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Lessons learned from the Kroger-Albertsons merger case

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ABSTRACT

By synthesizing the findings and supporting evidence from the Kroger-Albertsons merger case—the largest proposed supermarket merger in history—and the Court's preliminary injunction ruling, this paper offers insights into the key drivers of supermarket competition today (circa 2025). We identify and explain the drivers of supermarket competition today using the preliminary injunction ruling as a guide. Supermarket competition has been heavily influenced by information technology and the resulting increases in retailer capabilities and consumers' digital engagement, in addition to other brand and product factors, not all of which have been well studied. We also highlight changes in the drivers of supermarket competition from previous grocery retail studies, in particular changes that are not yet well documented in academic literature. The article concludes with proposed topics for future research in supermarket competition.

1. Introduction

On October 14, 2022, the Kroger Corporation filed notice with the Federal Trade Commission (FTC) of its intention to merge with the Albertsons Companies. In February 2024, the FTC, along with the attorneys general of Arizona, California, Washington, D.C., Illinois, Maryland, Nevada, New Mexico, Oregon and Wyoming, filed a lawsuit to block the merger. Separate litigations were also brought by the Washington and Colorado attorneys general. On December 10, 2024, U.S. District Judge Adrienne Nelson (who will be referred to as 'the Court') issued a ruling on the case and ordered a preliminary injunction to prevent the merger from proceeding, after which the parties abandoned the transaction. In this case, the Court relied on ordinary course-of-business documents and testimony from executives at Kroger and Albertsons, as well as testimony from an unusually broad array of retailers across several different retail formats. The case therefore offers a unique, up-to-date snapshot of the supermarket industry and insights into the drivers of contemporary supermarket competition.

This paper synthesizes the findings and supporting evidence from the merger case—the largest proposed supermarket merger in history—and the Court's preliminary injunction ruling to provide insights into the key drivers of supermarket competition today (circa 2025). To that end, we draw on the expert witness experience of Edward Fox, who was engaged in this matter by the FTC as an expert

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¹ Testimony was solicited from leaders at traditional supermarket retailers (Kroger, Albertsons, Stater Brothers, Ahold, and Raley's Supermarkets), supercenters (Walmart), club stores (Costco, Sam's Club, and BJ's Wholesale Club), natural and organic stores (Whole Foods, Sprouts, Natural Grocers), limited assortment stores (Trader Joes, Aldi, and Lidl), dollar stores (Dollar Tree, Dollar General) and grocery wholesalers (C&S Wholesale Grocers, SpartanNash) (Complaint Counsel's Pretrial Brief 2024).

"in retail operations and consumer shopping behavior" (Opinion & Order 2024), and the team that supported him. Our objective is to interpret and explain evidence cited by the Court about the challenges that C&S Wholesale Grocers (hereafter 'C&S' for ease of exposition) would have faced as the divestiture buyer, enabling us to identify and explain the drivers of contemporary supermarket competition. The competitive drivers go beyond pricing; we also consider non-price drivers of supermarket competition in our assessment of the challenges C&S would have faced to build a national retailer. Importantly, we do not take a position on how the divestiture would have affected supermarket competition, nor on whether the divestiture was sufficient to mitigate the anticompetitive effects of the merger. As a legal requirement, we are bound by confidentiality, including specific topics covered in multiple Court rulings. Moreover, though the trial was public, transcripts from the trial have not yet been released and so cannot be cited directly. We will therefore cite other public evidence, including press reporting on the trial, to document our discussion.

This paper contributes to the academic literature on supermarket retailing by exploring the learnings from the evidence put forth in the largest proposed supermarket merger in U.S. history. In the context of this merger, we reconsider the key drivers of supermarket competition and explain how they have changed with: (1) the continued growth of grocery sales in Walmart supercenters and other large-format retailers; (2) integrated information technology and shoppers' use of digital devices enabling e-commerce (and fulfillment options like delivery, curbside, and buy-online-pick-up-in-store), feature advertising online for website visitors, and personalized promotions delivered by email, text, and app; and (3) the increasing importance of private label brands to retailer revenues and shoppers' store choices.

The paper includes a summary of the Court's ruling on the preliminary injunction that prevented the merger from proceeding. That summary begins with the antitrust economic analyses and touches on other relevant analyses, then pivots to the proposed divestiture of 579 current Kroger and Albertsons stores to C&S, which would have created a new national supermarket retailer. The divestiture was intended to replace the competition lost in the merger of the two largest U.S. supermarket retailers, but the Court found that the challenges C&S would have faced in forming a large-scale supermarket retailer virtually from scratch made it unlikely that C&S could have replaced the lost competition.

Fox's expert reports and testimony identified and developed evidence of the challenges cited in the Court's ruling by comparing C&S's capabilities and supporting assets to those required by large-scale supermarket retailers to compete effectively. The paper discusses in detail these necessary capabilities and assets, which we refer to as 'drivers of supermarket competition,' and then examines them from an academic viewpoint. The result is a series of lessons learned about present-day supermarket competition, circa 2025, including:

- Widespread adoption of e-commerce among supermarket retailers has made their prices visible to both shoppers and competitors, resulting in both direct and indirect effects on supermarket pricing and other aspects of supermarket competition.
- As consumers engage with supermarkets using digital devices, the marketing of supermarket discounts and promotions has
 expanded from local newspapers to retailer websites, while shopper loyalty program data has enabled personalized ads and promotions to be delivered digitally via email, text, and app.
- Retail media networks represent a compelling new source of incremental revenue and profits for supermarket retailers. Retail
 media networks are particularly potent in combination with shopper loyalty programs, which together enable the measurement of
 advertising and promotional effectiveness.
- Supermarket retailers rely on their suppliers to fund retail promotions and now to fund retail media networks. The sources of
 funding within supplier organizations (trade vs. brand funds) are unclear but will likely determine whether or not retail media
 network funding is incremental.
- The Court found that retailers' brands (i.e., banners) and their private label programs are fundamental to supermarket customer
 retention. This finding raises macro-level questions about supermarket retailers' growth by acquisition and micro-level questions
 about how retail banners and private labels affect consumers' expectations of the shopping experience and, as a result, their
 shopping behavior.

The paper will proceed as follows. In Section 2, we explain the Court's ruling in the Kroger-Albertsons merger case, highlighting the economic antitrust analyses and other analyses addressed in the ruling. In Section 3, we identify and discuss in detail the challenges posed by the divesture, specifically to the divesture buyer C&S's ability to replace the competition that would have been lost due to the merger. This section is split into two subsections; first covering the technology-enabled drivers of supermarket competition, then covering brands and products as drivers of supermarket competition. In Section 4, we discuss the implications of our findings and propose several questions and topics for future research.

