&P 500 Universe
PG	PROCTER & GAMBLE CO	Consumer Staples	Household Products	29%	1
PEP	PEPSICO INC	Consumer Staples	Beverages	24%	1
CL	COLGATE-PALMOLIVE CO	Consumer Staples	Household Products	17%	2
EL	LAUDER (ESTEE) COS INC -CL A	Consumer Staples	Personal Products	15%	2
MDLZ	MONDELEZ INTERNATIONAL INC	Consumer Staples	Food Products	15%	2
KMB	KIMBERLY-CLARK CORP	Consumer Staples	Household Products	14%	2
MKC	MCCORMICK & CO INC	Consumer Staples	Food Products	14%	2
COST	COSTCO WHOLESALE CORP	Consumer Staples	Food & Staples Retailing	14%	2
GIS	GENERAL MILLS INC	Consumer Staples	Food Products	13%	2
KO	COCA-COLA CO	Consumer Staples	Beverages	13%	2
CLX	CLOROX CO/DE	Consumer Staples	Household Products	11%	3
K	KELLOGG CO	Consumer Staples	Food Products	10%	3
SYY	SYSCO CORP	Consumer Staples	Food & Staples Retailing	9%	4
CPB	CAMPBELL SOUP CO	Consumer Staples	Food Products	8%	4
KR	KROGER CO	Consumer Staples	Food & Staples Retailing	8%	4
HSY	HERSHEY CO	Consumer Staples	Food Products	7%	5
CHD	CHURCH & DWIGHT INC	Consumer Staples	Household Products	7%	5
WMT	WALMART INC	Consumer Staples	Food & Staples Retailing	6%	6
WBA	WALGREENS BOOTS ALLIANCE INC	Consumer Staples	Food & Staples Retailing	5%	6
SJM	SMUCKER (JM) CO	Consumer Staples	Food Products	5%	7

Top 20 S&P 500 Consumer Staples Ranked By Passive / Quant / ETF ESG Fund Ownership as of 1Q20					
Ticker	Company Name	sector	Industry	Popularity in Passive / Quant / ETF ESG Funds: % Funds Own	Decile Ranking Within Entire S&P 500 Universe
GIS	GENERAL MILLS INC	Consumer Staples	Food Products	55%	1
PG	PROCTER & GAMBLE CO	Consumer Staples	Household Products	53%	1
CL	COLGATE-PALMOLIVE CO	Consumer Staples	Household Products	53%	1
CLX	CLOROX CO/DE	Consumer Staples	Household Products	52%	1
PEP	PEPSICO INC	Consumer Staples	Beverages	50%	1
KMB	KIMBERLY-CLARK CORP	Consumer Staples	Household Products	49%	1
K	KELLOGG CO	Consumer Staples	Food Products	49%	1
MKC	MCCORMICK & CO INC	Consumer Staples	Food Products	48%	1
KO	COCA-COLA CO	Consumer Staples	Beverages	47%	2
CPB	CAMPBELL SOUP CO	Consumer Staples	Food Products	41%	3
EL	LAUDER (ESTEE) COS INC -CL A	Consumer Staples	Personal Products	40%	3
MDLZ	MONDELEZ INTERNATIONAL INC	Consumer Staples	Food Products	38%	3
SYY	SYSCO CORP	Consumer Staples	Food & Staples Retailing	35%	4
HSY	HERSHEY CO	Consumer Staples	Food Products	35%	4
SJM	SMUCKER (JM) CO	Consumer Staples	Food Products	33%	5
HRL	HORMEL FOODS CORP	Consumer Staples	Food Products	31%	5
KR	KROGER CO	Consumer Staples	Food & Staples Retailing	29%	6
WBA	WALGREENS BOOTS ALLIANCE INC	Consumer Staples	Food & Staples Retailing	29%	6
COST	COSTCO WHOLESALE CORP	Consumer Staples	Food & Staples Retailing	27%	6
CHD	CHURCH & DWIGHT INC	Consumer Staples	Household Products	27%	6

