CFRA

Industry Surveys

Consumer Staples
Distribution & Retail

JUNE 2023

Arun Sundaram, CFA, CPAEquity Analyst

Fateh Yahaya Industry Analyst

CONTENTS

5 Industry Snapshot

		,
6	Financial Metrics	
8	Industry Drivers	
11	Indus	try Trends / Porter's Five Forces
	11	Consumer Staples Merchandise Retail
	20	Drug Retail
	26	Food Distributors
	29	Food Retail
41	How the Industry Operates	
48	How to Analyze a Company in this Industry	
53	Glossary	
54	Industry References	
56	Comparative Company Analysis	

Contacts

Sales Inquires & Client Support

800.220.0502 cservices@cfraresearch.com

Media Inquiries

press@cfraresearch.com

CFRA

977 Seminole Trail, PMB 230 Charlottesville, VA 22901

Contributors

Raymond Jarvis Senior Editor

Atifi Kuddus, Geraldine Tan Associate Editors

Copyright © 2023 CFRA 977 Seminole Trail, PMB 230 Charlottesville, VA 22901 All rights reserved.

CHARTS & FIGURES

- Same-Store Sales GrowthU.S. Grocery Sales Trends
- 7 Operating Margin
- 8 Consumer Price Index Food-at-Home Producer Price Index All Foods
- 9 Food Sales Composition Real Disposable Personal Income
- 10 U.S. Consumer Prices (CPI)Consumer Confidence Index (CCI)
- 11 Profit Share Maps
- 14 Walmart U.S. Store Locations Walmart U.S. Sales Mix
- 15 Target Sales Mix
- 16 U.S. Grocery E-Commerce Top U.S Grocery Stores
- 17 Walmart's Alternative Profit Streams
- 18 Costco Sales MixU.S. Warehouse Club Market Size
- 19 Warehouse Club and Superstore Sales and Pricing Strategy
- 22 Top 10 Largest U.S. Pharmacies
- 23 Number of Older Americans
 Age Distribution of The Population

NEW THEMES



What's Changed: Some major changes were made to the GICS structure in March 2023; one such change is some Consumer Discretionary names moving to Consumer Staples. Read about how this affects the Consumer Staples Merchandise Retail subindustry on page 15.



What's Changed: Throughout the pandemic, food prices steadily increase due to higher costs. However, food inflation has likely peaked, in our view, as suggested by the food-at-home CPI—more on this on page 32.



What's Changed: Plant-based foods are here to stay, and we think this food category market share will continue to grow in size and reach. Page 34 has all the details.

EXECUTIVE SUMMARY

Welcome to the new Consumer Staples Distribution & Retail survey, which was renamed from Food & Staples Retailing in March 2023 as part of several changes made to the Global Industry Classification Standard (GICS) structure. A key update to the GICS structure was that retailers would be classified based on the nature of goods sold rather than according to the underlying technology used to deliver the product or service. As a result, companies like Target, Dollar Tree, and Dollar General have moved from the Consumer Discretionary sector to the Consumer Staples sector to join the same sub-industry as companies like Walmart and Costco.

Sub-industry	Fundamental Outlook	Key Positive Trends	Key Negative Trends
Consumer Staples Merchandise Retail	Neutral	Shifting consumer preferences (e.g., big-box stores benefit from consumers consolidating shopping trips and seeking value amid high inflation); diversified product mix; ability to pass inflation to the consumer; potential for industry consolidation; alternative profit streams (e.g., advertising, fulfillment services, subscription-based revenues, financial services).	Weaker discretionary product sales; elevated inventory levels; slowing samestore sales growth; increased competition; margin pressure from greater e-commerce mix, rising wages, warehousing/transportation costs, commodity cost inflation, more promotional activity, greater shrink (e.g., stolen products, wastage), and some lingering Covid-19 costs.
Food Retail	Neutral	Higher food selling prices; strong demand as consumers shift spending away from restaurants and to grocery stores; increased workfrom-home adoption supports foodat-home demand; potential for industry consolidation.	Slowing same-store sales growth; less SNAP benefits (<i>i.e.</i> , food stamps); increased competition; margin pressure from greater e-commerce mix, rising wages, warehousing/transportation costs, commodity cost inflation, more promotional activity, greater shrink (<i>e.g.</i> , stolen products, wastage), and lingering Covid-19 costs.
Food Distributors	Neutral	Business recovery is underway along with the broader Covid-19 recovery; consumer mobility trends are improving (benefits restaurants, hotels, schools, etc.); modest food inflation tends to support the top and bottom lines.	Business recovery won't be linear, as certain segments/markets will take longer to recover (e.g., hotels, certain international markets, states with tight Covid-19 restrictions); labor/wage pressures (impacts productivity rates); elevated transportation costs; recession risk (typically impacts chain restaurants the most)
Drug Retail	Neutral	Improving acute prescription drug trends as elective procedures recover from the pandemic; pharmacy integration with primary care.	Lapping of prior year Covid-19 vaccine and testing benefits; increased competitive activity (e.g., Amazon Pharmacy); reimbursement rate pressure; shifting consumer preferences.

Source: CFRA.

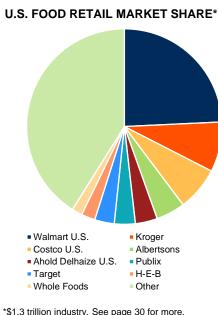
Food Inflation Is Moderating but Elevated on a Two-Year Basis

The food-at-home consumer price index (CPI) seems to have peaked in August 2022, as the index has now moderated for nine consecutive months. The 12-month food-at-home CPI as of May 2023 was 5.8%, down from the August 2022 peak of 13.5%, the highest rate experienced since the early '70s when food-at-home inflation spiked to greater than 20%. Lower protein prices have driven the recent decline. Overall, food inflation seems to be heading in the right direction, although we acknowledge that on a two-year basis, food inflation continues to be elevated. Additionally, we've seen stickier inflation within dry food categories (e.g., bread, cereal, snacks), partly due to the nature of brand products versus commodities but also because cost pressures continue to be an issue (e.g., higher wages).

CFRA Industry Snapshot www.cfraresearch.com

Consumer Staples Distribution & Retail

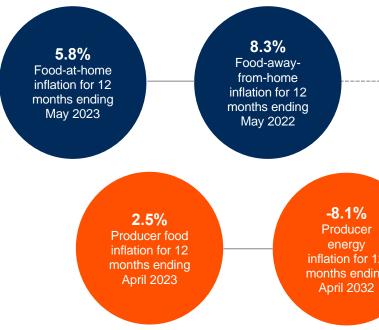
Outlook: Neutral

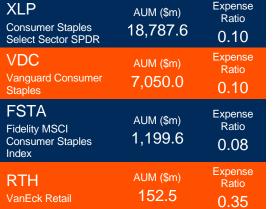


^{*\$1.3} trillion industry. See page 30 for more. Source: CFRA, company filings, Progressive Grocer.

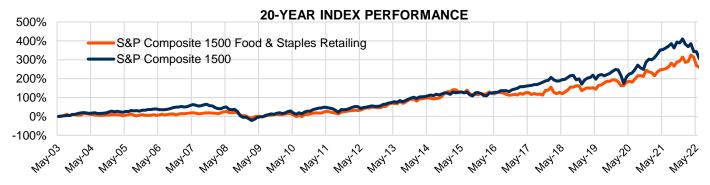
ETF FOCUS

BY THE NUMBERS







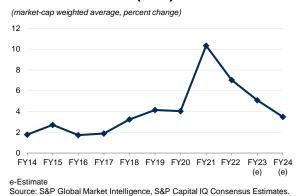


^{*}Data through May 24, 2023.

Source: CFRA, S&P Global Market Intelligence.

FINANCIAL METRICS

Same-Store Sales (SSS) Growth*



- We project SSS growth for retailers in the S&P Composite 1500 Consumer Staples Distribution & Retail Index of 5.1% and 3.5% in FY 23 and FY 24, respectively.
- SSS growth is moderating following strong demand in 2021 and higher prices in 2021 and 2022. We see SSS growth continuing to moderate as the sub-industry laps prior-year price increases and consumers pull back on discretionary spending.
- ◆ The two largest players in this industry are Walmart and Costco. We project FY 23 SSS growth of 5.7% for Walmart (FY 22: 6.6%) and FY 23 SSS growth of 5.7% for Costco (2022: 11.0%).

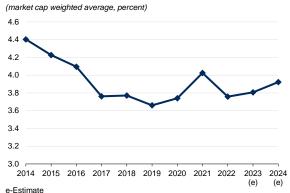
U.S. Grocery Sales Trend



Note: Values are from grocery sales only. *Annualized with data through March 2023. Sources: U.S. Department of Commerce.

- ◆ In the near term, food-at-home demand is expected to be supported by record-high U.S. inflation and record-low consumer sentiment, which we believe will shift more food spending to grocery stores than restaurants. In the longer term, however, we expect food-away-from-home demand to take a greater share of stomach, continuing a long-term secular trend. In 2023, we expect grocery sales to be down as sales volume and inflation are expected to moderate.
- Negative factors affecting growth include increased sales of lower-priced private label products and greater pricing competition, with a shift in sales from traditional formats to lowerpriced discount formats.

Operating Margin

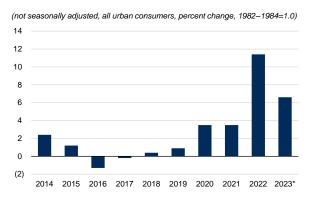


e-Estimate
Source: S&P Global Market Intelligence, S&P Capital IQ Consensus Estimates.

- We expect operating margin to remain flat in 2023 before increasing slightly to 3.9% in 2024.
- ◆ The industry is currently facing headwinds from a shift in consumer spending to consumables and away from discretionary products. This creates a gross margin headwind because discretionary products are typically high-margin sales versus consumables like grocery, which are typically low-margin sales.
- This shift in consumer spending is also creating excess inventory issues, forcing many retailers to offer price discounts and hold back on placing more orders until they have cleared the unwanted stock. We expect an intensive promotional environment in 2023, which will likely be a gross margin headwind for the industry.

KEY INDUSTRY DRIVERS

Consumer Price Index - Food-at-Home



*Midpoint estimate.
Source: U.S. Bureau of Labor Statistics; estimates by Economic Research Service.

- As of May 2023, food-at-home (FAH) saw 5.8% inflation, according to the U.S. Department of Agriculture (USDA). The categories with the highest rates of inflation include fats & oils and cereals & bakery products.
- According to USDA estimates, FAH prices are expected to increase 6.5%-7.5% in 2023, while food-away-from-home (FAFH) prices are expected to increase 7.5%-8.5% this year.
- While FAFH demand is expected to experience continued growth as the economy has resumed operation at pre-pandemic levels, the magnitude of growth might be subdued due to weak consumer sentiment amid record food and energy prices.

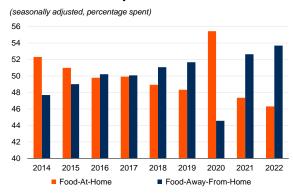
Producer Price Index - All Foods



Source: U.S. Bureau of Labor Statistics

- The Producer Price Index (PPI) measures the average price retailers pay producers for food products and has historically been a strong leading indicator for the Consumer Price Index.
- ♦ Wholesale food prices for the 12 months ending April 2023 declined significantly to 2.5%, the lowest reading in two years. In 2023, we expect food PPI to continue to moderate, as many commodities linked to the sector are showing signs of price stabilization. That said, certain commodities are still experiencing high inflation (e.g., sugar, cocoa). In addition, wage pressures continue to persist throughout the supply chain.

Food Sales Composition



Source: U.S. Department of Agriculture (USDA).

- Rising costs for ingredients, labor, and energy are among the factors contributing to the rise in FAFH prices. FAFH sales are expected to be higher in 2023 as inflation is expected to ease. According to the National Restaurant Association (NRA), 59% of restaurant operators reported higher same-store traffic in April 2023 from a year-ago period.
- ◆ Shrinkflation is common among food manufacturers where packaged items (e.g., cereal, chips) were packed less at the same (sometimes higher) sticker price to offset the rise in costs. According to NRA's 2022 Industry Report, restaurateurs cited food costs as a percentage of sales are higher than before Covid-19.

Real Disposable Personal Income



*Data through Q1 2023. Source: Federal Reserve Bank of St. Louis.

- Personal consumption typically increases alongside real disposable income, although such spending is typically skewed toward discretionary items. As such, there is a natural cap on the revenues of food and staples retailing companies. But that also means sales are typically more resilient during economic downturns.
- Real disposable personal income growth started to increase in 2022 with the reopening of the economy alongside higher wage growth. In addition, the Federal Reserve has been increasing interest rates in the hopes of cooling down the economy and taper inflation.

U.S. Consumer Price Index



*Data through May 2023. Source: Bureau of Labor Statistics.

- ◆ U.S. consumer prices rose 4.1% in May 2023, down from 4.8% in April 2023 and an indication that pressures are easing off despite inflation still remain a threat.
- ◆ Consumer prices have been on an upward trend since early 2021, driven by robust demand and tight supply. In 2022, we saw commodity and energy prices surge following the war in Ukraine. However, the consumer price index started to decline in 2023 due to tighter monetary policy, which led to the easing of inflation and moderating energy prices. Overall food prices are up 6.7% Y/Y (5.8% FAH, 8.3% FAFH), energy prices are down 11.7% Y/Y, and gasoline prices are down 19.7% Y/Y.

Consumer Confidence Index



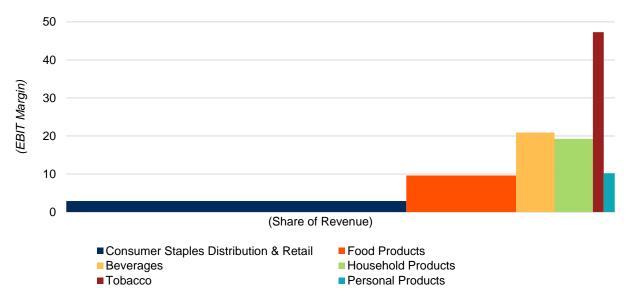
*Data through May 2023. Source: The Conference Board.

- The reading for May 2023 decreased to 102.3 from 103.7 in April 2023, but remains below prepandemic levels as consumers are still concerned about the short-term outlook regarding income, business, and labor market conditions.
- In addition, higher inflation concerns have led to a decrease in purchasing power, curtailing spending even for higher-income consumers.
- Rising concerns of a recession are dampening consumer confidence. CFRA believes that sticky inflation and high interest rates will continue to test confidence levels and temper economic growth well into 2023.

INDUSTRY TRENDS

The Consumer Staples Distribution & Retail industry is within the Consumer Staples sector and is comprised of four sub-industries: a) Consumer Staples Merchandise Retail, b) Drug Retail, c) Food Distributors, and d) Food Retail. Below are profit maps for the sector and industry.

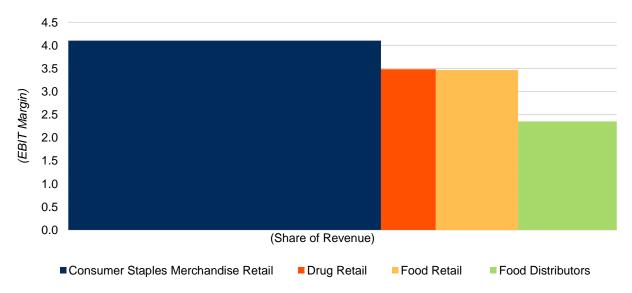
REVENUE SHARE MAP OF THE CONSUMER STAPLES SECTOR*



*As of Q1 2023.

Source: S&P Global Market Intelligence.

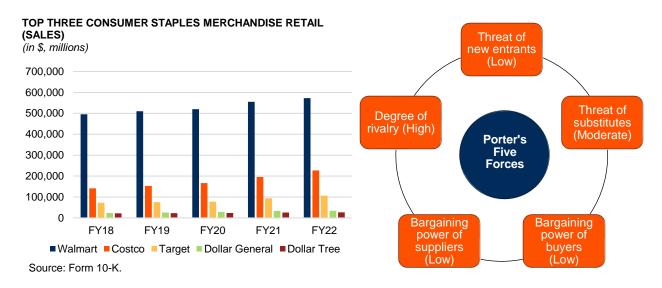
REVENUE SHARE MAP OF THE CONSUMER STAPLES DISTRIBUTION & RETAIL INDUSTRY*



*As of Q1 2023.

Source: S&P Global Market Intelligence.

Consumer Staples Merchandise Retail



Porter's Five Forces – Consumer Staples Merchandise Retail

Porter's Five Forces Analysis		
Threat of New	The threat of new entrants is low due to the capital and scale needed to	
Entrants or New	effectively compete with other players in this industry. For example, a new	
Entry	entrant would not be able to compete with Walmart's low prices in the near or	
(Low)	medium term, and it would take a significant investment of time and money to	
	compete in the long term with companies like Walmart, Target, and Costco.	
	Around 90% of the U.S. population lives within a 10-mile radius from a Walmart	
	or Sam's Club store, meaning it is highly unlikely for a new entrant to set up	
	shop in a location without the presence of another big-box retailer.	

For dollar stores, we would assign a slightly higher threat from new entrants compared to the big-box retailers given that less capital is required to compete against these discounters. However, we would still assess the overall threat as low given the scale of the major dollar store operators, noting Dollar General has more than 19,000 stores across the country, while Dollar Tree has more than 16,000 stores across the country.

Threat of Substitutes (Moderate)

We consider the threat of substitutes – the availability of another product/service that the consumer can purchase instead of the industry's product/service – to be **moderate**. Companies in the sub-industry specialize in offering a wide array of product categories. In this case, the threat of substitutes would be the consumer moving from purchasing goods at hypermarkets to either pure-play grocers or traditional department stores, rendering a high threat of substitutes.

However, as a result of the operating model for this industry, the threat of substitutes comes from nontraditional business models, such as subscription-based online meal kit providers or pure online retailers like Amazon. We think most players in this industry have begun to change their traditional operating model to adapt and compete with these newer types of business models. For example, meal kits are now being pushed through supermarkets rather than only being sold online. Additionally, big-box retailers are investing heavily into omni-channel offerings like home delivery and click-and-collect to compete with pure online retail giants like Amazon. They are also venturing into alternative revenue streams, including advertising, fulfillment services, membership fees, health care, financial services, etc.

Bargaining Power of Buyers (Low)

Buyers in this industry are consumers making purchases at the store or through an online channel. Individually, these buyers comprise only a small portion of total company sales, and therefore have **low** bargaining power. However, if buyers act collectively, they can be much more powerful.

