Amazon Private Brands: Self- Preferencing vs Traditional Retailing

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Introduction

Amazon’s retail operation is, in many ways, structured like that of a traditional bricks-and-mortar retail chain. It manages a digital platform for the sale to consumers of branded consumer goods manufactured by third-party firms. In recent years, Amazon has followed the example of countless western retailers by launching its own private label products (PLs) that compete against branded products in various consumer goods categories.

However, Amazon’s PL programs have recently been under intense scrutiny by competition authorities in the U.S. and Europe. Specifically, competition authorities have expressed concerns that Amazon has access to consumer behavior data including the browsing process and sale of national brands (NBs), allegedly giving it an unfair advantage in selling PLs. These concerns have led to calls for regulation (e.g., the Digital Markets Act (DMA) in Europe and the pending American Innovation and Choice Online Act (AICOA)) that would restrict or prohibit many Amazon’s PL practices, singling out Amazon as the only retailer to be subject to such restrictions.

In this article, I demonstrate that Amazon follows an off-the-shelf approach to its management of PLs that is standard for many western retail chains. Many retail chains: (1) have been using granular, consumer transaction-level data to manage their PL programs for decades, (2) have gone far beyond merely selling PLs, in some instances fully vertically integrating the manufacture and distribution of PLs, and (3) routinely engage in self-preferencing of their PL products both online and offline, a practice recommended by marketing textbooks and marketing strategy consultants, and (4) use PLs that mimic the trade dress of established national brands.

Moreover, Amazon’s PL products are relatively new and small compared to those of other retail chains. As total U.S. PL sales continue to grow, reaching $199 billion in 2021 (17.7% of retail sales) and accounting for nearly one in every five retail products sold, Amazon’s PLs still account for around 1% of sales. Nevertheless, many comparable-sized, established retail chains with orders-of-

1 This article is based on the author’s presentation at the 2022 CRESSE Conference. E-mail: jean-pierre.dube@chicagobooth.edu. Dubé acknowledges that he has worked as a temporary consultant for Amazon as well as many national U.S. retail chains and Consumer Packaged Goods manufacturers. Researcher(s)’ own analyses calculated (or derived) based in part on data from Nielsen Consumer LLC and marketing databases provided through the NielsenIQ Datasets at the Kilts Center for Marketing Data Center at The University of Chicago Booth School of Business. The conclusions drawn from the NielsenIQ data are those of the researcher(s) and do not reflect the views of NielsenIQ. NielsenIQ is not responsible for, had no role in, and was not involved in analyzing and preparing the results reported herein.
2 See for instance the UK Competition Commission’s “The Supply of Groceries in the UK Market Investigation,” app. 9.10.47 (2008). The FTC further concluded that PLs not only compete on prices with established NBs, they also inhibit price fixing between retailers and manufacturers of established brands (FTC 1945).
3 PLMA (2022).
magnitude larger PL programs would not be subjected to existing and pending regulations that would apply to Amazon’s PL program.⁵

Singling out Amazon for its PL practices sets a complicated double standard in retail. Further, subjecting Amazon’s PL practices to the broad regulations targeted toward so-called “digital platforms” without regard for how Amazon’s business model (a retailer) differs from those of Google and Meta, for instance, will likely have the unintended consequence of harming consumers. The extant academic literature has unambiguously found that the growth of PLs ultimately benefits consumers by offering them parity products at lower prices (Newmark 1988) and, in recent years, genuinely innovative new products. And, antitrust authorities and economists have concluded that such practices by established chains do not have an adverse effect on competition (e.g., Adelman 1945, Editors 1968).

What is a private label brand?

“Private labels can be defined as products marketed by retailers and other members of the distribution chain. Private labels can be called store brands when they actually adopt the name of the store itself in some way (such as Safeway Select).

Private labels should not be confused with generics, whose simple black-and-white packaging typically provides no information about who made the product.” [emphasis added] (Keller and Swaminathan 2020, page 206)

They are frequently placed “next to well-known brands.” (Valenzuela et al. 2013, p. 885). For instance, Kirkland Signature Hazelnut spread is placed next to Nutella on Costco’s shelves and sells very well.⁶

Retailers have adopted various positioning strategies for their PLs. Academics have classified them into 4 types:⁷

i. **Generic**: Not really brands at all as labels usually only indicate the commodity. These days, generics are mainly used for prescription drugs and commodity goods (e.g., milk, eggs etc).

ii. **Copycat**: Imitate leading NBs’ appearance and packaging. Generally perceived as lower quality, but sold at much lower price. Prevalent primarily in pharmacy (e.g., Walgreen’s and CVS) and apparel (e.g., Zara). Often use a “look-a-like” trade dress that uses all the visual cues of the NB (e.g., shape, size color) to make it easier for consumer to find and forces a price comparison with NB. By 1994s, for instance, copycat PL jeans were 25.6% of the U.S. denim category.⁸ This trend has not subsided. Scott-Morton and Zettelmeyer (2004) found that about 50% of surveyed consumer packaged good (CPG) store brands used similar color, size and shape to a national brand against which they competed.

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⁵ Amazon generated $113.64 billion in global revenues in 2021. Meanwhile, the Schwarz Group (Lidl) generated $106.04 billion and Aldi generated $98.95 (NRF 2022). The PL shares at Aldi and Lidl are 77% (Souza 2022) and 65% (Kumar and Steenkamp 2007), respectively. Below we show that Amazon’s PL share has never exceeded 1%. On the basis of total sales, Amazon generated $217.79 in 2021 whereas Walmart generated $459.51 (NRF 2021), with a PL share of about 33% (Brumley 2021), and Costco generated $140.41 billion, with a PL share of 32% from its Kirkland brand (Costco 2020).

⁶ Appelbaum (2022).


Similarly, the global *fast fashion* market was projected to grow from $25.08 Billion in 2020 to $30.58 Billion in 2021. Zara remains the world’s top-selling fast-fashion brand. Research in consumer psychology has found that such copycat branding can be well-perceived by consumers when they face high uncertainty about product quality.

iii. **Premium**: Goal is to be on par with leading NBs. Split into 2 sub-types
   a. **Premium-Lite**: parity product to leading NBs but with lower price. Retailer needs to invest in product innovation (e.g., Staples filed over 25 patents in 2004, Costco has invested in creating a premium-private-label Kirkland brand which generated $52 billion in total 2020 Global Sales).
   b. **Premium-Price**: superior quality to NB and higher price than at least some leading NBs. During the 1980s, President’s Choice pioneered this idea by adding the labeling claim “harvested from trees planted more than 80 years ago and produced from the first cold-pressing of sun-ripened olives” on its olive oil products to position them on par or above national brands. We see this in the UK at Marks & Spencer (gourmet food and clothing), Tesco and Sainsbury. Retailer must take active role in positioning and manufacturing, taking on such tasks as Product development, marketing research, advertising and promotion, packaging design etc. In the U.S., premium-price PL is an emerging trend. In 2020, Kroger recently launched plant-based PLs and Albertsons launched sustainable wines and the Open Nature brand of compostable nonfood items.

iv. **Value-Innovators**: Although relative rare in frequency, these products are either pioneering (e.g., a new category) or push the innovation frontier within an existing category. Emerging PL plant-based products (e.g., Whole Foods’ 360 brand) are one area where we see such value innovators.