Source: RBC US Equity Strategy

Net/net

We believe that Costco's extreme consumer value proposition, driven by its immense buying scale and razor thin markup process, makes Costco the ultimate rinse and repeat model. Despite its size, our proprietary research, led by our data science team RBC Elements, suggests that the company should be able to add another 400-500+ locations in the US over time or 75%-90% above current levels. In addition, given the company's relatively low base (~240 locations, including ~100 just in Canada) we think the company's international growth opportunity may even exceed that of the US. We believe these factors, coupled with additional productivity enhancements (including e-commerce, vertical integration and private label), provide Costco with one of the highest barriers to entry in all of retail and support the company's premium valuation.

Exhibit 18: Valuation snapshot for Costco Wholesale Corp.

COST	Current Price		$341.55	***estimates have been calendarized for COST			
	Assigned P/E		42.0				
2020 Valuation				**2021 Valuation**			
Historical 1-year forward P/E for S&P 500 (3 year median)			18.2	Historical 2-year forward P/E for S&P 500 (3 year median)			16.5
Historical 1-year forward P/E for COST (3 year median)			31.4	Historical 2-year forward P/E for COST (3 year median)			29.0
Historical Premium vs. Market			**72%**	**Historical Premium vs. Market**			**76%**
Current P/E Ratio of S&P 500 on 2020 EPS Estimates			26.1	Current P/E Ratio of S&P 500 on 2021 EPS Estimates			20.6
Premium of Assigned P/E to Current Market Multiple			**61%**	**Premium of Assigned P/E to Current Market Multiple**			**104%**
2019 EPS			$8.41	RBC's 2020 EPS Estimate			$8.85
2020 Estimated EPS Growth Rate (RBC Base Case)			5.3%	2021 Estimated EPS Growth Rate (RBC Base Case)			10.4%
Current P/E Based on RBC's 2020 EPS Estimate			38.6	Current P/E Based on RBC's 2021 EPS Estimate			34.9
Current PEG Ratio			NA	Current PEG Ratio			NA
PEG Ratio using Assigned P/E			NA	**PEG Ratio using Assigned P/E**			NA
Price Target: 2020 Scenario Analysis				**Price Target: 2021 Scenario Analysis**			
	Base Case	**Upside**	**Downside**		**Base Case**	**Upside**	**Downside**
2019 Sales	$158,350.0			Estimated 2020 Sales	$172,928.8		
New Store/Other Sales Growth	0.2%	1%	-1%	New Store/Other Sales Growth	3.1%	5%	2%
Comp Growth	9.0%	11%	7%	Comp Growth	4.3%	6%	2%
Estimated 2020 Sales	$172,928.8	$177,352.0	$167,851.0	Estimated 2021 Sales	$185,712.2	$191,086.3	$179,846.0
2019 Operating Margin	3.2%			2020 Operating Margin	3.2%		
2020 Operating Margin	3.2%	3.4%	3.0%	2021 Operating Margin	3.2%	3.4%	3.0%
Estimated 2020 Operating Profit	5,453.1	6,030.0	5,035.5	Estimated 2021 Operating Profit	5,948.4	6,496.9	5,395.4
Interest expense/income	(69.0)	(69.0)	(69.0)	Interest expense/income	(34.0)	(34.0)	(34.0)
Tax rate	26.9%	26.9%	26.9%	Tax rate	27.0%	27.0%	27.0%
Estimated 2020 net income	3,933.4	4,354.8	3,628.3	Estimated 2021 net income	4,317.5	4,717.9	3,913.8
2019 year-end share count	443.1			2020 year-end share count	442.8		
2020 Share Buyback	0.1%	1%	-1%	2021 Share Buyback	0.5%	1%	0%
Estimated 2020 Share Count	442.8	440.9	447.5	Estimated 2021 Share Count	440.5	438.4	442.8
Implied 2020 EPS	**$8.85**	**$9.88**	**$8.11**	**Implied 2021 EPS**	**$9.77**	**$10.76**	**$8.84**
Assigned P/E	**42.0**	45.0	37.0	Assigned P/E	**42.0**	45.0	37.0
Implied PT from Scenario	**$371.80**	**$444.47**	**$299.97**	**Implied PT from Scenario**	**$410.47**	**$484.30**	**$327.03**
Range of Valuations	9%	30%	-12%	Range of Valuations	20%	42%	-4%
12 Month Forward Price Target (75% 2020 & 25% 2021 Base Case Scenarios):	**$381**						
Implied Upside from Current Price	**12%**						
12 Month Forward Upside (75% 2020 & 25% 2021 Upside Scenarios):	$454						
Implied Upside from Current Price:	33%						
12 Month Forward Downside (75% 2020 & 25% 2021 Downside Scenarios):	$307						
Implied Downside from Current Price:	-10%						