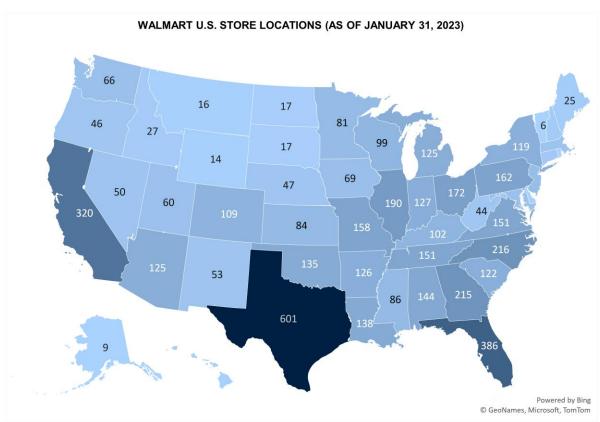
Bargaining Power of Suppliers (Low)

The bargaining power of suppliers is particularly **low** in this industry. Several suppliers rely heavily on one or two retailers for sales. For example, many packaged food manufacturers, household products manufacturers, and beauty companies receive more than 10% of total revenue from Walmart. As a result, Walmart has much more bargaining power over these suppliers than the suppliers have with Walmart. Furthermore, big-box retailers have relatively low switching costs if a supplier raises its prices. Most big-box retailers work with thousands of suppliers, so they can always switch from one supplier to another if there is any problem with quality or price. Suppliers in this industry are known to be pressed during periods of rising prices, given that they are sometimes unable to pass on these costs.

Degree of Rivalry/Competition (High)

The degree of rivalry in this industry is particularly **high**, with companies often referred to as "big-box" retailers since they offer a wide assortment of products for one-stop shopping. As these companies are essentially an intersection between supermarkets and department stores, competition can vary from general merchandisers like Target, traditional supermarkets like Kroger and Albertsons, department stores like Macy's, or specialty stores like Home Depot. In our view, the ability to develop, open, and operate units at the right locations and deliver a customer-centric, omni-channel experience determines the competitive position within this industry.

For dollar stores, these operators tend to focus on factors like value, affordability, and convenience. They also compete with other sales channels, including drug stores, convenience stores, and conventional grocery stores.



Source: Walmart, Google.

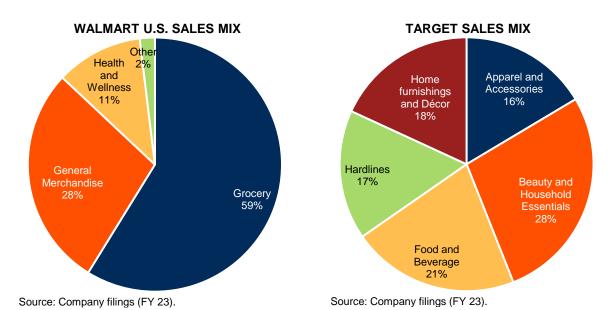


Source: Target, Google.

Sub-Industry Overview

The three largest public U.S. players within this sub-industry, as defined by the Global Industry Classification Standard (GICS), are Walmart, Costco, and Target. The other two major retailers in this sub-industry are Dollar General and Dollar Tree.

In March 2023, there were major changes made to the GICS structure. One key change was that retailers will be classified based on the nature of goods sold rather than according to the underlying technology used to deliver the product/service. As a result, companies like Target, Dollar Tree, and Dollar General have moved from the Consumer Discretionary sector to the Consumer Staples sector to join the same sub-industry as companies like Walmart and Costco.



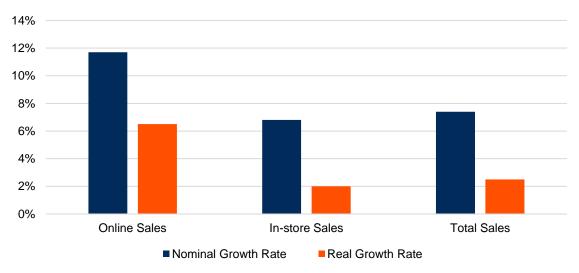
Supermarkets: Who Will Win the Grocery E-commerce War?

Grocery e-commerce is one of the least penetrated but fastest-growing U.S. e-commerce product categories, even more so amid the Covid-19 pandemic. Online grocery sales surged when the pandemic began and, in theory, should have increased even more if it weren't for capacity constraints (every food retailer had trouble meeting grocery e-commerce demand early in the pandemic). We expect e-commerce adoption to continue growing as retailers invest in product assortment, speed of delivery, and the overall customer experience.

There are more e-commerce channels today than ever before. We have click-and-collect (also referred to as curbside pickup), delivery (either first party or third party like Instacart, DoorDash, etc.), and direct-to-consumer. We note omni-channel shoppers tend to have bigger basket sizes, spend at a higher level, and make more frequent purchases, thus creating a virtuous cycle for retailers and consumers. Even Amazon realizes the power of omni-channel, as the online behemoth is now investing in its brick-and-mortar footprint (e.g., Amazon Fresh, Amazon Go, Whole Foods).

In 2022, about 11.2% of all U.S. grocery sales were purchased through an online channel (e.g., store pickup, delivery), nearly three times the rate in 2019 (pre-pandemic) when just 3.4% of all U.S. grocery sales were purchased online. According to research firm Mercatus, U.S. online grocery sales will likely reach 14% of all U.S. grocery sales by 2027.

U.S. GROCERY SALES GROWTH FORECAST*



^{*5-}year CAGR ending 2027.

Source: Brick Meets Click, Mercatus Grocery Shopping Survey.

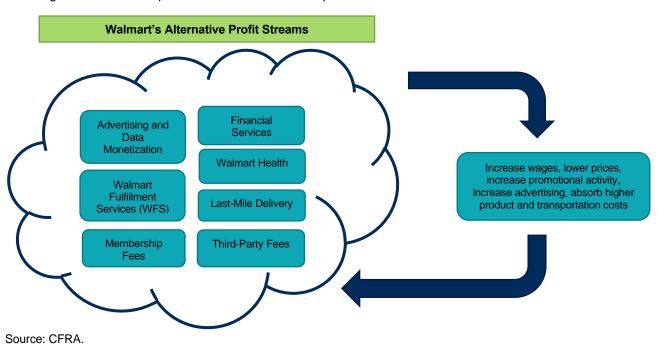
Aside from Walmart, which is far and away the largest U.S. grocer (with annual revenues doubling the second highest ranked grocer; see table below), the industry is highly fragmented, and not all grocers have invested in e-commerce equally. We think larger grocery chains are better positioned than smaller competitors to protect market share and accelerate e-commerce sales growth due to their ability to scale supply chain and technology investments.

TOP U.S	TOP U.S. GROCERY STORES			
2021 RANK	COMPANY	MOST RECENT FY REVS. (IN MILLIONS)	TOP BANNERS	
1	Walmart Inc. (excl. Sam's Club)	\$393,247	Walmart Supercenter, Walmart Neighborhood Market	
2	Amazon (excl. Whole Foods)	\$239,150	Amazon Fresh, Key by Amazon In-Garage	
3	Costco (U.S.)	\$141,398	Costco Wholesale	
4	The Kroger Co.	\$137,888	Kroger, Harris Teeter, Smith's	
5	Walgreens Boots Alliance (U.S. retail)	\$112,005	Walgreens, Duane Reade	
6	Target Corp.	\$106,005	SuperTarget Center	
7	CVS Health	\$100,105	CVS Pharmacy, HealthHUB, MinuteClinic	
8	Sam's Club	\$73,556	Sam's Club	
9	Albertsons Cos.	\$71,887	Safeway, Albertsons, Vons	
10	Ahold Delhaize USA	\$53,699	Food Lion, Stop & Shop, Hannaford	
11	Publix Super Markets	\$47,997	Publix, Publix GreenWise Market	
12	7-Eleven Inc. (U.S. only)	\$41,034	7-Eleven, 7NOW	
13	Dollar General	\$34,200	Dollar General, DGX	
14	H-E-B	\$34,000	H-E-B, H-E-B Plus, H-E-B Central Market	
15	C&S Wholesale Grocers	\$33,022	C&S Wholesale Grocers, Piggly Wiggly	
16	Meijer Inc.	\$25,547	Meijer	
20	Rite Aid	\$24,568	Rite Aid Pharmacy	
21	Aldi U.S.	\$18,200	Aldi Food Store	
22	BJ's Wholesale Club	\$16,306	BJ's clubs	
23	Dollar Tree (including Family Dollar)	\$14,900	Dollar Tree, Dollar Bills, Family Dollar	
24	Hy-Vee Food Stores Inc.	\$12,300	Hy-Vee Pharmacy Solutions	
25	EG America (C-stores)	\$12,254	Cumberland Farms, Kwik Shop, Minit Mart	
Source: Progressive Grocer (latest available).				

We like Walmart's odds of winning the grocery e-commerce war given its dominant market share, geographic advantages, commitment to being a low-cost retailer, and massive e-commerce investments. We think Amazon could choose to grow market share in this category, but think it would be more prudent for Amazon to allocate more capital toward other higher-growth, higher-margin segments, such as its Amazon Web Services cloud business. Investors often forget the importance of refrigeration capacity and location when it comes to grocery delivery, two factors that Walmart dominates.

Retailers Are Becoming More Than Just Retailers

Business models are evolving – retailers are expanding beyond their core retail offering and becoming a more diversified business. These alternative profit streams include advertising, data monetization, supply chain and fulfillment services, first-party and third-party marketplace fees, membership income, financial services, health care services, and more. As these asset-light, high-margin businesses continue to grow, retailers can reinvest some or all profits back into their core retail business (*e.g.*, increase wages). The following chart is an example of Walmart's alternative profit streams.

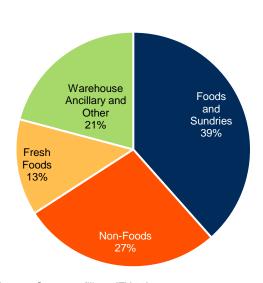


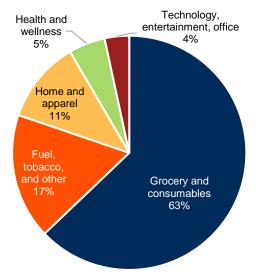
Costco, Sam's Club, BJ's: Club Store Model Is Poised for Growth

Club stores have witnessed a surge in new members since the onset of the Covid-19 pandemic. In the early days of the pandemic, shoppers flocked to club stores to stock up on groceries and household staples like toilet paper. Even now, these shoppers continue to return as membership renewal rates remain exceptionally high. In fact, just about every club store operator is experiencing record renewal rates, likely due to shifting consumer shopping habits amid elevated inflation. For instance, when gas prices surged to around \$5 per gallon during the summer of 2022, a record number of people were observed filling up at club stores, where they could save more than \$0.20 per gallon compared to regular gas stations. Costco's membership renewal rates in the U.S. and Canada hit a record high of 92.6% as of the second quarter of 2023, while BJ's tenured renewal rate reached 90% as of 2022, up by 3 percentage points since 2018. It's worth noting that BJ's does not disclose its total renewal rate, likely because it experiences more churn among its first-year members due to new member promotions.

COSTCO SALES MIX

SAM'S CLUB SALES MIX





Source: Company filings (FY 22).

Source: Company filings (FY 23).

The warehouse club channel is dominated by Costco, followed by Sam's Club and then BJ's Wholesale. The U.S. warehouse club channel has grown at a 6% compounded annual growth rate (CAGR) since 2007, fueled by club unit expansion, a rise in club memberships (including higher-tier memberships), expanded product/service selection, and significant e-commerce growth. In terms of store locations, Sam's Club operates 600 stores in the U.S. and Puerto Rico, while Costco U.S. had 584 clubs as of February 2023 (Costco has an additional 264 international clubs, primarily in Canada and Mexico), and BJ's Wholesale had 237 clubs as of March 2023. Although Sam's Club has more U.S. stores than Costco, Costco's warehouses are mostly larger and generate more sales, partly due to its greater mix of bigger-ticket discretionary goods (e.g., jewelry and furniture).

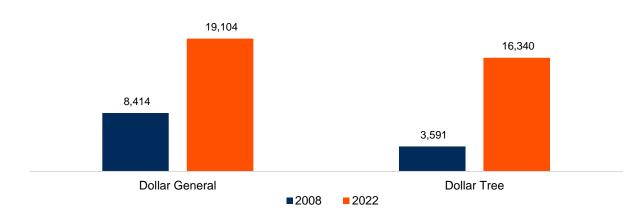


Source: BJ's Investor Day Presentation (as of September 2023).

Dollar Stores Are Rapidly Expanding

The dollar channel is much larger and stronger today than it was in 2008. Retailers like Dollar General and Dollar Tree have spent the last decade expanding their store footprint. Dollar General currently has more than 19,000 stores across the country, compared to just 8,414 stores across 35 states in 2008. Dollar Tree currently has more than 16,000 stores vs. 3,591 stores in 2008. However, it is important to note that Dollar Tree acquired Family Dollar in 2014, which more than doubled its total footprint. Both Dollar General and Dollar Tree have expanded their product assortment while continuing to focus on value. This includes more consumable products (e.g., fresh food, beverages, cleaning products, and health and beauty) and non-consumable products (e.g., seasonal merchandise, home décor, and apparel).

NUMBER OF STORES (2008 vs. 2022)



Source: CFRA, company filings (as of Q4 2022).

PRICING STRATEGY

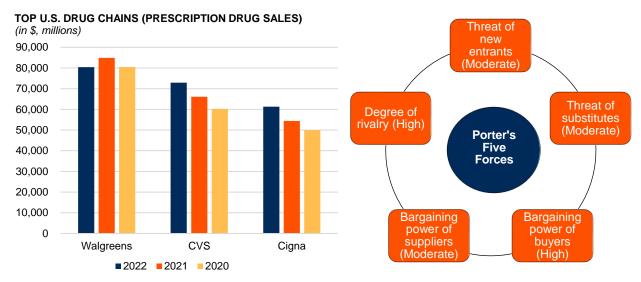
Banner	Pricing Strategy
Dollar General	\$10 or less, although 20% of assortment is priced at \$1 or less
Dollar Tree	\$1.25 (raised in 2022 from \$1.00)
Family Dollar (owned by Dollar Tree)	\$1 to \$10
Dollarama (in Canada)	Price points up to C\$5 (raised from C\$4 in 2022)

Source: CFRA, company filings.

\$1.25 Tree?

In 2022, Dollar Tree made the monumental decision to raise prices under its Dollar Tree banner from \$1.00 to \$1.25. This is the company's first price increase under the Dollar Tree banner and a major shift in strategy. This higher price point will not only help offset recent cost pressures, but will also allow the company to expand its product assortment, which is something its customers have been asking for. The rollout of the \$1.25 was completed in the first quarter of 2022, and now the company is working on expanding its product assortment in traffic-driving categories (e.g., food and beverage). Both sales per square footage and gross margins have improved following this new price point.

Drug Retail



Source Company reports.

Porter's Five Forces - Drug Retail

Porter's Five Forces Analysis		
Threat of New Entrants or New Entry (Moderate)	The threat of new entrants is moderate . Although there are only a few large chain retail pharmacies (<i>e.g.</i> , CVS, Walgreens, and Cigna), there are also many successful small/independent pharmacies throughout the U.S. Start-up costs are dependent on location and size, but on average range around \$350k-\$450k. Independent retailers have a competitive advantage by offering more personalized service to customers, along with some specialty services that some large retail pharmacies may not be able to offer. However, independent pharmacies may lack the variety of products and delivery channels that large retail pharmacies can provide.	
Threat of Substitutes (Moderate)	The threat of substitutes can mean several different things in drug retail. For prescription drugs themselves, there is a very low threat of substitute products, as the other substitutes would be no drugs or herbal remedies/alternative medicine. However, for the operating model of drugstores, the threat of substitutes is high , given that consumers can now purchase prescription drugs from supermarkets, hypermarkets, and general merchandise stores. Consumers are now able to purchase prescription drugs through online channels, driven by new entrants like PillPack (owned by Amazon), which is an e-commerce company that offers a convenient way to purchase prescription drugs for individuals who take multiple drugs per day for chronic conditions. Traditional retail pharmacies have taken note and have since begun to invest heavily into e-commerce platforms.	

Bargaining Power of Buyers (High)

Buyers for the Drug Retail sub-industry include two primary groups. First, there is the patient or customer, who purchases prescription drugs and generally forks over a copayment. These customers also purchase goods from the front end of a traditional drugstore. This group does not have much bargaining power, in our view, since each individual represents a small and insignificant portion of the entire consumer base. Third-party payers, on the other hand, often exert more power over drugstores since this group covers most of the sales price of a prescription drug, giving them **high** bargaining power. Third-party payers include pharmacy benefit managers, insurance companies, and governmental agencies. Many drugstores interact with a limited number of third-party payers. For example, Walgreens Boots Alliance notes that substantially all of its retail pharmacy sales were to customers covered by third-party payers (e.g., pharmacy benefit managers, insurance companies, and governmental agencies). We see the bargaining power of buyers increasing, due to the consolidation happening in the health care sector.

Bargaining Power of Suppliers (Moderate)

We think the bargaining power of suppliers is **moderate** since there are only a few large pharmaceutical distributors in the U.S., including McKesson Corporation, AmerisourceBergen, and Cardinal Health. Drug retailers typically have long-term agreements with one or more pharmaceutical distributors for the supply of branded and generic drugs. We think this alleviates some of the bargaining power that distributors have. We also think that the bargaining power of suppliers was lower when there was less M&A activity in the sector. However, due to the recent trend of significant consolidation, we think the bargaining power of other players in the supply chain has increased, thereby reducing the bargaining power of pharmaceutical distributors.

Suppliers for drug retailers also include distributors that supply products in the front end of the stores. These items include non-prescription drugs, beauty products, toiletries, and general merchandise. These suppliers have low bargaining power as a result of low switching costs for drug retailers to substitute one distributor for another.

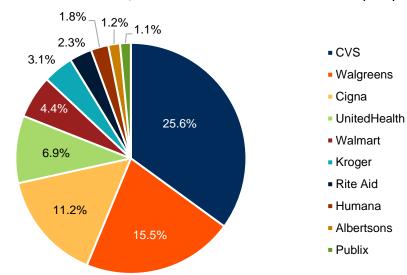
Degree of Rivalry/Competition (High)

The Drug Retail sub-industry is **highly** competitive. Players in this sub-industry compete principally based on store location and convenience, customer service and satisfaction, product selection and variety, and price. Drugstores compete with other drugstore chains (*e.g.*, Walgreens, Rite Aid, CVS), supermarkets, discount retailers, independent pharmacies, warehouse clubs, and retail health clinics, as well as mail-order dispensing pharmacies. We think the sub-industry's competitive landscape has recently intensified due to dynamic consolidation within the health care sector.