While copycat PLs were common during the 1980s, the more recent trend is for retailers to offer a broader spectrum of qualities that allow them to segment their customers, ranging from value to luxury. Cross-sectional studies have found PL quality to be a stronger determinant of success than low price (e.g., Hoch and Banerji 1993). Further, contrary to claims in the popular press, PLs are not merely a way to offer low prices to attract low-income shoppers.

Accordingly, product categories with little perceived quality differentiation are most vulnerable to PL entry and growth. While I am unaware of a source measuring the categories in which retailers are most likely to supply a PL, Exhibit 1 lists the categories in which U.S. adults are most likely to

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9 “Fast Fashion refers to the low-cost designs that quickly move from catwalk to stores, and that’s where it got the name” (Modern Genetlemen 2021). Typically, these brands produce garments with styles that are literally straight off the runway.
11 Statista (2022).
12 “...Kirkland Signature products are high quality, offered at prices that generally lower than national brands and help lower costs, differentiate our merchandise offerings and generally earn higher margins” Costco (2020, p. 5). Costco describes it Kirkland strategy as follows: “Maintaining consistent product quality, competitive pricing, and availability of these products is essential to developing and maintaining member loyalty. These products also generally carry higher margins than national brand products and represent a growing portion of our overall sales” Costco (2020, p. 9).
13 Costco (2020).
14 Houlihan Lokey (2022). Recent work suggests benefits from using 3-tier quality approach (2nd-degree price discrimination) to PLs (Geyskens et al 2010, Ter Braak et al 2014, Gielens et al 2021). Some recent evidence suggests possible benefits of housing these three quality tiers under a single brand umbrella (e.g., Keller et al 2021). A concern with such brand-stretching across a wide quality array is that it would confuse consumers about what quality to expect.
15 Dubé et al (2018) find no evidence of income effects in demand for PLs and find that nearly all the PL growth during the recession was explained by a pre-existing trend. Sayman et al (2002) find most PL buyers to be middle-income (they find quality to be a key determinant of PL success). They also find that deal-proneness is not a key characteristic of PL buyers.
Why do retailers launch private label brands?

The main reason to launch a PL is to increase customer store loyalty and generate higher profits and margins. In an increasingly competitive retail market, many retailers are using PLs to promote repeat-business to their stores by offering exclusive products that meet consumers’ needs and differentiate the chains from competitors.

a) Private Labels Help Build Store Loyalty

A recent McKinsey report argues that “Retailers that seize this moment to reset their private-label strategies can translate short-term switching behavior into long-term customer loyalty [and that] high-quality PLs can gain a devoted following and become a powerful driver of customer loyalty to the retailer.”16 17 As explained in our taxonomy of PL positioning strategies above, most retailers promote loyalty through lower prices although, increasingly, they also offer parity or even superior quality than national brands. In short, one of the key motivations to build a successful portfolio of PL brands is to differentiate from competing retailers, who carry overlapping assortments of national brands, and generate incremental profitability through this repeat-business. Academic research finds that such loyalty justifies carrying PLs even if they do not generate higher margins than NBs (Corstjens and Lal 2000, Ailawadi et al 2008, Seenivasan et al 2016). Furthermore, retailers use PLs to expand variety by launching products not currently offered by NBs and/or products that are offered by NBs but at a better value. An IRI study finds that store brands are extremely or very influential on store choice.18

b) Private Labels May Yield Higher Margins

At least since the 1930s, a primary explanation for the growth in PL sales is the higher potential retail margin compared to NBs.19 Typically, PLs are cheaper to manufacture and sell than NBs.20 Indeed, PL gross margins are about 25-30%, nearly double the margins on the sale of NBs.21 A one percentage point shift from NBs to PLs in food and beverages would generate $5.5 billion in incremental supermarkets sales.22 Of course, a chain may still benefit from the sale of PLs with lower margins than NBs if the PLs attract incremental consumers who would not have purchased in the category or in the store itself but for the availability of the PLs.

At some chains, NBs have become less profitable to sell, further increasing the appeal of PLs:

“Despite historically shunning oneweek deals, Wal-Mart’s policy of beating competitors’ promotional prices means it often loses money on the brands, too, because some competitor has them on sale virtually every week.”

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16 Begley and McOuat (2020).
17 Keller et al (2016) find that retailers tend to assign their banner brand name and logo to the PL (instead of a stand-alone brand name) when the PL has high quality.
18 Driggs (2019).
19 Alderson (1935).
20 For commodity PLs with lower marginal costs, there is a strategic incentive to mimic the leading NB (i.e., to create high cross-price elasticity) and lower the NB’s bargaining power (e.g., Scott Morton and Zettelmeyer 2004).
22 Kotler and Keller (2016).
Wal-Mart has lost as much as $30 million annually on Tide alone, according to industry executives. “23

“...one reason retailers support private labels is to improve their category margins, "because they don't make any money on Tide, Bounty and Pampers."”

R. Keith Harrison, Global Product Supply Officer, P&G24

PLs do expose the retailer to risks. Unlike NBs, unsold volume of PLs cannot be returned for refunds and, due to the exclusivity of the PL brand, there are few to no alternative channels through which to sell unmoved PL inventory.