2. Overview of the Court's preliminary injunction ruling

On August 26, 2024, the Court began a 15-day hearing on the FTC's motion for a preliminary injunction to block the Kroger-Albertsons merger. Three and a half months later, on December 10, 2024, Judge Nelson granted the motion, having found that the

² He and the other authors of this paper worked on the preparation of Fox's reports and testimony. As all authors were engaged in preparation of the reports and testimony, our exposition will refer to the authors collectively as 'we' and 'us.' In the main, we will refer to the Court's opinion for the arguments underlying the ruling. To the extent that those arguments explicitly cite Fox or mirror our arguments, we will explain the context and supporting evidence.

FTC was likely to succeed on the merits of its arguments that the merger would substantially lessen competition and result in harm to consumers.³ On December 11, 2024, the day after the ruling, Albertsons terminated the merger agreement with Kroger.

In reaching its conclusion, the Court made determinations on three primary antitrust issues. First, the Court defined the relevant antitrust market. This market definition determines the set of competing firms and geographies that should be analyzed for potential antitrust concerns. Second, the Court ruled on competitive effects. This ruling represents the Court's assessment of whether the merger would, on its face, result in substantially lessened competition in the relevant markets. Third, the Court considered and ruled on rebuttal evidence from Kroger and Albertsons about the potential mitigation of any anticompetitive effects from the merger. The rebuttal evidence provided by Kroger and Albertsons included the divestiture of stores and assets to C&S. This divestiture serves as our basis for identifying changes in the drivers to supermarket competition, discussed in Section 3.

2.1. Market definition

To determine the makeup of the relevant markets, the Court assessed supermarket competition on two different dimensions: the relevant product market and the relevant geographic market.

Relevant Product Market. The first dimension involved identifying the set of stores with which supermarkets compete, which in antitrust law represents the 'relevant product market.' The Court determined that the primary relevant product market consisted of traditional supermarkets and supercenters (such as Walmart and Target), termed the "Supermarkets" market. The Court also adopted a second, broader product market definition that included traditional supermarkets and supercenters as well as club stores (such as Costco and Sam's Club), natural food stores (such as Whole Foods and Sprouts Farmers Market), and limited assortment stores (such as Trader Joe's and Aldi). The Court termed this set of grocery retailers the "Large-Format Store" market, despite including a variety of large and small format stores. In this way, the Court chose both a more limited primary product market and a more broadly defined market to assess the sensitivity of the market concentration analysis to the market definition (Opinion & Order 2024). Although the Court's definition of the relevant product market for supermarkets did not break new ground, it did offer a broader assessment of the competitive market in which supermarkets operate than was provided in the recent Safeway-Albertsons merger case.

In its analysis of the relevant product market, the Court identified one-stop shopping as a key factor in consumers' supermarket store choice decisions, presumably attracting 'major' or 'stock-up' trips (Kollat & Willett, 1967; see also Hunneman, 2017). Evidence before the Court highlighted Kroger's and Albertsons' investments in one-stop shopping convenience, which the Court noted includes broad, fresh product assortments and ancillary services: "Kroger itself advertises one-stop shopping as an 'innovation' available at its stores...believ[ing] that its primary store format is successful 'because the stores are large enough to offer the specialty departments that customers desire for one-stop shopping, including natural food and organic sections, pharmacies, general merchandise, pet centers and high-quality perishables such as fresh seafood and organic produce.'" (Opinion & Order 2024). Albertsons, the ruling noted, similarly "shapes its offerings to attract the one-stop shopper." (Opinion & Order 2024). Notable among the ancillary products/services providing one-stop shopping convenience are pharmacies (which accounted for approximately 10 % of both Kroger and Albertsons revenues in 2023 (Albertsons, 2024; Kroger, 2024)) and store-adjacent fuel centers (which accounted for approximately 11 % of Kroger revenues and 6 % of Albertsons revenues in 2023).

Within the context of one-stop shopping, the Court recognized the role of Walmart's supercenters as direct competitors of traditional supermarkets, finding that "Supercenters...essentially contain traditional supermarkets within their footprints." (Opinion & Order 2024). There is longstanding evidence that Walmart supercenters have a substantial competitive impact on supermarkets (Basker, & Noel, 2009; Seenivasan & Debabrata, 2016; Singh et al., 2006). Further, Walmart currently commands a large share of U.S. grocery retail sales and dominant shares in many geographic markets (e.g., Aull et al., 2022; Inklebarger, 2024).

Relevant Geographic Market. The second dimension assessed by the Court in its relevant market determination was the geographic area within which stores compete. This determination, known as the 'relevant geographic market,' is a fundamental aspect of retail competition. It is closely related to trade or trading areas, which Huff defined as the "geographic delineation of the region containing the probable customers" (Huff, 1963 p. 81; see also Huff, 1964 for pioneering work on estimation of trading areas). The Court agreed with a determination of store-specific relevant geographic markets using loyalty data to calculate each Kroger and Albertsons store's "seventy-five percent 'catchment area,' representing the area around it that includes seventy-five percent of its sales." (Opinion & Order 2024). The average radii of the seventy-five percent catchment areas for Albertsons' and Kroger's stores in areas where they overlap were 5.6 miles and 4.6 miles, respectively (Complaint Counsel's Pretrial Brief, 2024). These empirical catchment area statistics are a useful supplement to prior academic research, which often relied on self-reported survey data (e.g., Liu, Han & Cohen, 2015).

³ In addition to a reduction in consumer markets, the FTC argued that the merger would reduce competition for unionized grocery store labor, harming workers' wages and benefits. The Court provided a brief analysis of the parties' arguments and determined that, while there was no prohibition against considering the labor theory of competitive harm, the evidence at the time of the decision was not strong enough to support the grant of a preliminary injunction (Opinion & Order 2024).

⁴ The relevant product market determination used so-called "Brown Shoe" indicia which come from Brown Shoe, 370 U.S. Relevant "Brown Shoe" indicia in this matter included "industry or public recognition of the submarket as a separate economic entity," "product's peculiar characteristics and uses," "distinct customers," and "distinct prices and sensitivity to price changes."

⁵ The expert defined the seventy-five percent catchment as a radial distance from the store, then doubled the radius to count competing stores. Doubling the radial distance allows the identification of competing stores that likely draw shoppers located within the seventy-five percent catchment area of the focal store of interest.

Further, the proliferation of loyalty programs like Kroger's and Albertsons' that allowed for the direct calculation of catchment areas in this case can also be used more generally to determine supermarket trading areas.