Sub-Industry Overview

The U.S. Drug Retail sub-industry is highly competitive, and the landscape is continually evolving. Driven by prescription drug sales, the long-term outlook of this sub-industry remains favorable, in part due to an aging population, increases in life expectancy, increases in the availability of generic drugs, the continued development of innovative drugs, and increases in the number of persons with insurance coverage. However, over the next 12 months, we see certain factors impeding growth for this sub-industry. These headwinds include intense reimbursement pressure, increased competition from non-traditional players, and volatile front-end retail sales due to a changing competitive landscape.

In 2022 (latest available), the top three drugstore chains – CVS Health, Walgreens, and Cigna – had approximately \$286.6 billion in prescription revenues (including all pharmacy dispensing formats), representing approximately 52.3% of the total pharmacy industry prescription sales (about \$550 billion in 2022), according to data from Drug Channels.



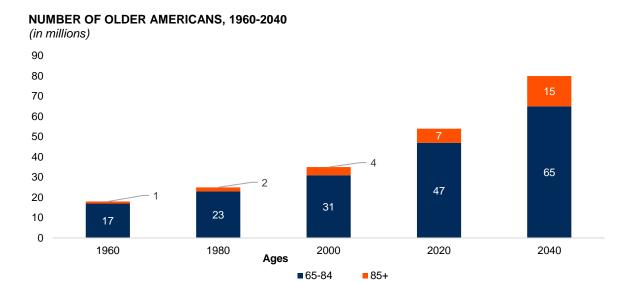
TOP 10 LARGEST U.S. PHARMACIES, BY TOTAL PRESCRIPTION REVENUES (2022)

Source: Drug Channels.

Demographic Shifts Change Customer Profile

The Drug Retail sub-industry is expected to benefit from favorable long-term trends that include an aging population, a strong drug pipeline (both branded and generic drugs), and expanded health care coverage for Medicare participants. Prescription drug spending is projected to grow by 6% to 8% in 2023 compared to 2022, according to the American Journal of Health-System Pharmacy. The report forecasts drug spending growth to further accelerate due to surge in specialty and cancer drugs along with the evolution of pandemic brought upon the industry.

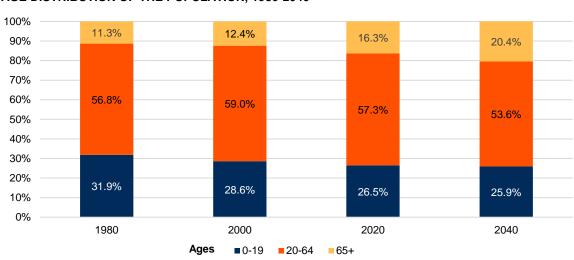
Supporting the projection of increasing prescription drug spending, the U.S. will experience a steep rise in the number of elderly residents. This is an important trend, as prescription drug expenditures are highest for people aged 65 and older. The U.S. Census Bureau projected that by 2040, there will be 80 million people 65 years and older. The group of adults ages 85 and older who most often require help with basic personal care is expected to quadruple between 2000 and 2040, according to Urban Institute. Pharmacies will experience an increase in demand from this aging U.S. population.



Source: U.S. Census Bureau (2004a, 2004b, 2004c).

This expected growth in population aging in the U.S. is particularly important for anticipating health care and assistance needs. As reflected in the prescription drug use by age data published by the CDC, the average annual number of prescriptions per person increases significantly with age. Baby boomers (born between 1946 and 1964) are getting older (the first baby boomers turned 65 in 2011, and all baby boomers will be 65 years or older by 2030), so increased prescription drug use will benefit drugstores. However, as younger people are more likely than older people to work and pay taxes that finance Social Security, Medicare, and other public-sector activities, population aging could strain government budgets.

On August 16, 2022, President Biden signed into law the Inflation Reduction Act of 2022. The new law includes provisions to try and lower drug prices for millions of people in the United States. For example, the law will cap out-of-pocket spending for Medicare beneficiaries, limit copayments for insulin products, and allow the federal government to negotiate drug prices for certain prescription drugs. These provisions will be implemented in phases, beginning in 2023 and going through 2026.



AGE DISTRIBUTION OF THE POPULATION, 1980-2040

Source: U.S. Census Bureau (2004a, 2004b, 2004c).

Amazon's Disruption to the Industry

In June 2018, Amazon shook the health care sector by acquiring the online pharmacy PillPack. PillPack is currently licensed to deliver medication to all states except Hawaii. In December 2019, PillPack struck a deal with Blue Cross Blue Shield of Massachusetts to integrate its pharmacy services into Blue's app and website.

In November 2020, Amazon expanded its pharmacy offering by launching its own service called Amazon Pharmacy (currently just in the U.S.). This service is distinct from PillPack, as PillPack tailors more to consumers managing multiple daily medications for chronic conditions. Amazon has filed for trademark approval of the name "Amazon Pharmacy" in several countries, which CFRA believes is a signal that the company has greater ambitions in the pharmacy market. Amazon also introduced a savings program for its Prime members called Amazon Prime prescription savings benefit. This is not an insurance plan but rather a savings program administered by Cigna's Inside Rx platform. Amazon states its Prime members can experience discounts of up to 80% off generic and 40% off brand name medications. Prime members can use these discounts at 50,000 brick-and-mortar pharmacies nationwide, in addition to its Amazon Pharmacy platform.

In a related move, Amazon has also launched a medication management skill for its artificial intelligence assistant Alexa. Individuals can use Alexa to check their prescriptions, set reminders for taking medication, and order prescription refills. While Amazon is working on this feature with third-party pharmacies now, CFRA sees the company rolling out even more advanced Alexa abilities with its own online pharmacy.

In February 2022, Amazon closed on its acquisition of One Medical, a differentiated primary care provider, for \$3.9 billion. This acquisition is Amazon's latest attempt to further penetrate and disrupt the broader U.S. health care sector, including purchasing PillPack in 2018 and launching Amazon Pharmacy in 2020, Amazon Clinic in 2022, and RxPass in January 2023. While Amazon's health care business may eventually be successful, the company is likely to face obstacles in the short term due to the highly regulated and complex nature of the industry.

Reimbursement Headwinds for Drug Retailers

The retail pharmacy market relies heavily on private and government third-party payers for reimbursement once a prescription drug is sold by the pharmacy to the consumer. When these payers take actions that restrict eligibility or reduce prices or reimbursement rates, those actions hurt sales and margins. This phenomenon has become more common as a result of heavy consolidation in the health care sector, which has given more bargaining power to players higher up in the value chain, such as pharmacy benefit managers and third-party insurers.

For brands and specialty drugs, the reimbursement rate/formula is typically clearer since it is usually based on the wholesale price plus a markup. However, for generic drugs, there are many ways for third-party payers to tweak the reimbursement rate, such as moving a drug from a formula to a fixed amount, also called the Maximum Allowable Cost (MAC). The MAC can be adjusted based on market prices for generic drugs and the severity of the current competitive landscape. As such, we believe volatile generic drug prices lead to lower reimbursement rates for drug retailers.

Reimbursement pressure is nothing new to this sub-industry. However, what is new, in our view, is that there are fewer opportunities to mitigate or offset this headwind. Pharmacies used to be able to manage reimbursement headwinds by controlling inventory costs and other expenses, dispensing more higher-margin generic drugs, finding new revenue streams through pharmacy services, and/or dispending a greater volume of prescriptions.

No More Tobacco

CVS Health became the first national retail pharmacy chain to stop selling tobacco products in all of its stores because it conflicted with the company's purpose of helping people on their path to better health. This move was applauded by many politicians and consumers but pressured other retail pharmacy chains to do the same. For several years, Walgreens has "de-emphasized" tobacco products in its stores, and in April 2019, the company announced that it would increase the age to buy tobacco products to 21. On the same day, Rite Aid announced that it would also increase the age to buy tobacco products to 21, which came weeks after Rite Aid had announced that it would stop selling e-cigarette products. On December 20, 2019, President Donald Trump raised the federal minimum age for sale of tobacco products from 18 to 21 years.

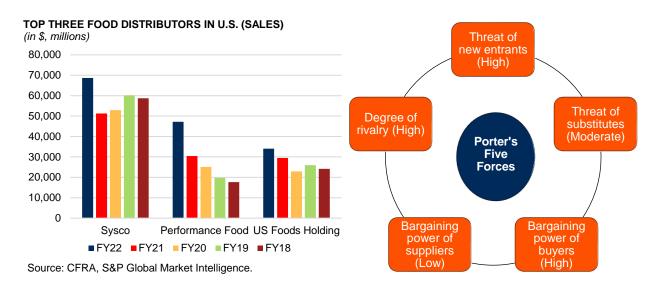
Everyone's Favorite New Topping - Cannabidiol

Hemp-derived Cannabidiol (CBD) is becoming one of the hottest ingredients in consumer products, and retailers are beginning to carefully evaluate the market, testing CBD-infused products to satisfy consumer demand. Regulatory uncertainty has put some companies on the sidelines, but we have started to see some large companies take the initiative. Walgreens offers certain products containing CBD in nearly 3,860 Walgreens stores in select states. The CBD-related items it carries are topical creams, patches, and sprays.

Hemp is legal in the U.S., but with several restrictions. Hemp is similar to cannabis, except with one key difference: hemp contains little or no THC (less than 0.3%), the substance that produces a "high." For a very long time, federal law did not differentiate hemp from other cannabis plants, making it effectively illegal. However, as part of the Hemp Farming Act of 2018, hemp was removed from the Schedule I controlled substance list, which led to the growth of CBD in consumer products.

According to Brightfield Group, total U.S. hemp-derived CBD market is expected to reach \$11 billion by 2027, up from about \$5.0 billion in retail sales in 2022. CBD is currently not formally permitted as a dietary supplement and food additive. If federal reforms are implemented by 2024, sales are estimated to reach \$11 billion by 2027 due to accelerated growth of ingestible product categories, including capsules and gummies and increased acceptance by mainstream retailers. This growth will be fueled by consumer awareness trends and investments made by retailers in this space. Currently, supplements and body care make up the majority of CBD sales. However, CBD sales are starting to grow in the food and beverage space, including ready-to-drink beverages, gum, and chocolate.

Food Distributors



Porter's Five Forces - Food Distributors

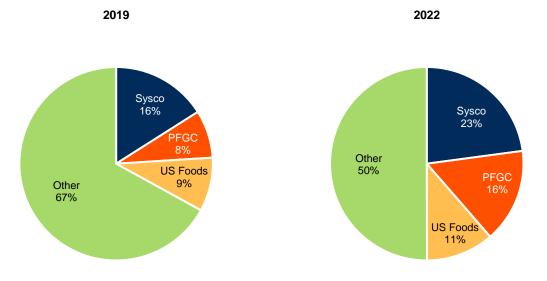
Porter's Five Forces Analysis		
Threat of New Entrants or New Entry (High)	There are few barriers to entry in the Food Distributors sub-industry, which is opportune since consumers seek more locally sourced products. Furthermore, existing competitors can relatively easily expand their product line or increase their geographic footprint. This is why the industry is so fragmented and why M&A is such a prevalent growth strategy; thus, high threat of new entrants.	
Threat of Substitutes (Moderate)	We consider the threat of substitutes to be moderate due to the growing number of nontraditional business models, which in turn increases the competition for traditional food distributors. Customers can also choose to purchase products directly from wholesale or retail outlets, including club, cash and carry, and grocery stores; from online retailers; or by negotiating prices directly with the suppliers of food distributors, which would effectively wipe out the food distributor as the intermediary.	
Bargaining Power of Buyers (High)	Given the highly fragmented market and the growth of many smaller food distributors, switching costs for buyers or customers are very low. Therefore, customers can make supplier and channel changes very quickly with minimal effort and cost. To combat the high bargaining power of buyers, large food distributors look to acquire other smaller food distributors in order to control a greater portion of market share.	
Bargaining Power of Suppliers (Low)	We consider the bargaining power of suppliers to be low . Food distributors typically purchase from thousands of suppliers, both domestic and international, and do not typically rely on any single supplier. These suppliers consist generally of large corporations selling brand name and private label goods, as well as independent, regional brand and private label processors and packers. Food distributors are also moving more into purchasing from small- to mid-sized producers in order to meet the growing demand for locally	

	sourced products. Supplier agreements are typically negotiated on a centralized basis to reduce overhead costs.
Degree of Rivalry/Competition (High)	The Food Distributors sub-industry is fragmented and highly competitive , with local, regional, and multi-regional distributors either carrying a large array of product categories or a limited number of niche product categories. There are several different types of food distributors in the marketplace, including broadline distributors (carrying a broad line of products and services), system distributors (carrying products for large chains), and specialized distributors (focusing on a specific product category like meat or produce). The rise of more specialized distributors with a local presence has magnified the competitiveness of this industry, because these distributors have a competitive advantage from their close proximity to customers, which allows for a closer customer relationship and an enhanced speed-to-market operating model.

Sub-industry Overview

The U.S. Food Distributors sub-industry is led by Sysco, US Foods, and Performance Food Group Company. These are the only three publicly traded foodservice distributors in the U.S. with a national footprint. In 2022, Technomic projects the U.S. foodservice industry to increase to approximately \$345 billion, up from \$300 billion in 2021, and Sysco served about 20% of the approximately \$345 billion U.S. foodservice market. Performance Food Group holds about 14% share and US Foods commands about 10% share, by our estimates. Although the industry is largely led by these three players, the food distribution market is highly fragmented and competitive. The industry is characterized by a high volume of sales and low profit margins. As such, inventory management is key. Cost inflation or deflation between the time inventory is acquired from suppliers to the final sale to customers could lead to unexpected shifts in demand and potentially selling inventory at a smaller profit – or even a loss.

U.S. FOOD DISTRIBUTION MARKET SHARE



Source: CFRA, company filings.

Independent Restaurants = Growth

We've seen restaurant-goers over the past several years migrate from chain restaurants to independent restaurants. Independent customers are typically local restaurants. Sales to these customers are typically more profitable for foodservice distributors than sales to larger customers (e.g., chain restaurants). Independent customers also tend to purchase private brands over national brands and are more likely to use ancillary services offered by the larger distributors, such as menu creation, takeout and delivery optimization, and marketing assistance. Sysco, US Foods, and Performance Food Group are all gaining independent customers, which is noteworthy since many independent restaurants have permanently closed in the U.S. due to hardships caused by the pandemic.

One of the biggest growth opportunities, in our view, will come from increasing share of wallet with independent customers. Increasing share of wallet with existing customers is probably the most profitable form of growth because not only would it lead to an increase in sales and improve customer mix, but it would also result in lower costs and greater efficiencies since drivers don't have to go to a new location to drop off cases. Larger foodservice distributors currently have about 30% share of wallet with independent customers vs. roughly 70%+ with chain restaurants, as independent customers tend to work with several distributors (sometimes three or more) in order to procure local, fresh, or specialty products. To increase share of wallet, we've seen larger distributors like Sysco and US Foods acquire specialty distributors, since combining broadline capabilities with specialty assortment helps provide better value for independent customers.

Transportation Costs

Transportation costs have declined to a 10-year record low due to lower demand and ongoing destocking in two critical components – drivers and tractors. The Cass Truckload Linehaul Index, which tracks permile truckload linehaul rates (independent of fuel), illustrates this trend in the chart below. The index fell 12.3% year-over-year in April 2023. On a two-year stacked basis, the index remained relatively flat in April 2023, indicating a return to pandemic recovery year level (2021) as consumer demand slowed down and fuel prices dropped in recent months.

CASS TRUCKLOAD LINEHAUL INDEX

(per-mile truck hauling rates - not including fuel, Y/Y change)

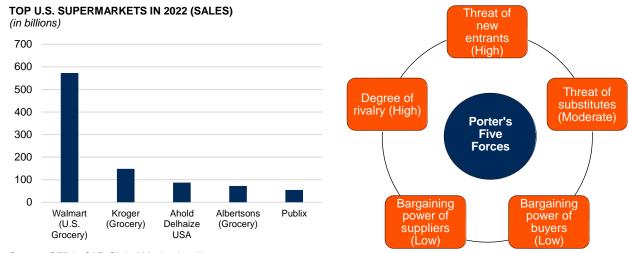


*Data through May 2023.

Source: Cass Information Systems, Inc.

CFRA believes that transportation cost pressures will continue to ease, as ocean freight rates and fuel prices have come down in recent times. We believe this trend can continue given concerns of softer consumer demand and exploding retail inventory levels.

Food Retail



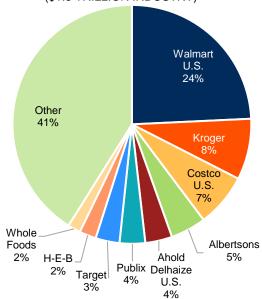
Source: CFRA, S&P Global Market Intelligence.

Porter's Five Forces - Food Retail

	Porter's Five Forces Analysis		
Threat of New Entrants or New Entry (High)	We consider the threat of new entrants to be high because of the highly fragmented nature of this sub-industry, along with a wide array of food retailers, including large, conventional supermarkets, warehouse clubs, small grocery stores, and convenience stores, as well as natural and organic, specialty, mass, and discount formats. We are also seeing a rise in new store openings, particularly among specialty stores and discount stores. For example, Aldi was on track to become the third largest grocery by store count by the end of 2022; however, it fell short of that goal and is now targeting to meet the goal by the end of 2023.		
Threat of Substitutes (Moderate)	We consider the threat of substitutes to be moderate due to the growing number of nontraditional business models emerging and disrupting the subindustry. However, most traditional food retailers have already begun adapting and changing their operating model to compete with the likes of these new players. For example, Kroger has been investing significantly in its online and digital infrastructure, and the company's efforts have started to pay off. Kroger's digital sales increased 4% year-over-year in FY 23. FY 22 saw Kroger's digital sales decline 3% after growing 116% in FY 21. This follows a 29% growth in FY 20 and 58% growth in FY 19. Kroger has also expanded its delivery reach to 98% of the households within close proximity to a Kroger location. Another example is how the meal kit market has evolved. Historically, meal kits were exclusively sold online and were subscription-based. However, we are now seeing meal kits making their		

	way into grocery stores. This could be a great strategy for retailers who are seeking ways to increase customer foot traffic.
Bargaining Power of Buyers (Low)	The buyers for this industry are the consumers making purchases at either the store or through an online channel. Individually, these buyers comprise a small portion of the food retailers' sales and do not command much bargaining power; thus, low bargaining power for customers. However, if buyers act together collectively, they can be much more powerful.
Bargaining Power of Suppliers (Low)	Food retailers source products from thousands of suppliers, both domestically and internationally. There are, however, a few large suppliers that typically supply over a hundred different products in several different grocery categories, such as General Mills, Conagra Brands, and PepsiCo. These suppliers are more likely to flex their bargaining strength than the smaller, local manufacturers, creating low bargaining power for suppliers.
Degree of Rivalry/Competition (High)	The degree of rivalry among food retailers is notoriously high . The sub-industry is characterized by its intense price competition in order to attract customers. Furthermore, customer preferences are dynamically evolving with the advancement of online delivery, click-and-collect, and other digital initiatives. Although margins are already very low in this sub-industry, we anticipate more margin pressure giving rising input costs, higher transportation expenses, and the shift to online grocery orders (online orders are typically margin dilutive to the sub-industry given higher costs to fulfill these orders).