Antitrust Allegations, Regulation and Amazon Private Labels

Competition authorities in the U.S. and Europe have repeatedly singled out Amazon’s PL practices as potentially anticompetitive. Lina Khan, the current Chair of the Federal Trade Commission, argued:

“This source of this power is: (1) its dominance as a platform, which effectively necessitates that independent merchants use its site; (2) its vertical integration—namely, the fact that it both sells goods as a retailer and hosts sales by others as a marketplace; and (3) its ability to amass swaths of data, by virtue of being an internet company.” (Khan 2017, p.783)

The Subcommittee on Antitrust made a similar argument in their recent report on competition in digital markets:

“Amazon’s dual role as an operator of its marketplace that hosts third-party sellers, and a seller in that same marketplace, creates an inherent conflict of interest. This conflict incentivizes Amazon to exploit its access to competing sellers’ data and information, among other anticompetitive conduct.” (Subcommittee on Antitrust 2022, p. 10)

At the heart of the concern is Amazon’s access to consumer behavioral data spanning the search and purchase of products on the platform, including NBs. As explained by Margrethe Vestager, Executive Vice President of the European Commission:

“Our investigation shows that very granular, real-time business data relating to third party sellers' listings and transactions on the Amazon platform, systematically feed into the algorithms of Amazon’s retail business. It is based on these algorithms that Amazon decides which new products to launch, the price of each individual offer, the management of inventories, and the choice of the best supplier for a product.” (Vestager 2020, p. 1)

These concerns have led to calls by public officials to regulate Amazon’s PL practices, typically grouping Amazon with other large digital platforms like Apple, Meta and Google even though Amazon is distinct from those companies in that Amazon operates like a traditional retailer

In defense of her inclusion of Amazon in the AICOA, Senator Klobuchar argues “Why should Amazon be allowed to use data from sellers on its platform to create knockoff products?” (Klobuchar 2021a, p.xi) On the U.S. senate floor, Senator Klobuchar reiterated her defense of Amazon’s inclusion in the AICOA:

“This is Amazon using incredibly detailed nonpublic information that they get from their sellers on their

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24 Neff (2005), p. 4.

Electronic copy available at: https://ssrn.com/abstract=4205988
platform to create copycat products and box off competition from small innovators.” (Klobuchar 2021b)

European authorities have also grouped Amazon in with other large digital platforms in the broad call for regulation. After specifically mentioning Amazon as a concern, Ms. Vestager explained:

“…we can correct in specific cases, we can punish illegal behaviour, but when things become systematic, then we need regulation as well. If there is a systemic misbehaviour, then we need regulation to come in.” (Vestager 2022, p. 1)

Below I will show that Amazon’s PL practices are standard for established retail chains. There is nothing distinct about Amazon’s PL programs which, if anything, are considerably smaller than those of many other established retailers. In this regard, the calls for regulation singling out Amazon as the only retailer seem ill-founded. To the extent that competition authorities and lawmakers are concerned about PL practices harming consumers, then a more logical approach would be to pass regulations specific to PL practices, rather than singling out those at Amazon.

**Amazon’s PL programs are small and young relative to many established retailers**

Amazon started selling PLs under its first private brand, Pinzon, in 2009. Meanwhile, PLs have a very long history in western retail businesses, with the first PLs launched in the 19th century. The first grocery PLs in the U.S. were sold by A&P. Similarly, Sears has been selling its own brands, Kenmore and Craftsman, of appliances and tools at least since 1927. Even, Amazon’s closest U.S. retail competitor in size, Walmart, launched its first PL brand -- dog food brand “Ol’ Roy” – in 1983. So Amazon is a recent entrant into the retail PL space.

Exhibit 2 uses the Nielsen-Kilts Panelviews shopping panel database, a representative panel of U.S. households (see Appendix), to measure the U.S. CPG PL share between 2004 and 2020. At the time Amazon was making its first foray into PL (2009), PLs already accounted for 19% of U.S. CPG spending and was on a steady growth trend. CPG PLs grew at about 1% per year, or 0.45 share points per year, between 2004 and 20012 (Dubé et al 2018). By 2020, the U.S. CPG share reached 24%. Total PL spending growth outpaced national brands in 2020 at 13.7% vs 12.9%. Total U.S. PL spending reached $158 Billion in 2021. Exhibit 2 also shows that Amazon’s PL growth was stagnant over this period and never exceeded 1%.

**<Exhibit 2 about here>**

PLs have even higher penetration in Western Europe, where their share was over 40% in 2020. In the U.K., the PL share hit 52.5% in 2018. European Annual growth outpaces the U.S., at 4%. European grocery chains like Lidl dedicate 90% of the shelf space to its own products. The 2020 European CPG PL share was above 30% of sales in all but 3 of 18 countries tracked by Nielsen.

Exhibit 3 summarizes Amazon’s PL share by category for 2020. Amazon PLs account for less

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26 Fitzell (1982).
27 Keller (2013).
28 Isidore (2018).
29 Georgiev Inside Scoop on Walmart.
30 Georgiev Inside Scoop on Walmart.
33 CBI Insights (2018).
34 PLMA (2021a).
than 5% of total sales for each category except Softlines (9%). Overall, PLs represent about 1% of Amazon’s total retail sales, or less than $5 billion in 2021. At 1% share, Amazon’s PL programs have, if anything, under-performed given their goal several years ago to hit a 10% share by 2022. As of July 2022, Amazon appears to be committed to scaling back its PL programs by over 50%. Moreover, “most [private label] brands launched didn’t do so well.”

In fact, third-party sellers account for a majority of Amazon’s sales in all categories except books (26%), with the majority of the balance in sales represented by first-party sales of non-private brands (e.g., Amazon selling of nationally-branded goods). As a side point, the fact that third-party sellers account for over 50% of retail sales on Amazon’s platform serves in and of itself as a challenge to Khan’s (2017, p. 710) claim that “…Amazon has marched toward monopoly…”

Many established retailers have much larger PL programs than Amazon. In the supermarket industry, Albertson’s own brand portfolio, with 12,000 items spanning 500 categories, is currently valued at $14 billion and represents 25% of sales. Kroger’s PLs grew 13.4% in 2021 to $21.6 billion, accounting for 21.3% of sales. By the end of 2021, four of Kroger’s PL brands had each exceeded $1 billion in annual sales. In total, Kroger sells more than 10,000 PL products. Costco’s Kirkland products accounted for 32% of total 2020 sales, with growth reflecting, in part, expansion outside of CPG into categories like putters, motor oil, copper exposed cookware and apparel. In 2021, Kirkland generated $58 Billion in sales (30% of Costco’s sales). Trader Joe’s also sells thousands of PLs that accounted for 59.4% of its 2022 sales, and Walmart and Target have also been expanding their PL portfolios. As mentioned earlier, the PL shares at Aldi and Lidl are 77% (Souza 2022) and 65% (Kumar and Steenkamp 2007), respectively. A recent report found that 84% of Walmart shoppers purchase its PLs, higher than at Kroger or Costco. Target’s PL campaign grew 8% in 2021, generating $30 billion in sales, rivaling the size of some Fortune 100 companies and accounting for 28% of sales. Walmart sells over 29,000 PL products, representing about one third of total sales at approximately $186 billion. 18 of Walmart’s PL brands generate over