2.2. Competitive effects

Having identified both the geographic area from which each supermarket draws its customers and the stores within that area that meet the criteria for the competitive set, an FTC expert developed post-merger concentration forecasts for each store's geographic market to determine if the merger would substantially lessen competition. This analysis was performed using the Herfindahl-Hirschman Index (HHI). Store-level HHI forecasts were then compared with the most recent antitrust thresholds found in the Department of Justice and FTC 2023 Merger Guidelines. The 2023 Merger Guidelines presume a merger to substantially lessen competition in a market if the merger creates a market with an HHI of greater than 1800, and that represents an increase of 100 or more over the pre-merger HHI (Merger Guidelines, 2023). The expert determined that 1922 individual "Supermarkets" markets would become presumptively anticompetitive, and 1785 "Large Format Stores" markets would become presumptively anticompetitive (Opinion & Order, 2024). This finding demonstrated that the economic analysis was generally insensitive to whether the relevant market was defined more narrowly as "Supermarkets" (including supercenters) or more broadly as "Large Format Stores." The Court also found that Kroger and Albertsons competed directly with one another in relevant geographic markets, particularly on pricing and promotions, and also on other aspects of grocery retail including product quality, freshness, assortment, customer service, and convenience (Opinion & Order, 2024).

2.3. Rebuttal evidence

Kroger and Albertsons argued that three primary factors would mitigate or offset any harm to competition from the proposed merger.

Expansion of Other Competitors. First, they argued that any harm would be mitigated by the entry of new competitors, but the Court found it was unlikely that the entry of new competitors would be timely, likely, or sufficient to mitigate the merger's anti-competitive effects. This conclusion about the insufficiency of new entrants also appears to have included the expansion of retailers in the broader "Large Format Stores" market, which includes limited-assortment chains like Aldi and Lidl (Opinion & Order 2024).

Merger Efficiencies. Second, Kroger and Albertsons argued that a number of cost-saving efficiencies would be passed through to consumers as a result of the merger. Specifically, "[b]ased on their projected efficiencies, [they] tout their promise to make a \$1 billion 'price investment' should the merger go through." (Opinion & Order 2024). However, the Court found that a significant portion of the claimed efficiencies were neither merger-specific (i.e., the efficiencies could have been achieved without the merger occurring) nor verifiable (i.e., there is no guarantee that the efficiencies would have resulted from the merger), and that the promise to lower prices after the merger was speculative and unenforceable (Opinion & Order, 2024).

Divestiture. Third and most relevant for this paper, Kroger and Albertsons argued that the proposed divesture of assets to C&S would remedy any anticompetitive effects of the merger. The divestiture assets included 579 stores (485 Albertsons stores and 94 Kroger stores) in 18 states and Washington, D.C. (henceforth, the 'divestiture stores'), six distribution centers, ownership of four geographically-limited Kroger and Albertsons store banners and five Albertsons private label brands, and license agreements for other Kroger and Albertsons banners and private label brands. The Court ultimately found that the divestiture was unlikely to mitigate the merger's anticompetitive effects. In the following section, we will detail the evidence and frameworks on which that finding was based (Opinion & Order, 2024).

The proposed divestiture to C&S may have faced particular scrutiny from the Court because of the notable failure of the divestiture in the U.S.'s largest *completed* supermarket merger, the 2015 Albertsons-Safeway merger. In that case, Albertsons divested 146 stores in four western states to Haggen Food & Pharmacy, a smaller grocery chain that was operating 18 stores in Washington state at the time. Within a year of the divestiture, Haggen was forced to file for bankruptcy, and Albertsons re-acquired many of the divested stores along with the Haggen banner (which Albertsons still owns). This recent experience likely contributed to the Court's in-depth analysis of the divestiture in the Kroger-Albertsons case, the extent of which was described by then-FTC chair Lina Khan as "...one of the more rigorous assessments of a proposed divestiture in recent antitrust history." (Khan, 2025).

3. Supermarket competition and the challenges facing the divestiture buyer

Fox's testimony in this case was focused on the proposed divestiture, specifically on identifying "challenges C&S will need to overcome to compete effectively." (Plaintiff's Post-hearing Brief, 2024) At the divestiture stores, the current operator (Kroger or Albertsons) uses its capabilities and assets to offer the store's shopping experience, which in turn sets customer expectations. Replacing the competition lost due to the merger would have required that the divestiture stores, after transitioning to C&S's ownership and operation, meet their customers' expectations in order to attract and retain customers. To meet those customer expectations within a

⁶ The HHI is calculated for each relevant geographic market as the sum of the squares of the market shares of the firms that compete in the relevant product market.

⁷ For example, the Court found that increased vendor pricing knowledge and negotiating power was not verifiable because "defendants must negotiate those prices with vendors and have not and cannot do so until after the merger is consummated." (Opinion & Order 2024).

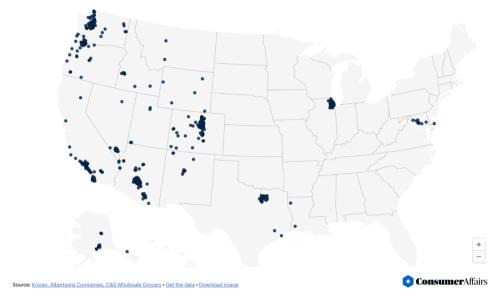


Fig. 1. Locations of the 579 Divestiture Stores (Guthrie, 2024).

reasonable time frame following the merger, C&S would have had to either possess, receive, or rapidly develop the capabilities and assets needed to offer a similarly attractive shopping experience. Thus, the capabilities and assets that enable Kroger and Albertsons to offer a shopping experience that meets divestiture store customers' expectations (implied by customers' revealed preferences) served as benchmarks for the divestiture buyer.

The challenges C&S faced were substantial in scale and scope, as the divestiture would have expanded C&S's regional retail footprint from the direct operation of 23 stores in three states to over 600 stores in 21 states and Washington, D.C. With the addition of the divestiture stores and their \$40 billion in annual sales, C&S would have become the eighth largest grocery retailer in the U.S., with stores from Vermont to California (Moses, 2024). A map of the divestiture stores, which excludes C&S's current stores in New York, Vermont, and Wisconsin, is shown in Fig. 1.

Even with C&S's large-scale grocery wholesale business, approval of the divestiture would have transformed the company, virtually overnight, from a small regional supermarket operator based largely in the eastern U.S. to a nationwide operator and a simultaneous market entrant (for both its wholesale and retail business) in western states from Texas to Washington.

In its analysis of the proposed divestiture, the Court concluded that "[t]here are serious concerns about C&S' ability to run a large-scale retail grocery business that can successfully compete against the proposed merged business, as would be required to offset the competitive harm of the merger." (Opinion & Order, 2024). For the purposes of this paper, the ruling and evidence in the case offer a window into what is required for a supermarket retailer to operate effectively at scale. We will look through that window and consider in detail the drivers of the shopping experience that set customer expectations. Some of those drivers affect the shopping experience directly, others indirectly. For example, a robust shopper loyalty program meets customers' expectations for personalized discounts and promotions directly, while an effective distribution network meets customers' expectations for stores' in-stock levels indirectly.

3.1. Technology-enabled drivers of supermarket competition

The Court's finding that C&S would likely be unable to replace the competition offered by the 579 divesture stores under Kroger's and Albertsons' operation leads us to consider the drivers of supermarket competition in today's marketplace. Several of those drivers depend on integrated information technology (IT) capabilities. We will address those drivers of competition first.