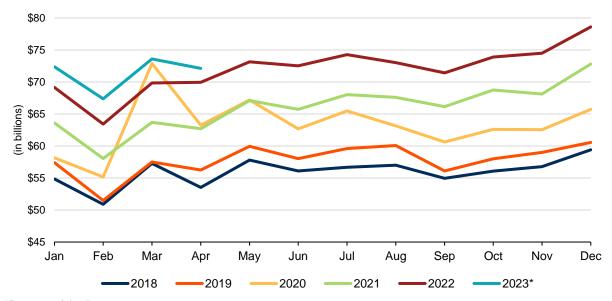
Source: CFRA, company filings, Progressive Grocer.

Sub-Industry Overview

The ~\$1.3 trillion U.S. Food Retail sub-industry is a large but highly fragmented market. The top five companies control nearly 50% of the market share, led by Walmart U.S., which controls nearly a quarter of the market. We think we could see increased consolidation over the coming years, particularly given retailers need scale for an effective e-commerce strategy. Many of the smaller specialty grocers (many of them are independent grocers) face bankruptcy risk over the long term, in our opinion.

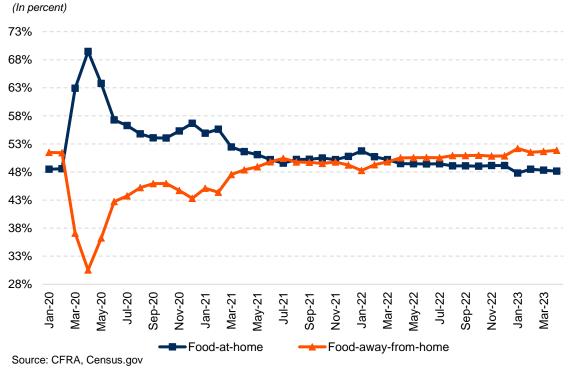
The Covid-19 pandemic has increased at-home food demand. We saw the initial surge in demand in March 2020 following various stay-at-home orders, quarantines, and lockdowns. While at-home demand has moderated since that initial surge, it has remained well elevated versus pre-pandemic levels. More recently, at-home food sales have been lifted by rising food prices.

SUPERMARKET AND OTHER GROCERY SALES



*Data as of April 2023. Source: U.S. Census Bureau (not seasonally adjusted).

FOOD-AT-HOME VS. FOOD-AWAY-FROM-HOME CONSUMPTION

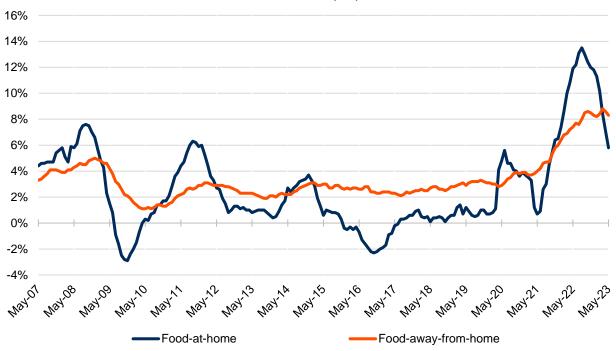


Food Inflation Has Likely Peaked

Food prices surged at the onset of the pandemic due to very strong demand and tight supply. In addition, most retailers reduced the level of promotions or discounts offered on their food products to avoid the persistent out-of-stock issues experienced nationwide. Then, in 2021, food prices rose as a result of input cost inflation, driven by higher raw material prices, transportation, and labor costs.

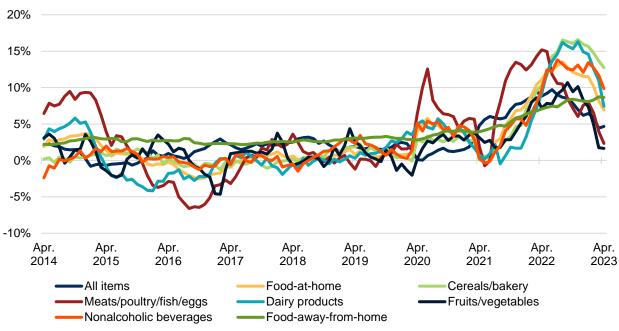
The food-at-home consumer price index (CPI) seems to have peaked in August 2022, as the index has now moderated for nine consecutive months. The 12-month food-at-home CPI as of May 2023 was 5.8%, down from the August 2022 peak of 13.5%, the highest rate experienced since the early '70s when food-at-home inflation spiked to greater than 20%. Lower protein prices have driven the recent decline. Overall, food inflation seems to be heading in the right direction, although we acknowledge that on a two-year basis, food inflation continues to be elevated. Additionally, we've seen stickier inflation within dry food categories (e.g., bread, cereal, snacks), partly due to the nature of brand products versus commodities, but also because cost pressures continue to be an issue (e.g., higher wages).

FOOD-AT-HOME CPI VS. FOOD-AWAY-FROM-HOME CPI (Y/Y)



Source: U.S. Bureau of Labor Statistics (BLS)

SELECT FOOD CATEGORIES CPI (Y/Y)



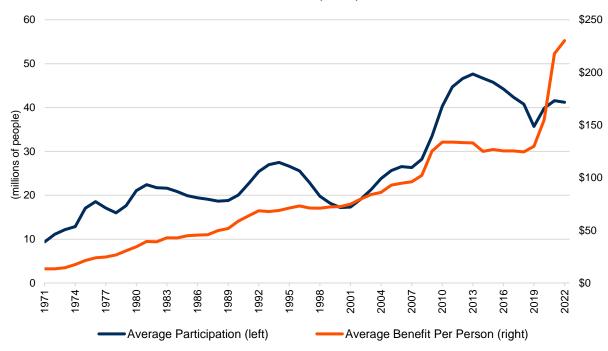
Source: U.S. Bureau of Labor Statistics.

Food Assistance (SNAP or Food Stamps)

The Supplemental Nutrition Assistance Program (SNAP), formerly known as food stamps, is a federal program that operates under the requirements of the U.S. Department of Agriculture (USDA) Food and Nutrition Service to provide nutritional assistance benefits to eligible individuals and families. SNAP provides monthly benefits to households through an Electronic Benefits Card (EBT) to supplement the purchase of nutritious foods.

Consumer participants in SNAP represent 16% (22 million) of U.S. households and upward of 44 million people. We note that the temporary boost to SNAP benefits put in place during the Covid-19 pandemic, known as emergency allotments, ended nationwide after the February 2023 issuance. SNAP households receive at least \$95 less in benefits, with some households in certain states seeing a reduction of \$250 a month or more.

SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP)



Source: CFRA, U.S. Food and Nutrition Service.

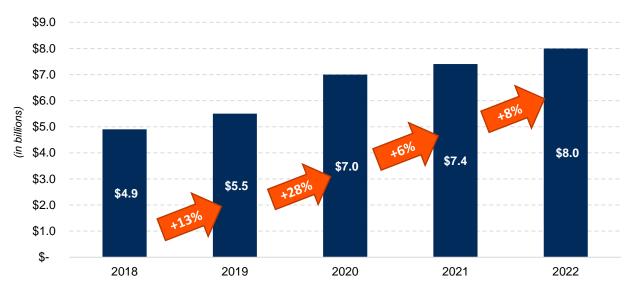
Plant-Based Foods

Consumers are increasingly shifting to organic or natural products and subscribing to various eating styles, from vegetarian to keto and paleo diets. Amid this changing environment, plant-based diets are gaining traction in the U.S. and around the world. In 2022, U.S. plant-based food retail sales (excluding foodservice sales) grew to \$8 billion (+8% year-over-year) but unit sales were down 3%. The growth, however, is slower than 2020, when the market grew a whopping 28% year-over-year. The slower year-over-year growth can be attributed to tough comparable figures from the year-ago period, ingredient shortages, supply chain constraints, and fewer opportunities to spur consumer trials amid Covid-19-related disruptions.

Plant-based foods have played a major role in driving the U.S. retail food growth, particularly in the 2019-2022 period, as plant-based food unit sales growth exceeded that of both animal-based food and total food. According to a Credit Suisse research, among consumers aged 16 to 40 from 10 different countries, 66% plan to spend more on plant-based meat and dairy alternative in the future.

Despite the high inflation, lack of scale, subsidies, and shrinking retail spaces, plant-based food managed to consistently grow in sales in recent years, contributing to a surge in demand for healthier diet. We think the industry will break through to the next level of consumer adoption once the industry can make the products indistinguishable from their animal counterparts from both a taste and cost perspective.

U.S. PLANT-BASED FOODS RETAIL DOLLAR SALES



Source: The Good Food Institute State of the Industry Report.

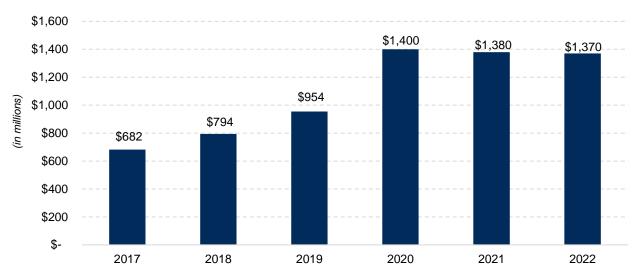
The Budding of Plant-Based Protein

The vegetarian and vegan market is a relatively old one. Consumers have been able to find veggie burgers on almost every traditional restaurant menu. What is new, however, is sophisticated plant-based meat grown in labs using plant-based protein alternatives. Plant-based meat is gaining prominence in the U.S., and not just from vegetarians. Both meat-eaters and vegetarians now consume more plant-based protein, although the industry has really tailored its products to consumers who mainly follow a vegetarian diet but occasionally eat meat.

The alternative meat market is experiencing explosive growth, as the industry is targeting flexitarians rather than vegetarians or vegans. Flexitarians eat mostly a vegetarian diet, but occasionally eat meat and poultry. About a quarter of all U.S. meat buyers also purchase alternative meat. One company that has been gaining heavy media exposure is Beyond Meat. This company was founded in 2009 and is one of the largest plant-based meat producers, with products available in supermarkets, restaurants, and wholesalers in the U.S. and Canada. According to the founder of Beyond Meat, Ethan Brown, 93% of people who purchased the Beyond Burger do not identify as vegetarian or vegan.

After gaining a 46% year-over-year sales growth in 2020, plant-based meat retail sales have managed to remain stable in the \$1.4 billion range in 2022, down slightly by 1.2% compared to 2021 sales. While unit sales declined 8.2% in 2022, this category continues to hold a steady 2.5% market share of all packaged meats. The main barrier to plant-based meat will continue to be its taste as the repeat rate for it is still quite low at 62% compared to other plant-based food (75%-80%). CFRA believes this industry is still nascent and has a long runway ahead. As the industry continues to innovate, we believe the industry will be able to tackle the taste/flavor problem, which hinders most consumers to continue consuming plant-based meat. On top of that, plant-based meat solves several of the planet's most pressing sustainability and environmental challenges, including climate change, global resource constraints, human health, and animal welfare.

U.S. PLANT-BASED MEAT RETAIL DOLLAR SALES

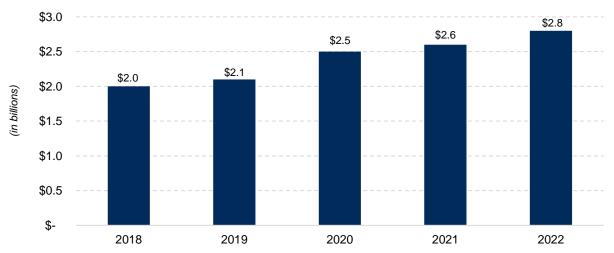


Source: The Good Food Institute State of the Industry Report.

Plant-Based Milk Is the Largest Plant-Based Category

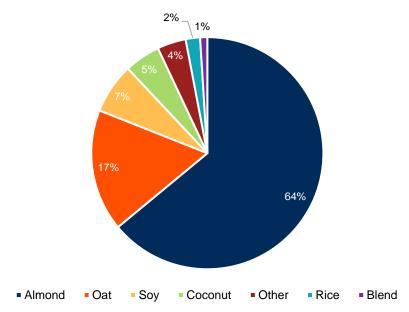
Plant-based milk retail sales grew 9% in 2022 to \$2.8 billion, after a 4% growth in 2021. However, the growth rate was much lower than the 12% growth in the animal milk category. Plant-based milk has been a key driver for the overall milk category in recent years, with unit sales surging 19% over the 2019-2022 period, compared to animal-based milk, which declined 4% over the same period. Plant-based milk is the largest and most developed plant-based category in the U.S., now representing 15% of the entire milk category and 35% of the entire plant-based food sales. Household penetration is now 40.6% in the U.S. for plant-based milk – meaning about 4 out of 10 U.S. households purchase plant-based milk. Purchasers tend to be younger and from higher-income brackets. As these cohorts grow older and have more disposable income, we think we will see the adoption rate accelerate. Keep in mind that 60% to 70% of consumers joined the category within the last few years alone, proving how quickly the category is becoming mainstream. Growth in coffee consumption, changes in eating habits, and influence from global trends like sustainability and nutrition are key drivers fueling this growth.

U.S. PLANT-BASED MILK RETAIL SALES



Source: The Good Food Institute State of the Industry Report.

U.S. PLANT-BASED MILK MARKET SHARE



Source: CFRA, Oatly company filings.

Private Label Movement

The concept of private label has been around for decades but only recently began growing apace, largely due to innovation and changes in retail strategies. Historically, private label products had the consumer perception of being "cheap" or "low-quality". However, retailers have now invested in quality, packaging, and the image of their store brands to promote superior quality. Private label products typically carry a lower selling price than branded products but generate much higher margins for retailers.

Private label in the packaged foods market has been taking market share away from its branded counterparts for many years. In the grocery space, private label brands account for approximately 17% of sales, while branded products account for 83%. The strongest market share positions for private label are typically in frozen fruit, refrigerated meat, dairy products, cooking oils, and certain snacks, such as trail mix. We attribute this growth to investments made in the quality of these products (*e.g.*, ingredients, packaging, etc.), favorable demographic trends, the rise of e-commerce, and support from retailers who have been increasing their private label exposure.

Longer term, we think private label will outpace store brand growth due to 1) e-commerce growth (retailers can easily advertise their products online); 2) improved store brand quality; 3) growth of discount and value retailers (e.g., Aldi, Lidl); and 4) shifting consumer preferences (e.g., less brand loyalty).

Amazon Disrupts Food Retailers

Amazon's acquisition of Whole Foods in 2017 was a wake-up call to traditional brick-and-mortar grocers that may have lagged in the e-commerce movement. We see Amazon's purchase of Whole Foods as a strategic move to increase e-commerce sales more than in-store sales, as Whole Foods' real estate is a lucrative distribution point for Amazon Prime members. Since many Amazon Prime members live near a Whole Foods Market, Amazon can use the store as a distribution point for grocery delivery. Furthermore, Amazon can benefit from those customers who value physical stores.

With the addition of Amazon Go and Amazon Go Grocery, Amazon now has a few different brick-andmortar brands in its arsenal, each covering unique markets and consumer needs. These stores offer the latest technology in retail, including Just Walk Out, which allows shoppers to enter a store, grab what they want, and just walk out of the store. The Just Walk Out system uses ceiling-mounted cameras and artificial intelligence to track shoppers' selections as they walk around the store and automatically charges them when they exit. Another example is Amazon One, which is a fast, convenient, contactless way for people to use their palm to make everyday activities like paying at a store, presenting a loyalty card, entering a location like a stadium, or badging into work more effortless. The service is designed to be highly secure and uses custom-built algorithms and hardware to create a person's unique palm signature. Just Walk Out or Amazon One is now available at Texas A&M's Kyle Field, Lumen Field in Seattle, Crypto.com Arena in Los Angeles, and a Hudson Nonstop at Dallas Fort Worth International Airport.

E-Grocery Now a Cost of Doing Business, But Will Be the Future

We have seen an uptick in investments tailored to e-commerce and omni-channel platforms. For example, Kroger now offers home delivery to nearly all its households (defined as households within close proximity to a Kroger store). Walmart invested nearly \$17 billion in capital expenditures in 2022, with most of its resources going towards e-commerce, technology, and supply chain. This is well above Walmart's historical annual capital expenditures range of about \$10 billion to \$12 billion.

For many grocers, online grocery channels (*i.e.*, delivery, click-and-collect, etc.) are currently margin dilutive compared to the traditional brick-and-mortar business. This is because grocers are not always able to cover all the costs associated with warehousing, technology, transportation, and delivery. Grocers have been investing into this channel to build capacity, which will soon lead to increased operating leverage. Therefore, once volume sales begin to rapidly grow in this channel, online sales could be just as profitable as in-store sales.

Click-and-collect is a hybrid e-commerce model in which consumers purchase items online and pick them up at the store or at a centralized collection point. According to Kroger CEO Rodney McMullen, it can take about three to five years for a click-and-collect location to generate enough orders to offset costs and reach the breakeven point. Click-and-collect helps retailers increase sales and build customer loyalty. This service is particularly attractive to young families who struggle to navigate through large stores with children.

The rapid expansion of click-and-collect grocery services by food retailers is helping defend market share against Amazon. While Amazon has increased its focus on food, its expertise falls behind industry leaders, as Amazon's fresh grocery home delivery primarily services urban shoppers. For the rest of the U.S., food retailers meet the growing demand for online grocery shopping with a combination of local click-and-collect and home delivery – usually via a third-party service, such as Instacart – which helps them become more immune to Amazon's expansion into food.

