CFA Institute Research Challenge

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Team Name: Babson College

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BJ’s Wholesale Club Holdings, Inc.
NYSE:BJ

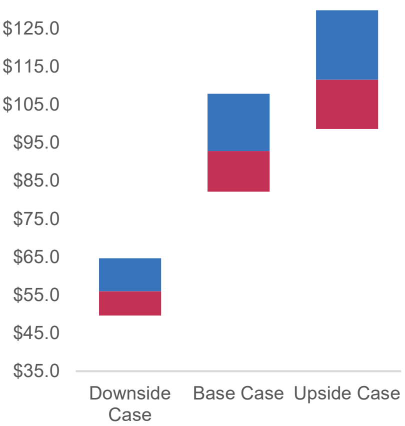
GICS: Consumer Staples
Valuation Date: January 5, 2023

Recommendation:	**BUY**
Current Price:	$67
Target Price:	$93
Upside:	39%

NYSE: BJ - BUY Rating	
Date	January 5, 2023
Current Price	$67
Target Price	$93
Upside	39%
Market Capitalization ($ mn)	8,894
Enterprise Value ($ mn)	9,947
Diluted Shares Outstanding (mn)	137
52-week Low	$51
52-week High	$80

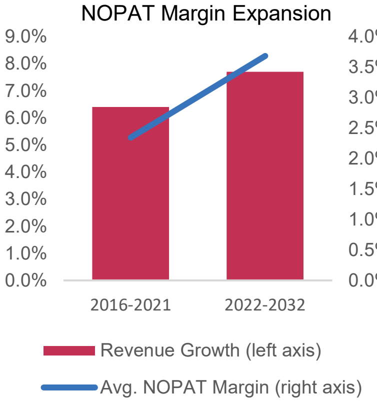
Valuation Summary	
DCF (50% weight)	$101
Relative Valuation (50% weight)	$84
Target Price	$93

Figure 1: Valuation Price Range



Source: Team Analysis

Figure 2: BJ’s Revenue Growth and NOPAT Margin Expansion



Source: Company Data, Team Analysis

RECOMMENDATION

We initiate coverage on BJ’s Wholesale Club Holdings, Inc. (NYSE:BJ) with a BUY recommendation based on our fundamental outlook and a price target of $93, derived using both a discounted cash flow (DCF) analysis and a relative valuation analysis.

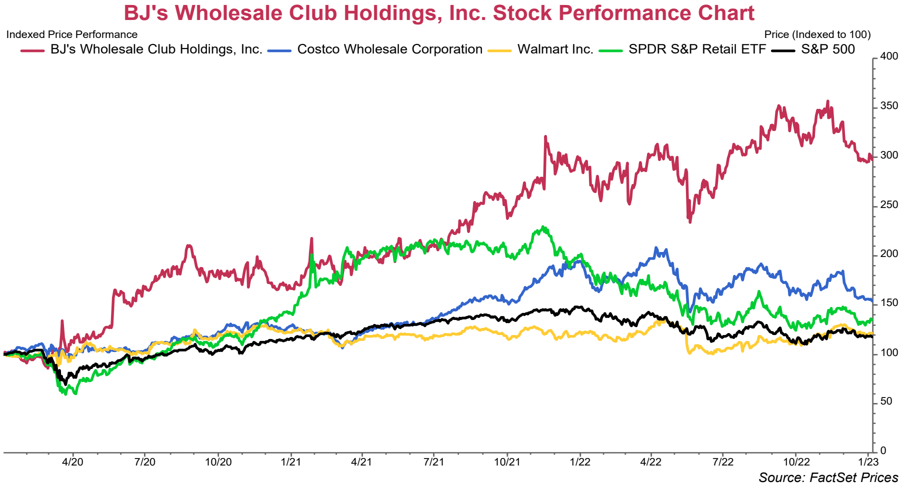
Investment Summary Highlights

1) BJ’s is accelerating store expansion in new and existing markets which is underappreciated by the street due to higher competitor presence in new markets.
   a) Restructuring of the real estate development division to include members with 15+ years of industry experience accelerated store unit growth from 1-2% to 4-5% annually.
   b) BJ's is witnessing stronger performance in newly opened stores, given their alignment with customers' key purchasing criteria, such as package sizing and pricing.
2) BJ’s changes in assortment mix, driven by the implementation of digital systems and processes, are enabling the company to improve store space productivity, driving a forecasted expansion in NOPAT margin of 33%, from approximately 3% to 4%.
   a) Excess assortment across grocery and sundries will be trimmed to allocate space to general merchandise products, providing greater choices to customers.
   b) Data analysis is enabling the company to replace slow-moving SKUs with fast-moving SKUs to improve store space efficiency.
3) The quality of BJ’s membership base and the growth of their membership fee income (MFI) is underappreciated by the market, as analysts have yet to appreciate the high member tier penetration and rising renewal rates.
   a) Development of the Easy Renewal program is improving member retention rates, with 100% of members at new stores automatically enrolled in this program.
   b) High membership tier penetration, which has increased more than 1,000 bps over the last four years, will continue to accelerate.

Valuation Summary

BJ’s current share price of $67 is substantially undervalued based on our intrinsic value estimate. Our team relied on an equally weighted split of our DCF valuation and relative valuation, yielding a price target of $93. Given our fundamental analysis, we forecast revenue growth of 7.7% CAGR, NOPAT margin expansion from 3% to 4%, and used a discount rate of 7.5% to derive a DCF target price of $101. Our relative valuation was conducted using (1) a comparable company analysis with an EV/Sales of 0.78x and an EV/EBITDA of 13.1x, and (2) a fair value multiple analysis, EV/Sales of 0.79x, by performing a multiple linear regression. The relative valuation yielded a price target of $84, complementing our DCF valuation and reinforcing our BUY recommendation for BJ’s Wholesale Club.

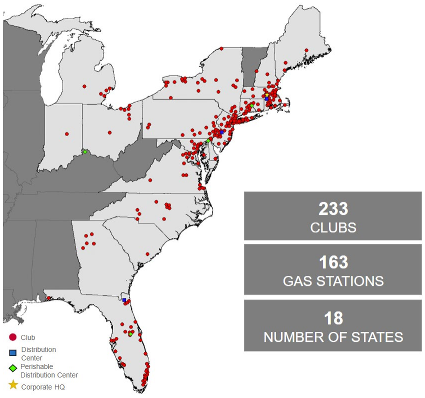
BJ's Wholesale Club Holdings, Inc. Stock Performance Chart



Source: FactSet Prices

BUSINESS DESCRIPTION

Figure 3: Company Presence and Size



Source: Company Data

BJ's Wholesale Club Holdings, Inc. is a membership-only warehouse club retail chain offering groceries, general merchandise, and other ancillary services to their members. The company is based in Marlborough, Massachusetts and has a strong presence in the New England region. As of Q3 2022, BJ's operates 233 warehouse clubs and 163 gas stations spanning 18 states (Figure 3).

Business Model

BJ's Wholesale Club generates revenue from selling retail products and charging membership fees. The retail segment is a low margin business, whereas membership fees are a 100% margin business that generates recurring revenue, as they have approximately 90% membership retention as of 2022. The membership fees revenue accounted for approximately 53% of BJ's operating income in 2022, with retail sales accounting for the rest.

Private Labels: BJ's generates around 24% of their retail sales from private label brands, Wellsley Farms and Berkely Jensen. These products are priced 20-30% below branded alternatives and provide higher margins to the company. Since going public, BJ's has increased private label share by 400 bps, providing incremental value to their members.

Digital: BJ's also operates an omnichannel platform with an online website and a mobile application allowing members to choose from options such as: buy-online-pickup-in-club (BOPIC), curbside delivery, same day delivery, and traditional home delivery. This platform accounts for roughly 9% of net retail sales. Furthermore, members shopping digitally have higher basket sizes and shop more often which improves likelihood of membership renewal.

Figure 4: Revenue Segments

Source: Company Data, Team Analysis

Product Offerings

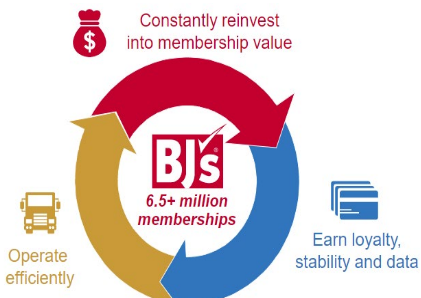
BJ's offers groceries and general merchandise products in bulk quantities at discounted prices. Being a warehouse membership club, the company maintains 7,000 core SKUs compared to supermarkets which typically carry 40,000 SKUs. Their offerings are grouped into three divisions (Figure 4):

Grocery: This segment contributed to 67% of revenue (excluding membership fees) in 2022 and consists of bakery, beauty care, beverages, cleaning products, dairy, food, meat, paper products, and more.

General Merchandise: This segment contributed to 11% of revenue (excluding membership fees) in 2022 and consists of apparel & accessories, electronics, seasonal goods, and more.

Gasoline and Other Services: This segment contributed to 22% of revenue (excluding membership fees) in 2022, from gasoline and other services revenue.

Figure 5: BJ's Flywheel of Value Creation



Source: Company Data

Membership Tiers

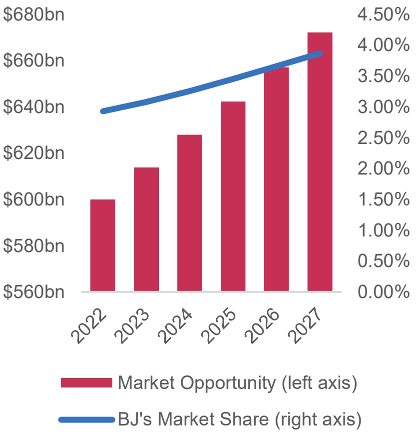
Apart from retail, BJ's generates revenue from charging membership fees with over 6.5 million members as of Q3 2022. BJ's offers multiple membership plans, charging different fees, and offering different value propositions:

The Inner Circle: BJ's basic membership, priced at $55/year, provides members with exclusive member coupons, brands and low gas prices. This also includes a second household card.

Perks Rewards: BJ's higher tier membership, priced at $110/year, includes 2% cash back, travel benefits, and the other perks associated with Inner Circle membership.

Business Membership: BJ's offers Business Inner Circle ($55/year) and Business Perks Rewards ($110/year), providing small businesses access to resale privileges, tax exemptions, and other benefits.

Figure 6: Market Opportunity and BJ's Market Share

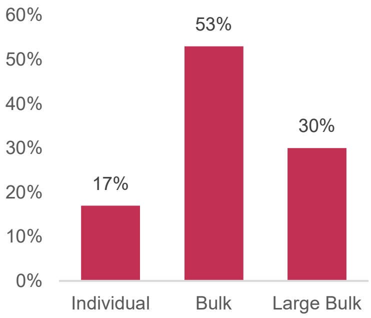


Source: IBIS World, Team Analysis

INDUSTRY OVERVIEW AND COMPETITIVE POSITIONING

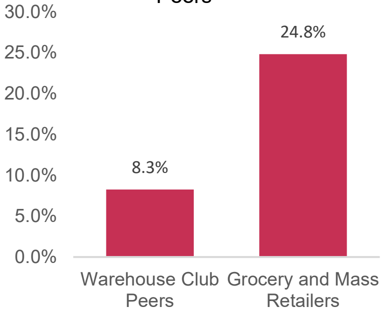
BJ's Wholesale Club operates in the warehouse club retail industry, a subsector within Consumer Staples. As per IBIS World, the industry is currently estimated to be worth over $600 billion and forecasted to grow to approximately $670 billion by 2027, implying a growth of 2.3% CAGR (Figure 6). A warehouse club is a type of retail store that includes large stores offering a line of grocery and general merchandise products. They have unique business models, charging their members annual fees which provides them with a stable and consistent stream of cash flow. In return for the membership fee, they provide customers a wide range of product offerings in bulk sizes and at discounted prices. Additionally, the industry is resilient to economic turmoil because of its low-cost and high-value approach.