The importance of integration between the various competitive drivers enabled by IT—from e-commerce to pricing to marketing, shopper loyalty programs, and retail media networks—was conspicuous in arguments about C&S's competitive fitness as a divesture buyer. The integrations of each of Kroger's and Albertsons' systems (after Albertsons 2015 merger with Safeway) across their respective banners and geographies had clearly been a long-term effort, while C&S's retail IT capabilities were relatively rudimentary and largely unintegrated across the two banners comprising its 23 stores (Plaintiff's Post Hearing Brief, 2024). To remedy this, C&S would have had to rely on the assistance of the merged Kroger-Albertsons under a proposed *Transition Services Agreement* (TSA) to

⁸ C&S is the largest privately held grocery wholesaler in the U.S. At the time of the merger, C&S directly operated 11 stores under the Grand Union banner in upstate New York and Vermont and 12 stores under the Piggly Wiggly banner primarily in Wisconsin. Despite once operating over 300 stores in the U.S. Northeast and Southeast in the late 2000s, C&S sold off the last of its retail stores in 2012 and re-entered supermarket retail as the divestiture buyer for the Grand Union stores during the Tops / Price Chopper merger in 2021. C&S also owns the rights to the Piggly Wiggly banner, which it licenses to independent supermarket operators.

bolster its IT capabilities across the divested stores in a short period of time. The TSA provided for C&S to receive a "tech stack clone', or a copy of the IT systems currently used in Albertsons store[s]." (Opinion & Order, 2024).

This "tech stack clone," however, was not a complete, integrated IT system. C&S would still have had to integrate the four separate IT system architectures in operation at the 579 divestiture stores—the primary systems of Kroger and Albertsons, as well as independent IT systems at Kroger's Harris Teeter and Albertsons' United Supermarkets stores (Opinion & Order, 2024; Post-hearing Brief). The tech stack also excluded models and algorithms used for important retailing capabilities, such as for pricing, customer loyalty, marketing, inventory management, and sales forecasting (Plaintiff's Post-hearing Brief, 2024). In addition, C&S's use of the Albertsons technology systems would have been temporary; C&S would have had to relinquish all Albertsons intellectual property in the tech stack after a period of time (Plaintiff's Post-hearing Brief, 2024). While components of the tech stack may be available from third parties (e.g., McKinsey's suite of pricing tools), the integrated IT capabilities required for the operation of a large-scale supermarket retailer cannot simply be outsourced and instead require institutional knowledge and experience.

Recent evidence from the 2015 Albertsons-Safeway merger illustrates the difficulty of completing large-scale IT integrations even among established store operators. At the time of their merger, Albertsons and Safeway were among the largest supermarket operators in the U.S., yet Albertsons required over four years to fully complete its integration of IT systems and assets with Safeway, with its largest expenditures on store conversions occurring years after the merger in fiscal year 2018 (Albertsons, 2019; Albertsons, 2020; Redman, 2020).

With the importance of fully integrated IT systems in mind, we now discuss in detail four technology-enabled drivers of supermarket competition: e-commerce, pricing, marketing and shopper loyalty programs, and retail media networks.

E-commerce. At least in part due to the Covid-19 pandemic, large supermarket retailers have developed and expanded their e-commerce capabilities. While a relatively small proportion of supermarket revenues come from e-commerce sales today, those capabilities are increasingly expected by supermarket shoppers. Yet supermarket retailers vary in terms of their e-commerce infrastructure, ordering platform(s) (i.e., online, via app), and order fulfillment (i.e., delivery, curbside pickup, and/or buy-online-pickup-in-store). Supermarkets with less-developed e-commerce infrastructure rely on third parties for these capabilities, outsourcing ordering, fulfillment, and delivery services to Instacart and Shipt or contracting with services such as UberEats, DoorDash and Grubhub, among others, for delivery. Kroger and Albertsons have both developed e-commerce infrastructures that enable them to perform these functions themselves in many geographic areas, while relying on or being supplemented by third-party support (primarily Instacart) for order fulfillment and delivery in others (Kroger, Albertsons, Grocery Dive). By contrast, C&S had not invested in e-commerce infrastructure, outsourcing its e-commerce operations to Instacart, and experienced notable year-over-year declines in e-commerce sales at the Grand Union stores it began operating in 2022 while consumers' online grocery spending has been increasing (Bigora, 2024a; Plaintiff's Post-hearing Brief, 2024).

Pricing. The expansion of e-commerce has resulted in supermarket retailers posting prices online and in-app, as well as on the digital platforms of third-party providers like Instacart, Shipt, UberEats, DoorDash and Grubhub. Because shoppers now have ready access to supermarkets' real-time prices on their digital devices, it is imperative for supermarkets to align their in-store and e-commerce prices in order to avoid customer dissatisfaction. This alignment requires a seamless integration of IT systems across store and e-commerce platforms.

The technological hurdle of aligning in-store and e-commerce prices becomes greater if supermarket retailers zone price, and specifically if they zone price within geographic markets. For decades, supermarkets have used zone pricing to respond to differences in shopper demographics and competition in their stores' trading areas (Chintagunta et al., 2003). Shoppers' price visibility online and in-app enables comparison with in-store prices, risking negative consequences if shoppers discover that they are being charged a higher price. Kroger and Albertsons use zone pricing but require e-commerce customers to identify their zip code or home store. Both Kroger's and Albertsons' IT systems integration is sufficient to support within-market zone pricing. By contrast, the Court found that C&S lacks retail pricing IT capabilities, and so does not zone-price within the geographies where it operates. C&S's lack of sophisticated pricing technology and planned reliance on Kroger pricing technology after the merger was noted as a key issue for C&S's independence as the divesture buyer: "Of particular concern is that Kroger, a competitor, will provide sales forecasting data and a base pricing plan to C&S for a period of time after the transition. C&S is permitted to adjust prices but must do so by instructing Kroger's 'clean room' to execute pricing changes." The Court noted that this continued relationship could leave C&S vulnerable to Kroger's competitive behavior (Opinion & Order, 2024).

E-commerce also makes supermarkets' real-time prices visible to their competitors. Other retailers access these prices from third-party technology providers that "scrape" prices from the web and make them available to retailer subscribers. On one hand, web scraping offers supermarkets more comprehensive and up-to-date competitive price information than in-person price checks, enabling more rapid response to competitors' price changes. On the other hand, grocery retailers without e-commerce capabilities—notably Aldi at the time of the proposed merger (Redman, 2022)—would still have to be price-checked in person. The trial record showed that, to take advantage of nearly real-time competitive price information, both Kroger and Albertsons use rule-based pricing programs to execute price changes, enabling rapid and effective responses to competitors (Opinion & Order, 2024; Plaintiff's Post-hearing Brief, 2024). Kroger's rule-based pricing capability uses its own customized tools; Albertsons uses McKinsey pricing tools and algorithms (McKinsey; Plaintiff's Post-hearing Brief 2024).