Source: RBC Capital Markets estimates, FactSet, and Company reports. Priced as of 10:45am EST on 08/19/2020

ELEMENTS

A new wave of investor insight

Powered by RBC

Description

RBC Elements is a primary research and data science team embedded within RBC's Global Research division. The main focus of RBC Elements is to use scientific methods, algorithms and systems to analyze vast amounts of structured and unstructured data, to obtain insights that are inputs into RBC's Fundamental Global Research teams.

Objective

The team is involved in creating various machine learning and predictive modeling tools and processes, helping RBC Research discover the information hidden in big data, and allowing the Research division to make smarter decisions and deliver differentiated products to our clients. RBC Elements strives to augment the already available industry data with different alternative data sources, and enhance data collection procedures to include information that is relevant.

Methods

The team is implementing different machine learning and data mining algorithms using state-of-the-art methods. Examples include:

- Machine learning techniques and algorithms, such as k-NN, Naive Bayes, SVM, Decision Forests, Clustering, Artificial Neural Networks, and Natural Language Processing to find patterns in the past, and to predict the future.
- Feature selection techniques to find what matters most in the data.
- Statistical modeling and analysis, and statistical tests such as distributions, and regression/GLM.
- Developing hypotheses and making inferences using large amounts of data.

Costco Wholesale Corp.
Quarterly Income Statement (Fiscal Year Ends August 31)

