

October 25, 2023

Specialty Retail

Higher Levels of Organized Theft and Retailer Opportunism Boost Shrink Narrative; Expect Impact to Stabilize Into 2024

Over the course of 2022 and 2023, retailers have increasingly highlighted rising shrink concerns and related headwinds on margin. We believe context is important, namely that much of the increase in 2022 was related to shrink normalization coming out of the pandemic, when temporary closures and subsequent in-store shopping restrictions led to a more dramatic decrease in shrink. To be sure, 2023 estimated shrink does look elevated, coinciding with growing organized retail crime. We believe there is a disconnect, however, between the expected increase in shrink and the attention it has drawn, which has resulted in higher levels of inbound on the topic from investors. While theft is likely elevated, companies are also likely using the opportunity to draw attention away from margin headwinds in the form of higher promotions and weaker inventory management in recent quarters. We also believe some more recent permanent store closures enacted under the cover of shrink relate to underperformance of these locations. In this report, we attempt to quantify the impact of shrink as 2024 inventory counts come closer to view. Ultimately, we believe recent actions to stoke government response, incremental mitigation efforts by companies, and some early signs of stability in shrink metrics all point to a more manageable issue looking into 2024.

Key highlights:

- Based on the historical industry average and our analysis of various retailers, we estimate that shrink as a percentage of sales for 2023 will land at roughly 2.0%, or 60 basis points ahead of pre-pandemic levels, suggesting an incremental \$30 billion in inventory losses on a growth-adjusted basis.
- While we expect shrink to remain elevated into 2024, the incremental impact is likely more contained than in recent years, given early signs of stability in shrink levels already in 2023 and some indication of overexaggeration associated with more recent measures including closures.
- We see limited, if any, near-term fixes to the larger problem of organized retail theft. We believe shrink will remain an issue more broadly given the prevalence of retail theft videos on both social and traditional media, combined with convenient and anonymous resell channels and the continuation of high inflation and a murky macro backdrop.
- We believe retailers are increasingly vocal on the subject, in part to draw out government action, leading to the proposal of a bipartisan bill in early 2023. However, targeted investigations that lead to a break-up of organized criminal rings behind much of the rise in theft will take time.

We also provide key takeaways around the recent impact of shrink across our coverage universe, including BJ's Wholesale Club, Burlington, Costco, Five Below, Nordstrom, O'Reilly Automotive, TJX Companies, and Ulta Beauty.

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Burlington Stores, Inc.

BURL (NYSE) \$120.16
Stock Rating: **Outperform**

BJ's Wholesale Club Holdings, Inc.

BJ (NYSE) \$70.45
Stock Rating: **Outperform**

Costco Wholesale Corporation

COST (NASDAQ) \$551.84
Stock Rating: **Outperform**

Five Below, Inc.

FIVE (NASDAQ) \$177.24
Stock Rating: **Outperform**

Nordstrom, Inc.

JWN (NYSE) \$14.01
Stock Rating: **Market Perform**

O'Reilly Automotive, Inc.

ORLY (NASDAQ) \$872.00
Stock Rating: **Outperform**

The TJX Companies, Inc.

TJX (NYSE) \$89.46
Stock Rating: **Outperform**

Ulta Beauty, Inc.

ULTA (NASDAQ) \$379.11
Stock Rating: **Outperform**

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What is shrink?

Inventory shrinkage is the discrepancy between the products physically on-hand versus the inventory balance recorded on the balance sheet. Internal and external theft drives roughly two-thirds of shrink, with the remaining balance attributable to other factors such as damages, inventory mismanagement, or clerical errors. Shrink levels can vary significantly between retailers, based on product assortment, channel mix, geographic presence, and supply chain complexity. Historically, lower-ticket items and the online channel have maintained lower shrinkage given the reduced risk of external theft, while higher-ticket items with better resale potential, brick-and-mortar channels, urban markets, and high-touch logistics networks run at elevated levels.

Companies estimate shrinkage based on average in-stock variations of past physical inventory counts and reserve for the expected loss on a monthly basis. Estimated losses accrue throughout the year, and third parties typically perform physical inventory counts across a company’s fleet of stores and distribution network during low-volume periods, usually immediately before and after the holiday season. If the discrepancy between the actual and estimated loss of inventory is materially higher, the company will true-up its year-to-date losses to reflect the elevated shrinkage and accrue at the higher rate going forward. Depending on the size of the true-up, shrink headwinds can have a significant impact in certain quarters and have more recently led to increased volatility in gross margin.