Court documents reveal that Kroger's and Albertsons' pricing rules focus on competitors by geographic market. More specifically, they identify a key local competitor, most often a traditional supermarket, and match that competitor's prices on key value items or items otherwise identified as being important to shoppers. For other items, Kroger and Albertsons set a maximum percentage gap that they are willing to price above the key local supermarket competitor, and both monitor Walmart in geographies where Walmart is present. Kroger in particular sets prices at a small percentage spread above Walmart's prices for key value items but allows larger

percentage price gaps on other items in the store (relative to the key supermarket competitor, which is often Albertsons as the "high priced retailer" and corresponding pricing upper bound) (Opinion & Order, 2024; Plaintiff's Post-hearing Brief, 2024).

Surprisingly, despite employing similar rule-based pricing approaches, Albertsons stores charge significantly higher average prices than the Kroger stores with which they compete, reportedly 10 %-12 % higher per testimony from Kroger CEO Rodney McMullen (Rush & Durbin, 2024). One may gain additional insight from Kroger's discussion of this reported disparity in average prices with Albertsons-bannered stores. Acknowledging the pricing disparity, Kroger promised to make a billion-dollar investment in lowering prices (Moran, 2024). Framing changes to pricing rules as an investment—presumably reducing price gaps versus competitors—implies an expected future return. That return could only be due to increased store traffic and the resulting additional revenues from lowering prices at Albertsons stores (Coolidge, 2024). This framing suggests a longer-term view of retail pricing decisions. Note that, although the combined buying power of Kroger and Albertsons after the merger was acknowledged by the Court as a potential synergy, the companies' relative negotiation power with vendors was not cited as an underlying cause of the price difference (Opinion & Order, 2024). One plausible conjecture to explain the disparity between Kroger and Albertsons prices is that the latter did not 'invest' in driving store traffic in the long-run, pricing to generate higher margins instead (Little & Shapiro, 1980; Fox, Postrel & Semple, 2009).

Marketing and Shopper Loyalty Programs. Pricing is not the only competitive driver affected by shoppers' increasing engagement with supermarkets using their digital devices. In particular, the marketing of promotional deals and discounts has changed fundamentally in the past decade.

Historically, supermarket retailers have disseminated their weekly price deals through feature advertising in local newspapers. In 2023, Kroger stopped placing weekly feature ads in local newspapers across its many banners. While most supermarket retailers continue to advertise in local newspapers, some large-scale non-supermarket retailers such as Walgreens and CVS have also abandoned newspaper advertising (Meyersohn, 2023). In lieu of feature ads, Kroger banners post weekly price deals online using their websites. However, the number of people who receive these deals is limited to the number of website visitors in a given week.

Kroger's departure from feature advertising highlights a growing commitment to digital and personalized advertising disseminated through shopper loyalty programs. Since 2003, Kroger has developed a robust shopper loyalty program called Kroger Plus, offering membership benefits and rewards including personalized coupons and fuel points. As of 2024, Kroger Plus had approximately 60 million household members, tracked 90 % of Kroger's sales, and delivered two trillion personalized recommendations per year (Kroger, 2023). In July 2022, Kroger launched Kroger Boost, a subscription-based loyalty, e-commerce, and delivery program, which helped drive Kroger's 25 % year-over-year e-commerce sales growth in both 2022 and 2023 (Kroger, 2024). As of 2024, Albertsons' loyalty program, "Albertsons for U," had grown to 44.3 million members, which represents a 63 % increase from 2020, and a 15 % year-over-year increase after an April 2024 "revamp that made it easier for customers to earn and redeem points" (Wassel, 2025). In 2021, Albertsons debuted FreshPass, an analogous program to Kroger Boost (Redman, 2021a).

These shopper loyalty programs generate valuable customer data. For loyalty program members, Kroger collects contact information, including name, email, and phone number. Purchases linked to a customer's membership(s) comprise their purchase history and identify which stores the customer visits, providing Kroger with geographic information about shoppers. Together, contact information and purchase histories enable Kroger to push out weekly price deals to their customer loyalty database proactively – that is, without waiting for consumers to visit their website. Purchase history data also permits Kroger to personalize the weekly price deals for individual customers, highlighting deals on products they purchased previously or might be expected to purchase. In this way, the small format of digital devices, which limits the amount of information shoppers can view, is less likely to keep them from finding relevant weekly price deals.

Shopper loyalty programs are designed to build the brand loyalty of a supermarket's customers. Ideally, the programs would promote and reinforce positive brand associations with attractive offers and incentivize incremental store trips and purchases. In practice, the effect of loyalty programs on sales and profits has been shown to level off or erode over time (Lin & Bowman, 2022; Lal & Bell, 2003). Yet in recent years both Kroger and Albertsons, as well as numerous other retailers including Walmart, have invested heavily in loyalty programs and in data-analytic capabilities to leverage the customer data these programs generate. A supermarket operator that can effectively leverage the data collected from a strong loyalty program is potentially better able to make offers to program members that drive incremental store visits and consumer purchases. In combination with CPG suppliers seeking to optimize their own ad spending, retailers can tap into a large, emerging, and immediate driver of supermarket media revenue: retail media networks.

Retail Media Networks. Retail media networks allow retailers to sell digital and in-store advertising to third parties, leveraging shopper loyalty and sales data. Today, retail media networks provide many retailers with a rapidly growing, high-margin alternative revenue stream (see, e.g., UBS; Opinion & Order, 2024). The combination of retail media networks with robust shopper loyalty programs, enabled by sophisticated information systems and analytics capabilities, allows supermarket retailers to deliver personalized advertisements and promotions, funded by the retail media networks' CPG advertisers.

Kroger's retail media network, Kroger Precision Marketing (KPM), launched in 2017. KPM combines loyalty and company data to personalize advertising, offering CPG brands access to Kroger's customers online and in-store via Kroger's retail data science arm named 84.51°. Kroger identifies its ability to capture shopping data, together with its data science capabilities, as a competitive advantage that results in higher customer brand loyalty to Kroger banners (Kroger, 2023). Through KPM, Kroger delivers >2 trillion

⁹ The article also notes that "McMullen countered that argument by saying that Albertsons' prices are 10-12 percent higher than Kroger's and the merged company would try to reduce the disparity as part of a strategy for keeping customers."