Food retail companies that have invested in building a strong e-commerce platform will fare better than others during this pandemic and once we come out of this pandemic, by CFRA analysis. This is because e-commerce in food retail could become part of the new normal for everyone once this pandemic is all over. As a result, it is imperative that food retailers attempt to limit the amount of out-of-stocks during the period and ensure the customer experience is a positive one so that retention rates are high. For companies that have lagged in terms of building an omnichannel presence, we forecast they will need to leverage their assets and resources to make up for lost time. Otherwise, they could be put out of business by larger players with size and scale advantages.

Automation to Boost Operational Efficiency

Walmart, Kroger, Albertsons, and Ahold Delhaize are among the retailers that are significantly investing in automation. Some examples include Kroger's partnership with Ocado, Walmart's Alphabot program, and partnerships with Takeoff Technologies from both Albertsons and Ahold Delhaize. Kroger plans to build

20 customer fulfillment centers powered by Ocado, while Walmart plans to manage underused space more efficiently and effectively in its stores. Walmart is also working on ways to automatically bring items from storage to the workers who will consolidate the items in a click-and-collect order.

Automating repetitive but necessary tasks can increase in-store efficiency. Walmart has rolled out autonomous floor cleaners in a few hundred stores. It is also using advanced scanning technology to better sort inbound freight and scan shelves, so that it can identify out-of-stock items with high accuracy. Ahold Delhaize is also bringing shelf-scanning robots to its Giant and Stop & Shop stores.

Metaverse and Advertising

Walmart has debuted in the metaverse by launching two new Roblox metaverse experiences called Walmart Land and Walmart's Universe of Play to produce and sell virtual goods ranging from electronics, home decorations, sporting goods, and personal care products. This metaverse experience can serve as an e-commerce platform for physical products in the future. For the time being, however, we can see that Walmart is using the metaverse to target Gen Z customers who are more comfortable with virtual reality experiences. Walmart is also planning to offer users virtual currency and NFTs. Several other retailers have also recently been filing trademark applications to protect their virtual goods, including Nike, Gap, Urban Outfitters, Ralph Lauren, and Abercrombie & Fitch.

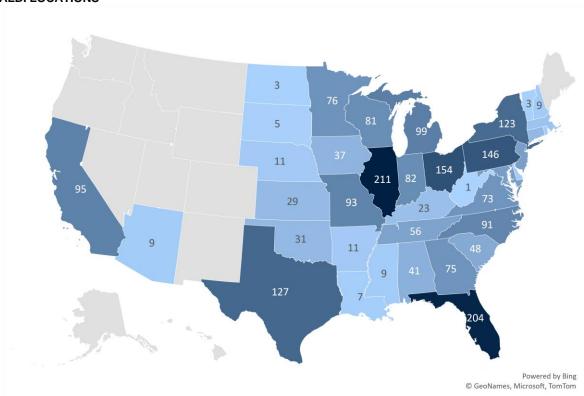
Hard Discounters a Potential Threat to Established Players

U.S. hard-discount grocery sales have grown steadily since 2010. Aldi is by far the leader, but companies like Lidl and Save-A-Lot have a large presence. Aldi is already four years into its five-year, \$5.3 billion U.S. growth plan to operate 2,400+ stores by the end of 2023. As of March 31, 2023, Aldi operates 2,305 stores in the U.S. The company earlier stated that it was on track to become the third largest grocer by store count by end-2022. However, it fell short of that goal and is now targeting to meet the goal by the end of 2023.

At first glance, it might seem absurd that Walmart could be at risk, given its established position and proven ability to fend off tough competition (see how well Walmart has been keeping up with Amazon). However, we note that Aldi and Lidl have beaten Walmart in Germany and the U.K. in terms of market share. Therefore, it may not be such a far-fetched idea that Walmart will have to contend head-on with the hard discounters in the coming years.

The hard discounters are also entering the online fray by offering e-grocery services of their own. The move highlights how Aldi's and Lidl's shopper base is growing to include customers who are willing to pay delivery fees. Aldi has a partnership with Instacart and is working to offer online grocery delivery to all of its stores across the U.S., while Lidl relies on Boxed and Target-owned Shipt to expand its grocery delivery service. Both services use personal shoppers to pick and deliver groceries.

ALDI LOCATIONS



Source: Aldi, Google.

HOW THE INDUSTRY OPERATES

Supermarkets and chain drugstores are the dominant retail outlets for food and drug sales. Other formats exist, but largely are variations of drugstores and supermarkets.

Supermarkets

A supermarket is a retail business that typically has more than 5,000 square feet of selling space (of which at least half is dedicated to grocery items) and has annual sales of more than \$2 million. Standard formats include conventional and "price-impact" supermarkets, superstores, combo stores, and supercenters.

- ◆ Traditional supermarkets. A conventional supermarket is a full-line, self-service retail store that sells dry groceries, canned goods, nonfood products, and perishable goods. To distinguish it from a grocery store, a supermarket generally has annual sales of \$2 million or more. In 2021 (latest available), the Food Marketing Institute (FMI) revealed that the average number of items carried in a supermarket is 35,829, down from 38,900 in 2016. Stores typically carry between 15,000 and 60,000 stock keeping units (SKUs).
- ◆ Superstores. A superstore (not to be confused with a supercenter) is essentially a large conventional supermarket with expanded service deli, bakery, seafood, and nonfood sections. The Stop & Shop Supermarket Co., for example, operates superstores under the Super Stop & Shop name.
- ♦ Combination (combo) stores. Complete, full-line, self-service stores with significantly larger floor space of at least 30,000 square feet. Combo stores have annual sales of at least \$10 million, typically devoting 40% or more of total space to nonfood items. Kroger's business model has a major focus on combo stores, with a majority of its stores operating in the combination store format.
- ◆ Supercenters. Supercenters are hybrids of large traditional supermarkets and mass merchandisers that offer a wide variety of food and nonfood merchandise. They average more than 170,000 square feet and may devote as much as 40% of selling space to grocery products. Supercenters include Walmart Supercenters, Super Target, Meijer, and The Kroger Marketplace stores.
- ♦ "Limited-assortment" stores. These are low-priced grocery stores that offer a limited variety of center-store and perishable items (fewer than 2,000 SKUs). Aldi, Trader Joe's, and SUPERVALU's Save-A-Lot operate under a limited-assortment format.
- ◆ **Dollar stores.** Dollar stores sell products, including food and consumable items, at affordable prices, which account for 20%–66% of their total sales volume. Stores in this format include Dollar General, Dollar Tree, and Family Dollar.

Other Food Outlets

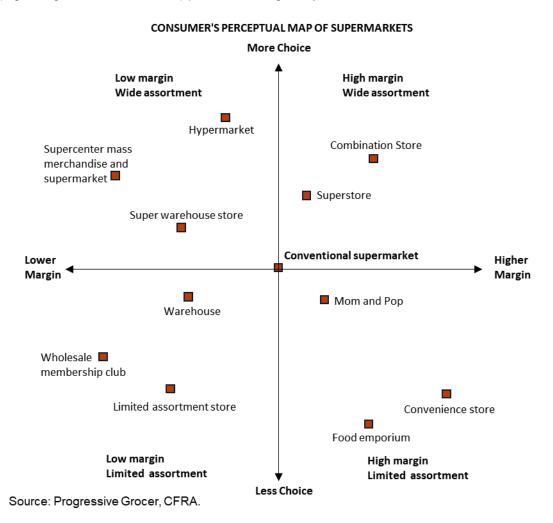
Food stores that are not in the supermarket category include grocery stores, convenience stores, and wholesale clubs. These stores may have selling areas of less than 5,000 square feet, annual sales of less than \$2 million, or a wholesale (nonretail) clientele.

- ♦ **Grocery stores.** These retail stores sell a variety of food products, such as some perishable items and general merchandise.
- ♦ Convenience stores. Small and easily accessible food stores with a limited assortment of items. Many stores of this format also sell fast food and gasoline. Examples of the convenience store format include the chains 7-Eleven and Casey's General Stores.

♦ Wholesale clubs. Membership retail/wholesale hybrid stores with a limited variety of products presented in a no-frills warehouse atmosphere. Inventory typically consists of 60%–70% general merchandise and health and beauty care products, with groceries comprising the balance; selling space averages about 120,000 square feet.

While wholesale clubs are open to retail customers, they sell merchandise in large sizes or bulk packs at prices that are close to wholesale. These stores attract cost-conscious consumers and small business owners, who are drawn by the low prices and multiple units of certain products. Dominant stores in this category today are Sam's Club (a division of Walmart), Costco Wholesale, and BJ's Wholesale Club.

- ♦ Fresh format stores. Not to be mistaken with traditional supermarkets and natural food stores, these stores offer perishables, such as ethnic, natural, and organic products (*e.g.*, Whole Foods, The Fresh Market, and other independents).
- ♦ E-commerce. Food and other consumables ordered using the internet, regardless of the method of payment or fulfillment. Companies such as Amazon and Peapod, as well as traditional brick-and-mortar stores (e.g., Kroger and Whole Foods) provide online grocery services.



Drugstores

Retail pharmacies are categorized according to the number of locations each has. Independent pharmacies consist of three or fewer locations, while chains have four or more. In addition to competing with each other, both compete with other stores that contain pharmacies, including supermarkets and mass merchandisers.

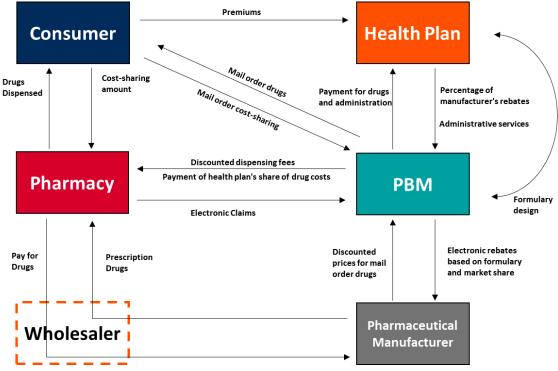
- ◆ Traditional chain drugstores. Averaging less than 11,000 square feet of selling space, drugstores that are part of a chain are much larger than independent units. The average chain drugstore generates annual sales of \$11 million per store. Although about 70% of total sales within chain drugstores are generated through the pharmacy department, chains generate nearly twice the pharmacy sales per store as independents.
- ♦ Independent pharmacies. Between 2017 and 2022, the number of independent pharmacies increased by 1.2% in aggregate to 23,254, according to a report by the Pharmaceutical Care Management Association in October 2022.

Drugstore Product Offerings

Products sold within drugstores fall into one of two categories: the pharmacy department (including prescription drugs) or the front end. Although prescription items generate the majority of drugstore sales, the front end is a major focus of operators to generate additional growth. Front-end product categories include over-the-counter products, general merchandise, health and beauty aids, and consumables. The largest drugstore chains also offer pharmacy benefit management (PBM) services.

The PBM Business Model

PBMs contract with health plan sponsors (large managed care organizations, employers, unions, and government agencies) to administer pharmacy benefits to members and beneficiaries. PBMs typically combine retail pharmacy claims processing, formulary development and maintenance as well as homedelivery pharmacy services into integrated product offerings to manage the prescription drug benefit for their clients.



Source: International Journal of the Economics of Business.

While the business models of all PBMs are similar, there are differences based on their individual compositions. Express Scripts is a pure-play PBM that focuses on the utilization of cost-effective mail-order drug delivery and the use of narrow networks for retail dispensing. The latter refers to using select retail pharmacies willing to accept lower reimbursement rates in return for increased volume from PBM subscriber pools. CVS Health, on the other hand, leverages its vast retail pharmacy chain to efficiently dispense drugs for its PBM clients. OptumRx, which is a part of leading managed care provider UnitedHealth Group, capitalizes on that relationship to enhance its PBM platform.

Behind the Scenes: Efficiency Is a Must

Supermarkets and drugstores have traditionally been low-margin businesses. Because of this and the growing competition from the new formats described earlier, retailers spend a great deal of energy improving operational efficiency and profitability. Category management, a technology-driven approach, is used to achieve efficiency in assortment and in managing merchandise.

Category Management

Category management is an accepted practice in the food and staples retailing industry. By adopting this practice, retailers hope to offer a merchandise mix that will produce maximum profits.

The intent of category management is to provide a framework for evaluating the selection, arrangement, promotion, and pricing of individual items to achieve the optimum product mix. Instead of offering 25 types of a certain product, the category management process might reduce the selection to 12—ideally, the 12 that consumers want the most. This information is usually gleaned from point-of-sale (POS) data or, less frequently, through customer surveys. By honing the store's merchandise assortment to offer products that customers typically buy, shelf space is freed for other quick-selling or higher-margin items.

The retailer's first step in implementing category management is to group similar products, such as breakfast cereals, together as a self-contained business unit. A category manager, who works with suppliers to ensure that consumers get the products they want in the sizes and quantities that sell the best, runs each business unit. The category manager consults computer-generated data captured at the store's checkout. This information reveals what sells the most, the fastest, or both, enabling the category manager to project how the product or category will perform in the current market. To enhance sales, the category manager may employ marketing, promotion, pricing, and merchandising strategies.

Retailers benefit from category management by having the right products on the shelves to draw customers and make the store a more compelling place to shop. Retailers and their suppliers benefit from reduced inventories, increased turnover, and improved profitability.

One Size Does Not Fit All

Although category management is important, merely refining inventory to emphasize top-selling items does not make a store more attractive to consumers. Consumers respond not only to isolated product categories, but also to the store as a whole and what it offers—its appearance, cleanliness, level of service, and perceived value. Since consumer preferences vary from location to location and change continuously, category management programs must constantly evolve to remain useful.

In selecting a mix of merchandise, it is important for a store operator to keep in mind the combination of categories that the store carries, as well as the performance of an individual product or group. In addition, a single item's popularity can vary widely from store to store, or even within a single store, according to the time of day.

Thus, while technology and automation are important advantages in today's competitive environment, they must be regarded as tools—as a means, not an end. It is important that stores do not neglect the personal side of merchandising (*i.e.*, helpful sales staff who know where items are located in the store).

Cost Control Is Crucial

Because supermarkets and drugstores are low-margin businesses, controlling costs is critical. The difference between strong and weak players may be decided by a mere 1% difference in net margins.

- ♦ **Product costs.** Even the best-managed supermarket and drugstore operators must pay approximately 75 cents in product costs for every dollar of their sales. Given the significance of product costs for retailers, sharp changes in food inflation or drug inflation can have a significant impact on a company's profitability. The quest for lower product costs has spurred a wave of industry consolidation, as supermarket and drug operators seek to increase their purchasing power over suppliers.
- ◆ Labor costs. Food retailing is a labor-intensive business and employee costs represent the supermarket's greatest operating expense. For supermarkets, labor accounts for more than 50% of total operating expenses, which are not as easily controlled as operators might like. Unlike drugstores, many supermarket chains are unionized, and their labor costs tend to be higher than those of nonunionized competitors, making it harder for operators to keep shelf prices competitive. This disadvantage has spurred supermarket operators to scrutinize every aspect of their businesses to find ways to cut costs. For example, many drug chains use robotics to help improve the rate at which they can fill prescriptions. To reduce the need for cashiers, some food & staples retailers encourage customer self-checkout.
- ♦ Other operating expenses. Marketing and advertising, rent, transportation, and utilities are other substantial but controllable costs for supermarket and drugstore operators. Technology is likely to continue to represent a significant cost for drugstore and supermarket operators, as discussed later in this section.

The Role of Consolidation

Drugstore and supermarket companies often find that it is cheaper to grow via acquisitions than to build units from scratch. Mergers can mitigate certain risks of entering new markets, such as the lack of local knowledge, the difficulty of attracting quality personnel, and the intensity of a competitor's response. Moreover, through consolidation, a food & staples retailer can generate economies of scale, as well as added clout in marketing and advertising, procurement, distribution, technology, corporate overhead, and private-label development.

Operations Shaped by Technology

To gain a competitive edge, many major drugstore and supermarket chains have invested heavily in computer and telecommunications equipment. The installation of more efficient information systems has enabled chains to improve inventory levels and to enhance their warehouse and distribution capabilities. Many stores are now linked together electronically, letting the chain's headquarters tally sales for all merchandise by store or by geographic region. This helps them keep pace with the latest industry sales trends and ultimately to lower costs.

Other technologies include electronic labor scheduling systems, which match staff hours with customer shopping patterns. Similar systems in distribution centers coordinate labor and equipment with arriving freight. Satellite communication systems link headquarters and stores. Technologies that some retailers are testing include electronic shelf tags, self-scanning checkouts, and grocery carts with advertising-filled video screens.

Perhaps the most important technologies used in supermarkets and drugstores are point-of-sale (POS) equipment and quick response programs. For drugstores, pharmacy technology is crucial, as explained below.

Quick Response Aids Inventory Management

To speed inventory replenishment and improve in-stock positions, retailers and their vendors have increasingly adopted quick response programs. Taking a "sell one, send one" approach, quick response seeks to maintain lean inventories, avoid overstocking, and ensure that retailers have on hand the merchandise that customers want to buy. Through these programs, retailers and manufacturers are linked via electronic data interchange (EDI), which speeds up the replenishment cycle by notifying vendors immediately when new merchandise must be ordered.

Drug Chains Get Wired

Like supermarkets, drug chains have adopted up-to-date technology, ranging from point of sale (POS) scanning setups to computerized inventory management systems. However, because of the decisive role that prescription medications play in the chain drugstore's merchandise mix, these retailers also face the challenge of staying on the cutting edge of increasingly sophisticated pharmacy technology.

The advent of third-party payment systems had spurred the rapid development of this technology. Pharmacy operators face the pressure of handling an increasing number of prescriptions, while the burdens of processing orders, dispensing medications, and billing threaten to degrade customer service.

Technology offers a tremendous opportunity to expand the pharmacist's role in patient care. It allows the pharmacist to ensure that consumers receive not only the correct drug in the proper amount, but instructions regarding the intended benefits of the medication as well.

Sophisticated management information systems can link stores to insurers' databases. This connection enables stores to check customers' eligibility and health plan parameters. It also allows the drugstore to be paid directly for the amount not covered by the customer's copayment.

Automated dispensing machines and picking systems can be tied into management information systems to enable pharmacists and technicians to order, pick, price, dispense, and bill for drugs more quickly and efficiently. Many pharmacies are now installing automated dispensing machines, giving pharmacists more time to work on drug utilization reviews, patient profiling, and counseling.

Finding Preferred Customers

Customers who shop at retail supermarkets and drugstores generally fall into two groups. One shops by comparing prices, trying to find the best deals. The other is more loyal to particular stores, believing that saving time is more important than saving money.