Scot Ciccarelli: (212) 428-6402
RBC Capital Markets

		2019A					2020E					2021E					2022E				
	2018A	**1Q19A**	**2Q19A**	**3Q19A**	**4Q19A**	**2019A**	**1Q20A**	**2Q20A**	**3Q20A**	**4Q20E**	**2020E**	**1Q21E**	**2Q21E**	**3Q21E**	**4Q21E**	**2021E**	**1Q22E**	**2Q22E**	**3Q22E**	**4Q22E**	**2022E**
Net Sales	$ 138,434.0	$ 34,311.0	$ 34,628.0	$ 33,964.0	$ 46,448.0	$ 149,351.0	$ 36,236.0	$ 38,256.0	$ 36,451.0	$ 52,463.4	$ 163,406.4	$ 39,559.2	$ 40,822.8	$ 40,297.6	$ 55,435.3	$ 176,114.9	$ 42,378.3	$ 43,753.3	$ 43,136.3	$ 59,313.1	$ 188,581.0
Membership Fees	3,142.0	758.0	768.0	776.0	1,050.0	3,352.0	804.0	816.0	815.0	1,106.9	3,541.9	847.4	863.1	866.5	1,171.9	3,748.9	896.6	912.6	915.6	1,237.6	3,962.3
Total Revenue	**141,576.0**	**35,069.0**	**35,396.0**	**34,740.0**	**47,498.0**	**152,703.0**	**37,040.0**	**39,072.0**	**37,266.0**	**53,570.3**	**166,948.3**	**40,406.6**	**41,685.9**	**41,164.1**	**56,607.2**	**179,863.8**	**43,275.0**	**44,665.9**	**44,051.8**	**60,550.7**	**192,543.4**
Merchandise Costs	123,152.0	30,580.0	30,720.0	30,233.0	41,310.0	132,843.0	32,233.0	34,056.0	32,249.0	46,516.2	145,054.2	35,170.8	36,338.5	35,684.1	49,153.2	156,346.5	37,667.5	38,936.2	38,187.4	52,577.4	167,368.4
Gross Profit	**18,424.0**	**4,489.0**	**4,676.0**	**4,507.0**	**6,188.0**	**19,860.0**	**4,807.0**	**5,016.0**	**5,017.0**	**7,054.1**	**21,894.1**	**5,235.8**	**5,347.4**	**5,480.0**	**7,454.0**	**23,517.3**	**5,607.5**	**5,729.7**	**5,864.5**	**7,973.3**	**25,174.9**
SG&A	13,876.0	3,475.0	3,464.0	3,371.0	4,561.0	14,871.0	3,732.0	3,743.0	3,830.0	5,251.2	16,556.2	4,051.0	3,993.0	4,103.0	5,538.2	17,685.2	4,325.6	4,265.0	4,377.6	5,905.8	18,874.1
Pre-opening Expense	68.0	22.0	9.0	14.0	41.0	86.0	14.0	7.0	8.0	35.0	64.0	20.0	13.0	13.0	42.0	88.0	21.0	15.0	14.0	45.0	95.0
Operating Income	**4,480.0**	**992.0**	**1,203.0**	**1,122.0**	**1,586.0**	**4,903.0**	**1,061.0**	**1,266.0**	**1,179.0**	**1,767.9**	**5,273.9**	**1,164.8**	**1,341.4**	**1,364.0**	**1,873.8**	**5,744.1**	**1,260.9**	**1,449.6**	**1,472.8**	**2,022.4**	**6,205.8**