Fig. 2. Distribution of Kroger Banners in 2024 (Complaint 2024).

personalized offers per year, leveraging 10 terabytes of Kroger Plus loyalty data (Kroger 2023 Fact Book). Albertsons' retail media network, Albertsons Media Collective, was launched in November 2021 and boasts the ability to connect advertisers to its 41 million loyalty program members ((Redman, 2021b)). In evaluating the parties' retail media networks, the Court noted that "applying Kroger's more mature retail media capabilities to Albertsons stores" was one of the efficiencies that Kroger and Albertsons argued would result from the proposed merger (Opinion & Order, 2024). Regional grocers are investing in retail media networks as well. In the last two years for example, Meijer, Giant Eagle, HyVee, Northeast Grocery, and Save Mart have all launched or expanded their retail media networks (Bigora, 2023a; Bigora, 2023b; Bigora, 2024b; Petrak, 2023; Silverstein, 2023).

Where does the funding for retail media networks come from within their CPG advertisers—trade promotion funds or brand funds? This is currently an open question. However, the growing investments in retail media networks, in addition to industry survey data (e. g., Loza, 2023) and market analyst reports (e.g., UBS), suggest that at least some of the revenues supermarket retailers receive from CPGs for the retailers' retail media network capabilities are incremental to CPGs' trade promotion allocations. Looking forward, an emerging opportunity for retailers is to demonstrate the value of their retail media networks by measuring the returns for their CPG advertisers (Goldschmidt, 2025; Inklebarger, 2025).¹⁰

3.2. Brand and product drivers of supermarket competition

While IT capabilities enable important drivers of supermarket competition, the Court also identified other critical drivers. The Court considered whether the divestiture stores, under C&S's control, would be able to offer the shopping experience and product assortments that shoppers of those stores had come to expect, and whether the supporting assets offered in the divestiture would be adequate to allow C&S to maintain the brand equity conferred on the divestiture stores by their current banners. To effectively replace competition, C&S would have had to be competitive across numerous customer-oriented dimensions, as Kroger and Albertsons compete not only on pricing and promotions, but "in other aspects of grocery retailing, such as product quality, freshness, assortment, customer service, and convenience." (Opinion & Order, 2024).

This emphasis on brand equity and customer-experience factors offers insights into the nature of supermarket competition related to the in-store experience, from the associations customers form with the banner on the front of each store to its product assortments to the distribution network that enables lower prices and higher in-stock levels on the shelves. Below, we discuss the following key drivers of supermarket competition related to supermarket brands and brand perceptions that factored into the Court's divestiture analysis: supermarket banners, product assortments and private labels, and distribution networks.

Supermarket Banners. Although branding is fundamental to both marketing practice and academic research, it is seldom considered in academic studies of supermarket retailing, which often focus instead on tactical issues (e.g., pricing, promotion, product assortment) or strategic issues (e.g., retail formats, supplier relationships). The Court's opinion in the Kroger-Albertsons merger case highlights the importance of supermarket retail branding (known as the store's banner) as a key competitive driver. The Court noted that the "banner holds a retailer's equity, including brand loyalty and name awareness." (Opinion & Order 2024). However, supermarket banners differ from most other branding applications in terms of their geographic focus and their role in retailers' growth.

Perhaps the defining aspect of supermarket branding is geography. Brands in other product categories are commonly distributed and marketed nationwide (or even worldwide), but supermarket banners generally operate stores in much smaller geographic areas. Roughly half of Kroger's and Albertsons's stores operate under their flagship Kroger, Safeway, and Albertsons banners, each of which has a broad geographic footprint across multiple states. Yet, Kroger and Albertsons operate supermarkets under approximately twenty

¹⁰ For example, in February 2025, Kroger announced new capabilities for incremental sales measurement and reporting for self-service advertisers using KPM. According to Kroger, this capability will allow advertisers to 'isolate the sales lift from advertising through control groups that precisely match the exposed audience.'

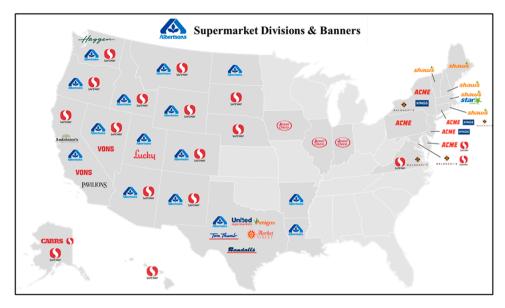


Fig. 3. Distribution of Albertsons Banners in 2024 (Complaint 2024).

different banners each, most of which are regionally focused. The state-level geographic distributions of most Kroger and Albertsons banners are shown in Figs. 2 and 3 below. The figures highlight the limited areas in which most of their banners operate. For example, Albertsons has five different banners with stores only in Texas; their areas overlap to varying extents (e.g., Randall's operates in the Austin and Houston areas; Tom Thumb operates only in the Dallas-Fort Worth area; and United Supermarkets operates across the northwestern Panhandle region).

As one might expect, a banner's marketing communications are concentrated in areas where it operates, and consumer touchpoints are similarly limited to those areas. As a result, brand awareness is higher in areas where stores operate under the banner, and brand associations, price, and quality perceptions are more established in those areas. In other words, the brand equity of a retail banner is greater in the areas where its stores are, and lower or non-existent in other areas.

A related aspect of supermarket brand competition involves the dynamics of retailer growth and industry concentration. Marketing theory has generally focused on growth through the introduction of new products or services which can leverage brands via line and brand extensions (Aaker, 1991; Keller, 1993). While supermarket retailers sometimes build new stores, supermarket mergers and acquisitions have outpaced organic growth in recent years. For decades, supermarket retailers have pursued growth by acquisition in search of scale benefits (Mohan et al., 2024; Ellickson, 2016). Because of the limited trading areas of individual supermarkets and the narrow geographic focus of most supermarket banners, acquisitions can be used to fill gaps in geographic coverage and to extend coverage to new areas. Additionally, acquisitions may require, for operational or contractual reasons, *rebannering* acquired stores to a new banner.

In the Kroger-Albertsons merger proposal, 286 of the 579 divestiture stores (49 %) in 17 states and Washington, D.C. required rebannering (Opinion & Order 2024). As a consequence, those stores would have lost their current banners and presumably the brand equity associated with those banners. Besides its own Piggly Wiggly and Grand Union banners, C&S would have gained exclusive ownership of just four geographically-limited Kroger and Albertsons banners: QFC (Kroger; Washington state, with 4 stores in Oregon), Mariano's (Kroger; Chicago area), Carrs (Albertsons; Alaska), and Haggen (Albertsons; Washington state). C&S would have also gained the rights to the more widely known Safeway and Albertsons banners, but only in two states each.

Under C&S's rebannering plan, 129 of the 286 stores (45 %) to be rebannered would have had to transition to a banner without any stores in the area, presumably to one with lower brand equity in the area than the current banner (Opinion & Order, 2024). For example, C&S would have had to rebanner 13 Albertsons-bannered stores in Nevada to one or more of the QFC, Mariano's, Haggen, Carrs, Grand Union or Piggly Wiggly banners, though none of these banners currently operates in the state or any neighboring states (with the exception of QFC's limited presence in the Portland, OR area). More generally, each rebannered store would have lost its brand, the brand that carried the expectations of the shopping experience for that store's customers in terms of price and quality, as well as for the full range of competitive drivers from e-commerce, shopper loyalty program, marketing and promotions to private label offerings.