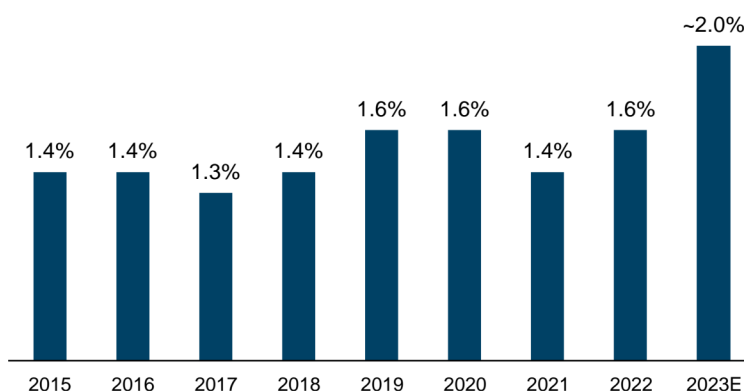
Quantifying shrink

According to a 2023 National Retail Security Survey, shrink as a percentage of sales for 2022 landed around 1.6%, up 20 basis points year-over-year but in line with pre-pandemic average levels. Data from this survey represents 177 retailers across 28 sectors, accounting for 97,000 stores and \$1.6 trillion of annual sales. By sector, apparel, grocery, and department stores all saw higher levels of shrink at or above 2%, with jewelry and shoe stores both below 1.5%. According to the survey, urban locations are prone to higher rates of in-store theft, with larger cities like Los Angeles, San Francisco, and Houston ranked as the top three areas most affected by theft.

We expect inventory shrinkage began to decline at the onset of the pandemic, on the increasing mix of online sales, low inventory movement amid high demand and supply chain bottlenecks, and in-store changes that minimized exposure to theft, including reduced hours, lower customer capacity, shift to suburban and rural locations, and employees at the entry/exit checking for masks. Most retailers expected the impact to be temporary and delayed recording the benefit to maintain a level of conservatism. As pandemic-era trends continued in 2021, retailers reduced its shrink accrual by an average of 20 basis points; however, the benefit to gross margin was largely overshadowed by elevated top-line leverage and lower promotions.

We view the increased shrink pressures in 2022 as more of a normalization to the historical average as pandemic-era benefits faded. However, companies became increasingly vocal around the impact of shrink in 2022 and 2023, coinciding with increasing gross margin pressures from deleverage on lower demand, increasing promotions, and rising cost inflation. Based on our retail analysis below, we expect inventory shrinkage to land around 2% of sales in 2023, up 40 basis points year-over-year and from pre-pandemic levels. Our estimates suggest inventory shrink will exceed \$140 billion in 2023, representing an incremental \$30 billion in inventory losses compared to 2019 on a growth-adjusted basis.

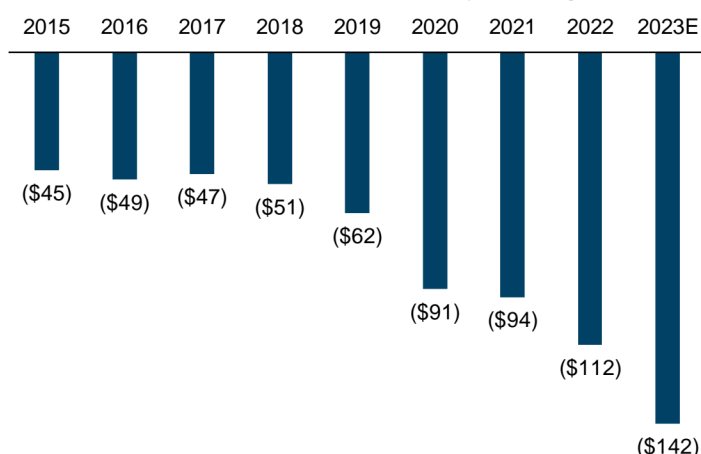
Average Retail Inventory Shrink as a Percentage of Sales