Store operators prefer to court the time-savers, whose tendency to buy merchandise at full price enhances store profits. Increasingly, many stores are trying to strengthen the loyalty of the shoppers that they attract through targeted marketing and/or customer segmentation programs.

Many stores use loyalty or frequent shopper programs to learn what these customers want. These programs involve issuing cards that customers can use to get special discounts on certain items. Whenever a customer uses the card, the store tracks the purchases electronically. This information can be used to compile a database that a retailer can use to target its customers directly and cross-promote other categories or items.

A retailer can use personal data obtained from its customers' frequent shopper cards to segment its customer base according to demographics, buying patterns, geographic location, and other variables.

With this information, the retailer can track customers' preferences and purchasing habits, including which products they buy and how frequently they shop at the store.

Although virtually all chains collect personal data through frequent shopper cards, not all use the information with the same efficiency. Some chains simply collect the data and make no use of it, while others have developed targeted marketing. Although frequent shopper programs may contribute to margin pressure through lower prices for items purchased, they can contribute to gross profits as customers make more trips to the retailer and/or increase the purchases made during each trip.

Regulation

There are various laws and regulations from the federal, state and local regulatory agencies that companies must adhere to, including health and sanitation standards, food labelling, equal employment, minimum wages, environmental protection, and licensing for the sale of food or alcoholic beverages. In the table below, we have highlighted some of the major laws and regulations that affect the industry within the U.S.

Major Laws and Regulations													
Food and Drug Administration (FDA)	Regulates food safety and quality through various statutory and regulatory mandates, including manufacturing and holding requirements for foods. The agency also specifies the standards of identity for certain foods, prescribes the format and content of information required to appear on food product labels, regulates food contact packaging and materials and maintains a Reportable Food Registry for the industry to report when there is reasonable possibility that an article of food could cause serious adverse health consequences.												
U.S. Department of Agriculture (USDA)	Imposes standards for product safety, quality, and sanitation through the federal meat and poultry inspection program. The USDA reviews and approves the labeling of these products and establishes standards for the grading and commercial acceptance of produce shipments from suppliers.												
Federal Trade Commission (FTC)	Administers antitrust and consumer protection legislation in pursuit of free and fair competition in the marketplace. One of the key provisions in U.S. antitrust law is to prevent anticompetitive mergers or acquisitions. The FTC reviews most large "transactions and will take legal action to block deals that it believes would substantially lessen competition".												

HOW TO ANALYZE A COMPANY IN THIS INDUSTRY

At CFRA, we recommend a top-down approach to valuation. An examination of the industry drivers on pages 7-8 is a good starting point.

Industry Drivers

- ♦ Consumer price index Food-at-home. The Economic Research Service (ERS) of the U.S. Department of Agriculture (USDA) releases the consumer price index (CPI) for food monthly, which measures the changes in the retail prices of food items only. Work on the CPI for food consists of several activities. ERS analyzes the current index level for food, examines changes in the CPI for food, and constructs forecasts of the CPI for food for the next 12-18 months. Forecasting the CPI for food has become increasingly important due to the changing structure of food and agricultural economies and the important signals the forecasts provide to farmers, processors, wholesalers, consumers, and policymakers.
- ♦ Food Sales Composition. The ERS Food Expenditure Series is a comprehensive data set that measures the U.S. food system, quantifying the value of food acquired in the United States by type of product, outlet, and purchaser. The data series measures the value of food acquired, including food and beverage sales (as well as taxes and tips), and the value of food produced at home, donated, and furnished to employees and institutionalized persons. The Food Expenditure Series is a valuable tool to assess and track developments in consumer food purchasing behaviors and the food supply.
- ♦ Producer Price Index Foods. Producer Price Index (PPI), another BLS index, measures changes in prices at the earlier stages of production prices paid to domestic producers for their output. Data is collected for nearly every industry in the goods-producing sector of the economy, but of particular interest to the food sector are the indices for farm products and processed foodstuff and feedstuffs. Changes in PPIs, particularly the stage-of-processing indices, are often an early indicator of retail food price inflation for related CPIs in the U.S. economy; this makes the PPI a useful tool in forecasting the CPI.
- ♦ Disposable personal income. Reported each month by the Department of Commerce (DOC), this measure tracks the growth in consumers' after-tax income. When personal income is gaining ground, consumers generally become more willing to loosen their purse strings. Conversely, when disposable income levels advance at a lackluster pace or not at all, consumers are less willing to spend. They may trade down to less expensive products, or postpone or forgo purchases, particularly big-ticket items.
- ♦ Consumer price index. The consumer price index (CPI) is released monthly by the U.S. Bureau of Labor Statistics (BLS). It measures changes in the prices of commodities, fuel oil, electricity, utilities, telephone services, food, and energy in the U.S. The core CPI smooths out the index by removing the volatile food and energy categories.
- ♦ Consumer confidence. The Conference Board, a not-for-profit research group, conducts the most widely followed consumer confidence survey by polling 5,000 representative U.S. households to gauge consumer sentiment. This measure is expressed as an index, in which 1985 is used as a base year (1985=100). Compiled from monthly surveys of consumer attitudes, the index has two components: the present situation index, which measures consumers' feelings about their current economic condition; and the expectations index, which tracks consumers' feelings about the future. Any reading above 90 is considered strong, according to The Conference Board.

When consumer confidence is high or rising, it is often accompanied by increased spending and borrowing. Conversely, when consumers are uncertain about the future, they may reduce or postpone expenditures.

Company Analysis

After gaining an understanding of the industry's drivers, an investor should then focus on company-specific analysis. Company-specific analysis focuses on a range of factors—both qualitative and quantitative—and should be used to evaluate a firm's strengths and weaknesses, as well as assess overall position within the overall retail landscape.

Qualitative Factors

Qualitative factors aid the investor in assessing where the company stands relative to its competitors. To make this comparison, several variables should be examined.

Store Location

The key to success for a drugstore or supermarket is location. Areas with growing populations help to ensure the long-term viability of a region for a company. In addition, if a site is in a wealthy community, it may be more profitable, because residents will have more disposable income, and the store can emphasize higher-margin products. One of the most important factors to consider is the level of competition from other retailers. Chains that are more geographically diversified will be able to alleviate the risk of strong competition or poor economics in any single market.

Market Position

A food & staples retailer's success hinges on the ability to secure a leading or dominant market share. If a chain is not one of the top two companies in one or more markets, that does not necessarily mean that it is a losing concern. Having the No. 1 or No. 2 position in any given market, though, may let a company leverage its marketing and distribution costs. For drugstores, a dominant position may mean the ability to win important third-party contract business and to negotiate more favorable reimbursement rates with managed care providers.

Many supermarket and drugstore chains have shed stores in areas where they do not have a significant presence in order to focus their operations on regions where they do have a commanding market share.

Service and Amenities

Successful operators draw customers by providing high-quality service. Good service, coupled with an array of amenities, can help boost a store's operating profitability. Amenities also appeal to shoppers. For this reason, drugstores are implementing value-added services free of charge (in some cases), such as in-store blood pressure testing and flu vaccinations. Supermarkets offer specialty departments like pharmacies and florists. Generally, service levels are known by reputation, but the best way for an investor to determine how good those levels are is to visit the chain's stores.

Merchandising and Store Presentation

Merchandising involves deciding which items to buy and stock. Presentation involves strategies for displaying items for sale, including store layout and décor. Both elements are essential to a store's success.

Growth Strategies

Having the right growth strategy is as important to a store's success as merchandising and presentation. Growth is necessary because companies, prompted by their investors, generally want to increase sales and profits. However, if a company selects the wrong growth strategy, it will end up losing money. In the

past, the easiest way to grow was to open new stores. Today, though, many companies have turned to acquisitions to fuel growth.

Technology

In today's competitive environment, companies must be adept at gathering, analyzing, and using information if they are to improve merchandising and distribution, expand customer service, and increase market share. Investing in information systems can help a company do this by tying its stores into supplier and vendor networks, and by integrating its internal systems, which can streamline its workflow and reduce expenses.

The investor should look for a company with systems that are integrated with those of its vendors. Integration enables a company to be more efficient and to cut down on items being out of stock, which can hurt sales and drive customers to competitors.

Quantitative Factors

Quantitative factors in the company analysis include trends in revenue, profit margins, EPS, cash flow items, and balance sheet items.

Sales

At the most basic level, a company with sales that are steadily increasing is preferable to one with stagnant or declining sales. Looking only at overall year-to-year sales changes, though, can be misleading. A company that aggressively opens new stores can generate strong sales gains even if its stores are unprofitable. Conversely, a company that is closing unprofitable stores may report lower sales, but its financial health could be improving.

Same-store or identical-store sales measure sales in stores that have been open for at least one year. Tracking this number helps the investor better understand a company's sales trends. In addition, sales per square foot can be measured to determine the true profitability of a company's sales.



Watch Out! Comparing same store sales growth across companies can be difficult because 'same store sales' is not a GAAP metric, and as a result, different companies may have varying definitions of same store sales. Additionally, some companies treat relocated (i.e., a store that is closed and reopened nearby), remodeled and expanded stores as part of the same store sales base, while others treat them as new stores Investors should also assess the consistency of a company's same-store sales definition over time and evaluate the likely impact of any changes. Since management has the ability to define its own same-store sales metric, management can easily change this definition to help flatter the company's same-store sales results.

Earnings per share (EPS)

EPS = Net Income - Preferred Dividends
Weighted Average Common Shares

Although management can manipulate this figure by increasing or decreasing the number of shares outstanding, EPS is essentially the amount of profit available to each stockholder. This number should be adjusted for special items so that meaningful year-to-year comparisons can be made.



Watch Out! Costs for bad debts, sales returns, obsolete inventory, and other provisions are estimated by management and recorded as either expenses or offsets to revenue (depending upon the provision). Management has discretion in calculating these estimates, and therefore can manipulate earnings, and sometimes revenues. Specifically, by under-provisioning or reversing previous provisions, management can generate artificial, and therefore unsustainable, earnings.

Cash Flow Analysis

The statement of cash flows records all changes affecting cash for operations, investments, and financing. These cash receipts and outflows are reported quarterly for domestic companies and are followed closely by investors.

A company's cash position needs to be examined concurrently with its ability to generate cash (*i.e.*, its free cash flow). If a firm operates continually with net cash outflows because of working capital needs and capital expenses, one should look to the cash level on the balance sheet to determine how long the company can fund itself until it needs to tap the capital markets for financing.

Free cash flow, defined as a firm's net income before depreciation and amortization minus capital expenditures, often predicts the future health of a company. Low or negative free cash flow may impede a company's ability to grow or may force it to raise capital (which can be costly) to continue operations. In contrast, a company that generates strong free cash flow can use this excess cash to increase dividends, repurchase stock or repay debt.

Balance Sheet Analysis

The balance sheet reports the major categories and value of assets, liabilities, and stockholders' equity at a specific time. Typically, investors welcome a strong balance sheet and avoid a highly leveraged one. The important items in the balance sheet for supermarkets and drugstores are described below.



Watch Out! Companies often securitize substantial amounts of accounts receivable by selling the receivables to a wholly owned consolidated special purpose entity. The special purpose entity then sells, on a non-recourse basis, an undivided interest in the receivables to off-balance sheet asset-backed conduits. Off-balance sheet financing, unsustainable boosts to earnings and acceleration of future cash flows into the current period at the expense of future period cash flows.



Watch Out! Accounting for business combinations remains a huge area of concern in any industry where acquisitions are a common occurrence. The revaluation of an acquired company's balance sheet to fair value required under U.S. GAAP provides an opportunity to value that balance sheet in a way that will benefit future earnings. This is generally done by understating the value of assets and overstating the value of liabilities acquired. This provides a benefit to earnings following the acquisition because the difference between the fair value of the target's net assets and the purchase price is allocated to goodwill, which is not expensed unless it is deemed impaired in a future period, and therefore does not impact earnings on a recurring basis.

- ◆ Return on capital invested. Return on capital invested is calculated as net income divided by the sum of shareholders' equity and long-term debt. Many companies use return on investment as the yardstick for running their businesses. In simple terms, it is acceptable to borrow funds if the long-term return is greater than the borrowing costs.
- ♦ Inventory turnover. This measures the rate at which inventory is sold. It is calculated as COGS, recorded on the income statement for a given period, divided by average inventory (recorded on the balance sheet for the same period). Because some 40%–50% of a drugstore or supermarket retailer's assets may be invested in inventory, this measure is a critical part of a company analysis. A high turnover implies that the company is managing its inventory efficiently. This can result in higher gross margins.



Watch Out! Inventory represents one of the most substantial assets on the balance sheets of Food & Staples Retailing companies and can be a leading indicator of financial condition. Therefore, a company's choices with respect to inventory accounting can have a significant impact on a company's results. Investors should assess whether a company has changed its inventory costing method, as such a move can impact comparability (and potentially flatter results) versus prior periods. Similarly, when analyzing a company relative to its peers, it is important to identify any differences in inventory costing policies between the companies.

◆ **Debt leverage.** Debt leverage can be measured using two standard ratios: debt-to-shareholders' equity and long-term debt as a percentage of total invested capital (the sum of stockholders' equity, long-term debt, capital lease obligations and deferred income taxes). There is no optimal amount of long-term debt that a company should carry.

Valuation Measures

Price-to-Earnings (P/E) Ratio

P/E Ratio = Price per Share / Earnings per Share

The P/E ratio is one of the most widely used valuation measures. It is useful for comparing a company with others in the same industry and other industries. The P/E ratio gives investors an idea of how much they are paying for a company's earning power. Investors typically afford a company a higher P/E ratio if its earnings are expected to grow more rapidly than those of its competitors.

Over the past 10 years, stocks of the major U.S. food retailing companies have tended to have P/E ratios below those of the broader stock market. This reflects the greater perceived investment risk by investors, given increased pricing competition due to the expansion of Walmart's supercenters and a volatile food inflation environment.

In the case of major U.S. drugstore companies, P/E ratios tended to trade significantly above most other industries in recent years, given a high growth rate for prescription drugs, favorable demographics due to an aging population, a favorable shift in product mix with increased sales of wider-margin generic drugs and benefits from industry consolidation.

GLOSSARY

Assortment—Items a store carries as merchandise. Assortment refers to, among other things, an item's size, flavor, or packaging.

Category management—A technology-driven approach to managing merchandise categories, which seeks to maximize profits.

Combination store—A dual food/drugstore.

Convenience stores—Retail outlets that usually carry fewer than 1,500 items.

Conventional supermarket—A full-line, self-service retail store that sells dry groceries, perishable items, canned goods, and some nonfood items.

Electronic data interchange (EDI)—A computer network linking retailers with manufacturers.

Front end—The designated area of a retail store for checkouts and bagging stands. Front-end categories typically include over-the-counter medications, health and beauty products, cosmetics, photo and photo processing, convenience food and beverage items as well as greeting cards.

General merchandise—Products other than food that are sold in supermarkets and require special buying, warehousing, and servicing.

Limited-assortment store—Food stores restricted in size, services, fixtures, and variety of merchandise.

Point-of-sale (POS) scanners—Electronic devices that read universal product codes (UPCs) on labels.

Private-label goods—A product line manufactured under contract for, and distributed exclusively by, a wholesaler/retailer.

Promotion—An agreement between manufacturers and retailers to use certain incentives to boost sales.

Replenishment—The sales cycle in which retailers order goods from a manufacturer, sell the goods, and then reorder them.

Stock keeping unit (SKU)—An individual product with a separate universal price code—a code number given to every item to distinguish it from other merchandise for inventory and accounting purposes.

Supercenter—A retail format that offers the merchandise mix of a discount store and a superstore. Supercenters average more than 170,000 square feet and have average annual sales of \$51.3 million.

Superstore—A supermarket with an average size of more than 50,000 square feet and annual sales of \$18.0 million or more.

Warehouse club—A retail/wholesale hybrid with a limited variety of products presented in a warehouse-type environment.

INDUSTRY REFERENCES

PERIODICALS

American Journal of Health-System Pharmacy

https://academic.oup.com/ajhp

Publishes peer-reviewed scientific papers on contemporary drug therapy and pharmacy practice innovations in hospitals and health systems.

International Journal of the Economics of Business

tandfonline.com

Presents original, peer reviewed research in microeconomics that is applicable to business or related public policy issues.

TRADE ASSOCIATIONS

The Conference Board

conference-board.org

A 501(c)(3) non-profit business membership and research group organization.

Food Marketing Institute

fmi.org

A nonprofit organization that provides research, education, and public relations services to its members, which include food retailers and wholesalers, and their customers internationally.

Pharmaceutical Care Management Association permanet.org

The national association representing America's pharmacy benefit managers.

Organic Trade Association

ota.com

A membership-based business association that focuses on the organic business community in North America.

GOVERNMENT AGENCIES

Centers for Medicare and Medicaid Services cms.gov

A federal agency within the U.S. Department of Health and Human Services that administers the Medicare program and works in partnership with state governments to administer Medicaid, the Children's Health Insurance Program, and health insurance portability standards.

Federal Trade Commission

ftc.gov

Ensures that the nation's markets function competitively, and are vigorous, efficient, and free of undue restrictions; educates the public about the importance of personal information privacy.

U.S. Census Bureau

census.gov

Principal agency of the U.S. Federal Statistical System, responsible for producing data about the American people and economy.

U.S. Department of Agriculture

fusda.gov

The U.S. federal executive department responsible for developing and executing federal laws related to farming, forestry, and food.

U.S. Department of Commerce

commerce.gov

This cabinet-level department's mission is to ensure and enhance U.S. economic activity by working with businesses and communities to promote economic growth. Its divisions include the U.S. Census Bureau, which publishes population statistics and projections.

U.S. Food and Drug Administration

fda.gov

Division of the U.S. Department of Health and Human Services responsible for supervising the food and pharmaceuticals industries.

White House

whitehouse.gov

Statements, Presidential actions, Press briefings, and speeches by the U.S. President.

RESEARCH FIRMS

Mordor Intelligence

mordorintelligence.com
A market research company.

Nielsen

nielsen.com

A global information, data, and measurement company.

The NPD Group

npd.com

A market research company.

Urban Institute

urban.org

A nonprofit research organization that offer solutions through economic and social policy research.

ONLINE RESOURCES

Brick Meets Click

brickmeetsclick.com

Focuses on how digital technology and new players are changing both shopping and retail.

Chain Drug Review

hchaindrugreview.com Covers events and trends pertinent to the growth and development of chain drugstores.

CVS Health

cvshealth.com

A retail pharmacy and health care company headquartered in Woonsocket, Rhode Island.