Figure 7: Package Size Preference



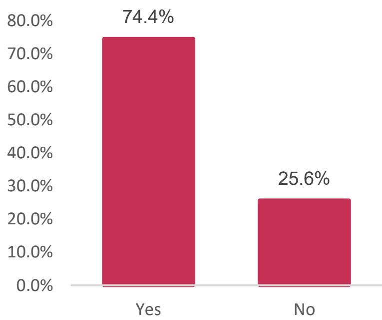
Source: Team Analysis

Figure 8: BJ's Price Savings Relative to Peers



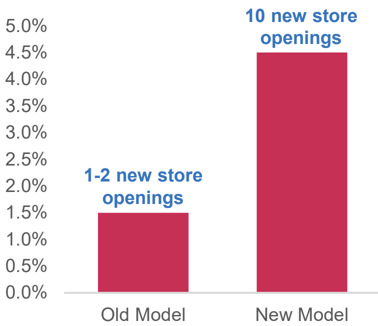
Source: Team Analysis

Figure 9: BJ's Members That Use Manufacturers' Coupons



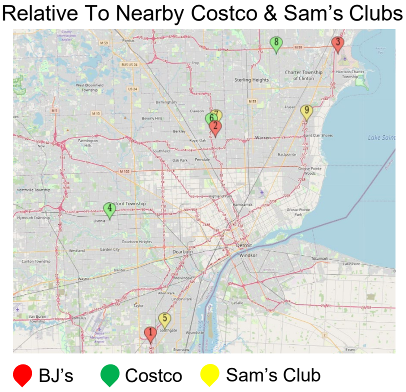
Source: Team Analysis

Figure 10: Annual Store Growth



Source: Company Data, Team Analysis

Figure 11: Michigan BJ's Locations Relative To Nearby Costco & Sam's Clubs



Source: Team Analysis

Competitive Positioning

BJ's is uniquely positioned in the retail industry, competing with both warehouse club peers and grocery and mass retailers. BJ's cost savings on product offerings and services, coupled with smaller package sizes, positions them strongly in the broader retail space as well as in the warehouse club industry.

Warehouse Clubs: BJ's offers bulk package sizes, which are smaller relative to the larger bulk sizes offered by their warehouse club peers. This is because BJ's targets mid-sized families whereas their warehouse club peers target larger families and restaurants. Our primary research indicates that 53% of mid-sized families prefer bulk package sizes at a discount which are offered by BJ's, enabling the company to operate in a niche segment within a broader retail space (Figure 7). Based on our team's basket analysis, BJ's provides significant value to their members with 8.3% price savings relative to other warehouse club retailers (Figure 8). Furthermore, BJ's is the only warehouse club retailer that allows members to use manufacturer's coupons resulting in greater value and larger cost savings (Figure 9).

Grocery and Mass Retailers: Compared to grocery and mass retailers, BJ's provides bigger package sizes, with items usually sold in packs containing three to five times the individual retail amount. Additionally, warehouse clubs invest heavily in price stability to ensure that they provide the best value to their customers, whereas grocery store prices are sensitive to inflation. Our basket analysis indicates that BJ's provides significant value to their members, with 24.8% price savings relative to grocery and mass retailers (Figure 8). The company further offers their members key services such as gasoline, with approximately 7-10% price savings relative to AAA National Average gasoline prices.

INVESTMENT SUMMARY

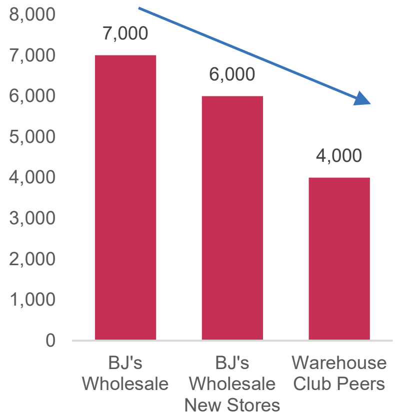
Investment Thesis #1

BJ's is accelerating store expansion in new and existing markets which is underappreciated by the street due to higher competitor presence in new markets.

Real Estate Development: As of Q3 2022, there are 233 BJ's Wholesale Club stores and 163 gas stations located across 18 states in the U.S. BJ's has leading positions in core Eastern U.S. markets, with approximately three times the number of clubs as the next largest warehouse club competitor. Moving forward, the company is expecting to open 10 clubs every year, representing 4-5% annual unit growth (Figure 10). The company's ability to accelerate expansion is bolstered by their revamped real estate development team. Prior to 2018, BJ's only opened 1-2 new stores annually, representing 1-2% store unit growth (Figure 10). Since then, the real estate development group focused on implementing ample data analysis and site selection strategies, including cell phone tower data, population growth comparisons, egress, ingress, people's work locations, and more. All of these factors contributed to the added success in new openings. For comparison, BJ's has increased their member acquisition target from 5,000 to 15,000 at the time of the grand opening as a reflection of expansion success, which dramatically accelerates the store's ability to breakeven and achieve profitability.

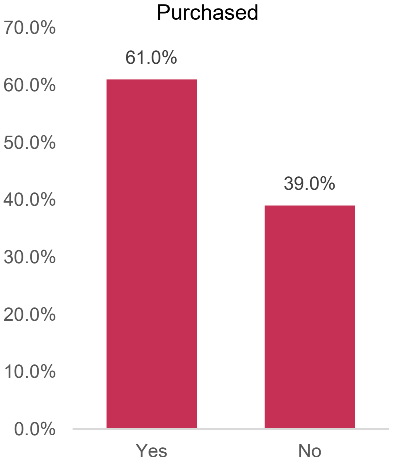
Replicating Store Success in Expansion: We believe that the street is underappreciating the company's expansion due to high competition in the markets from peers, such as Costco and Sam's Club. Our team's primary research supports BJ's ability to replicate their success in the new markets, as we surveyed existing Sam's Club and Costco customers in the Midwest and South to access BJ's value proposition. Our primary research showed that 71% of surveyed customers find BJ's pricing, package sizing, and manufacturers' coupon acceptance to be highly attractive, with the key purchasing criteria being BJ's smaller bulk package sizing. One example of BJ's success entering new markets with a heavy Costco and Sam's Club presence is their expansion into Michigan. Since 2018, BJ's has built three clubs in Eastern Michigan; these clubs are located in Taylor, Madison Heights, and Chesterfield (Figure 11). Each location has either a Costco or a Sam's Club within a fifteen-minute drive of their store, with the Madison Heights location being less than five minutes away from Costco and Sam's Club. Despite this, these new BJ's stores have had immediate success, with stronger sales performance and members-per-store being 20% higher than BJ's average members-per-store.

Figure 12: SKUs



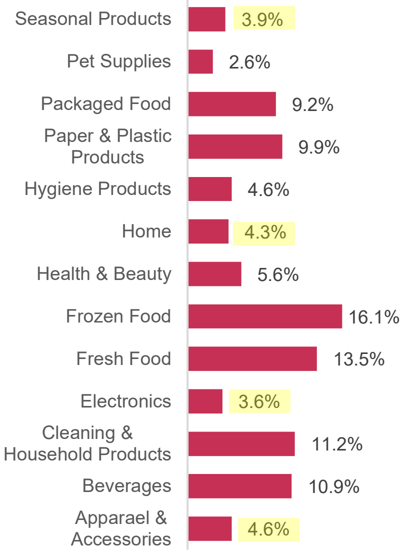
Source: Company Data, Team Analysis

Figure 13: Increase in Product Category Purchased



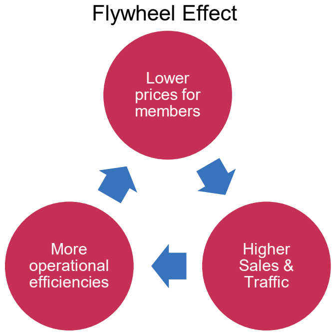
Source: Team Analysis

Figure 14: Consumer Product Category Trends



Source: Team Analysis

Figure 15: Assortment Changes Flywheel Effect



Source: Team Analysis

Conclusion: Consensus currently calls for 2.5% unit growth expansion, which translates to 6 new stores in 2023. We believe the market is undervaluing the longevity and success of BJ's store expansion, as we forecast 10 new stores every year through 2027. This translates into a 4-5% annual unit growth initially, before eventually sustaining a steady 1-2% annual unit growth.

Investment Thesis #2

BJ's changes in assortment mix, driven by the implementation of digital systems and processes, are enabling the company to improve store space productivity, driving a forecasted expansion in NOPAT margin of 33%, from approximately 3% to 4%.

Implementation of Digital Systems and Processes: Warehouse membership clubs usually maintain a narrow assortment within a wide range of product offerings, enabling them to improve category closure rate and achieve higher sales. Warehouse clubs maintain around 4,000 SKUs, which are significantly lower than supermarkets and supercenters, who maintain approximately 40,000 and 100,000 SKUs, respectively (Figure 12). BJ's has historically carried 7,000 SKUs due to excess assortment across their grocery and sundries division, which negatively impacts their ability to provide members with a wide range of product categories. This changed in 2019 when the company implemented the centralized SAP Vector platform, enabling them to digitize their systems and processes to better manage assortment. Prior to this development, BJ's relied on a manual legacy spreadsheet-based system with limited analytical capabilities. For the first time, BJ's had access to granular real-time data on an individual product and club basis. The company has developed technological processes for mapping and collecting space data from all clubs and connecting it to a membership system to track the performance of each SKU. Based on this centralized data, the company can decide on whether to restock a SKU or replace it with alternative offerings, driving significant improvements in utilization and efficiency.

Impact of Assortment Changes: Assortment changes will have multi-year benefits, with the goal of simplifying assortment to increase the breadth of product offerings, drive growth, and improve overall customer experience. The strategy is to trim assortment in the grocery and sundries division and utilize the free space to increase their general merchandise product mix, which has higher margins. The company is launching new stores with just 6,000 SKUs, 14% lower than chain average, and are already witnessing stronger performance and sales than pre-assortment changes (Figure 12). Given these changes, BJ's is now competing and gaining share in new product categories such as electronics, fitness equipment, and smart home products. Our team's primary research also shows that 61% of members are purchasing more product categories than previous years in apparel & accessories, electronics, home products, and more (Figures 13 & 14). As the company shifts to high-growth and high-demand product categories, they will extract operational efficiencies which will be passed to customers in the form of increased value and cost savings. This will drive more traffic and higher sales, enabling the company to leverage further efficiencies, eventually leading to a flywheel effect (Figure 15).

Conclusion: The implementation of digital systems and processes has enabled BJ's to operate with leaner inventory. Additionally, the increase in general merchandise sales coupled with better store space productivity will lead to a forecasted NOPAT margin expansion from 3% to 4%.

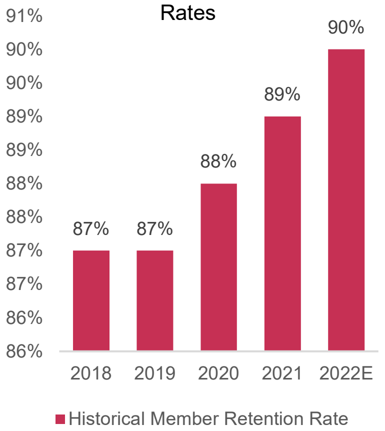
Investment Thesis #3

The quality of BJ's membership base and the growth of their membership fee income is underappreciated by the market, as analysts have yet to appreciate the high member tier penetration and rising renewal rates.

Since 1997, BJ's has grown membership fee income at an impressive 8.1% CAGR, with a forecasted 6.4% CAGR throughout our projection period. In the last three years, BJ's has seen a dramatic shift in both the growth of their total members, and the quality of their member base, which is underappreciated by the market. The significant improvements made to BJ's membership base can be attributed to two factors: strategic member acquisition strategies, and improved value for members.

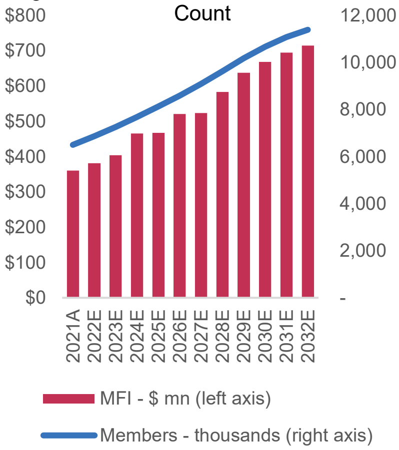
Strategic Initiatives: BJ's management team's emphasis on member acquisition and retention is not replicated by competitors. As a result, the company has experienced significant growth in their total membership count, and a member base quality that is quickly approaching that of leading competitors. BJ's membership base has improved in two significant ways: higher retention and increased high membership tier penetration.

Figure 16: Historic Member Renewal Rates



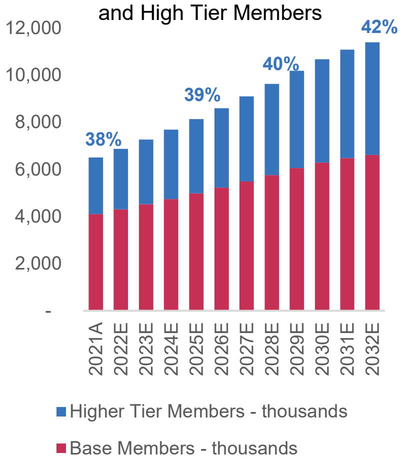
Source: Company Data, Team Analysis

Figure 17: Forecasted MFI and Member Count



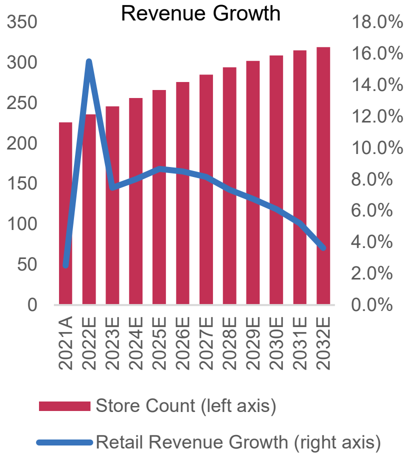
Source: Company Data, Team Analysis

Figure 18: Forecasted Base Members and High Tier Members



Source: Company Data, Team Analysis

Figure 19: Store Expansion and Retail Revenue Growth



Source: Company Data, Team Analysis

To improve retention, BJ's management developed their Easy Renewal program, which automatically renews customer memberships each year, requiring members to manually un-enroll as opposed to manually re-enroll. Since going public, the percentage of members with Easy Renewal has increased by 17%, with 77% of total members enrolled, and all new members are now automatically placed into this program. This has resulted in member retention increasing by 300 bps since 2019 to approximately 90% in 2022 (Figure 16). Management's emphasis on improving the quality of employees at their membership desks and making the process to obtain a membership more convenient has led to higher-tiered membership penetration growing by 1,000 bps in four years to 38%, quickly approaching that of the leading competitors.