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35 Matioli (2022).
36 Amazon’s total revenues (including Cloud Computing) were $469.8 billion (Matiollio 2022).
37 Matioli (2022).
38 Matioli (2022).
40 Albertsons is growing its PL program rapidly, launching 650 new Own Brand items in 2020, with plans to launch 800 more over next few years (Strailey 2021).
41 Hurtig (2021).
42 According to Kroger’s website, https://www.kroger.com/b/ourbrands, accessed on May 31, 2022. Once again, it’s unclear whether Kroger is referring to unique UPCs or barcodes as opposed to broader lines of a given item, such as different pack sizes of the same item.
43 Costco (2020, p. 3).
44 Davidkhanian (2022).
48 Kohan (2022).
49 Target maintains dozens of own brands (e.g., Cat & Jack, All in Motion), 10 of which generate over $1 billion in annual sales and 4 of which generate over $2 billion in annual sales. In 2021, Target’s PLs represented $30 Billion of its $106 Billion in sales.
50 Georgiev Inside Scoop on Walmart.
51 Brumley (2021).
52 Walmart generated $559 billion in sales in 2021 (Walmart 2021).
$1 billion annually each, with its Great Value brand alone generating over $27 billion.53 In the drugstore space, CVS currently carries 7,000 PLs, representing nearly a quarter of its sales and with a combined value of $5 billion.54 At CVS, PLs were the largest selling products in 14 out of 18 categories and account for about 25% of 2021 sales.55

Outside of CPG, Bed Bath & Beyond launched a home décor PL, Studio 3B in 2021 and hopes to get its PL share of sales up to 30% by 2024,56 especially through the launch of 10 new PLs over the next 3 years.57 Macy’s PLs now account for 15 to 20% of sales and are projected to grow to 25% in 2022.58 “J.C. Penney (JCP) has long generated about half of its revenue from its own in-house brands, which range from Liz Claiborne to St. John’s Bay to Arizona jeans, among many others.”59 By 2007, Staples, Office Deport and Office Max’s PL sales shares “reached record levels of roughly 20% or more.”60

In summary, with 3,000 PL products,61 total sales of $5 billion and a PL share below 1%, it is difficult to understand Khan’s (2017, p.782) characterization of Amazon’s PL program as a “juggernaut.”62 Its PL Program is an order of magnitude smaller than that of other leading retail chains (e.g., versus $186 billion at Walmart, $58 billion at Costco, $30 billion at Target, $22 billion at Kroger and $14 billion at Albertsons).

Retailers frequently give their PLs preferential treatment in marketing and promotion

Given the growing strategic importance of store brands to increase loyalty and margins, it’s perhaps unsurprising that traditional retailers’ store brands routinely benefit from lower prices, preferential marketing and prominent shelf space. Marketing of PLs plays a critical role in their success.

Since the perceived risks from making a purchase error can reduce consumer interest in PLs (Batra and Sinha 2000), retailers typically position their PLs aggressively against NBs. Academic research also recommends such marketing and positioning of PLs close to the NBs against which they compete.63 “Stocking private label brands next to name brands increases sales. In 2018, sales of private label nonalcohol drinks, for example, rose 4.9%, faster than national brands did.”64 In a recent study 11.7% of over 1,100 pioneering new national brand products in the Netherlands between 2005 and 2009 faced a PL copycat in at least one of the seven largest grocery retail chains (ter Braak and Deleersnyder 2018).

Retailers selling copycat brands rely heavily on price promotions and comparative messaging

54 Horwitz (2022).
55 Davidkhanian (2022).
56 Brumley (2021).
57 Davidkhanian (2022).
58 Moin (2022).
59 Wahba (2014).
60 CSA (2007).
61 The exact comparison of product counts is potentially confounded by the fact that none of the sources above provides a precise definition of a “product.” For instance, a product could be defined granularly as a unique UPC or barcode. Alternatively, a product could be defined more coarsely as a line of similar items sold in different package sizes.
62 Khan is unclear in her definition of a product and whether this denotes a unique UPC or barcode, or a line of similar products, such as different pack sizes of the same item.
64 Lempert (2020).
(sometimes right on the label itself) to self-preference. Walgreens sells its copycat brands at much lower prices, using side-by-side shelf displays (the “compare and save” offers). They also use electronic in-store displays, electronic displays showing the “deal of the week,” in-store shelf talkers and heavy promotion via circulars. Similarly, “Walmart’s white labeled products are focused on keeping “value- oriented customers” shopping at its stores.” Exhibit 4 illustrates how Walgreens uses a similar approach on its digital platform for its copycat aspirin. The link for Bayer aspirin juxtaposes Walgreen’s PL aspirin product which uses the same packaging and font colors while promoting a much lower price. CVS uses a similar preferential treatment for its PL analgesics on its digital platform (e.g., see Bronnenberg et al 2015, p. 1669).

Pending and existing regulations of digital platforms specifically restrict “self-preferencing.” However, standard marketing textbooks point out that self-preferencing of PLs is both recommended and standard practice for established retailers (Kumar and Steenkamp 2007). Retailers may benefit from self-preferencing through the higher margins associated with PLs and/or the ability to generate store loyalty through the exclusivity of their PLs. As we explain below, consumers also benefit from such self-preferencing when the PLs create incremental value, such as lower search costs and lower prices. In describing PL success factors, Kotler and Keller (2016, p. 542) note: “[Retailers] typically give more prominent display to their own brands and make sure they are well stocked.” The Chicago-area supermarket chain Mariano’s routinely offers free samples of its PL products at the entrance to the stores (Bronnenberg et al 2020). Exhibit 5 shows an end-cap display for PL batteries at Wegmans, a New York state chain, intended to catch a consumer’s attention before she enters the battery aisle in the store. Coincidentally, batteries are frequently cited as an example of a product for which Amazon might hypothetically prefer its PL over competing products on the site.

Retailing consultants also recommend preferential treatment of PLs on retailers’ websites. These strategies include digital promotions of PLs and prominent placement on homepages to push digital sales. A recent study finds that 20% of digital retailers promote their PLs directly on their homepage (tantamount to promoting them at the digital analog of the front door of the store).

On established retailers’ websites, PLs often surface near the top of search results. Exhibit 6 shows the results for the query “aspirin” at CVS.com. The first two results are for CVS’ PL aspirin products. Bayer, the leading national brand, appears in position 3, ostensibly due to its paid sponsorship, and without an image of its trade dress. This favorable positioning is not exclusive to the pharmacy setting. Exhibit 7 shows the results for the query “sprinkles” at Walmart.com. Walmart’s Great Value PL products appear in the first two positions, with the national brand Wilton appearing only in position three.