Drug Channels

drugchannels.net

Provides crucial insight into the complex U.S. pharmacy distribution and reimbursement system.

Good Food Institute

gfi.org

An international nonprofit reimagining meat production. The main goal of the institute is to build a world where alternative proteins are the default choice.

IQVIA (formerly Quintiles and IMS Health)

iqvia.com

A multinational company serving the combined industries of health information technologies and clinical research.

Morgan Stanley

morganstanley.com A multinational investment bank and financial services company.

Progressive Grocer

progressivegrocer.com Provides articles about grocery industry trends, companies, and statistics.

COMPARATIVE COMPANY ANALYSIS

								Operating	g Revenues	8							
	•				Million \$	5			С	AGR (%)		Inde	x Basis	(2012=1	00)	
Ticker Company	Yr. End	2022	2021	2020	2019	2018	2017	2016	10-Yr.	5-Yr.	1-Yr.	2022	2021	2020	2019	2018	2017
DRUG RETAIL																	
WBA [] WALGREENS BOOTS ALLIANCE, INC.	AUG	132,703.0	132,509.0	121,982.0	120,074.0	131,537.0	118,214.0	117,351.0	6.4	2.3	0.1	113	113	104	102	112	101
FOOD DISTRIBUTORS																	
SPTN § SPARTANNASH COMPANY	DEC	9,643.1	9,643.1	8,931.0	8,536.1	8,064.6	7,963.8	7,561.1	13.9	3.9	8.0	128	128	118	113	107	105
SYY [] SYSCO CORPORATION	JUL	68,636.1	51,297.8	52,893.3	60,113.9	58,727.3	55,371.1	50,366.9	4.9	4.4	33.8	136	102	105	119	117	110
ANDE § THE ANDERSONS, INC.	DEC	17,325.4	12,612.1	8,064.6	8,003.3	3,045.4	3,686.3	3,924.8	12.6	36.3	37.4	441	321	205	204	78	94
CHEF § THE CHEFS' WAREHOUSE, INC.	DEC	2,613.4	1,745.8	1,111.6	1,591.8	1,444.6	1,301.5	1,192.9	18.5	15.0	49.7	219	146	93	133	121	109
UNFI † UNITED NATURAL FOODS, INC.	JUL	28,928.0	26,950.0	26,559.0	22,341.0	10,226.7	9,274.5	8,470.3	18.6	25.5	7.3	342	318	314	264	121	109
FOOD RETAIL																	
CASY † CASEY'S GENERAL STORES, INC.	APR	0.0	12,952.6	8,707.2	9,175.3	8,364.9	7,472.1	6,640.6	7.2	14.3	48.8	0	195	131	138	126	113
GO § GROCERY OUTLET HOLDING CORP.	DEC	3,578.1	3,578.1	3,079.6	2,559.6	2,287.7	2,075.5	1,831.5	NA	11.5	16.2	195	195	168	140	125	113
SFM † SPROUTS FARMERS MARKET, INC.	JAN	0.0	6,404.2	6,099.9	5,634.8	5,207.3	4,664.6	4,664.6	13.6	6.5	5.0	0	137	131	121	112	100
KR [] THE KROGER CO.	JAN	148,258.0	137,888.0	132,498.0	122,286.0	121,852.0	123,280.0	115,337.0	4.3	3.6	4.1	129	120	115	106	106	107
CONSUMER STAPLES MERCHANDISE RETAIL																	
BJ † BJ'S WHOLESALE CLUB HOLDINGS, INC.	JAN	19,315.2	16,667.3	15,430.0	13,190.7	13,007.3	12,754.6	12,350.5	NA	6.2	8.0	156	135	125	107	105	103
COST [] COSTCO WHOLESALE CORPORATION	AUG	226,954.0	195,929.0	166,761.0	152,703.0	141,576.0	129,025.0	118,719.0	8.6	12.0	15.8	191	165	140	129	119	109
PSMT [] PRICESMART, INC.	AUG	4,066.1	3,619.9	3,329.2	3,223.9	3,166.7	2,996.6	2,905.2	7.1	6.3	12.3	140	125	115	111	109	103
TGT § TARGET CORPORATION	JAN	109,120.0	106,005.0	93,561.0	78,112.0	75,356.0	72,714.0	70,271.0	4.3	8.6	13.3	155	151	133	111	107	103
DG † DOLLAR GENERAL CORPORATION	JAN	37,844.9	34,220.4	33,746.8	27,754.0	25,625.0	23,471.0	21,986.6	8.7	9.3	1.4	172	156	153	126	117	107
DLTR § DOLLAR TREE, INC.	JAN	28,331.7	26,321.2	25,509.3	23,610.8	22,823.3	22,245.5	20,719.2	14.8	4.9	3.2	137	127	123	114	110	107
WMT [] WALMART INC.	JAN	611,289.0	572,754.0	559,151.0	523,964.0	514,405.0	500,343.0	485,873.0	2.5	3.3	2.4	126	118	115	108	106	103

Note: Data as originally reported. CAGR-Compound annual growth rate.

[]Company included in the S&P 500. †Company included in the S&P MidCap 400. §Company included in the S&P SmallCap 600. #Of the following calendar year. Souce: S&P Capital IQ.

Net Income

	-	Million \$								CAGR (%	5)		Index Basis (2012=100)							
Ticker Company	Yr. End	2022	2021	2020	2019	2018	2017	2016	10-Yr	5-Yr.	1-Yr.	2022	2021	2020	2019	2018	2017			
DRUG RETAIL																				
WBA [] WALGREENS BOOTS ALLIANCE, INC.	AUG	4,337.0	2,542.0	456.0	3,982.0	5,024.0	4,078.0	4,173.0	7.4	1.2	70.6	104	61	11	95	120	98			
FOOD DISTRIBUTORS																				
SPTN § SPARTANNASH COMPANY	DEC	34.5	34.5	73.8	5.7	33.6	(52.8)	56.8	0.8	NM	(53.2)	61	61	130	10	59	(93)			
SYY [] SYSCO CORPORATION	JUL	1,358.8	524.2	215.5	1,674.3	1,430.8	1,142.5	949.6	1.9	3.5	159.2	143	55	23	176	151	120			
ANDE § THE ANDERSONS, INC.	DEC	131.1	104.0	7.7	18.3	41.5	42.5	11.6	5.1	25.3	26.1	1,131	897	66	158	358	367			
CHEF § THE CHEFS' WAREHOUSE, INC.	DEC	27.8	(4.9)	(82.9)	24.2	20.4	14.4	3.0	6.7	14.1	NM	918	(163)	NM	800	675	475			
UNFI † UNITED NATURAL FOODS, INC.	JUL	248.0	149.0	(274.0)	(285.0)	162.8	130.2	125.8	10.5	13.8	66.4	197	118	(218)	(227)	129	103			
FOOD RETAIL																				
CASY † CASEY'S GENERAL STORES, INC.	APR	0.0	339.8	312.9	263.8	203.9	317.9	177.5	11.5	13.9	8.6	0	191	176	149	115	179			
GO § GROCERY OUTLET HOLDING CORP.	DEC	65.1	65.1	62.3	15.4	15.9	20.6	10.2	N/	25.9	4.4	638	638	611	151	156	202			
SFM † SPROUTS FARMERS MARKET, INC.	JAN	0.0	261.2	244.2	149.6	158.5	158.4	158.4	29.6	10.5	7.0	0	165	154	94	100	100			
KR [] THE KROGER CO.	JAN	2,244.0	1,655.0	2,585.0	1,659.0	3,110.0	1,907.0	1,975.0	10.6	(3.5)	(36.0)	114	84	131	84	157	97			
CONSUMER STAPLES MERCHANDISE RETAIL																				
BJ † BJ'S WHOLESALE CLUB HOLDINGS, INC.	JAN	513.2	426.7	421.0	187.2	127.3	50.3	44.2	N/	57.4	1.3	1.160	965	952	423	288	114			
COST [] COSTCO WHOLESALE CORPORATION	AUG	5,844.0	5,007.0	4,002.0	3,659.0	3,134.0	2,679.0	2,350.0	13.1	16.9	16.7	249	213	170	156	133	114			
PSMT [] PRICESMART, INC.	AUG	104.5	98.0	78.1	73.2	74.3	90.7	88.7	4.5	2.9	6.7	118	110	88	82	84	102			
TGT § TARGET CORPORATION	JAN	2,780.0	6,946.0	4,368.0	3,281.0	2,937.0	2,914.0	2,734.0	9.0	20.5	59.0	102	254	160	120	107	107			
DG † DOLLAR GENERAL CORPORATION	JAN	2,416.0	2,399.2	2,655.1	1,712.6	1,589.5	1,539.0	1,251.1	12.1	13.9	(9.6)	193	192	212	137	127	123			
DLTR § DOLLAR TREE, INC.	JAN	1,615.4	1,327.9	1,341.9	827.0	(1,590.8)	1,714.3	896.2	10.5	8.2	(1.0)	180	148	150	92	(178)	191			
WMT [] WALMART INC.	JAN	11,680.0	13,673.0	13,510.0	14,881.0	6,670.0	9,862.0	13,643.0	(1.4	0.0	1.2	86	100	99	109	49	72			

	_	Return on Revenues (%)								Retu	ırn on .	Assets	(%)			Ret	ırn on	Equity	ity (%)						
Ticker Company	Yr. End	2022	2021	2020	2019	2018	2017	:	2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017					
DRUG RETAIL																									
WBA [] WALGREENS BOOTS ALLIANCE, INC.	AUG	3.3	1.9	0.4	3.3	3.8	3.4		4.8	3.1	0.5	5.9	7.4	6.2	14.9	8.6	0.6	14.9	18.3	14.0					
FOOD DISTRIBUTORS																									
SPTN § SPARTANNASH COMPANY	DEC	0.4	8.0	8.0	0.1	0.4	NM		1.5	3.3	3.3	0.3	1.7	NM	4.5	9.7	10.7	8.0	4.7	NM					
SYY [] SYSCO CORPORATION	JUL	2.0	1.0	0.4	2.8	2.4	2.1		6.2	2.4	1.0	9.3	7.9	6.4	90.5	37.7	11.6	65.9	57.1	38.0					
ANDE § THE ANDERSONS, INC.																									
CHEF § THE CHEFS' WAREHOUSE, INC.	DEC	1.1	NM	NM	1.5	1.4	1.1		1.8	NM	NM	2.4	2.8	2.1	7.4	NM	NM	7.5	7.3	6.5					
UNFI † UNITED NATURAL FOODS, INC.	JUL	0.9	0.6	NM	NM	1.6	1.4		3.3	2.0	NM	NM	5.5	4.5	15.4	11.2	NM	NM	9.2	8.1					
FOOD RETAIL																									
CASY † CASEY'S GENERAL STORES, INC.	APR	0.0	2.6	3.6	2.9	2.4	4.3		NA	6.2	7.0	6.7	5.5	9.2	0.0	16.3	17.5	17.3	15.2	25.8					
GO § GROCERY OUTLET HOLDING CORP.																									
SFM † SPROUTS FARMERS MARKET, INC.	JAN	0.0	4.1	4.0	4.4	2.7	3.0		NA	8.5	8.4	10.2	5.5	9.5	0.0	26.0	26.5	39.3	25.6	25.6					
KR [] THE KROGER CO.	JAN	1.5	1.2	2.0	1.4	2.6	1.5		4.5	3.4	5.3	3.7	8.2	5.1	23.1	17.6	28.6	18.4	41.8	27.7					
CONSUMER STAPLES MERCHANDISE RETAIL																									
BJ † BJ'S WHOLESALE CLUB HOLDINGS, INC.	JAN	2.7	2.6	2.7	1.4	1.0	0.4		8.1	7.5	7.8	3.6	3.9	1.5	60.7	88.2	317.9	NM	NM	NM					
COST [] COSTCO WHOLESALE CORPORATION	AUG	2.6	2.6	2.4	2.4	2.2	2.1		9.1	8.4	7.2	8.1	7.7	7.4	30.5	27.6	23.7	25.8	26.3	23.2					
PSMT [] PRICESMART, INC.	AUG	2.6	2.7	2.3	2.3	2.3	3.0		5.8	5.7	4.7	5.6	6.1	7.7	11.0	11.2	9.6	9.4	10.1	13.5					
TGT § TARGET CORPORATION	JAN	2.5	6.6	4.7	4.2	3.9	4.0		5.2	12.9	8.5	7.7	7.1	7.2	23.1	50.9	33.3	28.3	25.5	25.7					
DG † DOLLAR GENERAL CORPORATION	JAN	6.4	7.0	7.9	6.2	6.2	6.6		8.3	9.1	10.3	7.5	12.0	12.3	40.9	37.1	39.7	26.1	25.3	26.7					
DLTR § DOLLAR TREE, INC.	JAN	5.7	5.0	5.3	3.5	NM	7.7		7.0	6.1	6.5	4.2	NM	10.5	19.6	17.7	19.8	13.9	NM	27.3					
WMT [] WALMART INC.	JAN	1.9	2.4	2.4	2.8	1.3	2.0		4.8	5.6	5.4	6.3	3.0	4.8	12.8	15.5	16.2	18.9	8.9	13.0					

 $[] Company included in the S\&P 500. + Company included in the S\&P MidCap 400. \\§ Company included in the S\&P SmallCap 600. \\#Of the following calendar year.$

Souce: S&P Capital IQ.

				Current	Ratio					Debt	/Capital	Ratio (%)			ebt as a %	6 of Net	Workin	g Capital					
Ticker Company	Yr. End	2022	2021	2020	2019	2018	2017	202	2 2	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017				
DRUG RETAIL																								
WBA [] WALGREENS BOOTS ALLIANCE, INC.	AUG	0.7	0.7	0.7	0.7	0.8	1.1	26	.0	24.4	44.8	44.2	36.2	31.6	NN	NM	NM	NM	NM	1072.6				
FOOD DISTRIBUTORS																								
	DEO	4.5	4.5	4.5	4.0	0.4	0.0	00	-	04.0	07.5	40.0	47.5	50.0	400.4	400.0	405.0	440.7	100.0	445.0				
SPTN § SPARTANNASH COMPANY	DEC	1.5	1.5	1.5	1.8	2.1	2.0	36		31.6	37.5	48.3	47.5	50.6	123.1	120.0	135.8	148.7	123.3	145.3				
SYY [] SYSCO CORPORATION	JUL	1.2	1.5	1.8	1.3	1.2	1.3	87		86.9	91.5	76.2	74.9	75.8	570.0	308.7	228.0	399.1	536.8	396.7				
ANDE § THE ANDERSONS, INC.	DEC	1.4	1.4	1.3	1.4	1.2	1.4	39	.5	57.7	63.0	52.4	51.1	35.5	80.1	120.9	265.4	228.0	369.6	169.5				
CHEF § THE CHEFS' WAREHOUSE, INC.	DEC	2.5	2.4	3.4	3.0	2.6	2.7	61	.6	52.4	52.9	53.3	47.4	55.8	147.6	141.4	134.5	126.4	136.9	166.5				
UNFI † UNITED NATURAL FOODS, INC.	JUL	1.6	1.4	1.6	1.7	2.6	2.4	54	.1	59.4	68.8	65.7	14.3	18.2	153.0	208.6	188.7	198.6	28.3	39.0				
FOOD RETAIL																								
CASY + CASEY'S GENERAL STORES, INC.	APR	0.0	0.8	1.2	0.4	0.7	0.8		NΑ	41.6	41.1	34.9	50.2	51.9	l NA	NM NM	1217.2	NM	NM	NM				
GO § GROCERY OUTLET HOLDING CORP.	DEC	1.7	1.9	1.6	1.3	1.6	1.6	25	.5	30.9	32.8	37.5	73.9	62.2	203.2	220.4	300.9	719.9	948.0	922.8				
SFM + SPROUTS FARMERS MARKET, INC.	JAN	0.0	1.3	1.1	0.9	0.9	1.1			19.3	20.7	22.5	48.2	43.5	N/	165.1	460.9	NM	NM	1900.1				
KR [] THE KROGER CO.	JAN	0.7	0.7	0.8	0.8	0.8	0.8	50		54.8	54.8	57.0	58.9	62.0	NN.		NM	NM	NM	NM				
u sa																								
CONSUMER STAPLES MERCHANDISE RETAIL																								
BJ † BJ'S WHOLESALE CLUB HOLDINGS, INC	C. JAN	0.7	0.8	0.7	0.8	0.8	0.9	57	.1	53.6	73.2	104.1	114.8	170.4	NM	NM	NM	NM	NM	NM				
COST [] COSTCO WHOLESALE CORPORATION	AUG	1.0	1.0	1.1	1.0	1.0	1.0	23	.9	27.0	28.7	24.7	33.1	37.2	928.9	10456.3	229.4	2066.1	1787.1	NM				
PSMT [] PRICESMART, INC.	AUG	1.3	1.3	1.2	1.2	1.4	1.4	10	.4	11.0	19.2	8.6	10.4	11.1	58.8	69.1	139.6	87.8	63.7	60.3				
TGT § TARGET CORPORATION	JAN	0.9	1.0	1.0	0.9	0.8	1.0	55	.7	47.4	40.4	45.9	45.0	46.8	NM	NM	1548.3	NM	NM	NM				
DG † DOLLAR GENERAL CORPORATION	JAN	1.3	1.1	1.2	1.1	1.5	1.4	55	.8	40.0	38.3	30.3	30.8	29.8	414.0	1285.7	343.3	458.7	173.8	203.0				
DLTR § DOLLAR TREE, INC.	JAN	1.5	1.3	1.4	1.2	2.0	1.6	28		30.7	30.7	36.0	43.0	39.9	159.7	238.5	244.3	487.2	194.1	277.3				
WMT [] WALMART INC.	JAN	0.8	0.9	1.0	0.8	0.8	0.8	30	.8	28.4	32.4	35.7	39.8	32.0	NN	NM	NM	NM	NM	NM				

 $[] Company included in the S\&P 500. \uparrow Company included in the S\&P MidCap 400. \\ \S Company included in the S\&P SmallCap 600. \\ \# Of the following calendar year.$

Souce: S&P Capital IQ.