Improved Member Value: Obtaining new members and retaining existing members is a function of the perceived value of BJ's membership. Since going public, BJ's has undergone a number of initiatives to help improve member experience and satisfaction. BJ's management has invested significantly in improving their service offerings to rival peers, such as Costco, in the last three years. Additionally, improvements have been made in BJ's credit card offerings, with the company recently partnering with CapitalOne. All of these efforts have resulted in members shopping more frequently, and with larger average basket sizes. While BJ's still lags leading competitors on a members-per-store basis, the company has grown this metric by 24% since 2018. These initiatives have been a significant focus of new stores, which has led to recently opened stores having 20% higher members-per-store than the overall chain, greater penetration into higher tier memberships, and nearly 100% of members being enrolled in their Easy Renewal program.

Conclusion: BJ's initiatives are reflected in our 6.4% MFI CAGR over the forecast period. This MFI growth is driven by a combination of member count growth (forecasted to grow at a 5.2% CAGR), greater penetration of higher tiered members, and price hikes which are forecasted to occur twice over the coming ten-year period (Figure 17).

FINANCIAL ANALYSIS

Revenue Growth Spurred by Store Expansion

BJ's historically had limited store expansion, adding 1-2 new stores each year. This has drastically changed in the past two years, with roughly 10 stores expected to be added this year, contributing significantly to the retail revenue growth. We project roughly 10 new stores added annually through 2027, followed by a period of mid-single digit store expansion. Historically, the company has maintained annual unit growth of 1-2%, resulting in a retail revenue growth of 5% CAGR over the past five years. We expect BJ's annual unit growth to accelerate to 4-5% before fading down to 1-2% annual unit growth, resulting in a forecasted retail revenue growth of 7.7% CAGR (Figure 19).

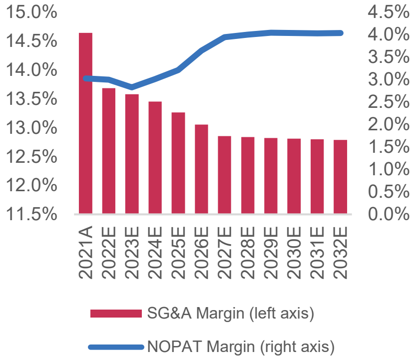
Improved Member Base Quality Leading to Sustained MFI Growth

BJ's has grown their membership fee income at roughly an 8.1% CAGR over the past 25 years. The company is poised for further growth as the quality of their membership base has improved significantly in the past four years and continues to become more attractive. The company has driven an improvement in higher tier membership penetration by 1,000 bps from 28% to 38%. We forecast BJ's to drive further higher tier membership penetration of 400 bps to reach 42% over our forecast period (Figure 18). We expect the company to grow total membership base at a 5.2% CAGR driven by member acquisition in newly expanded markets. Additionally, we forecast two membership fee hikes until 2032, as the company has historically hiked membership prices once every five years, with the last price hike in 2018-19. Combined, these factors drive our forecasted MFI growth of 6.4% CAGR (Figure 17).

Assortment Changes Leading to Better Operational Efficiencies

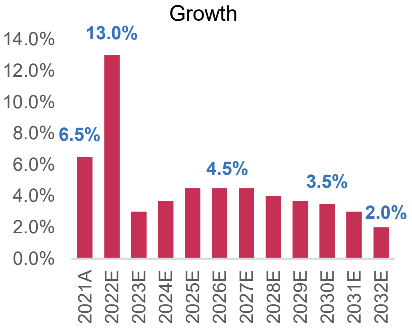
BJ's has implemented digital systems and processes to keep better track of customer and product data. This has enabled them to overhaul their assortment and replace slow-moving products with fast-moving products, leading to improved store space productivity. Our team views assortment changes as a multi-year benefit and we expect BJ's to realize SG&A margin compression of approximately 200 bps from 15% to 13%. We forecast the gross margins to decline over the coming three years due to (1) inflationary pressures, and (2) the duration required to scale newly opened stores, which is usually a couple of years. However, the SG&A margin compression will more than offset the forecasted decline in gross margin, resulting in forecasted NOPAT margin expansion of 33%, from approximately 3% to 4% over our forecast period (Figure 20).

Figure 20: SG&A and NOPAT Margin



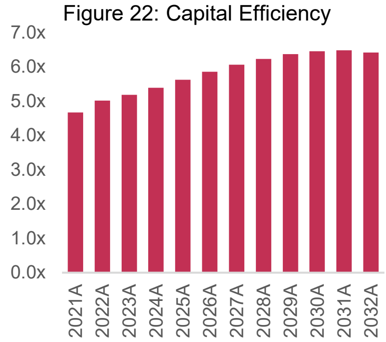
Source: Team Analysis

Figure 21: Comparable Club Sales Growth



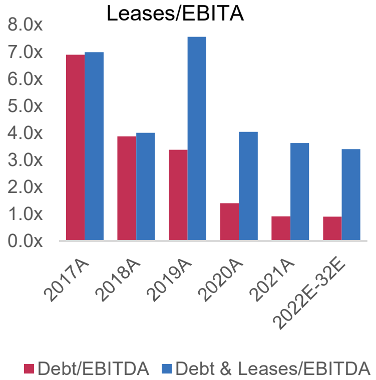
Source: Team Analysis

Figure 22: Capital Efficiency



Source: Team Analysis

Figure 23: Debt/EBITA and Debt & Leases/EBITA



Source: Company Data, Team Analysis

Figure 24: Valuation Price Target

Source: Team Analysis

Strong Comparable Club Sales Growth Driven by a Widening Value Proposition

Since 2016, BJ's has delivered comparable club sales (comp) growth of 4.2% CAGR and comp growth (minus gasoline) of 3.5% CAGR. The comp growth was driven by their strong positioning in food, consumables, and perishable categories. We estimate BJ's to grow comps slightly faster than their historic average at a 4.5% CAGR over the short to medium term (Figure 21). Our estimates suggest that the company witnesses strong membership growth as they expand into new geographies, driving comp growth. Our basket analysis shows BJ's ability to maintain prices 24.8% lower than grocery and mass retailers, and competitive pricing for new stores compared to peer warehouse club retailers, enabling them to add incremental value and drive comp growth.

Improving Capital Efficiency Driven by Higher Members-per-Store

BJ's initiatives have led to higher members-per-store in many of their existing locations. Additionally, the company has implemented their new assortment and member acquisition strategies immediately at their new locations, leading to an approximate 20% increase in members-per-store compared to historically reported periods. Higher members-per-store and larger baskets per member will lead to a forecasted improvement in capital efficiency of 2.5% CAGR (Figure 22). This is shown in our assumptions through higher member growth compared to new store growth. We forecast total members growing at a CAGR of 5.2%, compared with our total store count growing at a CAGR of 3.6%. This leads to members-per-store growing from approximately 28,000 members in 2022 to 38,000 members in 2032.

BJ's Reduced Leverage Leading to a Stronger Balance Sheet

BJ's has significantly strengthened its balance sheet over the past five years. Having gone public after being owned by two private equity firms, CVC Capital Partners and Leonard Green & Partners, total debt was nearly 7x EBITDA at the time of IPO. BJ's has since reduced this ratio to less than 1x, providing them with substantially higher flexibility. While leases have increased over this time period, total debt and total leases to EBITDA has decreased by nearly 50% since going public, with their total debt and leases currently at roughly 3.5x. Debt was paid down substantially using free cash flows throughout 2020 and 2021, as total debt to EBITDA fell by 60% in one year. We are forecasting total debt to EBITDA remaining flat at 0.9x, with total debt and leases to EBITDA at 3.5x through the forecast period (Figure 23). This reduced leverage provides BJ's with a stronger balance sheet and lower firm level risk, allowing the company to own new stores rather than lease new stores, offering better unit economics and faster development.

Liquidity in-line with Industry Peers

BJ's current ratio is roughly 0.8x, and has remained relatively stable since going public, declining by only 0.1x. We view this decline as a positive, as most has been driven by a decline in working capital days. Additionally, they are roughly in line with competitors, as Costco has a current ratio of 1.0x and Walmart has a current ratio of 0.9x. BJ's also has a quick ratio of 0.3x, which is in line with Costco's quick ratio and greater than Walmart's quick ratio of 0.2x. We are forecasting the current ratio (excluding the impact of cash) to remain at 0.8x throughout the forecast period. This is primarily driven by a decrease in inventory days, and a rise in accounts payable days. The decrease in inventory days arises primarily due to better assortment leading to higher inventory turnover, while the increase in accounts payable days is attributed to better terms with suppliers as negotiating leverage increases with larger purchases from each supplier.

VALUATION

We reiterate our BUY recommendation for BJ's with a target price of $93 by placing a 50% weighting on both our DCF and relative valuation, presenting a potential upside of approximately 39% based on the closing price of $67 on January 5, 2023 (Figure 24). We conducted a DCF valuation to incorporate rapid store expansion, improvements in assortment mix, and strong MFI growth. To corroborate our DCF valuation and to account for investment risks, we created multiple scenarios for our valuation. We also performed a sensitivity analysis and a Monte-Carlo simulation to test key assumptions. We conducted relative valuation by performing a comparable company analysis and a fair value multiple analysis using a multiple linear regression model. These methods allowed us to compare BJ's with their closest peers and to take their fundamental characteristics into consideration. The relative valuation complements our DCF valuation and reinforces our BUY recommendation for BJ's.

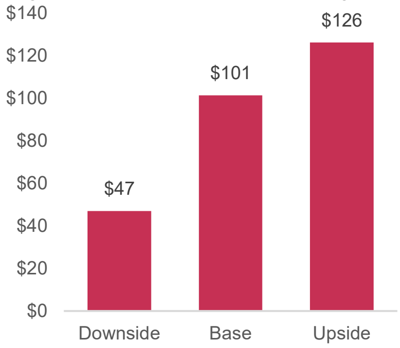
Cost of Debt	
Pre-Tax Cost of Debt	7.0%
Corporate Tax Rate	21.0%
After-Tax Cost of Debt	5.6%

Cost of Equity (CAPM Model)	
Risk-Free Rate	4.5%
Implied Equity Risk Premium	5.0%
Beta	0.41
Bottoms-up Beta	0.73
Cost of Equity	8.1%

Weighted Average Cost of Capital	% Total Capitalization	Cost
Debt	25.07%	5.6%
Equity	74.93%	8.1%
WACC		7.5%

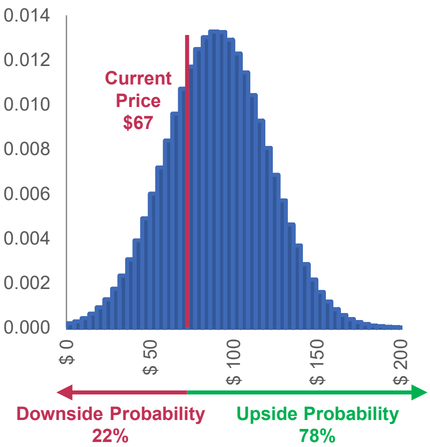
DCF Terminal Valuation Methods	Assumption	Price
Perpetual Growth Rate (50% weight)	2%	$94
EV/EBITDA Exit Multiple (50% weight)	11x	$108
DCF Target Price		$101

Figure 25: DCF Scenario Price Targets



Source: Team Analysis

Figure 26: Monte Carlo



Monte Carlo Simulation	
Trials	100,000
25th Percentile	$70
Mean	$90
75th Percentile	$110
Probability of Downside	22%
Probability of Upside	78%

Source: Team Analysis

DCF Valuation (Discounted Cash Flow) - $101

Our DCF valuation is a free cash flow to firm model, with a blend of terminal exit value methods. With an explicit forecast period from 2023 to 2032, our DCF model allows us to better incorporate financial impacts from our investment summary such as strong growth, margin expansion, and improved capital efficiency. Our valuation utilizes an equally weighted blend of (1) a perpetuity growth rate method and (2) an exit multiple method, yielding a DCF target price of $101.