Interest Exp, net	(159.0)	(36.0)	(34.0)	(35.0)	(45.0)	(150.0)	(38.0)	(34.0)	(37.0)	(50.0)	(159.0)	(40.0)	(41.0)	(41.0)	(52.0)	(174.0)	(39.0)	(41.0)	(42.0)	(51.0)	(173.0)
Interest Income and other,	121.0	22.0	46.0	36.0	74.0	178.0	35.0	45.0	21.0	45.0	146.0	37.0	46.0	43.0	56.0	182.0	39.0	47.0	48.0	62.0	196.0
Pretax Income	4,442.0	978.0	1,215.0	1,123.0	1,615.0	4,931.0	1,058.0	1,277.0	1,163.0	1,762.9	5,260.9	1,161.8	1,346.4	1,366.0	1,877.8	5,752.1	1,260.9	1,455.6	1,478.8	2,033.4	6,228.8
Taxes	$ 1,378.00	$ 254.8	$ 314.0	$ 278.6	$ 410.0	$ 1,257.35	$ 279.0	$ 330.0	$ 311.0	$ 476.0	$ 1,395.97	$ 313.7	$ 363.5	$ 368.8	$ 507.0	$ 1,553.06	$ 340.4	$ 393.0	$ 399.3	$ 549.0	$ 1,681.79
Net Income to Costco	**3,019.0**	**713.3**	**889.0**	**834.4**	**1,192.0**	**3,628.7**	**767.0**	**931.0**	**838.0**	**1,277.9**	**3,813.9**	**836.1**	**967.9**	**987.2**	**1,361.8**	**4,153.0**	**908.5**	**1,047.6**	**1,070.6**	**1,474.4**	**4,501.1**
EPS	**$ 6.84**	**$ 1.61**	**$ 2.01**	**$ 1.89**	**$ 2.69**	**$ 8.20**	**$ 1.73**	**$ 2.10**	**$ 1.89**	**$ 2.88**	**$ 8.60**	**$ 1.89**	**$ 2.19**	**$ 2.24**	**$ 3.09**	**$ 9.40**	**$ 2.06**	**$ 2.38**	**$ 2.44**	**$ 3.36**	**$ 10.25**
Diluted Shares	441.6	442.7	442.3	442.6	442.4	442.5	443.7	443.7	443.9	443.0	443.6	442.5	442.0	441.5	441.0	441.7	440.1	439.6	439.1	438.6	439.3
U.S. Comp (incl. Fuel)	9.4%	11.0%	7.4%	7.0%	6.2%	7.8%	4.7%	9.1%	5.9%	10.9%	8.0%	7.9%	5.3%	8.7%	4.7%	6.5%	5.5%	5.5%	5.5%	5.5%	5.5%
Int'l (incl. FX)	9.8%	3.2%	0.2%	1.5%	2.3%	1.8%	3.0%	3.1%	1.7%	13.7%	6.2%	5.3%	1.5%	8.0%	1.7%	3.9%	5.0%	5.3%	4.8%	5.0%	5.0%
Overall Comp	**9.5%**	8.8%	5.4%	5.5%	5.1%	**6.1%**	4.3%	8.9%	4.8%	11.6%	**7.8%**	7.2%	8.5%	8.5%	3.9%	**5.8%**	5.4%	5.5%	5.3%	5.4%	**5.4%**
Quarterly	**2018A**	**1Q19A**	**2Q19A**	**3Q19A**	**4Q19A**	**2019A**	**1Q20A**	**2Q20A**	**3Q20A**	**4Q20E**	**2020E**	**1Q21E**	**2Q21E**	**3Q21E**	**4Q21E**	**2021E**	**1Q22E**	**2Q22E**	**3Q22E**	**4Q22E**	**2022E**
Total Sales	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Merchandise Costs	87.0%	87.2%	86.8%	87.0%	87.0%	87.0%	87.0%	87.2%	86.5%	86.8%	86.9%	87.0%	87.2%	86.7%	86.8%	86.9%	87.0%	87.2%	86.7%	86.8%	86.9%