				Price/Earnings F	Ratio (High-Low)			1	Dividen	d Payou	ut Ratio (%)	Dividend Yield (High-Low, %)						
Ticker Company	Yr. End	2022	2021	2020	2019	2018	2017	2022	2021	2020	2019 2018 2017	2022	2021	2020	2019	2018	2017	
DRUG RETAIL																		
WBA [] WALGREENS BOOTS ALLIANCE, INC.	AUG	11 - 7	19 - 11	121 - 74	20 - 11	16 - 12	23 - 20	38.3	63.6	383.1	41.3 34.6 39.8	6.3 - 4.5	5.2 - 3.5	5.6 - 3.3	4.8 - 2.9	3.6 - 2.1	2.9 - 1.9	
FOOD DISTRIBUTORS																		
SPTN § SPARTANNASH COMPANY	DEC	38 - 25	13 - 8	11 - 4	141 - 56	29 - 18	NM - NM	86.1	38.4	45.5	360.7 77.2 NM	3.6 - 2.5	3.3 - 2.3	4.6 - 3.1	8.2 - 3.3	8.5 - 3.2	4.3 - 2.4	
SYY [] SYSCO CORPORATION	JUL	34 - 26	84 - 51	203 - 74	23 - 19	26 - 19	27 - 22	70.6	175.0	397.4	46.3 50.5 61.2	2.8 - 2.2	2.8 - 2.1	3.5 - 2.1	5.8 - 1.9	2.6 - 1.9	2.7 - 2.1	
ANDE § THE ANDERSONS, INC.	DEC	15 - 8	12 - 7	108 - 48	67 - 32	28 - 19	30 - 20	18.8	22.8	298.4	120.8 44.9 42.7	2.2 - 1.6	2.4 - 1.2	3.2 - 1.8	6.2 - 2.7	3.8 - 1.8	2.1 - 1.6	
CHEF § THE CHEFS' WAREHOUSE, INC.	DEC	54 - 36	NM - NM	NM - NM	50 - 37	55 - 27	39 - 22	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	0.0 - 0.0	
UNFI † UNITED NATURAL FOODS, INC.	JUL	13 - 8	16 - 5	NM - NM	NM - NM	16 - 10	20 - 13	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	0.0 - 0.0	
FOOD RETAIL																		
CASY † CASEY'S GENERAL STORES, INC.	APR	25 - 19	27 - 17	25 - 17	25 - 17	15 - 11	30 - 24	0.0	15.1	15.3	17.4 20.3 12.2	0.8 - 0.6	0.8 - 0.6	1.1 - 0.6	1.0 - 0.7	1.2 - 0.8	1.0 - 0.8	
GO § GROCERY OUTLET HOLDING CORP.	DEC	68 - 36	71 - 33	40 - 25	239 - 146	NA - NA	NA - NA	0.2	0.3	0.4	23.6 967.9 6.3	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	0.0 - 0.0	
SFM † SPROUTS FARMERS MARKET, INC.	JAN	13 - 9	13 - 6	10 - 7	23 - 17	23 - 14	25 - 16	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	0.0 - 0.0	
KR [] THE KROGER CO.	JAN	22 - 14	11 - 8	15 - 10	9 - 6	16 - 9	20 - 14	30.4	35.6	20.7	29.3 14.1 23.2	2.5 - 1.4	2.3 - 1.7	2.4 - 1.9	3.1 - 1.9	2.2 - 1.6	2.5 - 1.4	
CONSUMER STAPLES MERCHANDISE RETAIL																		
BJ † BJ'S WHOLESALE CLUB HOLDINGS, INC	C. JAN	23 - 12	16 - 6	21 - 15	29 - 18	NA - NA	NA - NA	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	0.0 - 0.0	
COST [] COSTCO WHOLESALE CORPORATION	AUG	46 - 32	41 - 28	38 - 31	35 - 23	32 - 21	30 - 23	25.6	26.3	37.0	28.4 22.0 30.0	0.8 - 0.6	0.8 - 0.5	0.9 - 0.7	1.0 - 0.8	1.2 - 0.9	1.3 - 1.0	
PSMT [] PRICESMART, INC.	AUG	26 - 19	32 - 20	30 - 17	37 - 20	38 - 32	31 - 27	25.4	22.0	27.4	29.2 28.6 23.5	1.5 - 1.1	1.3 - 0.8	1.1 - 0.7	1.6 - 0.9	1.4 - 0.8	0.9 - 0.7	
TGT § TARGET CORPORATION	JAN	19 - 12	23 - 10	20 - 11	16 - 11	15 - 9	18 - 13	66.0	22.3	30.7	40.5 45.5 45.9	3.1 - 1.4	1.7 - 1.2	2.9 - 1.5	3.9 - 2.0	4.2 - 2.9	4.9 - 3.3	
DG † DOLLAR GENERAL CORPORATION	JAN	23 - 17	21 - 13	25 - 17	20 - 14	19 - 12	22 - 15	20.4	16.3	13.4	19.1 19.3 18.4	1.2 - 0.7	0.9 - 0.7	1.1 - 0.6	1.1 - 0.8	1.3 - 1.0	1.5 - 1.1	
DLTR § DOLLAR TREE, INC.	JAN	25 - 15	20 - 12	34 - 25	NM - NM	16 - 9	26 - 19	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	0.0 - 0.0	
WMT [] WALMART INC.	JAN	31 - 26	32 - 22	23 - 18	48 - 36	33 - 20	17 - 14	52.3	45.0	45.3	40.6 91.5 62.1	1.9 - 1.4	1.8 - 1.4	2.1 - 1.4	2.2 - 1.7	2.5 - 1.9	3.0 - 2.0	

[Company included in the S&P 500.†Company included in the S&P MidCap 400.§Company included in the S&P SmallCap 600.#Of the following calendar year.
Souce: S&P Capital IQ.

		Earnings per Share (\$) Tangible Book Value per Share (\$)										Share (5)	Share Price (High-Low, \$)								
Ticker Company	Yr. End	2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017	2022	2021	2020	2019	2018	2017			
DRUG RETAIL																						
WBA [] WALGREENS BOOTS ALLIANCE, INC.	AUG	5.0	2.9	0.5	4.3	5.1	3.8	(10.9)	(0.4)	(3.6)	(5.8)	(4.4)	0.8	55.0 - 30.4	57.1 - 39.9	59.8 - 33.4	74.9 - 49.0	86.3 - 59.1	88.0 - 63.8			
FOOD DISTRIBUTORS																						
SPTN § SPARTANNASH COMPANY	DEC	1.0	2.1	2.1	0.2	0.9	(1.4)	13.6	13.7	12.2	10.3	11.4	11.2	37.8 - 23.8	26.4 - 16.8	23.9 - 9.0	22.5 - 8.8	27.7 - 16.1	40.4 - 18.6			
SYY [] SYSCO CORPORATION	JUL	2.6	1.0	0.4	3.2	2.7	2.1	(8.1)	(6.1)	(6.6)	(4.4)	(4.7)	(4.9)	91.5 - 70.6	86.7 - 68.1	85.1 - 26.0	86.0 - 61.0	76.0 - 56.0	62.8 - 48.9			
ANDE § THE ANDERSONS, INC.	DEC	3.8	3.1	0.2	0.6	1.5	1.5	29.0	24.7	20.9	20.3	25.6	24.7	59.0 - 29.4	39.7 - 22.5	25.9 - 10.0	38.2 - 17.4	41.7 - 27.6	44.5 - 29.6			
CHEF § THE CHEFS' WAREHOUSE, INC.	DEC	0.7	(0.1)	(2.5)	0.8	0.7	0.5	(1.1)	0.6	0.5	(0.0)	(0.2)	(2.5)	42.2 - 26.3	37.9 - 23.8	40.3 - 3.6	42.1 - 29.6	39.3 - 18.7	21.9 - 11.9			
UNFI † UNITED NATURAL FOODS, INC.	JUL	4.1	2.5	(5.1)	(5.6)	3.2	2.6	16.3	10.7	2.8	(0.5)	25.6	21.8	49.8 - 32.9	57.9 - 15.8	23.4 - 5.0	15.6 - 6.6	50.0 - 9.2	52.7 - 29.5			
FOOD RETAIL																						
CASY † CASEY'S GENERAL STORES, INC.	APR	0.0	9.1	8.4	7.1	5.5	8.3	0.0	43.9	47.9	40.3	34.1	30.7	249.9 - 170.8	229.2 - 175.0	196.6 - 114.0	179.2 - 122.9	137.1 - 90.4	125.4 - 99.8			
GO § GROCERY OUTLET HOLDING CORP.	DEC	0.7	0.6	1.1	0.2	0.2	0.3	3.1	2.2	1.3	(0.6)	(7.5)	(5.8)	46.4 - 23.7	46.6 - 21.0	48.9 - 28.1	47.6 - 27.8	0.0 - 0.0	0.0 - 0.0			
SFM † SPROUTS FARMERS MARKET, INC.	JAN	0.0	2.4	2.1	2.4	1.3	1.2	0.0	4.7	3.7	2.8	0.2	0.2	35.3 - 22.6	30.6 - 19.1	28.0 - 13.0	25.3 - 16.5	29.7 - 20.6	26.0 - 17.4			
KR [] THE KROGER CO.	JAN	3.1	2.2	3.3	2.0	3.8	2.1	8.7	7.5	7.3	5.7	4.4	3.3	62.8 - 41.8	48.0 - 31.4	37.2 - 26.7	30.0 - 20.7	32.7 - 22.9	35.0 - 19.7			
CONSUMER STAPLES MERCHANDISE RETAIL																						
BJ + BJ'S WHOLESALE CLUB HOLDINGS. INC.	JAN	3.8	3.1	3.0	1.3	1.1	0.5	(0.6)	(3.0)	(5.4)	(8.2)	(9.7)	(24.6)	80.4 - 51.5	74.1 - 37.0	47.5 - 18.8	29.4 - 20.8	32.9 - 19.3	0.0 - 0.0			
COST [] COSTCO WHOLESALE CORPORATION	AUG	13.1	11.3	9.0	8.3	7.1	6.1	44.4	37.5	39.2	34.6	29.2	24.7	612.3 - 406.5	571.5 - 307.0	393.2 - 271.3	307.3 - 199.9	245.2 - 175.8	195.4 - 150.0			
PSMT [] PRICESMART, INC.	AUG	3.4	3.2	2.6	2.4	2.4	3.0	31.0	28.4	25.7	24.5	23.2	22.4	88.3 - 56.3	104.9 - 67.9	95.4 - 41.2	79.9 - 48.1	94.5 - 55.5	94.0 - 78.0			
TGT § TARGET CORPORATION	JAN	6.0	14.1	8.6	6.4	5.5	5.3	23.0	25.8	27.5	22.1	20.5	20.2	254.9 - 137.2	269.0 - 166.8	181.2 - 90.2	130.2 - 64.8	90.4 - 60.2	74.2 - 48.6			
DG † DOLLAR GENERAL CORPORATION	JAN	10.7	10.2	10.6	6.6	6.0	5.6	0.0	3.1	4.7	4.6	3.4	2.2	262.2 - 183.3	239.4 - 173.5	225.3 - 125.0	167.0 - 106.0	118.5 - 85.5	96.6 - 66.0			
DLTR § DOLLAR TREE, INC.	JAN	7.2	5.8	5.7	3.5	(6.7)	7.2	16.6	11.7	9.4	4.9	(0.2)	(5.6)	177.2 - 123.6	149.4 - 84.3	114.3 - 60.2	119.7 - 88.3	116.7 - 78.8	110.9 - 65.6			
WMT [] WALMART INC.	JAN	4.3	4.9	4.8	5.2	2.3	3.3	16.4	17.9	16.7	13.6	12.3	20.2	160.8 - 117.3	152.6 - 126.3	153.7 - 102.0	125.4 - 91.6	110.0 - 81.8	100.1 - 65.3			
u										***												

[Company included in the S&P 500. †Company included in the S&P MidCap 400. \$Company included in the S&P SmallCap 600. #Of the following calendar year. Souce: S&P Capital ID.

The accuracy and completeness of information obtained from third-party sources, and the opinions based on such information, are not guaranteed.

Disclosures

CFRA's Industry Surveys Reports (the "Industry Surveys") have been prepared by Accounting Research & Analytics, LLC and/or one of its affiliates. The Industry Surveys are published and distributed by Accounting Research & Analytics, LLC d/b/a CFRA with the following exceptions: In the European Union/European Economic Area, the Industry Surveys are published and distributed by CFRA UK Limited (company number 08456139 registered in England & Wales with its registered office address at New Derwent House, 69-73 Theobalds Road, London, WC1X 8TA, United Kingdom), which is regulated by the UK Financial Conduct Authority (No. 775151): in Malaysia, the Industry Surveys are published and distributed by CFRA MY Sdn Bhd (Company No. 683377-A) and regulated by Securities Commission Malaysia, No. CMSL/A0181/2007 ("CFRA Malaysia"). CFRA Malaysia is a wholly-owned subsidiary of CFRA US. For Recipients in Canada: This report is not prepared subject to Canadian disclosure requirements and may not be suitable for Canadian investors.

The content of this report and the opinions expressed herein are those of CFRA based upon publicly-available information that CFRA believes to be reliable and the opinions are subject to change without notice. This analysis has not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. While CFRA exercised due care in compiling this analysis, CFRA AND ALL RELATED ENTITIES SPECIFICALLY DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, to the full extent permitted by law, regarding the accuracy, completeness, or usefulness of this information and assumes no liability with respect to the consequences of relying on this information for investment or other purposes.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of CFRA. The Content shall not be used for any unlawful or unauthorized purposes. CFRA and any third-party providers, as well as their directors, officers, shareholders, employees, or agents do not guarantee the accuracy, completeness, timeliness, or availability of the Content.

Past performance is not necessarily indicative of future results. This document may contain forward-looking statements or forecasts; such forecasts are not a reliable indicator of future performance.

This report is not intended to, and does not, constitute an offer or solicitation to buy and sell securities or engage in any investment activity. This report is for informational purposes only. Recommendations in this report are not made with respect to any particular investor or type of investor. Securities, financial instruments, or strategies mentioned herein may not be suitable for all investors and this material is not intended for any specific investor and does not take

into account an investor's particular investment objectives, financial situations or needs. Before acting on any recommendation in this material, you should consider whether it is suitable for your particular circumstances and, if necessary, seek professional advice.

CFRA may license certain intellectual property or provide services to, or otherwise have a business relationship with, certain issuers of securities that are the subject of CFRA research reports, including exchange-traded investments whose investment objective is to substantially replicate the returns of a proprietary index of CFRA. In cases where CFRA is paid fees that are tied to the amount of assets invested in a fund or the volume of trading activity in a fund, investment in the fund may result in CFRA receiving compensation in addition to the subscription fees or other compensation for services rendered by CFRA, however, no part of CFRA's compensation for services is tied to any recommendation or rating. Additional information on a subject company may be available upon request.

CFRA's financial data provider is S&P Global Market Intelligence. THIS DOCUMENT CONTAINS COPYRIGHTED AND TRADE SECRET MATERIAL DISTRIBUTED UNDER LICENSE FROM S&P GLOBAL MARKET INTELLIGENCE. FOR RECIPIENT'S INTERNAL USE ONLY.

The Global Industry Classification Standard (GICS®) was developed by and/or is the exclusive property of MSCI, Inc. and S&P Global Market Intelligence. GICS is a service mark of MSCI and S&P Global Market Intelligence and has been licensed for use by CFRA.

Certain information in this report is provided by S&P Global. Inc. and/or its affiliates and subsidiaries (collectively "S&P Global"). Such information is subject to the following disclaimers and notices: "Copyright © 2023, S&P Global Market Intelligence (and its affiliates as applicable). All rights reserved. Nothing contained herein is investment advice and a reference to a particular investment or security, a credit rating, or any observation concerning a security or investment provided by S&P Global is not a recommendation to buy, sell or hold such investment or security or make any other investment decisions. This may contain information obtained from third parties, including ratings from credit ratings agencies. Reproduction and distribution of S&P Global's information and third-party content in any form is prohibited except with the prior written permission of S&P Global or the related third party, as applicable. Neither S&P Global nor its third-party providers guarantee the accuracy, completeness, timeliness or availability of any information. including ratings, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such information or content, S&P GLOBAL AND ITS THIRD-PARTY CONTENT PROVIDERS GIVE NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE AND ALL S&P INFORMATION IS PROVIDED ON AN AS-IS BASIS. S&P GLOBAL AND ITS THIRD-PARTY CONTENT PROVIDERS SHALL NOT BE LIABLE FOR

ANY DIRECT, INDIRECT, INCIDENTAL, EXEMPLARY, COMPENSATORY, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES, COSTS, EXPENSES, LEGAL FEES, OR LOSSES (INCLUDING LOST INCOME OR PROFITS AND OPPORTUNITY COSTS OR LOSSES CAUSED BY NEGLIGENCE) IN CONNECTION WITH ANY USE OF THEIR INFORMATION OR CONTENT, INCLUDING RATINGS. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold, or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice."

Certain information in this report may be provided by Securities Evaluations, Inc. ("SE"), a wholly owned subsidiary of Intercontinental Exchange. SE is a registered investment adviser with the United States Securities and Exchange Commission (SEC). SE's advisory services include evaluated pricing and model valuation of fixed income securities, derivative valuations and Odd-Lot Pricing that consists of bid- and ask-side evaluated prices for U.S. Municipal and U.S. Corporate Securities (together called valuation services). Such information is subject to the following disclaimers and notices: "No content (including credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of SE. The Content shall not be used for any unlawful or unauthorized purposes. SE and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively SE Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content, SE Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. SE PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS. THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION.

In no event shall SE Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory,

punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages. Credit-related and other analyses and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions. SE assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. SE's opinions and analyses do not address the suitability of any security. SE does not act as a fiduciary or an investment advisor. While SE has obtained information from sources it believes to be reliable. SE does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Valuations services are opinions and not statements of fact or recommendations to purchase, hold or sell any security or instrument, or to make any investment decisions. The information provided as part of valuations services should not be intended as an offer, promotion or solicitation for the purchase or sale of any security or other financial instrument nor should it be considered investment advice. Valuations services do not address the suitability of any security or instrument, and securities, financial instruments or strategies mentioned by SE may not be suitable for all investors. SE does not provide legal, accounting or tax advice, and clients and potential clients of valuation services should consult with an attorney and/or a tax or accounting professional regarding any specific legal, tax or accounting provision(s) applicable to their particular situations and in the countries and jurisdictions where they do business. SE has redistribution relationships that reflect evaluated pricing, derivative valuation and/or equity pricing services of other unaffiliated firms with which SE has contracted to distribute to its client base. Pricing and data provided by these third-party firms are the responsibilities of those firms, and not SE, and are produced under those firms' methodologies, policies and procedures. Valuations services provided by SE and products containing valuations services may not be available in all countries or jurisdictions. Copyright © 2023 by Intercontinental Exchange Inc. All rights reserved."

Redistribution or reproduction is prohibited without written permission. Copyright @ 2023 CFRA. All rights reserved.