Discount Rate: We estimated a WACC of approximately 7.5% for BJ's. The after-tax cost of debt was calculated based on the average interest rate incurred on BJ's debt, which is approximately 5.6%. The capital asset pricing model was used to calculate the cost of equity. We used 4.5% as the risk-free rate because it is in-line with the Federal Reserve's Fed Funds Rate target, accounting for further rate hikes. We calculated BJ's beta by finding the average unlevered five-year beta for BJ's largest competitors and adjusting this figure for BJ's leverage. We chose to use this method as opposed to directly using BJ's beta due to limited market trading data, as the company's most recent IPO was only four years ago. Using the company's beta of 0.43 would reduce BJ's WACC to 6.3%. For the equity risk premium, we calculated a forward-looking implied equity risk premium of approximately 5%.

Terminal Value: Two terminal values were calculated based on a perpetual growth rate and terminal exit multiple, yielding price targets of $94 and $108 respectively. For the first method, we expect perpetual growth to stabilize at approximately 2% after a high growth projection period based on (1) the long-term real GDP growth rate in the US, and (2) the long-term inflation goal set by the Federal Reserve. For the second method, we used an exit multiple valuation using an 11x EV/EBITDA exit multiple based on (1) BJ's historic median multiple of 14x since IPO in 2018, (2) 11x being the lowest multiple the company traded at, and (3) 11x being the broader market's median multiple over the past 20 years.

Scenario Analysis: We created a scenario analysis using three different operating scenarios for the financial statement projections: Base Scenario, Upside Scenario, and Downside Scenario (Figure 25). These scenarios allow us to predict various outcomes of store expansion, membership growth, margin expansion, and more. The base operating scenario has the most representative assumptions based on our carefully conducted company analysis, primary research, and financial forecasts. The downside operating scenario accounts for risks and poor execution detailed in further sections, whereas the upside operating scenario accounts for faster materialization of our investment summary. Based on these scenario projections, our downside and upside DCF price targets are $47 and $126, respectively (Figure 25).

Sensitivity Analysis: We sensitized key assumptions to assess the effect they have on our valuation target price. The sensitivity table demonstrates how the blended DCF target price adjusts based on changes in perpetual growth rate, exit multiple, and WACC. We used conservative estimates for the perpetual growth rate (reduced to 0%), the exit multiple (reduced to 7x EV/EBITDA), and the WACC (increased to 8.5%), yielding a price target of $67 and $59 for the exit multiple method and perpetuity growth rate method, respectively. To gain a more holistic view on BJ's intrinsic price range, our team conducted a Monte-Carlo simulation by flexing key variables: new store openings, comp growth, MFI growth, operating margin, discount rate, perpetual growth rate, and exit multiple. After performing 100,000 iterations on the simulation, we derived a mean DCF target price of $90 which represents a 34% upside. Additionally, we arrive at a 78% probability of reaching prices representing an upside, and we arrive at only a 22% probability of reaching prices representing a downside (Figure 26). This represents an asymmetric opportunity which strengthens our BUY recommendation.

Sensitivity Analysis

Exit Multiple Method Sensitivity

		Exit Multiple				
		7.0x	9.0x	11.0x	13.0x	15.0x
WACC	6.5%	$82.5	$101.0	$119.6	$138.1	$156.6
	7.0%	$78.4	$96.1	$113.8	$131.5	$149.2
	7.5%	$74.5	$91.4	$108.3	$125.2	$142.0
	8.0%	$70.8	$86.9	$103.0	$119.2	$135.3
	8.5%	$67.3	$82.7	$98.0	$113.4	$128.8

Perpetual Growth Method Sensitivity

		Perpetuity Growth Rate				
	94x	0.0%	1.0%	2.0%	3.0%	4.0%
WACC	6.5%	$89.5	$103.4	$123.5	$155.1	$211.9
	7.0%	$80.2	$91.6	$107.4	$131.3	$171.0
	7.5%	$72.2	$81.6	$94.3	$112.8	$141.8
	8.0%	$65.2	$73.0	$83.5	$98.1	$120.0
	8.5%	$59.0	$65.6	$74.3	$86.0	$103.0

Relative Valuation		
	Weight	Price
Comparable Company	50%	$80
Multiple Regression	50%	$88
Target Price		$84

Comparable Company Peer Set		
Ticker	NTM EV/Sales	NTM/EV/EBITDA
BJ	0.60x	12.10x
COST	0.80x	18.60x
WMT	0.70x	12.10x
TGT	0.80x	10.00x
KR	0.30x	6.80x
ACI	0.33x	5.79x
Median	0.70x	10.00x
Historic Premium	11%	31%
Adjusted Multiple	0.78x	13.10x

Comparable Company Analysis		
	Assumption	Price
NTM EV/Sales (50% weight)	0.78x	$87
NTM EV/EBITDA (50% weight)	13.10x	$73
Target Price		$80

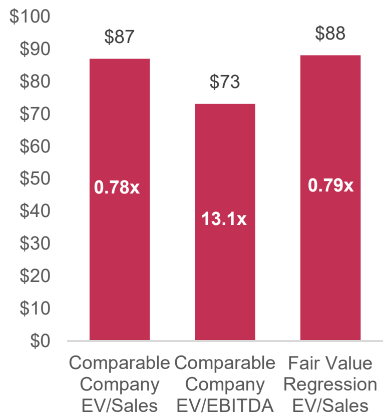
Multiple Regression Model		
	Assumption	Price
NTM EV/Sales (100% weight)	0.79x	$88
Target Price		$88

Multiple Regression Statistical Summary

R-squared = 75.34%

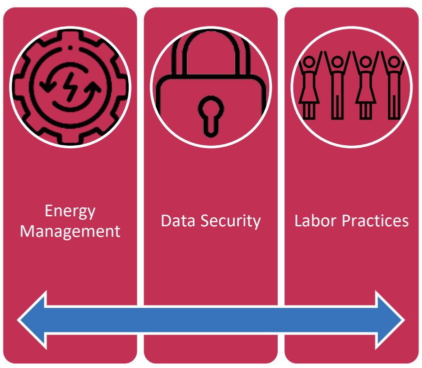
Both variables are statistically significant (P-value < 0.05)

Figure 27: Relative Valuation Methods



Source: Team Analysis

Figure 28: Key ESG Factors



Source: Team Analysis

Relative Valuation - $84

Our relative valuation is an equally weighted blend of (1) a standard comparable company analysis and (2) a fair value multiple based on our regression analysis, yielding a relative valuation price target of $84. This enables us to compare BJ's with the most relevant peer companies and at the same time use the regression model to calculate the intrinsic multiple of BJ's based on varying key fundamental assumptions.

Comparable Company Analysis: Our comparable company analysis yielded a price target of $80 per share, derived from an equally weighted split between adjusted multiples of NTM EV/Sales and NTM EV/EBITDA. Out of all retailers listed in the US, we chose five companies to represent the peer group, which were discussed as the main competitors during the company presentation. As explained in competitive positioning, BJ's is uniquely comparable to warehouse club retailers, grocery stores, and mass retailers. The stability of cash flows and economic resilience has enabled BJ's to historically trade at a premium relative to the peer group. Thereby, our team calculated the adjusted valuation multiples which are most appropriate to conduct a relative valuation.

NTM EV/Sales (50% weightage): We consider it to be fundamentally appropriate to use an NTM EV/Sales multiple as it accounts for differences across key performance variables for retailers: forecasted revenue growth and NOPAT margin.

NTM EV/EBITDA (50% weightage): We believe it is also appropriate to use an NTM EV/EBITDA multiple as it incorporates higher reinvestment rates and growth for BJ's going forward.

Adjusted Multiples: We believe it is important to adjust the valuation multiples based on historical averages to reflect the difference in business prospects across the peer group. We note that since going public, BJ's has traded at a premium valuation relative to the chosen retail competitors: 11% premium on an NTM EV/Sales multiple and 31% on an NTM EV/EBITDA multiple. Given the attributes we outlined for warehouse club retailers in the industry overview section, we believe their business model is more resilient to economic cycles. Furthermore, BJ's has gained the reputation of a high-quality business, making it a part of both retail and institutional portfolios, that can deliver superior risk-adjusted returns to shareholders across economic cycles. We believe that the premium will be maintained going forward as investors realize the longevity of BJ's growth prospects and competitive advantage. Therefore, we have applied the historical NTM EV/Sales premium of 11% and NTM EV/EBITDA premium of 31%, resulting in an intrinsic share price of $80.

Fair Value Multiple: For the fair value multiple, we performed a multiple linear regression with EV/Sales as the dependent variable, and expected 2024 NOPAT margin and two-year revenue growth as independent variables. Our sample consisted of 25 companies with primary listings on the US exchanges, market capitalizations of over $1 billion, and belonging to the 'Food and Staples Retailing' and 'Multiline Retail' sub sectors. We have high conviction in the regression model, as it yielded an R-squared of 75.3% with both variables being statistically significant (P-Value < 0.05). This shows that 75.3% of variation in the EV/Sales multiples across retail companies can be justified by their different forecasted revenue growth rates and NOPAT margins. Based on the line of best fit equation, BJ's should trade at an EV/Sales of 0.79x, yielding a target price of $88. Given the high R-squared and the statistically significant variables, we hold high conviction in the forecasting capability of the model and consider this approach in the triangulation of our price target.

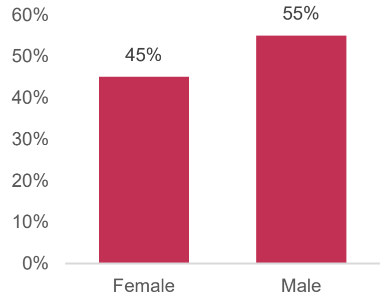
ENVIRONMENTAL, SOCIAL, GOVERNANCE

Our ESG analysis leveraged criteria developed by the Sustainability Accounting Standards Board (SASB), which identifies critical components of ESG that affect financial performance. Using SASB, we isolated factors in "E," and "S," that most influence the financial performance of a company similar to BJ's. In "E", the biggest factor is energy consumption and management; while in "S", data security, labor practices, and diversity and inclusion are the most impactful (Figure 28). While SASB did not isolate factors for the "G" component, our team recognized its importance and broke down this category below.

Environmental

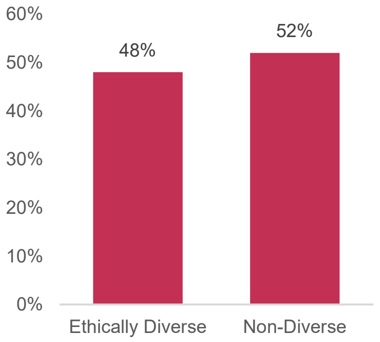
According to SASB, energy consumption and management are most likely to affect the long-term success of a multiline retailer. Our view is that BJ's is enhancing long-term shareholder returns by its commitment to environmental responsibility. They take energy conservation very seriously and have 100% LED lighting at new stores, employ full truckload shipping, and save 7% on energy per year by using variable frequency drives on all HVAC motors.

Figure 29: Employee Gender Diversity



Source: Proxy Statement, Team Analysis

Figure 30: Employee Ethnic Diversity



Source: Proxy Statement, Team Analysis

Figure 31: Internal Promotions

Source: Proxy Statement

Figure 32: Executive Management

Source: Company Website, Team Analysis

Furthermore, BJ's minimizes waste by donating unsold produce, meat, seafood, dairy, and bakery products on a daily basis to Feeding America. To date, the company has donated more than 100 million pounds of food. The company has also partnered with organizations such as Clean Harbors to reduce its environmental footprint. In 2019 alone, BJ's and Clean Harbors diverted 66.68 tons of waste from entering landfills. Finally, as a wholesaler, BJ's uses bulk packaging which generates overall less waste compared to traditional retailers.

Social

Data Security: As a membership-only warehouse club, BJ's collects customers' personal and payment information. MSCI's ESG Ratings Report on BJ's noted that "the company's data protection measures continue to lag those of peers," resulting in an ESG rating mark-down relative to industry leaders. MSCI did not specifically back up this statement, so our team reached out to UpGuard, a leading third-party risk management software company to gain their analysis. UpGuard gave BJ's the highest rating on cybersecurity and data protection, noting that the company has a "robust [online] security" system. Every document BJ's processes is managed through a secure third-party platform called TrueCommerce and every two years a third-party company audits BJ's entire data security policy. Aside from these tangible data protection investments, BJ's also takes responsibility for unanticipated occurrences. For example, after an external skimming incident at two gas pumps in 2019, BJ's offered members a year of free identity protection services from Experian. Reactionary measures like this indicate BJ's willingness to pay short-term costs in favor of long-term customer protection and satisfaction, which we view as a positive.