GM (incl. membership fees	**13.0%**	**12.8%**	**13.2%**	**13.0%**	**13.0%**	**13.0%**	**13.0%**	**12.8%**	**13.5%**	**13.2%**	**13.1%**	**13.0%**	**12.8%**	**13.3%**	**13.2%**	**13.1%**	**13.0%**	**12.8%**	**13.3%**	**13.2%**	**13.1%**
SG&A	9.8%	9.9%	9.8%	9.7%	9.6%	9.7%	10.1%	9.6%	10.3%	9.8%	9.9%	10.0%	9.6%	10.0%	9.8%	9.8%	10.0%	9.5%	9.9%	9.8%	9.8%
Pre-opening Expense	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
Operating Margin	**3.2%**	**2.8%**	**3.4%**	**3.2%**	**3.3%**	**3.2%**	**2.9%**	**3.2%**	**3.2%**	**3.3%**	**3.2%**	**2.9%**	**3.2%**	**3.3%**	**3.3%**	**3.2%**	**2.9%**	**3.2%**	**3.3%**	**3.3%**	**3.2%**
Interest Exp, net	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Pretax Margin	3.1%	2.8%	3.4%	3.2%	3.4%	3.2%	2.9%	3.3%	3.1%	3.3%	3.2%	2.9%	3.2%	3.3%	3.3%	3.2%	2.9%	3.3%	3.4%	3.4%	3.2%
Tax Rate	31.0%	26.0%	25.8%	24.8%	25.4%	25.5%	26.4%	25.8%	26.7%	27.0%	26.5%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%	27.0%
Net Margin	**2.1%**	**2.0%**	**2.5%**	**2.4%**	**2.5%**	**2.4%**	**2.1%**	**2.4%**	**2.2%**	**2.4%**	**2.3%**	**2.1%**	**2.3%**	**2.4%**	**2.4%**	**2.3%**	**2.1%**	**2.3%**	**2.4%**	**2.4%**	**2.3%**
Growth by Category																					
Total Sales	**9.7%**	**10.2%**	**7.3%**	**7.4%**	**7.0%**	**7.9%**	**5.6%**	**10.4%**	**7.3%**	**12.8%**	**9.3%**	**9.1%**	**6.7%**	**10.5%**	**5.7%**	**7.7%**	**7.1%**	**7.1%**	**7.0%**	**7.0%**	**7.0%**
Gross Profit	7.8%	7.1%	9.7%	6.5%	7.8%	7.8%	7.1%	7.3%	11.3%	14.0%	10.2%	8.9%	6.6%	9.2%	5.7%	7.4%	7.1%	7.1%	7.0%	7.0%	7.0%
SG&A	7.2%	7.8%	7.1%	6.8%	7.0%	7.2%	7.4%	8.1%	13.6%	15.1%	11.3%	8.5%	6.7%	7.1%	5.5%	6.8%	6.8%	6.8%	6.7%	6.6%	6.7%
Operating Profit	**10.3%**	**4.3%**	**18.4%**	**5.2%**	**9.7%**	**9.4%**	**7.0%**	**5.2%**	**5.1%**	**11.5%**	**7.6%**	**9.8%**	**6.0%**	**15.7%**	**6.0%**	**8.9%**	**8.2%**	**8.1%**	**8.0%**	**7.9%**	**8.0%**
Net Income	17.7%	19.1%	41.8%	11.3%	14.3%	20.2%	7.5%	4.7%	0.4%	7.2%	5.1%	9.0%	4.0%	17.8%	6.6%	8.9%	8.7%	8.2%	8.4%	8.3%	8.4%
EPS	**17.4%**	**18.6%**	**41.5%**	**11.0%**	**14.3%**	**20.0%**	**7.3%**	**4.4%**	**0.2%**	**7.1%**	**4.9%**	**9.3%**	**4.4%**	**18.4%**	**7.1%**	**9.3%**	**9.2%**	**8.8%**	**9.0%**	**8.9%**	**9.0%**