Note: 2023E reflects our estimate

Source: NRF's National Retail Security Survey and William Blair Equity Research

Estimated Dollar Amount Attributed to Inventory Shrinkage (\$ in billions)



Note: 2023E reflects our estimate

Source: NRF's National Retail Security Survey and William Blair Equity Research

We analyzed the shrink impact from nine public companies that have increasingly cited the rising impact of theft in recent years. Few companies quantified the impact of shrink in 2021, although Dollar Tree (DLTR \$108.52), Five Below, and Lowe's (LOW \$186.16) reduced its shrink accrual by an average of 25 basis points, relatively in line with the broader average and underscoring the benefits coming out of the pandemic related to temporary store closures, reduced hours, and higher employee to customer ratios. More companies began quantifying shrink in 2022, with an average hit to gross margin of some 40 basis points for the year and an additional 40-basis-point headwind expected in 2023.

FY2021 to FY2023E Shrink Impact to Gross Margin

	Actual and Consensus Sales (\$ in millions)			Shrink as Percentage of Sales (in bps)		
	FY 2021	FY 2022	FY 2023E	FY 2021	FY 2022	FY 2023E
Dick's Sporting Goods	\$12,293	\$12,368	\$12,803	-	-	50
Dollar General	\$34,220	\$37,845	\$38,735	-	-	25+
Dollar Tree	\$26,310	\$28,318	\$30,799	(40)	30	75
Five Below	\$2,848	\$3,076	\$3,548	(30)	30	60
Lowe's	\$96,250	\$97,059	\$87,881	(5)	20	0
Macy's	\$24,460	\$24,442	\$22,914	-	-	20
Target	\$104,611	\$107,588	\$107,194	-	60	50
TJX Companies	\$48,550	\$49,936	\$53,718	-	30	0
Ulta Beauty	\$8,631	\$10,209	\$11,146	-	70	60
Average				(25)	40	39

Note: 2023 bps reflect management commentary on previous earnings calls, "-" reflects no commentary provided

Source: Company filings and William Blair Equity Research

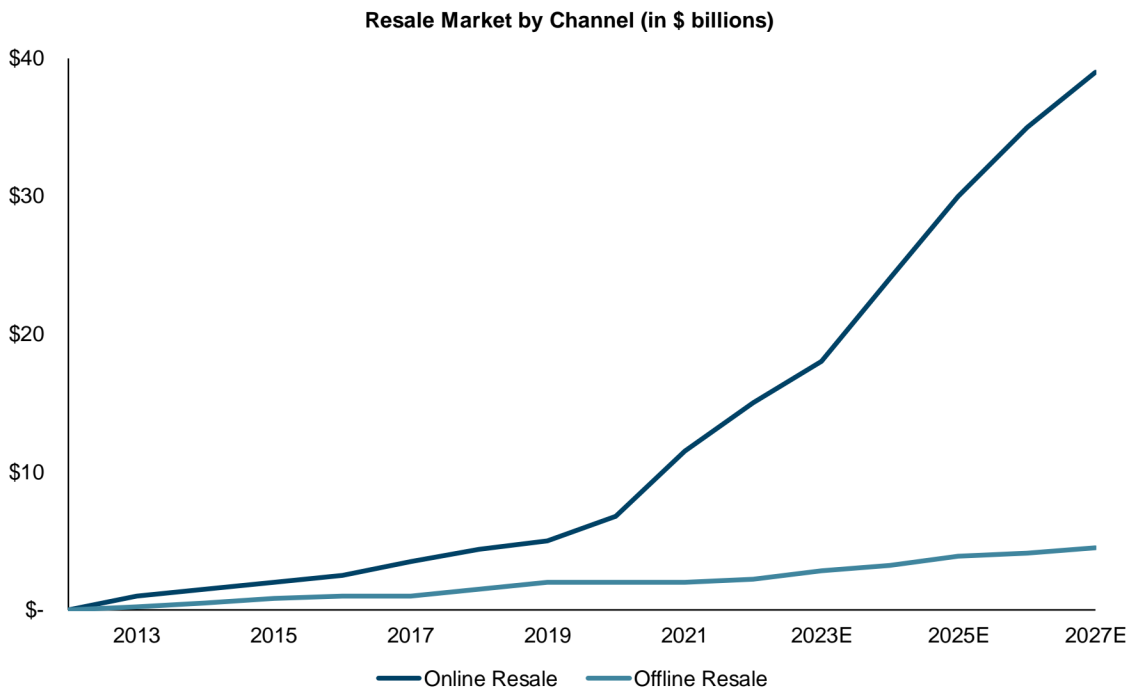
Lowe's is the only major retailer to disclose the dollar value of its annual shrink reserve. In 2022, Lowe's accrued shrink reserve reached its historical peak at nearly \$1.0 billion, or 1.0% of sales. Lowe's shrink reserve is below the industry average as a percentage of sales, likely given its bulkier product assortment and higher mix of professional customers. However, the company has not been immune to rising pressures from theft in recent years, with 2022 shrink levels up some 30 basis points from 2019. Lowe's expects shrink to remain relatively flat as a percentage of sales in 2023, and management highlighted benefits from its elevated customer service model, asset protection program, higher penetration of rural and suburban stores, and investments in tech, including RFID enhancements embedded in its power tools that make the tool inoperable until it is scanned and purchased.