Labor Practices: BJ's has sufficient labor practices that are in-line with leading peers. Even though employees are non-unionized, the company offers affordable healthcare plans, best-in-class parental leave benefits, and a variety of retirement plans including a 401k match program. BJ's also offers a wide range of non-statutory benefits including an employee relief program called Aisle Help, which provides financial support to full and part-time team members in times of need. The company also provides professional development and leadership training to all team members and is fully supportive of their team member's career growth, with roughly 70% of store general managers being internally promoted. Furthermore, in 2020, BJ's provided a temporary $2 hourly pay hike, and in 2021 a one-off bonus to all employees to help with the financial impact of COVID-19. Currently, BJ's average wage is over $15, higher than federal and most state minimum wages. Finally, BJ's strategy to reduce SKU's will make inventory management easier and more accurate, likely boosting employee productivity and satisfaction.

Diversity & Inclusion: BJ's takes diversity and inclusion seriously and has an Inclusion and Diversity Council focused on embracing the company's diverse team members. BJ's offers a wide variety of resource groups including the Women's Forum, Pride at BJ's, Citizens of the World, Veterans Group, and Working Parents. In terms of specific team member data, as of Q1 2022, 45% of first to executive level management were female and 48% were ethnically diverse (Figures 29 & 30).

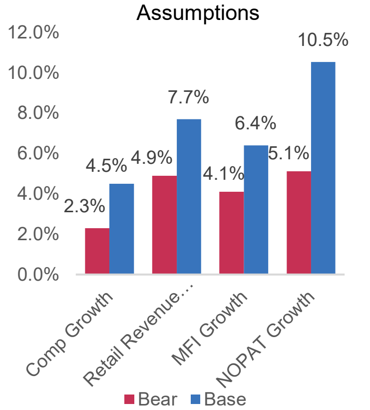
Governance

Board of Directors (BoD): BJ's BoD has ten members possessing knowledge and experience from various relevant fields, strengthening the company's position for future challenges and opportunities. The Chairman of the Board, Chris Baldwin, and the Lead Director, Rob Steele, are both involved in CVC, one of the Private Equity firms that brought BJ's public in 2018. Nine of the directors are independent under NYSE rules and based on our research, none of the independent directors appear dependent on income from BJ's to maintain their standard of living. Finally, 30% of the board members are women, a gender ratio we think can be improved.

Executive Management: The executive management team comprises nine members, two of which are female, managing the day-to-day operations. The executive team is highly experienced and has relevant educational backgrounds in their specialized fields, including finance, operations, and management, which contributes to BJ's reaching its goals and vision.

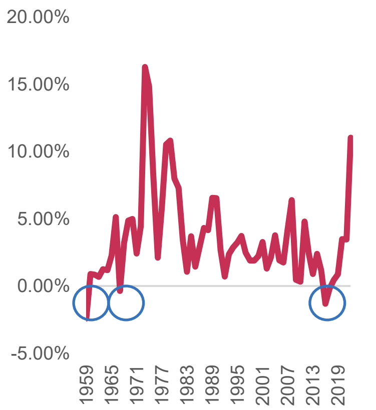
Remuneration: In terms of compensation, each executive is awarded a fixed short-term cash salary combined with a variable mid-term cash incentive plan and a long-term variable equity-based incentive plan. The mid-term cash incentive is paid out annually and the amount is based on adjusted EBITDA goals set by the compensation committee. The long-term equity incentive is based on adjusted EPS goals over a three-year performance period as determined by the committee. Finally, BJ's has a clawback policy that allows for the recovery of paid incentive compensation in the case of a financial restatement. We believe BJ's has a remuneration policy that heavily aligns management with shareholder priorities.

Figure 33: Downside Scenario Assumptions



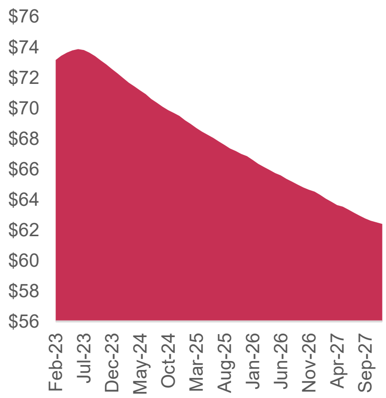
Source: Team Analysis

Figure 34: Food-at-Home Inflation



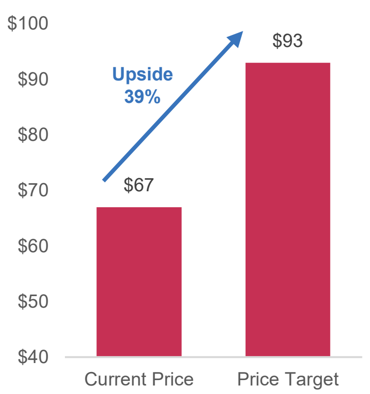
Source: FRED

Figure 35: Oil Futures Curve



Source: Bloomberg

Figure 36: Upside



Source: Team Analysis

Shareholders: BJ's enjoys a diversified base of institutional shareholders. The company's free float accounts for ~ 99% of outstanding shares and each share carries one voting right. The largest shareholders include institutional asset managers with strong ESG mandates and BJ's gains brand premium by having reputable investors, such as BlackRock, as one of its largest shareholders. Furthermore, the company has less than 10% equity concentration by a single investor, which ensures diversity and reduces the possibility of volatility from sudden sell-offs. Insiders account for ~1% of shares outstanding with Bob Eddy, the CEO, owning a $13 million stake.

To summarize, we consider BJ's ESG performance to be strong, with some areas for improvement which we believe will attract ESG-conscious investors who recognize and appreciate that the company poses a small ESG risk within their portfolio.

INVESTMENT RISKS

[F1] Firm Risk | Changes in Assortment

BJ's is aggressively making changes to their assortment mix by trimming the grocery and sundries division to increase the general merchandise mix. For instance, they have trimmed sundries SKUs by approximately 40% and allocated the freed-up space to increase general merchandise mix and product offerings. If management makes unfavorable SKU changes, it will lead to lower store space productivity and comp growth (Figure 33).
Mitigant: The company moved from a legacy-spreadsheet based system to a fully digitized SAP platform which provides granular SKU-level data. This provides management with strong analytical capabilities, driving assortment decisions. After making the assortment changes, BJ's is witnessing positive trends and performance relative to pre-assortment changes.

[F2] Firm Risk | Risk of Entering New Markets

BJ's has historically operated almost exclusively on the East Coast, a market that is not as saturated with warehouse club competitors as the South and Midwest. The expansion into new markets, predominantly dominated by Costco and Sam's Club, can pose challenges to acquire new members and retail revenue growth (Figure 33).
Mitigant: BJ's has had successful expansion into areas that contain a high density of competitors including Costco and Sam's Club. One example includes their expansion into Michigan, with three clubs successfully operating with results that outperform the average BJ's warehouse club. Additionally, our research suggests that consumers value BJ's package sizing and prices, providing superior customer value across the key purchasing criteria.

[M1] Market Risk | Deflation

The prices for food-at-home are almost 15% higher in 2022 than in 2020. This has been a key growth driver for BJ's as the company witnessed strong comp growth in 2021-2022. The rate of inflation is expected to decelerate in 2023 as the supply chains improve and commodity prices decline. However, in the case of weakening demand, BJ's faces the risk of witnessing deflation in food-at-home prices, posing significant headwinds to comp growth (Figure 33).
Mitigant: Inflation rates are likely to decelerate in 2023, but the chances of a deflation in prices for food-at-home are small. Since 1960, the average inflation rate for food-at-home has been 3.6% annually with only three years as an exception that displayed deflation in prices, providing us confidence in the longevity of BJ's comp growth (Figure 34).

[M2] Market Risk | Oil & Gas Prices

BJ's generates 22% of their revenue from oil and gas which exposes them to energy price volatility. Given the high energy prices, the gasoline business has positively contributed to the comp growth over the past two years. Additionally, these high prices create incentives for existing members to upgrade their membership to get more cash back off gas purchases. Any decline in energy prices will pose headwinds and negatively contribute to the comp growth and membership growth (Figure 33).
Mitigant: Oil and gas supplies remain constricted due to geopolitical tensions and lower production output, reducing the risk of a significant decline in oil and gas prices over the near term. This is further reinforced by the oil futures curve which shows prices staying at elevated levels, $60+, rather than returning to $30-$40 range (Figure 35).

Firm & Market Risk | Valuation Impact

Our downside operating scenario (DCF target price of $47) incorporates the above investment risks of weaker comp growth, retail revenue growth, MFI growth, and margin expansion (Figure 33). However, given our high conviction in risk mitigants, we believe there is a small probability of our downside scenario playing out. This helps us reinforce our BUY recommendation, with a 39% upside, for BJ's Wholesale Club (Figure 36).

APPENDIX

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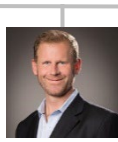
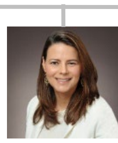
Appendix A: Executive Management

President, CEO
Bob Eddy






EVP, CFO	**EVP, CCO**	**EVP, COO**	**Senior VP, CHRO**	**EVP, CIO**	**SVP, General Counsel**	**EVP, CDO**	**EVP, Strategy & Development**
Laura Felice	Paul Cichocki	Jeff Desroches	Mark Griffin	Scott Kessler	Graham Luce	Monica Schwartz	Bill Werner

Name	Position	Appointed	Education	Work Experience
Bob Eddy	President, Chief Executive Officer	2021	- Babson College: B.S.	- BJ's Wholesale Club: Senior Vice President, Finance (2007); Executive Vice President, Chief Financial and Administrative officer (2018-2021) - PricewaterhouseCoopers LLP
Laura Felice	Executive Vice President, Chief Financial Officer	2021	- Boston College: Master of Accounting, Bachelor's degree in Finance and Accounting	- BJ's Wholesale Club: Senior Vice President, Controller (2016) - Clarks Americas, Inc.: Senior Vice President of Finance
Paul Cichocki	Executive Vice President, Chief Commercial Officer	2021	- Harvard Business School: MBA - University of Massachusetts: Bachelor's degree in Operations Management	- BJ's Wholesale Club: Executive Vice President, Membership; Analytics and Business Transformation - Bain & Company: Partner; Global Operating Committee and Investment Committee
Jeff Desroches	Executive Vice President, Chief Operations Officer	2018	- American Intercontinental University: B.S. in Criminal Justice and Law Enforcement Administration	- Metro NY market: Regional Asset Protection Manager (2001); Vice President of Supply Chain (2007); Senior Vice President of Supply Chain (2010) - Service Merchandise Company, Inc. (1993-2000)
Mark Griffin	Senior Vice President, Chief HR Officer	2018	- University of Rhode Island: Bachelor's degree in Industrial Psychology	- CVS Health: Senior Vice President, Corporate Human Resources
Scott Kessler	Executive Vice President, Chief Information Officer	2017	- Fairleigh Dickinson University: MBA; B.S. degree	- Belk: Executive Vice President, Chief Information Officer - GSI Commerce: Senior Vice President, Products Technology
Graham Luce	Senior Vice President, General Counsel	2015	- Boston University School of Law: Juris Doctor - Tufts University: Bachelor's degree in Political Science and Electrical Engineering	- BJ's Wholesale Club: Secretary - Bain & Company (2000-2015) - Goodwin Procter LLP (1995-2000)
Monica Schwartz	Executive Vice President, Chief Digital Officer	2021 2020	- UCLA Anderson School of Management: Master of Business Administration	- Home Depot: Vice President; Online Merchandising - Nine West Holdings; Stuart Weitzman; David Yurman
Bill Werner	Executive Vice President, Strategy and Development	2021	- College of the Holy Cross: Bachelor's degree in Mathematics and Accounting	- BJ's Wholesale Club: Senior Vice President, Strategic Planning and Invest Relations (2018); Senior Vice President, Strategic Planning and Analysis (2016); Senior Vice President, Finance (2013-2016)

Appendix B: Private Equity History

In 2011, BJ's Wholesale Club was acquired by a consortium of private equity firms; Leonard Green & Partners, and CVC Capital Partners in a deal valued at $2.8 billion, with roughly $630 million in equity invested by the two private equity firms. BJ's stock was acquired at $51.25 per share, a ~6% premium to the stock's price pre-announcement. At the time of acquisition, BJ's operated 190 stores located in 15 states across the Northeast. Additionally, the company generated approximately $403 million in EBITDA in the acquisition year. Prior to the acquisition taking place, Leonard Green had built an ownership stake of roughly 9.5%. The acquisition was finalized in September of 2011. BJ's then remained privately held until 2018, when it went public in July at $17 dollars per share. Over the course of the holding period, BJ's paid out three dividends to CVC and Leonard Green. The first occurred the year after the acquisition took place, with a dividend of $643 million. The second dividend was 2013, with $450 million paid out, and the third in 2017, with a $735.5 million dividend paid out. In addition to the proceeds from BJ's initial public offering, the two private equity firms earned over a 5x multiple of invested capital over the holding period.