(All numbers in millions, except per share data)
Source: RBC Capital Markets estimates and Company reports

Companies mentioned

Costco Wholesale Corporation (NASDAQ: COST US; $340.90; Outperform)

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Distribution of ratings
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As of 30-Jun-2020

			Investment Banking Serv./Past 12 Mos.	
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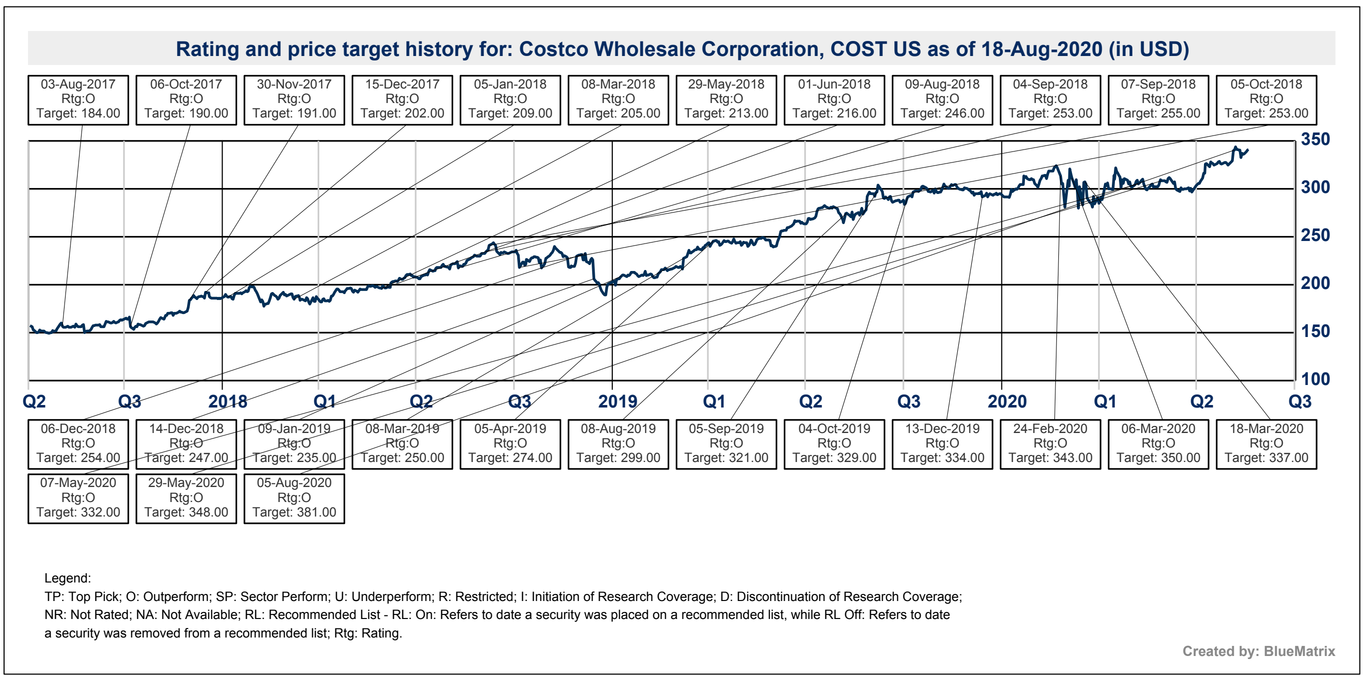
SELL [Underperform]	**92**	**6.12**	**12**	**13.04**



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Costco Wholesale Corporation

Valuation

Our 12-month forward price target of $381 is derived by applying a 42x P/E to a blend of our calendarized 2020/2021 EPS estimates of $8.85/$9.77. Our target multiple is based on our proprietary CVM (Ciccarelli's Valuation Matrix) blended valuation methodology, which uses the stock's relative valuation to both the market and its own historical valuation range. All of our valuation work is tied to our CVM model. This multiple is slightly below the stock's historical relative valuation (premium of 65% vs. historical 71%). Our price target and implied return support our Outperform rating.

Risks to rating and price target

- **Regional/geographic concentration –** Costco's performance is highly dependent on the health of its US and Canadian operations, which together accounted for ~90% of net sales in FY19. Furthermore, within the US, sales are highly dependent on the California market, which alone accounted for ~30% of US net sales in FY19. As such, declines in US (specifically California) or Canadian performance (i.e., declines in comparable sales, negative operating expense trends, labor disruptions, etc.) could materially affect the company's overall business health and financial results.
- **E-commerce cannibalization threats –** Costco operates in a highly competitive industry, directly competing with other supercenters, department and specialty stores, gasoline stations, and internet retailers for customers' wallet share. Specifically, intensifying competition from e-retailers such as Amazon, Jet.com, Boxed.com, etc. poses a risk to the traditional brick-and-mortar retail model and may increasingly impact retail traffic flow to Costco's clubs over time.
- **Commodity price deflation and FX risks –** Historically, the company has opted to absorb short-term changes in commodity costs instead of passing them on to customers (as seen with its rotisserie chicken), thereby exposing the company's profitability to commodity price changes. Additionally, because the company operates globally, it is exposed to foreign exchange rate volatility.
- **Economic deterioration –** The general health of the economy and the consumer could pressure Costco's results. While more than half of the company's sales stem from grocery items, it offers a wide assortment of more discretionary/big-ticket items as well. As such, we suspect that changes in consumer sentiment, particularly for those of higher-earning households (where Costco skews toward $92,000+/year), could affect the company's performance.
- **Low-margin structure is sensitive to modest changes in costs –** The goal of the model is to grow sales and leverage SG&A given a very low GM structure. That said, even modest changes to things that it cannot control, such as healthcare and utilities costs, could have a large impact on margins.

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