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65 Guthrie and Weissman (2019).
66 Dubé et al (2019) conducted blind taste tests of Mariano’s PLs and NBs at such free sample booths.
67 See for instance Baer (2022).
69 Moran (2021).
Some large retailers are even investing in national advertising for their PLs (e.g., Walgreens) and engaging in in-store merchandising (e.g., Loblaws). Retailers like Krogers use advertising tactics similar to those used for NBs, such as loyalty card consumers coupons and special deals on PLs. Safeway uses “in-store merchandising and its use of all its assets from stores to its weekly ad circulars to its Web site for promoting private-label sales.” Similarly, “The private labels from Target are starting to mirror some of what you see from a direct-to-consumer brand.”

PLs that use the retailer brand name (e.g., Gap, Banana Republic) re-orient customer loyalty to the retailer instead of the NBs. “Private brands which meet or exceed the quality of nationally branded products build consumers' confidence, and provide other cues which signal intangible qualities consumers may attribute to the store.” According to McKinsey: “Many retailers that exclusively or primarily carry private-label products have built fierce customer loyalty by becoming trendsetters, with their private labels providing a “halo” to their retail banner.”

At the higher end, retailers are increasingly creating distinct PL products. According to a recent eMarketer survey, 33% of switchers to a PL did so in response to packaging/display and 26% did not realize it was a PL at first.

In summary, many established retailers use considerably more aggressive marketing of their PLs than Amazon, including imitation of the trade dress of leading NB competitors and self-preferencing both online and in their physical stores.

Use of Data Analytics in Private Label

Khan (2017) alleges that a key distinction between Amazon’s PL programs and those of established chains is the access and alleged use of data. However, established retail chains have been using granular consumer-level data and analytics for decades, long before the launch of Amazon or its subsequent PL programs. In determining which PL products to launch and how to position & price them, retailers (both online and offline) have historically relied on detailed consumer purchase data to track shopping trends in demand and tastes for specific product characteristics. As we indicate below, many large retail chains rely heavily on detailed, internal and external consumer-level data to build and manage their PL programs. Recently, established retailers have begun to use granular, consumer-level data formats that would be difficult for an online seller like Amazon to collect and use.

a) Retail Analytics are Ubiquitous including for Bricks & Mortar Stores

Retailers have been using data analytics to enhance customer loyalty to their stores since at least since the early 1980s with the advent of Catalina’s point-of-sale scanner technology and ability to target coupons based on the items in a basket. By the 1990s, retailers developed targeting

71 Cook (2010).
73 Weissman (2019).
74 Harvey, Rothe and Lucas (1998).
75 Begley and McOuat (2020).
76 Davidkhanian (2022).
capabilities through loyalty card programs to collect individual consumer transaction histories, a concept pioneered by the partnership between UK retail giant, Tesco and Dunnhumby.

“Industry reports have proclaimed that retailing is “one of the hottest markets for big data analytics” (Ingram Micro, 2018), that “big data is especially promising and differentiating for retailers” (IBM Analytics, 2018), or that big data will be “a complete game changer in the retail sector” (Forbes, 2015). A 2011 McKinsey report put forward that big data have the potential to increase retailers’ operating margins with up to 60%, and cause a sector-wide annual productivity gain of up to 1% in the next five years (McKinsey, 2011).”

A recent McKinsey report views the application of machine-learning and big data analytics “to crunch the vast quantities of customer data that retailers already accumulate” as a key element of modern bricks-and-mortar retailing strategy.

Retailers that operate physical stores have already developed numerous innovative ways to collect valuable consumer data to generate insights into their PL programs. By 2005, Walmart required its top 100 suppliers to attach RFID tags on their shipments to assist with reordering, stocking, tracking purchases and in-store movement of packs from the shelves to the checkout counter. In Germany, Metro Group rolled out and tracked RFID tags on products across its 180 Metro Cash & Carry and Real stores (Kraftt and Mantrala 2009). However, in-store data evolved quickly during the early 2000s:

“The source and quality of data has changed. Grocers are relying on their own proprietary research to decide how and where and at what price to place products—their own brands as well as those from CPG. Kroger and Walmart are using increasingly sophisticated software to decide where to place items and which products to shelf next to one another—factors that can move sales up or down several percentage points. The software—which can incorporate video surveillance of shoppers and how they react to displays and the time they take in selecting, or not, a product and was widely exhibited at the National Retail Federation in January—helps them create much more sophisticated plan-o-grams.”

During the early 2000s, companies like ShopperTrak enabled “video mining” capabilities to “analyze video images without relying on human eyes” where “nearly all of its videotaping is done without the knowledge of the people being taped.” Such data allow retailers to monitor total traffic and conversion in their physical stores, while also identifying traits such as “adult shopper” and tracking browsing behavior. ShopperTrak included such clients as Gap, Banana Republic, Limited Brands, Victoria’s Secret, Payless Shoes, American Eagle Outfitters and Children’s Place. In fact,

“Some research companies’ cameras, with lenses as small as a quarter, can provide data on everything from the density of shopping traffic in an aisle to the reactions of a shopper gazing at the latest plasma TV set... cameras can be found in banks, fast-food outlets and hotel lobbies...”
CPG companies like P&G use in-store video data on consumer movements and expressions to better package and position its brands. At an annual conference in 2010, the President and CEO of Hershey described how it used video mining to create heat maps to determine the optimal locations for candy aisles and promotions in convenience stores. Experts in 2004 indicated that retailers had the capabilities at the time to match a photo with a consumer’s identity at the checkout counter with their transaction information using loyalty cards and store credit cards. Even today, large digital retailers like Amazon do not have access to such granular information regarding a consumer’s physical appearance and/or facial expressions during the browsing of a website.

In fact, more recently, in-store video has been matched with point-of-sale transaction records to determine the impact of in-store marketing on individual consumer browsing and purchase behavior (e.g., Jain et al 2020). Similarly, individual consumer transactions can be matched with their physical, in-store browsing paths using RFID tags to learn about in-store behavior (e.g., Hui et al. 2009, Seiler and Pinna 2017). In short, video and other in-store data are being used to manage the plan-o-gram and impact overall in-store consumer shopping behavior in general, often using data formats and marketing interventions that simply aren’t available to a purely online retailer. In addition, these in-store insights are used to position PLs both in terms of their price and attributes (compared to other products on the shelf) and in terms of their physical placement on the shelf itself.

b) Retail Analytics for PL are also Ubiquitous

By 2007, the VP of marketing of Marsh Supermarkets claimed they had “increased penetration of private-label and Center Store categories” by remodeling 80% their physical stores using in-store path-tracking capabilities and quadrant analysis implemented by TNS Sorensen.