Appendix C1: Income Statement

	Jan-22	Jan-23	Jan-24	Jan-25	Jan-26	Jan-27	Jan-28	Jan-29	Jan-30	Jan-31	Jan-32	Jan-33
Year	**2021A**	**2022E**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**	**2029E**	**2030E**	**2031E**	**2032E**
	Historical	Estimates										
												6.4%
Revenue	**$16,667.3**	**$19,215.5**	**$20,642.3**	**$22,323.7**	**$24,219.4**	**$26,292.6**	**$28,399.1**	**$30,503.7**	**$32,576.4**	**$34,557.2**	**$36,342.4**	**$37,658.1**
Retail Revenue	*$16,306.4*	***$18,833.9***	***$20,238.6***	***$21,858.3***	***$23,752.0***	***$25,771.8***	***$27,875.6***	***$29,920.8***	***$31,938.9***	***$33,888.8***	***$35,648.1***	***$36,943.8***
Membership Fee Revenue	*$360.9*	***$381.7***	***$403.6***	***$465.4***	***$467.4***	***$520.7***	***$523.5***	***$582.9***	***$637.4***	***$668.4***	***$694.3***	***$714.3***
Cost of Goods Sold	13,588.6	15,858.1	17,101.7	18,470.3	20,022.9	21,648.3	23,331.9	25,043.8	26,732.9	28,364.9	29,837.5	30,921.9
Gross Profit	**$3,078.7**	**$3,357.4**	**$3,540.6**	**$3,853.4**	**$4,196.4**	**$4,644.2**	**$5,067.2**	**$5,460.0**	**$5,843.5**	**$6,192.3**	**$6,504.9**	**$6,736.1**
	15.0%	14.0%	13.8%	13.7%	13.5%	13.3%	13.1%	13.1%	13.1%	13.1%	13.1%	13.0%
SG&A Costs	2,425.5	2,599.1	2,772.7	2,972.7	3,182.8	3,401.9	3,623.8	3,889.7	4,152.1	4,405.5	4,634.3	4,802.7
Pre-Opening Costs	14.9	30.0	30.0	30.0	30.0	30.0	27.0	27.0	24.0	21.0	18.0	12.0
EBIT	**$638.3**	**$728.3**	**$737.9**	**$850.7**	**$983.7**	**$1,212.4**	**$1,416.4**	**$1,543.3**	**$1,667.4**	**$1,765.8**	**$1,852.7**	**$1,921.4**
D&A	*180.5*	*200.7*	*219.4*	*239.6*	*261.5*	*285.3*	*311.1*	*338.7*	*368.2*	*399.6*	*432.5*	*466.6*
EBITDA	*818.9*	*929.0*	*957.3*	*1,090.2*	*1,245.2*	*1,497.7*	*1,727.5*	*1,882.0*	*2,035.7*	*2,165.3*	*2,285.2*	*2,388.1*
Interest Expense	-58.8	-58.9	-60.7	-69.1	-79.0	-95.0	-109.6	-119.4	-129.1	-137.3	-144.9	-151.4
Other Expenses	-21.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBT	**$557.8**	**$669.4**	**$677.2**	**$781.5**	**$904.7**	**$1,117.4**	**$1,306.8**	**$1,423.9**	**$1,538.3**	**$1,628.4**	**$1,707.8**	**$1,770.0**
Taxes	131.1	$140.58	$142.22	$164.12	$189.99	$234.65	$274.43	$299.03	$323.05	$341.97	$358.63	$371.70
Net Income	**$426.7**	**$528.84**	**$535.01**	**$617.41**	**$714.71**	**$882.72**	**$1,032.39**	**$1,124.91**	**$1,215.28**	**$1,286.47**	**$1,349.14**	**$1,398.30**

Appendix C2: Income Statement Drivers

	Jan-22	Jan-23	Jan-24	Jan-25	Jan-26	Jan-27	Jan-28	Jan-29	Jan-30	Jan-31	Jan-32	Jan-33
Year	**2021A**	**2022E**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**	**2029E**	**2030E**	**2031E**	**2032E**
	Historical	**Estimates**										
Total Revenue		**$19,215.5**	**$20,642.2**	**$22,323.6**	**$24,219.3**	**$26,292.5**	**$28,399.1**	**$30,503.7**	**$32,576.3**	**$34,557.1**	**$36,342.4**	**$37,658.0**
Retail Revenue Growth												
Current Stores	221	226	236	246	256	266	276	285	294	302	309	315
New Stores	5	10	10	10	10	10	9	9	8	7	6	4
Ending Stores	**226**	**236**	**246**	**256**	**266**	**276**	**285**	**294**	**302**	**309**	**315**	**319**
Store Growth	*2.3%*	*4.4%*	*4.2%*	*4.1%*	*3.9%*	*3.8%*	*3.3%*	*3.2%*	*2.7%*	*2.3%*	*1.9%*	*1.3%*
Same Store Sales Growth	6.5%	13.0%	3.0%	3.7%	4.5%	4.5%	4.5%	4.0%	3.7%	3.5%	3.0%	2.0%
Retail Revenue Per Store	$72.2	$81.5	$84.0	$87.1	$91.0	$95.1	$99.4	$103.4	$107.2	$110.9	$114.3	$116.5
Total Retail Revenue	**$16,306.4**	**$18,833.85**	**$20,238.6**	**$21,858.3**	**$23,752.0**	**$25,771.8**	**$27,875.6**	**$29,920.8**	**$31,938.9**	**$33,888.8**	**$35,648.1**	**$36,943.8**
Membership Fee Income Growth												
Total Members	6,500.0	6,873.1	7,268.2	7,686.7	8,130.0	8,599.5	9,096.9	9,624.0	10,182.4	10,672.4	11,080.1	11,393.7
Membership Growth Rate												
Total Revenue	**$360,900.0**	**$381,658.5**	**$403,644.9**	**$465,367.3**	**$467,367.0**	**$520,739.3**	**$523,480.9**	**$582,898.5**	**$637,448.1**	**$668,434.8**	**$694,305.9**	**$714,301.0**
Base membership	4,095.0	4,299.8	4,514.7	4,740.5	4,977.5	5,226.4	5,487.7	5,762.1	6,050.2	6,292.2	6,481.0	6,610.6
% of Total Members	63%											
Membership Growth		5%	5%	5%	5%	5%	5%	5%	5%	4%	3%	2%
Membership Cost	$55	$55	$55	$60	$55	$60	$55	$60	$60	$60	$60	$60
Membership Cost Increase	$0	$0	$0	$5	$0	$0	$0	$0	$5	$0	$0	$0
Total Revenue	**$225,225.0**	**$236,486.3**	**$248,310.6**	**$284,428.5**	**$273,762.4**	**$313,582.4**	**$301,823.0**	**$345,724.6**	**$363,010.8**	**$377,531.2**	**$388,857.2**	**$396,634.3**
Higher Tiered Members	2,405.0	2,573.4	2,753.5	2,946.2	3,152.5	3,373.1	3,609.3	3,861.9	4,132.2	4,380.2	4,599.2	4,783.1
% of Total Members	37%											
Membership Growth		7%	7%	7%	7%	7%	7%	7%	7%	6%	5%	4%
Membership Cost	$56	$56	$56	$61	$61	$61	$61	$61	$66	$66	$66	$66
Membership Cost Increase	$0	$0	$0	$5	$0	$0	$0	$0	$5	$0	$0	$0
Total Revenue	**$135,675.0**	**$145,172.3**	**$155,334.3**	**$180,938.9**	**$193,604.6**	**$207,156.9**	**$221,657.9**	**$237,173.9**	**$274,437.3**	**$290,903.5**	**$305,448.7**	**$317,666.6**

Year	Jan-22 2021A	Jan-23 2022E	Jan-24 2023E	Jan-25 2024E	Jan-26 2025E	Jan-27 2026E	Jan-28 2027E	Jan-29 2028E	Jan-30 2029E	Jan-31 2030E	Jan-32 2031E	Jan-33 2032E
	Historical	Estimates										
Income Statement Controls												
COGS (% of Retail Revenue)	83.3%	84.2%	84.5%	84.5%	84.3%	84.0%	83.7%	83.7%	83.7%	83.7%	83.7%	83.7%
SG&A Costs (% of Retail Revenue)	14.9%	13.8%	13.7%	13.6%	13.4%	13.2%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%
Pre-Opening Costs ($ Per New Stores)	$3.0	$3.0	$3.0	$3.0	$3.0	$3.0	$3.0	$3.0	$3.0	$3.0	$3.0	$3.0
Interest Expense (% of Debt)	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Other Expenses (% of Total Revenue)	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tax Rate (% of EBT)	23.5%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%

Appendix D1: Balance Sheet

Year	Jan-22 2021A	Jan-23 2022E	Jan-24 2023E	Jan-25 2024E	Jan-26 2025E	Jan-27 2026E	Jan-28 2027E	Jan-29 2028E	Jan-30 2029E	Jan-31 2030E	Jan-32 2031E	Jan-33 2032E
	Historical	Estimates										
Assets												
Cash & Cash Equivalents	**$45.4**	$506.0	$986.0	$1,895.5	$2,967.4	$4,528.5	$6,147.1	$7,589.7	$9,108.6	$10,591.7	$12,095.1	$13,583.1
Accounts Receivable	174.0	147.4	158.4	171.3	185.8	201.7	217.9	234.0	249.9	265.1	278.8	288.9
Inventory	1,242.9	1,451.1	1,555.5	1,669.9	1,799.3	1,933.5	2,071.1	2,209.3	2,343.7	2,486.8	2,615.9	2,711.0
Prepaid Expenses	54.7	57.6	61.9	67.0	72.7	78.9	85.2	91.5	97.7	103.7	109.0	113.0
Other Current Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Current Assets	**$1,517.1**	**$2,162.2**	**$2,761.8**	**$3,803.6**	**$5,025.2**	**$6,742.6**	**$8,521.3**	**$10,124.6**	**$11,799.9**	**$13,447.3**	**$15,098.8**	**$16,695.9**
Long Term Assets												
Gross PP&E	$4,165.1	$4,560.6	$4,985.6	$5,444.7	$5,943.5	$6,484.7	$7,070.1	$7,698.4	$8,369.1	$9,080.8	$9,829.4	$10,605.2
Accumulated Depreciation	-1,090.8	-1,291.5	-1,510.8	-1,750.4	-2,011.9	-2,297.2	-2,608.3	-2,947.1	-3,315.3	-3,714.8	-4,147.3	-4,614.0
Net PP&E	3,074.3	3,269.2	3,474.8	3,694.3	3,931.6	4,187.4	4,461.7	4,751.3	5,053.8	5,365.9	5,682.0	5,991.2
Goodwill	924.1	924.1	924.1	924.1	924.1	924.1	924.1	924.1	924.1	924.1	924.1	924.1
Other Intangibles	124.6	124.6	124.6	124.6	124.6	124.6	124.6	124.6	124.6	124.6	124.6	124.6
Deferred Tax Assets	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Long Term Assets	23.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Assets	**$5,668.9**	**$6,480.1**	**$7,285.3**	**$8,546.6**	**$10,005.5**	**$11,978.8**	**$14,031.8**	**$15,924.7**	**$17,902.5**	**$19,862.0**	**$21,829.7**	**$23,735.9**
Liabilities												
Accounts Payable	$1,112.8	$1,299.1	$1,410.3	$1,528.2	$1,662.2	$1,803.0	$1,949.7	$2,099.6	$2,248.5	$2,393.5	$2,526.0	$2,626.2
Accrued Expenses	318.3	365.1	392.2	424.2	460.2	499.6	539.6	579.6	619.0	656.6	690.5	715.5
Curr. Port. of Long Term Debt	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Curr. Port. Of Leases	142.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Curr. Income Taxes Payable	10.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unearned Revenue	214.4	249.8	268.3	290.2	314.9	341.8	369.2	396.5	423.5	449.2	472.5	489.6
Other Current Liabilities	201.2	230.6	247.7	267.9	290.6	315.5	340.8	366.0	390.9	414.7	436.1	451.9
Total Current Liabilities	**$2,002.5**	**$2,144.5**	**$2,318.6**	**$2,510.5**	**$2,727.8**	**$2,959.9**	**$3,199.2**	**$3,441.7**	**$3,681.9**	**$3,914.0**	**$4,125.0**	**$4,283.2**
Long Term Liabilities												
Long Term Debt	$748.6	$836.1	$861.6	$981.2	$1,120.7	$1,347.9	$1,554.7	$1,693.8	$1,832.1	$1,948.8	$2,056.7	$2,149.3
Long Term Leases	2,074.6	2,322.5	2,393.3	2,725.6	3,112.9	3,744.2	4,318.6	4,705.0	5,089.2	5,413.3	5,713.0	5,970.2
Unearned Revenue	22.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pension & Benefits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Def. Tax Liability	52.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Long Term Liabilities	120.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Liabilities	**$5,020.8**	**$5,303.2**	**$5,573.4**	**$6,217.3**	**$6,961.4**	**$8,052.0**	**$9,072.6**	**$9,840.6**	**$10,603.1**	**$11,276.1**	**$11,894.7**	**$12,402.7**
Shareholder's Equity												
Common Stock	$1.5	$1.5	$1.5	$1.5	$1.5	$1.5	$1.5	$1.5	$1.5	$1.5	$1.5	$1.5
Additional Paid In Capital	902.7	902.704	902.704	902.704	902.704	902.704	902.704	902.704	902.704	902.704	902.704	902.704
Retained Earnings	131.3	660.2	1,195.2	1,812.6	2,527.3	3,410.0	4,442.4	5,567.3	6,782.6	8,069.1	9,418.2	10,816.5
Treasury Stock	-388.7	-388.7	-388.7	-388.7	-388.7	-388.7	-388.7	-388.7	-388.7	-388.7	-388.7	-388.7
Comprehensive Inc. and Other	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Total Common Equity	**$648.1**	**$1,176.9**	**$1,711.9**	**$2,329.3**	**$3,044.0**	**$3,926.8**	**$4,959.2**	**$6,084.1**	**$7,299.3**	**$8,585.8**	**$9,935.0**	**$11,333.3**
Total Liabilities & Owners Equity	**$5,668.9**	**$6,480.1**	**$7,285.3**	**$8,546.6**	**$10,005.5**	**$11,978.8**	**$14,031.7**	**$15,924.6**	**$17,902.5**	**$19,861.9**	**$21,829.6**	**$23,735.9**