Sources: Lowe's Companies and William Blair Equity Research

Causes of shrink

Select retailers, primarily those in the convenience space, started becoming more vocal about rising shrink in 2018 and 2019. The issues largely faded into the background around the time of the pandemic as inventory constraints and a surge in demand became the No. 1 priority. However, shrink started to become an issue again in 2022, with a key driver being the rise in organized retail crime (ORC). According to the National Retail Federation, ORC (defined as theft with the intent to convert the illegally obtained merchandise into financial gain with no personal use) surged post-pandemic, with incidences growing by over 26.5% in 2021. As per what accounts for a rise in ORC, there seems to be a confluence of factors. For one, retail theft has been and remains relatively “easy” and low risk, though widespread attention to that fact has likely risen with social and traditional media coverage. Retailers train staff NOT to stop anyone trying to steal goods, with the thought that an insurance claim from any injured party is most likely a bigger cost than a stolen item. Several videos, much of which get picked up by traditional media outlets, showing [groups of people rushing into a store to grab luxury goods](#) or even [casually stealing items from a pharmacy](#) reinforce this point and arguably encourage mimicking behavior. Meanwhile, reselling any item, from a Chanel handbag to throat lozenges, is facilitated by anonymous online marketplaces, such as Facebook, Amazon, and eBay. On the other side of that transaction, the rise of resale platforms has eroded the stigma around secondhand goods, creating a broader marketplace for stolen items. Combined with a bleaker macro outlook, the capacity to steal and move stolen goods has reached an inflection point. We do not see any of these trends reversing, in fact, we believe most will likely grow stronger in the coming years, particularly given online demand for secondhand goods amid an uncertain economic backdrop.



Source: ThredUp and William Blair Equity Research

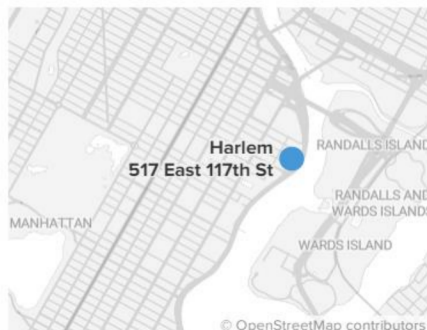
Target case study

While certainly data and company commentary point to an increase in theft worth noting, we would also allow that some of the commentary and reaction from companies could be opportunistic. For one, we have to acknowledge that retail crime, which has [increasingly become more violent](#), does pose very real risk to retailers and their employees. Several retailers have pointed to safety concerns as the primary drivers behind recent closures in urban areas, including Target (TGT \$110.60), Starbucks (SBUX \$95.17; Outperform), Whole Foods, CVS (CVS \$68.53), and Walgreens (WBA \$21.12). However, the actual increase in rates of theft seemingly does not necessarily correspond to the increase in company commentary and action—particularly one of the more dramatic initiatives to thwart crime, store closures. Here, we would have to believe that the decision is being made more from a risk to employees than an actual dollar amount loss. And yet, we have to acknowledge potentially ulterior, more opportunistic motives.