Today, the use of customer data and analytics to manage retailer PL programs has become ubiquitous amongst traditional brick-and-mortar chains across western economies:

“Retailers are grounding their private label strategies in deep shopper insight and powerful data mining, including loyalty card analysis... Through analysis of loyalty card and POS scan data, these retailers have refined their assortments, pricing, and consumer targeting efforts with significant success. Today, both Kroger and Tesco offer multi-tiered private label products, managed as part of a comprehensive portfolio.”

A recent eMarketer study recommends capitalizing on “Consumer Insights and Data Analytics” as one of the key approaches for retailers to succeed with PLs. Indeed, analytic capabilities are widely recognized as the heart of Tesco’s PL success:

“Analysts say that Tesco’s big advantage over major international rivals, which also include Germany’s Aldi and Lidl, is its unrivaled ability to manage vast reams of data and translate that knowledge into sales. While data crunching may sound dull, it has given Tesco two major advantages: an unmatched ability to operate multiple retail formats ranging in size from

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84 Gogoi (2005).
85 The Hershey Company (2010).
86 Pereira (2004).
87 The plan-o-gram refers to the physical layout of the shelves and the manner that products and labeling information on a shelf are viewed by a consumer browsing a given aisle
88 Karolefski (2007).
89 Houlihan Lokey (2017). For more discussion of Tesco’s use of consumer data to manage private labels, see also Tesco (2008).
90 Davidkhanian (2022).
convenience stores to hypermarkets and the market knowledge to offer what many analysts say is the best and **broadest range of house brands from any retailer**.91 [emphasis added]

In the U.S., Albertson’s identifies its decentralized operating structure and data analytics capabilities as central to the success of its PL programs, which generated $10.9 billion in sales in 2016.92

In particular, retailers use customer shopping data to determine the categories in which to launch PLs:

“*When determining whether or not to enter a category, retailers need to take three consumer-focused factors into mind. First, they must identify their core shoppers — those who visit and spend the most — and understand what motivates them to make a purchase in a given category. Shopper loyalty programs are particularly useful in helping retailers understand what’s in patrons’ carts.*”93 [underline added]

Jim Lucas, Director Global Insights & Strategy, SGK

In the U.K., Marks & Spencer used computer software and consumer-driven predictive analytics to test tens of thousands of products, spanning over 50 departments.94

Safeway has also established PL brand management teams that “…increasingly focus on consumers and consumer analytics in developing new lines and new products,” relying in particular on “…data and insight from proprietary data systems to get granular information on what’s working.”95 More recently, Albertson’s and Rite Aid are relying on data analytics to integrate their PL offerings in one-another’s stores.96 Aeroplan, Canada’s largest loyalty card program has partnered with Dunnhumby since 2010 to use “…loyalty card data to make sure they have the right assortments.”97 At least since 2006, Kroger’s partnership with Dunnhumby has allowed it to use loyalty card data for various purposes, including the determination of successful new PL launches including “Private Selection specialty meats and cheeses to Big K Diet Cola.” Kroger’s PL program already generated 24% of sales in 2006.98

According to Bain, consumer transaction data can also be used by retailers to position the PL against NB competitors:

“*…a retailer used perceptual mapping of hygiene products, based on actual purchase behaviors, to identify which product features mattered most to consumers. It learned that shoppers differentiated strongly between branded and private label products for small packs, but not for large packs. With this insight, the retailer developed distinct buying strategies for different products and pack sizes.*”99

As this example highlights, data-based management of PLs also benefits the consumer by offering...

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94 Berthiaume (2020).
95 Dairy Foods (2012).
96 Redman (2018).
97 Grocery Headquarters Staff (2011).
them a better match in terms of product features. Apparel retailer H&M is “using algorithms to analyze store receipts, returns and loyalty-card data” to manage its product mix and reduce markdowns.\(^{100}\)

A successful PL data analytics strategy can also create feedback loops whereby the loyalty data inform the launch of PLs and the PL shopping data inform the retailer about emerging consumer trends. For instance, Kroger views its PL shopping data as essential “to keep its finger on the consumer’s pulse and adapt their product offerings for various locales as needed. This can really only be done with private label.”\(^{101}\)

Contrary to Khan’s (2017) allegations, as discussed above, there does not appear to be anything unique or exceptional about the data used by Amazon to manage its PLs. Perhaps an exception is access to search queries; although, as described above, physical retailers use software and in-store video to track consumer browsing behavior.

How do retailers source private label brands?

One of the key concerns with Amazon’s PL program stems from the vertically integrated nature of the platform. However, many established retail chains have considerably more vertically integrated supply chains for their PLs. While most retailers do not own and operate or have ownership stakes in manufacturing facilities for PLs, an increasing number of large chains are now by-passing small suppliers entirely with a fully vertically-integrated channel from sourcing to manufacturing to store shelf.

Often, retailers develop the design and specifications for their PL and then contract with manufacturers to produce them. In other cases, they work with NB manufacturers for special version of standard products that is exclusive to store. In some instances, the exclusive brand is manufactured by a third party, but the retailer develops its own brand identity for the product. For instance, Macy’s products under the “American Rag” apparel label are often hard to distinguish from leading national brands like Levi’s. Similarly, in OTC drugs:

“The Manufacturer produces the dietary supplement and the regional chain designs and packages the product under its own in-house brand. It’s quite common for a private label product to appear on the shelf next to the manufacturer’s national brand, but the private label is usually sold at a lower price.”\(^{102}\)

Examples abound. Costco’s Kirkland brand is sourced through many NB partnerships:

- Kirkland Signature Dog Food = Diamond Pet Foods
- Kirkland’s Signature House Blend Medium Roast, Espresso Blend Dark Roast and Decaf House Blend Medium Roast = Starbucks
- Kirkland Signature Batteries = Duracell
- Kirkland albacore tuna = Bumble Bee
- Kirkland Signature Diapers = Huggies (by Kimberly-Clark)

\(^{100}\) Alaimo (2018).
\(^{101}\) Canning (2010).
• Kirkland Signature mattress = Stearns & Foster.\textsuperscript{103}

However, we are seeing an emerging trend with many large retailers manufacturing their own PLs. According to Safeway’s 2010 Annual Report, the chain maintains the manufacturing capabilities to produce 14\% of its PLs.\textsuperscript{104} One internal Safeway CPG expert explained: “Being completely vertically integrated in some of the categories certainly allows us better control over costs, as well as in some instances allowing us to respond faster to trends in the marketplace,” using its quick launch of internally manufactured Lucerne Greek yogurt as an example.\textsuperscript{105} Kroger owns 33 manufacturing plants to produce PLs.\textsuperscript{106} In 2022, Kroger’s website indicates that it manufacturers about 40\% of its PLs in its own plants, representing 26\% of sales.\textsuperscript{107} Costco also moved into vertical integration, deploying its own chicken complex in Nebraska.\textsuperscript{108}

Singling-Out Amazon’s PL practices sets a double-standard

Competition authorities in the U.S. and Europe have repeatedly singled out Amazon’s PL practices as potentially anticompetitive and in need of regulatory oversight. Size appears to be the only criterion for singling out Amazon from other global retailers with PL programs, in spite of the fact that Amazon’s PL program is considerably smaller than those of other established retailers.