Rebannering stores differs fundamentally from line and brand extensions, because the store being rebannered is not a new offering

from the incumbent customer's perspective but an existing offering being rebranded—and not always to a higher-equity brand (Food Lion, 2020). This rebranding leads to another potential complication for the operator of the rebannered store. Especially in divestiture acquisitions, the rebannered store might have to compete with stores in the same area that retained the prior ownership and banner, providing existing customers of the rebannered store with familiar alternatives to switch to.

This competitive challenge with merger-retained stores was the case for California-based Raley's Supermarkets after the Albertsons-American Stores merger in 1999 (as well as for Haggen after the Albertsons-Safeway merger in 2015). Through divestiture, Raley's acquired 27 Albertsons-bannered stores to extend its own banner from the Sacramento, CA area to Las Vegas and New Mexico, but the rebannered Raley's stores continued to compete in local areas with Albertsons-bannered stores retained in the merger. Within three years, Raley's had exited both states, selling the New Mexico divestiture stores back to Albertsons and the Nevada divestiture stores to Kroger (Plaintiff's Post-hearing Brief, 2024). Keith Knopf, the current CEO of Raley's Supermarkets, testified to the challenges of rebannering: "The stores are community and neighborhood centric in nature, and the customer has come to have a relationship with those stores, the people in those stores, and the nature of that brand. And changing the name on a building is very, very complicated, and it's very risky, because the incumbent customer will not recognize it." (Opinion & Order 2024).

Product Assortment and Private Labels. An additional factor in the Court's analysis of whether C&S would be able to replace competition lost in the merger was C&S's relatively underdeveloped private label program.

In order to provide the one-stop shopping convenience that the Court cited as a defining characteristic of supermarket competition, stores must offer a compelling range of products to meet a household's daily needs. In particular, one-stop shopping convenience requires that supermarkets offer fresh (i.e., perishable) products, including produce, meat, seafood, and dairy. The court found that several retailers do not compete head-to-head with supermarkets, at least in part because they do not offer enough fresh products. For example, limited assortment stores like Aldi, Lidl, and Trader Joe's are "focused primarily on private label brands rather than national brands, and [have] *fewer staffed service counters*, to offer a lower price point," while dollar stores like Dollar General and Dollar Tree "sell a much smaller selection of food and grocery items, many non-grocery items, [and have] *very limited or not fresh products*[.]" (Opinion & Order, 2024; *italics ours*).

Further, the majority of products found in supermarkets are national- or locally-branded items that do not differentiate retailers because these items can also be purchased at competing stores. The quality of fresh items and the breadth of assortment of fresh items in categories like produce, meat, seafood, and dairy can differentiate supermarkets and their banners, providing competitive advantage (Cook, 2011). Supermarkets can also differentiate based on private label brands. Private label brands are generally exclusive to the operator and its banners, and therefore not sold at competing stores. ¹² There is extensive literature on private labels in grocery retail, focused largely on national brand competition (e.g., Hoch, 1996; Choi & Coughlan, 2006; Sethuraman, 2009; Gielens et al., 2021) and pricing (e.g., Sethuraman, 1992; Barsky et al., 2003). Yet evidence from the Court's analysis of the proposed Kroger-Albertsons merger suggests that the context that informed much of the extant literature has changed significantly.

Private label brands have become demonstrably more important to supermarket shoppers and therefore to supermarket retailers. It has long been received wisdom in grocery store pricing, promotion, and assortment research that consumers are more responsive to national brands than to private label brands (Blattberg & Wisniewski, 1989; Sethuraman, 1992; Pauwels & Srinivasan, 2009). In 2023, however, private label products were responsible for approximately 18 % of U.S. spending on consumer packaged goods (Orgel, 2023). For Kroger and Albertsons, private label sales represented approximately 27 % and 22 % of revenues respectively, excluding fuel (Rohr, 2024; Albertsons Form 10-K 2024). Importantly, those private label revenues generate higher margins for retailers than national brands (Ailawadi & Harlam, 2004). As Stater Bros. Markets CEO Peter J. Van Helden testified, the focus for retailers is simple: "[p] rivate label brands offer a lower-cost alternative to national brands that require less marketing and capture a higher profit margin." (Opinion & Order, 2024). Both Kroger's and Albertsons' extensive private label programs include portfolios of tiered private label brands, including 'national brand equivalent,' 'better for you,' and 'premium' offerings. At the time of the hearing, Kroger offered approximately 13,000 unique private label items; Albertsons offered >14,000 (Albertsons, 2024; Kroger, 2024).

Consistent with their high revenue shares in national supermarket chains, private labels have also become increasingly important in shoppers' store choice decisions. According to a 2023 survey conducted by the Food Industry Association (FMI), "nearly 90 % of shoppers consider [private labels] at least somewhat important [when choosing a store], and that more than half consider [private labels] very or extremely important." (Orgel, 2023). The FMI survey also found that, while price and value were clearly the top reasons for private label purchases, quality and taste were also important. Further, the survey found that the trustworthiness of private label brands is just as important as it is for national brands, evidence of blurring between national brand and private label brand perceptions (Orgel, 2023).

Finally, both Kroger and Albertsons have committed to some degree of backward integration to gain a measure of control in private label sourcing. Kroger has demonstrated a strong commitment, manufacturing approximately 30 % of its private label products and >40 % of its grocery private label products at its 33 manufacturing facilities (Kroger, 2024). Albertsons has demonstrated somewhat

¹¹ In preparing reports and testimony in this matter, we came across examples of rebannering to replace a lower equity banner with a higher equity banner, including Ahold Delhaize's expansion of the Food Lion banner through its 2020 acquisition of 62 BI-LO and Harveys stores in the Southeastern U.S.

¹² C&S is a member of the Topco retailer cooperative. Topco develops and sources products under several private label brands, which it sells to its member retailers. Based on this arrangement, C&S shares a number of private label brands in its stores with other Topco member retailers. Thus, member retailers have no guarantee of exclusivity for the Topco private label brands. Further, C&S also relies on Topco to source many of the products offered under its own exclusive Best Yet private label brand.

less of a commitment to backward integration, manufacturing 10.1 % of its private label products at its 19 manufacturing facilities (Albertsons Form 10-K 2024). Together with the revenue contributions of their private label programs and proliferation of private label products in their stores, Kroger's and Albertsons's manufacturing investments reflect their belief in the importance of their private label programs.