Target has been one of the more vocal companies around the impact of shrink and now expects roughly a \$1.1 billion, or over 100 basis points, cumulative incremental headwind over the past two years, landing above the retail industry average. This culminated in the closure of nine stores across New York City, San Francisco, Seattle, and Portland in mid-2023. Management cited higher violence and theft, which posed major safety concerns in these stores.

Locations of Target's Nine Store Closures in Mid-2023

NEW YORK CITY



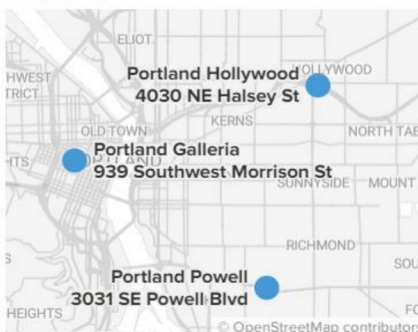
SAN FRANCISCO + OAKLAND



SEATTLE



PORTLAND



Source: CNBC, Target, and William Blair Equity Research

Many of the stores closed by Target are smaller format locations, a concept the company started rolling out more in 2018. Reports suggest the average size of a smaller format Target store is around 40,000 square feet, compared to the average Target store size of around 125,000 square feet. If we assume that these stores are as productive as the average Target store (likely understating revenue given the smaller format locations are in high-traffic, urban areas), each location generated close to \$14 million annually. Management has quantified the incremental total company margin impact as close to 100 basis points from 2019 to 2023, which would equate to a total incremental loss of over \$1 billion, or \$4.40 per square foot. What is more, we would allow that as this is a total Target average, it could well be that these smaller format stores are seeing theft levels well above even this level (which in our analysis is theoretically offset by underestimating productivity). At this level of impact, the total margin impact to a smaller format store is nearly 125 basis points, or over 6% of profits, if we assume average four-wall margins in the 20% range.

Target Store Productivity Analysis

Total stores	1,948
Total square feet	244,584,000
Average square feet per store	125,556
Total sales	107,588,000,000
Retail sales	87,590,230,483
Total sales per square foot	\$ 440
Retail sales per square foot	\$ 358
Smaller format store average square feet	40,000
Estimated total sales per smaller format store	14,324,769
Cumulative impact from shrink 2019-2023 (BPS sales)	100
Estimated dollar impact	1,075,880,000
Cumulative shrink per store	552,300
Cumulative shrink per square foot	\$ 4.40
Dollar shrink impact to small format stores	175,953
BPS margin impact	123

Note: Figures are as of fiscal year ending January 2023

Source: Company reports, William Blair Equity Research

Target has not quantified the dollar or basis-point impact of theft in the stores it is closing. And it would seem a relatively small and likely fleeting hit to profits could not be telling the whole story. Indeed, there is a more cynical theory as to why some retailers are choosing to close a store to address theft. One [analysis](#) by Popular Information found that the stores Target is closing in both New York and San Francisco actually had lower reported theft rates when compared to other nearby locations (though total dollar amounts were not reported and instances of violence are harder to parse out through reports alone). More pointedly, we would note that after making a big push into smaller format, Target has not discussed the initiative since 2020. As such, we allow that Target could be using shrink to mask other issues, including poor inventory management, which came to a head in 2022 following supply chain disruption, and is now exiting underperforming stores to boost overall margins. Meanwhile, stores in downtown locations could also be seeing as much if not more of an impact from lower overall traffic patterns.