Interestingly, the U.K., a country with one of the largest PL shares in the world, reached a different conclusion about competition concerns. The UK Competition Commission established that one source of evidence for a grocery retailer to possess a decisive advantage in competing with branded manufacturers would be “a trend towards an increasing share of sales for own-label products.”\textsuperscript{109} Based on growth in the UK PL share, they concluded that “Research suggests that the advantages that grocery retailers have in selling own label products are not sufficient to ensure growth at the expense of branded products.”\textsuperscript{110} PL shares in the UK are considerably larger than those in the US and Amazon’s PL share is an order of magnitude smaller than the US average. It follows that Amazon’s relatively small PL program would not meet the minimum growth standards established by the UK Competition Commission to constitute an unfair advantage over established brands.

The UK Competition Commission described the competitive concerns of standard PL practices by established retain chains as follows:

> “Two concerns were raised in this investigation regarding competition issues in the groceries supply chain that might arise from the sale of own-label products by grocery retailers. These relate to: grocery retailers’ position as customers and competitors of brand manufacturers; and the use of copycat packaging for own-label goods.”\textsuperscript{111}

However, they “…concluded that any sustained negative effect on competition is unlikely to result from copycat packaging”\textsuperscript{112} and “…that the sale of own-label products by grocery retailers

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{103} Louis (2021).
\item \textsuperscript{104} Dairy Foods (2012).
\item \textsuperscript{105} Dairy Foods (2012).
\item \textsuperscript{106} Kroger a (2022).
\item \textsuperscript{107} Lempert (2020).
\item \textsuperscript{108} Kroger b (2022).
\item \textsuperscript{109} Costco (2020, p. 3).
\item \textsuperscript{109} UK Competition Commission (2007, paragraph 9.74).
\item \textsuperscript{110} UK Competition Commission (2007, paragraph 9.75).
\item \textsuperscript{111} UK Competition Commission (2007, paragraph 9.71).
\item \textsuperscript{112} UK Competition Commission (2007, paragraph 9.79).
\end{itemize}
\end{footnotesize}
does not give rise to an [adverse effect on competition.]”

As discussed above, Amazon’s PL practices amount to textbook “retailing.” Established retail chains routinely collect and use granular data tracking third-party NB sales and consumer-level transactions and in-store behavior. Established chains also frequently position their PLs next to leading NBs, sometimes copycatting them physically, and often granting them premium shelf space and promotional support both online and offline.

Therefore, singling out Amazon’s practices would set a double-standard. This double-standard is particularly striking given that the analogous PL practices were deemed unlikely to affect competition adversely for established retailers with much larger PL programs. At least in the U.S., this would suggest that Amazon’s PL program “has not resulted in and would not result in material harm to competition.”

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114 AICOA, Sec.3 “Unlawful Conduct”, part (b)(2)(A).
Curbing the development of PL programs would most likely harm consumers.

"The Consumer is the winner."^{1415}

As traditional retailers continue to expand their database marketing capabilities to launch broader and better PL programs, the consumer ultimately benefits. In particular, (1) PLs offer consumers better value for their money; (2) PLs reduce search costs; and (3) PLs offer consumers new product varieties in such emerging categories as plant-based foods. Since the best-response of manufacturers is to launch more innovative products and to increase quality continuously, consumers also get access to higher quality.^{116} PLs are especially valuable in categories that lack NBs, such as Whole Foods’ successful PLs in organic food categories. During this current regime of high inflation, removing PLs would force many consumers to pay higher prices as they substitute to NBs, often without obtaining any incremental consumption value.

In fact, emerging consumer segments seem to care less about branded goods, with one study finding 30% of U.S. consumers self-report caring less about brand names. In the U.S., PL growth is most pronounced amongst Millennial shoppers.^{118} Millennials are markedly less loyal to CPG national brands than older consumer generations, in part due to growing up in an era with considerably more availability of better value-for-money alternatives (Bronnenberg et al 2022). Thus, restricting PLs would likely harm this segment which clearly derives low value from the intangible images associated with established brands sold at a price premium.

More broadly, consumers are increasingly purchasing PLs for value, not simply to save money. A 2016 Nielsen study found that 70% of U.S. households believe that PLs are good alternatives to national brands.^{119} An IRI study finds that PLs also create value by helping consumers save time in categories with vast selections of products.^{120} A more recent study finds that 90% of U.S. adults who switched to a PL did so due to “quality for price.”^{121} Finally, U.S. consumers save over $40 billion annually by choosing PLs over national brands;^{122}

"Private labels work best for products with decent turnover and excessive margins…Remember when HDMI cables sold for $30 a decade ago. Now, you can find them for $7."^{123}

Most important, the escalation in PLs create consumer value by reducing search costs and improving the overall shopping experience. In this regard, self-preferencing steers consumers to a more convenient and lower search-cost experience. For instance, a recent survey found that over 70% of global respondents prefer having PLs and NBs positioned next to one-another on shelves to facilitate price comparisons (Chattopadhyay 2018). Given the large amounts of variety supplied in a typical supermarket, department store or online retail website, consumers may feel overwhelmed

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115 Kumar and Steenkamp (2007), page 216.
116 Consumer Reports conducted 21 blind taste tests between PLs and NBs, and the NB won in only 7 of the trials. Consumer Reports concluded that consumers could cut their costs by as much as half by switching to a store brand. A 2021 survey finds that 80% of U.S. consumers (and 4 other countries) found PLs to be of similar quality or higher than NBs (see also Dubé et al 2019).
117 Davidkhanian (2022).
118 IRI (2017).
119 Nielsen (2016).
120 Driggs (2019).
121 Davidkhanian (2022).
122 PLMA (2022).
123 Hough (2019).
with choice. The process of *searching* (browsing, researching and deliberating) can be time-consuming and unpleasant, especially if the consumer is still stuck making purchase decisions under uncertainty about product quality and match value. Brands are well known to create value by reducing search costs. A strong reputation and easy-to-recognize brand elements and trade dress can facilitate consumer choices. Further, branding can help facilitate recall and more efficient purchase decisions through the associations a consumer assigns to a brand and its brand elements in memory (see Bronnenberg, Dubé and Moorthy 2019). In the case of PLs, most retailers establish a PL brand reputation through consistent and successful application of the brand across categories. A PL program with a reputation for “value” can improve the consumer’s shopping experience across categories, promoting retailer loyalty. For these reasons, consumers inherently benefit when retailers engage in self-preferencing to promote their PLs.