Appendix D2: Balance Sheet Drivers

	Jan-22	Jan-23	Jan-24	Jan-25	Jan-26	Jan-27	Jan-28	Jan-29	Jan-30	Jan-31	Jan-32	Jan-33
Year	**2021A**	**2022E**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**	**2029E**	**2030E**	**2031E**	**2032E**
	Historic					**Estimates**						
Balance Sheet Assumptions												
Accounts Receivable Days	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Inventory Days	33.4	33.4	33.2	33.0	32.8	32.6	32.4	32.2	32.0	32.0	32.0	32.0
D&A (% of Gross PP&E)	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%
Capex (% of Retail Revenue)	2.0%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%
Accounts Payable Days	29.9	29.9	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	31.0
Accrued Expenses (% of Total Revenue)	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
Total Debt/EBITDA	0.9x	0.9x	0.9x	0.9x	0.9x	0.9x	0.9x	0.9x	0.9x	0.9x	0.9x	0.9x
Long Term Leases/EBITDA	2.5x	2.5x	2.5x	2.5x	2.5x	2.5x	2.5x	2.5x	2.5x	2.5x	2.5x	2.5x

Appendix E: Statement of Cash Flow

	Jan-22	Jan-23	Jan-24	Jan-25	Jan-26	Jan-27	Jan-28	Jan-29	Jan-30	Jan-31	Jan-32	Jan-33
Year	**2021A**	**2022E**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**	**2029E**	**2030E**	**2031E**	**2032E**
						Estimates						
Operating Cash Flows												
Net Income	$426.7	$528.8	$535.0	$617.4	$714.7	$882.7	$1,032.4	$1,124.9	$1,215.3	$1,286.5	$1,349.1	$1,398.3
Depreciation and Amortization	183.9	200.7	219.4	239.6	261.5	285.3	311.1	338.7	368.2	399.6	432.5	466.6
Asset Writedown & Rest. Cost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stock-Based Compensation	53.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Operating Activities	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Change in Acc. Receivable	-1.2	26.5	-10.9	-12.9	-14.5	-15.9	-16.2	-16.1	-15.9	-15.2	-13.7	-10.1
Change In Inventories	-37.2	-208.2	-104.4	-114.4	-129.4	-134.2	-137.6	-138.2	-134.4	-143.1	-129.1	-95.1
Change in Acc. Payable	124.7	186.3	111.2	117.9	134.0	140.9	146.6	149.9	148.9	145.0	132.4	100.3
Change in Other Net Operating Assets	71.6	97.7	58.5	68.9	77.7	85.0	86.4	86.3	85.0	81.2	73.2	53.9
Cash Flow From Operations	**$831.7**	**831.9**	**808.7**	**916.6**	**1043.9**	**1243.8**	**1422.7**	**1545.5**	**1667.2**	**1754.0**	**1844.5**	**1914.0**
Investing Cash Flows												
Capital Expenditure	-$323.6	-$395.5	-$425.0	-$459.0	-$498.8	-$541.2	-$585.4	-$628.3	-$670.7	-$711.7	-$748.6	-$775.8
Other Investing Activities	19.1	-166.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flows From Investing Activities	**-$304.5**	**-$561.9**	**-$425.0**	**-$459.0**	**-$498.8**	**-$541.2**	**-$585.4**	**-$628.3**	**-$670.7**	**-$711.7**	**-$748.6**	**-$775.8**
Financing Cash Flows												
Issuance/(Repayment) of Debt	-$353.4	$190.6	$96.2	$452.0	$526.8	$858.5	$781.3	$525.5	$522.4	$440.8	$407.6	$349.8
Issuance/ (Repurchase) of Common Shares	-$171.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dividends	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Other Financing Cash Flows	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Cash Flows From Financing Activities	**-$525.2**	**$190.6**	**$96.2**	**$452.0**	**$526.8**	**$858.5**	**$781.3**	**$525.5**	**$522.4**	**$440.8**	**$407.6**	**$349.8**
Net Change in Cash	**$2.0**	**$460.6**	**$480.0**	**$909.5**	**$1,071.9**	**$1,561.1**	**$1,618.6**	**$1,442.6**	**$1,518.9**	**$1,483.1**	**$1,503.4**	**$1,488.0**
Beginning Cash		**45.4**	**506.0**	**986.0**	**1,895.5**	**2,967.4**	**4,528.5**	**6,147.1**	**7,589.7**	**9,108.6**	**10,591.7**	**12,095.1**
Ending Cash	**$45.4**	**$506.0**	**$986.0**	**$1,895.5**	**$2,967.4**	**$4,528.5**	**$6,147.1**	**$7,589.7**	**$9,108.6**	**$10,591.7**	**$12,095.1**	**$13,583.1**

Appendix F1: Discounted Cash Flow (DCF)

Assumptions	
WACC	**7.5%**
Tax Rate	**21.0%**
Exit Multiple	**11x**
PGR	**2.0%**
Shares Outstanding	**137.3**

	Jan-18	Jan-19	Jan-20	Jan-21	Jan-22	Jan-23	Jan-24	Jan-25	Jan-26	Jan-27	Jan-28	Jan-29	Jan-30	Jan-31	Jan-32	Jan-33
Year	**2017A**	**2018A**	**2019A**	**2020A**	**2021A**	**2022E**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**	**2029E**	**2030E**	**2031E**	**2032E**
	Historical										**Estimates**					
Revenue	**$12,754.6**	**$13,007.3**	**$13,190.7**	**$15,430.0**	**$16,667.3**	**$19,215.5**	**$20,642.3**	**$22,323.7**	**$24,219.4**	**$26,292.6**	**$28,399.1**	**$30,503.7**	**$32,576.4**	**$34,557.2**	**$36,342.4**	**$37,658.1**
% Growth		2%	1%	17%	8%	15%	7%	8%	8%	9%	8%	7%	7%	6%	5%	4%
Cost of Goods Sold	10,513.5	10,646.5	10,763.9	12,451.1	13,588.6	15,858.1	17,101.7	18,470.3	20,022.9	21,648.3	23,331.9	25,043.8	26,732.9	28,364.9	29,837.5	30,921.9
Gross Profit	**$2,241.1**	**$2,360.9**	**$2,426.8**	**$2,979.0**	**$3,078.7**	**$3,357.4**	**$3,540.6**	**$3,853.4**	**$4,196.4**	**$4,644.2**	**$5,067.2**	**$5,460.0**	**$5,843.5**	**$6,192.3**	**$6,504.9**	**$6,736.1**
% Margin	18%	18%	18%	19%	18%	17%	17%	17%	17%	18%	18%	18%	18%	18%	18%	18%
Operating Expenses	2011.76	2053.48	2074.582	2336.564	2440.369	2629.071517	2802.694354	3002.732113	3212.766226	3431.879669	3650.833488	3916.710469	4176.061027	4426.538779	4652.251856	4814.689087
EBIT	**$229.3**	**$307.4**	**$352.2**	**$642.4**	**$638.3**	**$728.3**	**$737.9**	**$850.7**	**$983.7**	**$1,212.4**	**$1,416.4**	**$1,543.3**	**$1,667.4**	**$1,765.8**	**$1,852.7**	**$1,921.4**
% Margin	1.8%	2.4%	2.7%	4.2%	3.8%	3.8%	3.6%	3.8%	4.1%	4.6%	5.0%	5.1%	5.1%	5.1%	5.1%	5.1%
EBITDA	*$393.4*	*$469.6*	*$509.2*	*$809.8*	*$818.9*	*$929.0*	*$957.3*	*$1,090.2*	*$1,245.2*	*$1,497.7*	*$1,727.5*	*$1,882.0*	*$2,035.7*	*$2,165.3*	*$2,285.2*	*$2,388.1*
Taxes	$48.2	$64.6	$74.0	$134.9	$134.0	$153.0	$155.0	$178.6	$206.6	$254.6	$297.4	$324.1	$350.2	$370.8	$389.1	$403.5
NOPAT	$181.2	$242.9	$278.2	$507.5	$504.3	$575.4	$583.0	$672.0	$777.1	$957.8	$1,118.9	$1,219.2	$1,317.3	$1,395.0	$1,463.6	$1,517.9
NOPAT Margin	*1.4%*	*1.9%*	*2.1%*	*3.3%*	*3.0%*	*3.0%*	*2.8%*	*3.0%*	*3.2%*	*3.6%*	*3.9%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*	*4.0%*
					1.61%											1.01%
Plus: Depreciation	172.5	168.8	162.2	171.8	183.9	200.7	219.4	239.6	261.5	285.3	311.1	338.7	368.2	399.6	432.5	466.6
Less: Capex	-137.5	-145.9	-196.9	-218.3	-323.6	-395.5	-425.0	-459.0	-498.8	-541.2	-585.4	-628.3	-670.7	-711.7	-748.6	-775.8
Less: Δ Net Working Capital	24.3	27.7	-71.8	111.1	86.3	4.6	-4.1	-9.3	-10.0	-9.2	-7.1	-4.5	-1.3	-13.2	-10.4	-4.9
Unlevered Free Cash Flow	**$240.5**	**$293.5**	**$171.7**	**$572.1**	**$451.0**	**$385.2**	**$373.2**	**$443.3**	**$529.9**	**$692.7**	**$837.5**	**$925.2**	**$1,013.5**	**$1,069.6**	**$1,137.2**	**$1,203.9**
Discount Period:						0	1	2	3	4	5	6	7	8	9	10
Present Value of Free Cash Flows							**$347.2**	**$383.6**	**$426.5**	**$518.6**	**$583.4**	**$599.4**	**$610.8**	**$599.7**	**$593.1**	**$584.1**

Exit Multiple Valuation	
PV of Forecasted Cash Flows	$5,246.4
Terminal Value	$26,268.8
PV of Terminal Value	$12,744.1
Enterprise Value	$17,990.5
Less: Net Debt	3,122.8
Less: Preferred Equity	0
Less: Minority Interest	0
Equity Value	$14,867.7
Per Share Value	$108.3

Perpetual Growth Rate Method	
PV of Forecasted Cash Flows	$5,246.4
Terminal Value	$22,322.5
PV of Terminal Value	$10,829.6
Enterprise Value	$16,075.9
Less: Net Debt	3,122.8
Less: Preferred Equity	0
Less: Minority Interest	0
Equity Value	$12,953.1
Per Share Value	$94.3

Appendix F2: Discount Rate (WACC)

Cost of Equity	
Beta Used	Market Beta
Beta	0.73
Market Risk Premium	5.0%
Risk Free Rate	4.5%
Cost of Equity	8.1%

Cost of Debt	
Weighted Average Interest Expense	7.0%
Tax Rate	21%
Cost of Debt	5.6%

WACC	
Equity	$9,444
Debt	$3,159
Weight of Equity	74.9%
Weight of Debt	25.1%
Weighted Cost of Equity	6.1%
Weighted Cost of Debt	1.4%
WACC	7.5%

Market Beta Calculation

Company	Levered Bera	Debt	Equity	Debt/Equity	Tax Rate	Unlevered Beta
WMT	0.53	$68,012	$397,751	17%	21%	0.47
COST	0.71	$9,046	$216,683	4%	21%	0.69
BJ's Actual Beta	0.41	$3,159	$9,444	33%	$0.2	0.32
Market Average	0.62					0.58
BJ's Implied Levered Beta	0.73	$3,159	$9,444	33.5%	21%	0.58

Appendix F3: Sensitivity Analysis

Sensitivity Analysis- Base

Exit Multiple Method Sensitivity

Wacc Sensitivity Increment: 0.5%

Exit Multiple Sensitivity Increment: 2.0x

WACC \ Exit Multiple	7.0x	9.0x	11.0x	13.0x	15.0x
6.5%	$82.5	$101.0	$119.6	$138.1	$156.6
7.0%	$78.4	$96.1	$113.8	$131.5	$149.2
7.5%	$74.5	$91.4	**$108.3**	$125.2	$142.0
8.0%	$70.8	$86.9	$103.0	$119.2	$135.3
8.5%	$67.3	$82.7	$98.0	$113.4	$128.8