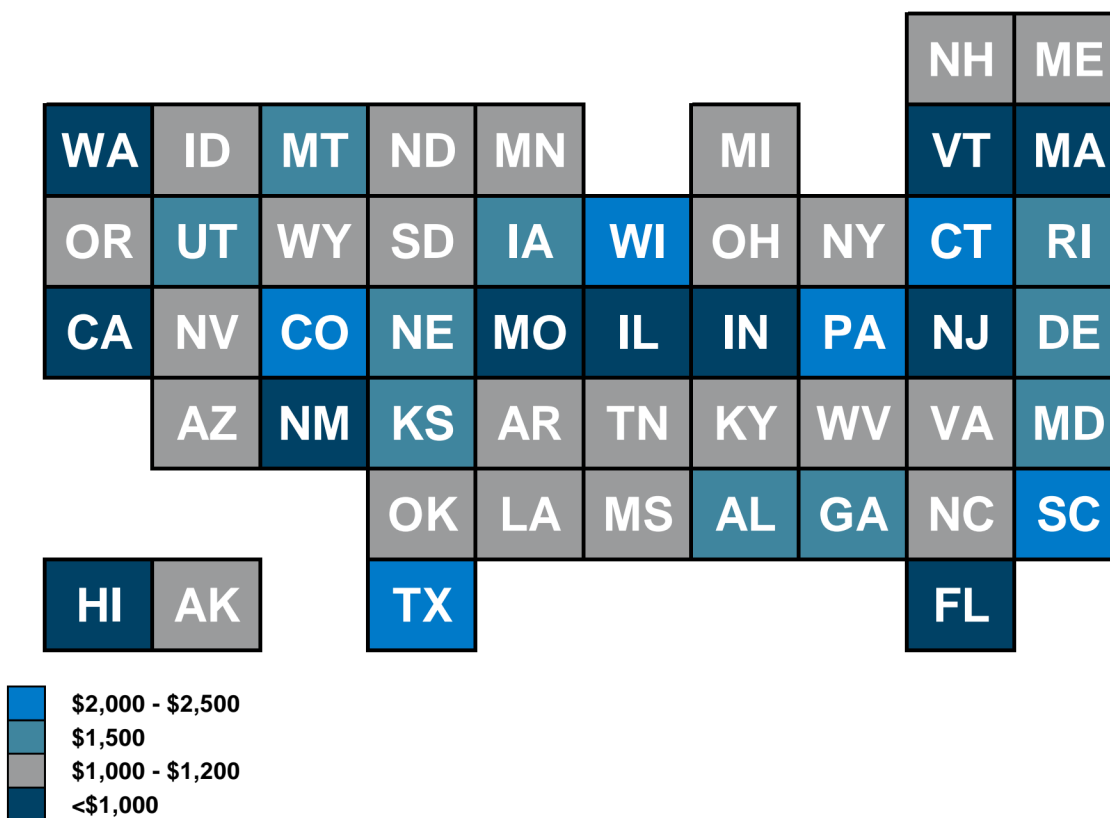
As some indication of why this theory on Target might not be farfetched, Walmart (WMT \$163.78) closed four Chicago locations in April 2023 after reporting that those stores lose “tens of millions of dollars a year with annual losses nearly doubling in just the last five years.” Notably, Walmart did not blame crime or theft and rather acknowledged strategies like downsizing its footprint, localizing product assortment, and offering services beyond traditional retail underperformed expectations. It is worth noting again that while Target made a big deal of pushing smaller format stores prior to the pandemic, it has not talked publicly about the initiative since 2020.

What comes next?

We believe companies like Target could indeed be using the current narrative around shrink to take broader action in lagging parts of their business where it might otherwise be viewed unfavorably by the Street. We also believe, admittedly without much proof, that part of the reason companies are being more vocal on shrink relative to the incremental impact has to do with trying to stimulate some sort of government action, given that there is little they can do on their own. What is more, what measure they can take, including locking up items, assortment changes, price increases, or reducing self-service POS options, adds friction points to conversion and can negatively impact store sales, productivity, and customer engagement. Other alternatives, such as security cameras, anti-theft sensors, and third-party guards, have been noted to be largely ineffective at curtailing retail crime and further weigh on margins.

This leaves government action as the best possible solution. Some retailers we speak with suggest that one of the easiest actions local governments could take would be to lower the dollar threshold for theft to be considered a felony (and therefore add more deterrents). However, data here is [relatively uncertain](#), including in the 12 states that have instead raised the threshold for felony theft since 2000. We believe this campaign would have limited appeal given more recent inflation (which in effect lowers the dollar amount felony threshold on theft) and a backlog of criminal cases in the U.S. coming out of the pandemic.