“The advantage to the producer of private label goods is the opportunity to increase production without glutting the market with his trademarked commodity; the advantage to the alert consumer is a premium product at a thrifty price; and the advantage to the society is variety without wasted resources.” Editors (1968, p. 533)
Bibliography


Appendix: the Nielsen-Kilts Data

We use the Nielsen Homescan Panel for 2004-2020 to measure household spending on national brands and private labels and to compute the private label market share. Homescan includes about 169,000 unique households, of which we observe about 39,000 in each year for 2004-2006 and about 61,000 in each year for 2007-2016. Nielsen instructs households to use an optical scanner in their homes to scan the barcodes of each of the UPC-coded consumer packaged goods items that they purchase during trips to supermarkets, convenience stores, mass merchandisers, club stores and drug stores. Details on the stratified sampling methodology employed by Nielsen to promote representativeness of the Homescan panel can be found in Kilts Center for Marketing (2013). A key advantage of the Homescan panel data set is that it includes all US retailers including mass merchants such as Walmart who do not offer their data for syndication.

Following Dubé et al (2018), we drop all the products from the General Merchandise and Alcohol departments. We then apply the same filters to obtain our empirical sample. To compute total sales, we apply Nielsen’s projection factors to the household sample. We then define the private label share as the total share of CPG dollars spent on products designated as “CTL”, Nielsen’s code for store brands and private labels.

Electronic copy available at: https://ssrn.com/abstract=4205988
### Exhibit 1: Product Categories of Private Label Items that US Adults Purchased vs. Are Open to Purchasing (Davidkanian 2022)

<table>
<thead>
<tr>
<th>Category</th>
<th>Purchased*</th>
<th>Open to purchasing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pantry items (pasta, canned goods, snacks, etc.)</td>
<td>67.4%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Personal care (soap, shampoo, body cream, etc.)</td>
<td>54.2%</td>
<td>22.4%</td>
</tr>
<tr>
<td>Apparel (jeans, T-shirts, underwear, socks, etc.)</td>
<td>54.1%</td>
<td>24.9%</td>
</tr>
<tr>
<td>Household cleaning supplies</td>
<td>53.6%</td>
<td>24.7%</td>
</tr>
<tr>
<td>Over-the-counter medicine</td>
<td>51.8%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Meat and poultry</td>
<td>43.2%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Footwear (slippers, boots, running shoes, etc.)</td>
<td>34.3%</td>
<td>31.1%</td>
</tr>
<tr>
<td>Beauty products (makeup, face cream, fragrances, etc.)</td>
<td>33.4%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Pet food and supplies</td>
<td>31.0%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Electronics and accessories (TV, batteries, ear pods, etc.)</td>
<td>23.9%</td>
<td>31.7%</td>
</tr>
<tr>
<td>Accessories (handbags, backpacks, belts, wallets, etc.)</td>
<td>23.2%</td>
<td>35.3%</td>
</tr>
<tr>
<td>Home furnishings (bath towels, decorative pillows, duvets, etc.)</td>
<td>23.1%</td>
<td>45.7%</td>
</tr>
</tbody>
</table>

*Note: *“in the past 6 months

Source: Insider Intelligence, "Private Label Flash Survey" conducted by Bizrate Insights, March 1, 2022

Electronic copy available at: https://ssrn.com/abstract=4205988

<table>
<thead>
<tr>
<th>Category</th>
<th>% of Total Sales $</th>
<th>Private Brand % of First-Party</th>
<th>Non-Private Brand % of First-Party</th>
<th>% of Total Sales $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Electronics</td>
<td>43%</td>
<td>3%</td>
<td>97%</td>
<td>57%</td>
</tr>
<tr>
<td>Beauty</td>
<td>35%</td>
<td>&lt; 1%</td>
<td>&gt; 99%</td>
<td>65%</td>
</tr>
<tr>
<td>Home &amp; Kitchen</td>
<td>33%</td>
<td>4%</td>
<td>96%</td>
<td>67%</td>
</tr>
<tr>
<td>Softlines</td>
<td>28%</td>
<td>9%</td>
<td>91%</td>
<td>72%</td>
</tr>
<tr>
<td>Books</td>
<td>74%</td>
<td>&lt; 1%</td>
<td>&gt; 99%</td>
<td>26%</td>
</tr>
<tr>
<td>Consumables</td>
<td>41%</td>
<td>2%</td>
<td>98%</td>
<td>59%</td>
</tr>
<tr>
<td>Toys</td>
<td>42%</td>
<td>&lt; 1%</td>
<td>&gt; 99%</td>
<td>58%</td>
</tr>
</tbody>
</table>
Exhibit 5: End-cap display for private label batteries at Wegmans

122 Accessed at https://www.bing.com/images/search?view=detailV2&ccid=ngUc2FGt&cid=7A6155F078B1B7E040CB9D563C45CC A5AB810862&thid=OIP.ngUc2FGt87u8_II8s7Fj_AAAAAA&mediaurl=https%3a%2f%2fwww.fixtureseaseloscup.com%2fwf-content%2fuploads%2f2018%2f07%2fPrivate-Label-Battery-Family-Pack-Cashwrap-Display-Main.jpg%3fresize%3d440%252C587%26is-pending-load%3d1%23038%3bssl%3d1&cdnurl=https%3a%2f%2fth.bing.com%2fth%2fid%2fR.9e051cd851ad6fbbbcf897e3b163fe%3frik%3dYgiBq6XMRTxWnQ%26pid%3dImgRaw%26r%3d0&exph=587&expw=440&q=wegman%27s+priv

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ate+label+batteries&simid=608049597209735482&FORM=IRPRST&ck=319E23C7FC4B3AF3F36A899C1328B137&selectedIndex=14&ajaxhist=0&ajaxserp=0 on 7-13-2022.
Exhibit 6: Screen shot of search results for “aspirin” on cvs.com, accessed on June 17, 2022.
Exhibit 7: Screen shot of search results for “sprinkles” on Walmart.com, accessed on June 17, 2022.