Perpetual Growth Rate Valuation

Wacc Sensitivity Increment: 0.5%

PGR Sensitivity Increment: 1.0%

WACC \ Perpetual Growth Rate	0.0%	1.0%	2.0%	3.0%	4.0%
6.5%	$89.5	$103.4	$123.5	$155.1	$211.9
7.0%	$80.2	$91.6	$107.4	$131.3	$171.0
7.5%	$72.2	$81.6	**$94.3**	$112.8	$141.8
8.0%	$65.2	$73.0	$83.5	$98.1	$120.0
8.5%	$59.0	$65.6	$74.3	$86.0	$103.0

Sensitivity Analysis- Bull

Exit Multiple Method Sensitivity

Wacc Sensitivity Increment: 0.5%

Exit Multiple Sensitivity Increment: 2.0x

WACC \ Exit Multiple	7.0x	9.0x	11.0x	13.0x	15.0x
6.5%	$101.8	$123.9	$146.0	$168.1	$190.2
7.0%	$97.0	$118.1	$139.2	$160.2	$181.3
7.5%	$92.4	$112.5	**$132.6**	$152.7	$172.8
8.0%	$88.0	$107.2	$126.4	$145.6	$164.8
8.5%	$83.8	$102.1	$120.5	$138.8	$157.1

Perpetual Growth Rate Valuation

Wacc Sensitivity Increment: 0.5%

PGR Sensitivity Increment: 1.0%

WACC \ Perpetual Growth Rate	0.0%	1.0%	2.0%	3.0%	4.0%
6.5%	$113.4	$130.5	$155.4	$194.4	$264.6
7.0%	$101.9	$116.0	$135.6	$165.1	$214.2
7.5%	$92.1	$103.7	**$119.5**	$142.3	$178.2
8.0%	$83.5	$93.2	$106.1	$124.2	$151.2
8.5%	$76.0	$84.1	$94.8	$109.3	$130.4

Sensitivity Analysis- Bear

Exit Multiple Method Sensitivity

Wacc Sensitivity Increment: 0.5%

Exit Multiple Sensitivity Increment: 2.0x

WACC \ Exit Multiple	7.0x	9.0x	11.0x	13.0x	15.0x
6.5%	$40.4	$53.4	$66.4	$79.4	$92.3
7.0%	$37.8	$50.2	$62.6	$75.0	$87.4
7.5%	$35.3	$47.2	**$59.0**	$70.8	$82.6
8.0%	$33.0	$44.3	$55.6	$66.9	$78.1
8.5%	$30.7	$41.5	$52.3	$63.1	$73.9

Perpetual Growth Rate Valuation

Wacc Sensitivity Increment: 0.5%

PGR Sensitivity Increment: 1.0%

WACC \ Perpetual Growth Rate	0.0%	1.0%	2.0%	3.0%	4.0%
6.5%	$31.6	$38.7	$48.9	$65.0	$94.0
7.0%	$26.9	$32.7	$40.8	$52.9	$73.2
7.5%	$22.8	$27.6	**$34.1**	$43.6	$58.4
8.0%	$19.3	$23.3	$28.6	$36.1	$47.3
8.5%	$16.3	$19.6	$24.0	$30.0	$38.7

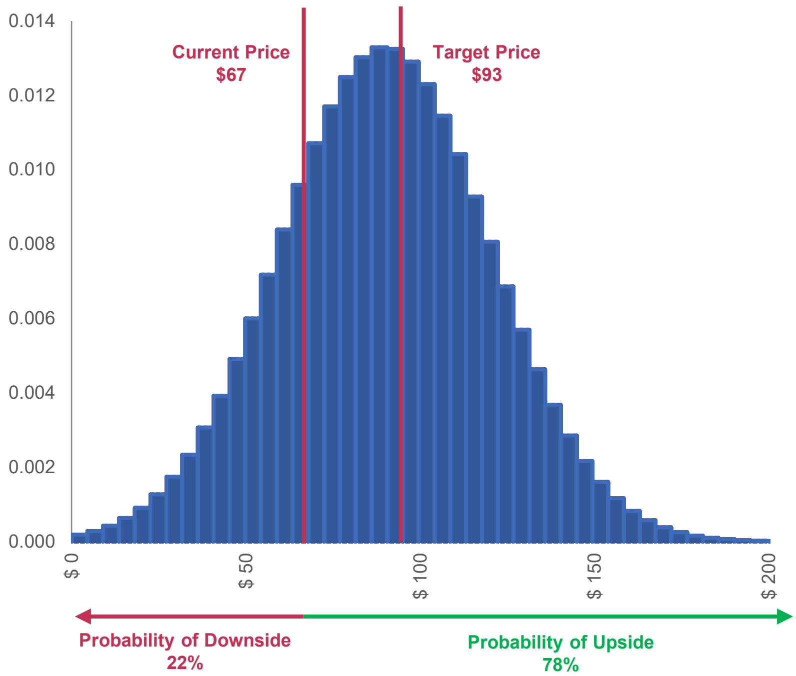
Appendix F4: Monte-Carlo Simulation

Our team performed a Monte-Carlo simulation with 100,000 iterations to gain a holistic view on BJ's intrinsic price trajectory. In the simulation, we stressed the following fundamental metrics:

1) New Store Expansion
2) Comparable Club Sales Growth (Comp Growth)
3) MFI Growth
4) Operating Margin
5) Discount Rate (WACC)
6) Perpetual Growth Rate
7) EV/EBITDA Exit Multiple

We observe our target price of $93 to be within the 5th percentile of the mean output of $90, providing us more confidence in our fundamental outlook and financial projections. Furthermore, we noticed that 22% of all outcomes yield an intrinsic price value below current market price and 78% of all outcomes yield an intrinsic price value about current market price, reinforcing our BUY recommendation.

Monte Carlo Simulation	
Trials	100,000
25th Percentile	$70
Mean	$90
Target Price	$93
75th Percentile	$110
Standard Deviation	$29
Kurtosis	2.9
Probability of Downside	22%
Probability of Upside	78%



Appendix G1: Relative Valuation (Standard Comparable Company Analysis)

For the comparable company analysis, our team chose five companies which were discussed as the main competitors of BJ's during the company management call. Due to BJ's unique industry positioning, they compete with warehouse club competitors, grocery stores, and mass retailers. Subtle differences in their business model and customer value proposition makes BJ's trade at a premium relative to the peer group. Thereby, our team calculated the adjusted valuation multiples which we believe are most appropriate to conduct the relative valuation.

We note that since going public BJ's has traded at a premium relative to the chosen retail competitors: 11% premium on an NTM EV/Sales multiple and 31% on an NTM EV/EBITDA multiple. Costco shares a very similar business model as BJ's and has consistently traded at a significant premium relative to the same peer group. Warehouse club retailers generate consistent and recurring cashflow in the form of membership fee income which provides stability to the business. Due to its value-driven customer proposition, they are further immune from the economic turmoil and downturns. BJ's has gained the reputation of a high-quality business, making it a part of both retail and institutional portfolios, that can deliver superior risk-adjusted returns to shareholders across economic cycles. We believe that the premium will be maintained going forward as investors realize the longevity of BJ's growth prospects and competitive advantage. Therefore, we have applied the historical NTM EV/Sales premium of 11% and NTM EV/EBITDA premium of 31%, resulting in an intrinsic share price of $80.

Comparable Company Peer Set

Ticker	NTM EV/Sales	NTM/EV/EBITDA
BJ	0.60x	12.10x
COST	0.80x	18.60x
WMT	0.70x	12.10x
TGT	0.80x	10.00x
KR	0.30x	6.80x
ACI	0.33x	5.79x
Median	0.70x	10.00x
Historic Premium	11%	31%
Adjusted Multiple	**0.78x**	**13.10x**

Comparable Company Analysis

	Assumption	Price
NTM EV/Sales (50% weight)	0.78x	$87
NTM EV/EBITDA (50% weight)	13.10x	$73
Target Price		$80

Appendix G2: Relative Valuation (Fair Value Multiple – Regression Analysis)

Company Name	Ticker
Albertsons Companies, Inc.	ACI
BJ's Wholesale Club Holdings, Inc.	BJ
Casey's General Stores, Inc.	CASY
Costco Wholesale Corporation	COST
Grocery Outlet Holding Corp.	GO
Ingles Markets, Incorporated	IMKT.A
Performance Food Group Company	PFGC
PriceSmart, Inc.	PSMT
SpartanNash Company	SPTN
Sprouts Farmers Market, Inc.	SFM
Sysco Corporation	SYY
The Andersons, Inc.	ANDE
The Chefs' Warehouse, Inc.	CHEF
The Kroger Co.	KR
United Natural Foods, Inc.	UNFI
US Foods Holding Corp.	USFD
Walgreens Boots Alliance, Inc.	WBA
Walmart Inc.	WMT
Weis Markets, Inc.	WMK
Dollar General Corporation	DG
Dollar Tree, Inc.	DLTR
Kohl's Corporation	KSS
Nordstrom, Inc.	JWN
Ollie's Bargain Outlet Holdings, Inc.	OLLI
Target Corporation	TGT

Multiple Linear Regression Model

Est. Revenue Growth - 2yr	10.6%
NOPAT Margin 2024	2.8%

R-squared = 75.34%

R-squared (adj) = 72.87%

Both variables are statistically significant (P-value < 0.05)

Regression Equation:

$$-0.263 + 29.2 \times Est. NOPAT\ Margin\ FY2 + 2.19 \times Est. Revenue\ Growth\ 2yr$$

Multiple Linear Regression Price Target

	Assumption	Price
NTM EV/Sales (100% weight)	0.79x	$88
Target Price		**$88**

For the fair value multiple analysis, we performed a multiple linear regression using EV/Sales as the dependent variable and estimated revenue growth – 2yr and estimated 2024 NOPAT margin as independent variables. Our sample consisted of 25 companies with primary listings on the US exchanges, market capitalization of over $1 billion, and belonging to the 'Food and Staples Retailing' and 'Multiline Retail' sub sectors. Based on the line of best fit equation, BJ's should trade at an EV/Sales of 0.79x given their two-year expected growth rate of 10.6% and 2.8% NOPAT margin for 2024. This equates to an estimated intrinsic value of $88. Given the high r-squared and the statistically significant variables, we hold high conviction in the forecasting capability of the model and consider this approach in the triangulation of our price target.

Appendix H: Porter's Five Forces

Bargaining Power of Suppliers – 2

Wholesale clubs purchase supply in high volumes. They have a high degree of bargaining influence with their suppliers, and can find alternative suppliers with ease. This flexibility from wholesale clubs decreases the bargaining power of suppliers.

Bargaining Power of Buyers – 1

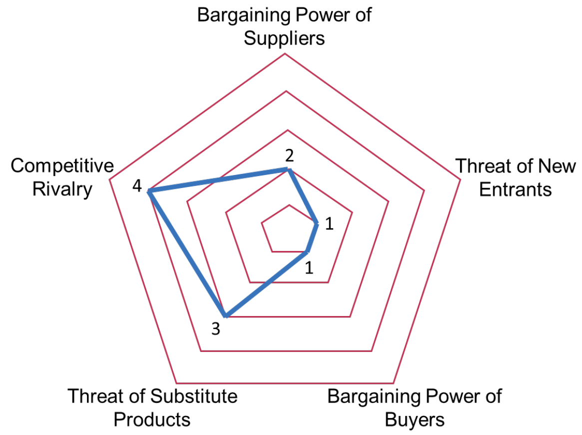
The main buyers in this industry are fragmented, as they are individual consumers. These consumers do not possess a lot of bargaining power with the retailers, as buyers cannot negotiate with wholesale clubs about prices. In fact, discounted prices are a key purchasing criteria for customers.

Threat of New Entrants – 1

There are only three large-scaled warehouse clubs in the entire industry: BJ's, Costco, and Sam's Club. Entering this market requires high upfront capital investments, as well as scale to efficiently negotiate with suppliers, making it difficult to enter the space. Additionally, it is very difficult for new entrants to enter the market and offer the attractive prices that incumbents offer.

Threat of Substitute Products – 3

Individual consumers, households, and firms do not have to purchase from warehouse clubs. There are many alternative places and channels for making purchases, including ecommerce retailers. However, due to the cheap prices and package sizes that warehouse clubs offer, consumers often find these cost-saving and high-value products to be more convenient.



*Score from 1-5, with 5 representing the biggest threat, and 1 being the lowest threat (though not non-existent)

Competitive Rivalry – 4

Competition is high among the three warehouse club competitors. All three compete for revenue and membership growth by offering competitive pricing. While they each have their own private label brands, there is limited differentiation in their offerings and limited switching costs between warehouse clubs allowing customers to change memberships with limited difficulty. This leads to high competition among companies in this space.

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