Minimum Theft Amount for Felony Charges



Sources: World Population Review and William Blair Equity Research

It seems really the only thing the government could do would be to go after ORC at higher levels. There has been some traction here, including a bipartisan [bill proposed in the Senate](#) in early 2023 to create a specialized unit to address ORC within Homeland Security. More recently Home Depot (HD \$281.20), working with law enforcement, successfully thwarted an organized theft ring run by a pastor who was recruiting people from a drug recovery program he ran to steal items he would sell on eBay. By the time he was apprehended, the pastor had already listed 35,000 items, with a reported \$1.4 million in gains. Considering the over \$140 billion in theft expected in 2023, the recent Home Depot case underscores that this will likely be a slow journey. As such, we think in a best-case scenario, shrink remains elevated but does not increase more meaningfully into next year. However, with any worsening of the economic backdrop, we cannot rule out that incremental theft will continue to take more margin, which could in turn lead to additional store closings (again, some of which could be opportunistic).

Company-specific highlights

See below for key takeaways around the impact of shrink across our coverage universe.

BJ's Wholesale Club (BJ)

Outperform; \$9.2B Market Cap

- Earlier this year, management indicated rising shrink has had less of an impact on its model than many of its competitors, saying, "Although we see it, and it is material, we benefit from the fact that we have a membership business, you need a card to get in, our stuff is large and bigger pack sizes so it's harder to pilfer." We expect the inherent nature of the membership club model should continue to insulate margins despite increasing shrink pressures more broadly.
- Management continues to work closely with industry partners to mitigate additional losses, while strategic investments in omnichannel functionality, like BOPIS, same-day delivery, and curbside-pickup, should also help to alleviate external shrink pressures. We expect benefits from the enhanced omnichannel offering to be partly offset by the rollout of self-check and scan-and-go technology.
- BJ's store footprint is primarily concentrated in suburban locations along the East Coast, outside of higher-risk markets in hyper-urban regions and the West Coast, which should also minimize the impact of external theft compared to competitors.

Burlington Stores (BURL)

Outperform; \$7.7B Market Cap

- Contrary to other retailers, Burlington's higher merchandise margin for its second quarter was driven by higher markup, lower markdowns, and lower shrink expense year-over-year.
- Management accredited the shrink benefit in the quarter to the anniversary of an adjustment in what it terms its shortage accrual due to timing of its physical inventory counts last year. The company took a roughly 100-basis-point hit to gross margins in the second quarter of 2022, nearly double the industry average.
- The benefit from lower expected shrink in the second quarter of 2023 was not as large as the company had been anticipating.
- We attribute Burlington's more recent shrink "benefits" more to its own inventory internal management (arguably mismanagement). Overall, we expect Burlington would have in-line if not slightly greater exposure to retail theft relative to the broader apparel and accessories industry.

Costco Wholesale (COST)

Outperform; \$245B Market Cap

- On the company's most recent earnings call, management indicated shrink was not a material problem for the company, saying, "In the past several years, our inventory shrink has increased by a couple of basis points, in part we believe due to the rollout of self-checkout. Over the past year, it has increased by less than one basis point."
- Similar to BJ's Wholesale Club, we expect Costco's membership club model should inherently reduce the impact of shrinkage. The company's bulkier product assortment, larger pack size, membership card checks upon entry and at checkout, and receipt validation upon exiting the warehouse should all help to prevent external theft.
- While Costco's warehouse footprint maintains a more significant exposure to higher risk markets, we expect the company would swiftly institute mitigating efforts in the event of increased shrink pressures. Historically, Costco has been quick to address any potential issues threatening its low-cost model. More recently, the company has been increasingly vocal around expanding measures to prevent unauthorized card-sharing between members and nonmembers through more frequent in-warehouse membership checks and requiring a matching photo ID at checkout.

Five Below (FIVE)

Outperform; \$9.8B Market Cap

- Management began to highlight increasing theft pressures earlier this year. Shrink drove a 30-basis-point margin decline in fiscal 2022, which was largely a normalization after taking a benefit in 2021 and brought levels back in line with 2019 at around 1.5% of sales. Investors had a largely negative reaction to the company's shrink headwinds, which has historically thought to have been limited to high-ticket retailers and luxury brands, but now is impacting the value and discount segment at a greater scale on the growing use of online resale platforms for a wider range of goods and price points.
- Management now expects an additional 60-basis-point headwind in 2023, much of which will negatively impact the third quarter to true-up year-to-date results based on recent inventory counts. Management's latest estimates suggests shrink will land around 2.0% of sales in 2023, in line with the industry average. However, we believe Five Below's shrink problem remains relatively low, considering the company's small online presence (estimated in the low-single-digits) and broad store footprint across urban and suburban markets with a labor-light model. The company highlighted that the theft was likely external, given the elevated shrink rates at locations with higher usage of assisted self-checkout. Going forward, the company is increasing the number of manned registers in new locations and expects to accelerate openings in urban and semi-rural areas where the incremental impact of shrink will likely be a wash.
- Management highlighted that its guide assumes the worst-case scenario before any efforts to mitigate shrink pressures, including planned enhancements in tech, register formats, merchandise presentation, product assortment, select price increases, and changes in policy. More recently, Five Below changed its return policy to require receipts and reduced the availability of assisted self-checkout during low-volume periods, which should help prevent additional headwinds.

Nordstrom (JWN)

Market Perform; \$2.2B Market Cap

- Given that Nordstrom sells a higher mix of luxury goods, with a lower ratio of retail staff to customers, we expect the company will run at higher levels of shrink in the current environment.
- Management has not quantified the impact of shrink. The company has said that while losses from theft may be at higher levels historically, such shrink losses were imbedded in its guide, and the company has taken measures to minimize its impact.
- On the company's second-quarter earnings call, management stated they have "not seen a continuing rise of shrinkage that exceeded what we've planned." More recently, management has noted shrink as having stabilized as recently as September 2023.
- The company has, however, been a subject of media attention on the issue of ORC. On August 12, 2023, there was a "flash mob" robbery at Nordstrom's Westfield Topanga Shopping Center location Mall location in Canoga Park, CA with anywhere between 20 and 30 suspects stealing reportedly \$300,000 worth of merchandise.
- In August 2023, Nordstrom announced its plans to close its San Francisco 315,000-square-foot store after operating for 35 years, attributing weakness to lower foot traffic, given higher levels of crime in and around the store and broader structural issues in the downtown area. Occupancy rates in the city remain low compared to historical levels (at around 70%), which we believe is likely one of the causes for nearly 40 retail stores exiting the Union Square area since 2020.

O'Reilly Automotive (ORLY)

Outperform; \$53B Market Cap

- Management called out positive shrink results during the most recent second-quarter print, bucking the trend of its broader retail peer group.
- We expect O'Reilly's model should continue to be insulated from shrink pressures, as its best-in-class supply chain operations should minimize the impact of inventory mismanagement. Furthermore, the company's labor-intensive and services-focused store model, healthy mix of sales to professional customers (~50%), and store footprint skewed to rural and suburban locations should all lower the company's exposure to rising external theft pressures.
- We expect the company's most significant risk related to shrink would be around the rise of internal, organized theft rings given the high-frequency, high-touch logistics network and store labor model.

TJX Companies (TJX)

Outperform; \$101B Market Cap

- Given that TJX sells higher-value branded goods, we expect the company to run at overall higher levels of shrink compared to both the apparel and accessories and off-price industries.
- TJX has continued to guide for shrink to be flat in the current fiscal year, noting unfavorable shrink headwinds throughout the first, second, and third quarters, with an expected benefit in the fourth quarter as it laps an increase last year.
- Management spoke to “increasing tagging, tethering, the uses of hard cases, and the increased loss prevention presence” as newer initiatives to protect its merchandise.

Ulta Beauty (ULTA)

Outperform; \$18B Market Cap

- Note that given the nature of what Ulta sells (smaller in nature, high value), we expect the company will run higher levels of overall shrink.
- In the first quarter of 2023, unexpected shrink levels in the quarter led Ulta to lower its operating margin guide for the year on the persistence of increasing shrink trends and normalizing promotions. More recently, the company has indicated that it expects the gross margin impact of shrink to be slightly better compared to 2022, or better than the 70 basis points impact it report last year.
- Ulta remains prudent in implementing theft preventative measures, namely installing fragrance fixtures, now in 50% of stores and on track to reach 70% of the fleet by year-end.

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DOW JONES: 33141.40
S&P 500: 4247.68
NASDAQ: 13139.90

Additional information is available upon request.

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Market Perform (Hold)	28	Market Perform (Hold)	2
Underperform (Sell)	1	Underperform (Sell)	0

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