Distribution Networks. Large-scale supermarket retailers like Kroger and Albertsons are self-distributing, operating their own distribution centers in layered networks instead of relying on wholesalers for distribution services. Many retailers have shifted to self-distribution models in recent years; notably, Ahold Delhaize's and Target's transitions to self-distribution beginning in 2019 cost C&S its two largest wholesale customers, which testimony revealed prompted the wholesaler to pivot toward supermarket retail operations (Garces & Wafajow, 2024; De Leon, 2024).

Each Kroger and Albertsons store is supplied by multiple distribution centers (DCs). Each store has a primary DC, from which it receives fast-moving products. As a result, stores receive shipments from their primary DCs more frequently and the primary DCs are located relatively close to the stores they supply. Each store is also supplied by secondary distribution centers, each of which carries a different portfolio of product categories. For example, Kroger operates 44 distribution centers across the country in three tiers: Tier 1 distribution centers service a single division and distribute grocery, frozen, and perishable products; Tier 2 distribution centers service multiple divisions and distribute general merchandise, health and beauty care products, and slow-moving grocery products; Tier 3 distribution centers service stores nationwide and distribute very slow-moving products like specialty and seasonal items (Kroger Fact Book, 2015). Albertsons similarly uses a layered distribution structure with 22 total primary and secondary DCs (Albertsons, 2024).

For self-distributing supermarket retailers operating across geographic markets, distribution can be an important competitive driver and potential source of advantage. In particular, the scale and scope of distribution networks can make retailers more or less competitive (Randall et al., 2011).

4. Discussion and future research

The Court's evaluation considered both benefits and competitive risks of the proposed Kroger-Albertsons merger. In its opposition to the merger, the FTC used its expert's store-level market share forecasts to argue that the merger would unlawfully reduce competition across geographic markets. ¹³ The Court accepted this argument, finding the FTC expert's analysis more persuasive than the analysis offered by Kroger's expert and concluding "that there are numerous presumptively unlawful markets...suggesting that the proposed merger is likely to substantially lessen competition...." (Opinion & Order, 2024). In support of the merger, Kroger argued that the merger would result in synergies (including greater buying power) and efficiencies, allowing for a billion-dollar investment in lowering prices at Albertsons-owned stores—to the benefit of consumers. The Court rejected that argument, concluding that "the efficiencies permitting defendants' planned price investment are neither merger-specific nor verifiable, so there is no guarantee that they will result from the merger or that they could not be achieved in the absence of the merger." Kroger's other primary argument in support of the merger was that the divestiture of 579 Kroger and Albertsons stores, with some supporting assets, to C&S would sufficiently mitigate the harm to consumers from losing head-to-head competition between the two largest U.S. supermarket retailers. The Court rejected this argument too, concluding that "[t]here is ample evidence that...the divesture will not adequately restore competition." (Opinion & Order, 2024).

Retail Branding and Private Label. While the proposed Kroger-Albertsons merger was unique in that it involved the two largest U.S. supermarket retailers, it offers interesting implications for research in retail branding and private labels. The Court highlighted the importance of these two competitive drivers in particular, observing that "[i]t is difficult to see how certain of C&S' plans, such as rebannering about half the stores and introducing new private label items, which is effectively the same as opening a new, unfamiliar grocery store in the eyes of consumers, could maintain the current level of competition provided by stores with familiar banners and products." (Opinion & Order, 2024).

The risk that rebannering a store poses to its competitiveness raises fundamental questions about the role of banners as supermarket brands, including how they affect consumers' expectations of the shopping experience (both in-store and e-commerce) and their store choices. Prior studies of grocery store choice focused on store-specific factors, like location, and largely banner-specific factors, like pricing and product assortments, including private labels (e.g., Arnold, Ma & Tigert, 1978, Oum & Tigert, 1983; Bell, Ho & Tang, 1998; Fox, Montgomery & Lodish, 2004; Briesch, Chintagunta & Fox, 2009). Pecual Because food retail is highly localized compared to most other branded products or services, one might expect more variation in consumer perceptions, associations, and expectations of supermarket banners—specifically store-level variation. If so, what does store-level variation mean for the management of retail brands and their brand equity? Interestingly, banners with strong brand equity do not necessarily price at a premium, perhaps because of the importance of price image or because most of the products sold in supermarkets are national brands that can be purchased at competing supermarkets and supercenters.

By equating the introduction of new private labels and new banners with "opening a new, unfamiliar grocery store in the eyes of consumers," the Court highlighted the importance of private labels to supermarket brands, stores, and shoppers. Given the prominence of Kroger's and Albertsons' private label brands in this case, researchers might revisit the conventional wisdom that private label brands are generally less important to consumers than national brands. Extended time series data from syndicated providers or

 $^{^{13}\,}$ The FTC's expert providing analysis on antirust economics was Dr. Nicholas Hill.

¹⁴ Note that a smaller number of studies have measured prices at the store-level, though price variation is highly correlated at the banner-level due to promotions. Perceptions of price image are also measured at the banner level.

individual retailers' shopper loyalty programs could also be studied to identify trends in private label brand choice within- and across-shoppers and categories. In addition, identifying private label purchases by price and quality tiers would allow researchers to determine whether specific types of private labels affect consumer store choice more than others. Further, the Court's choice to associate consumer awareness of banners with the importance of a private label program suggests that private label exclusivity is an important contributor to supermarket brand equity and competitiveness. This hypothesis could be tested to assess the benefits of retailer investment in private label brand marketing. In a somewhat different vein, the generally narrow geographic coverage of supermarket banners points to the use of spatial models for supermarket brand competition, possibly incorporating cost parameters that depend on their multi-layered distribution networks.

Areas for Future Research: Retail Branding and Private Labels

- How have recent changes in the supermarket retail landscape affected how consumers' expectations of the shopping experience are influenced by store banners? Have shoppers become more loyal to the banners or the specific stores that they shop?
- How have increases in the number and range of private label products changed the impact of private labels on shoppers' store choice decisions?

Store Networks. The proposed merger also raises questions about competition between store networks. A particularly interesting issue in the case concerned the ability of divestiture stores to compete with stores retained by the merged Kroger and Albertsons. Specifically, how can a store sold to a new retailer change its banner, private label brands, shopper loyalty program, etc. to that of the new retailer, then compete with nearby stores that retain the previous banner, private label brands, and shopper loyalty program? Recent research on Dutch supermarket acquisitions found that current customers demonstrate loyalty to the specific outlets they shopped, but that outlet loyalty was adversely affected when other stores in the market retained the outlet's previous banner (Van Lin & Gijsbrechts, 2014). The CEO of Raley's Supermarkets similarly testified that the new retailer in such situations is at a major competitive disadvantage (Opinion & Order, 2024). Growth by acquisition will result in such situations unless the new retailer acquires all stores of the previous banner in the geographic market, including lower-performing stores. Evaluating these tradeoffs in alternative store acquisition strategies is a potentially useful subject for future research.

A somewhat related research opportunity would be to revisit the benefits of store density for retailers and their geographically-focused banners. With promotions increasingly available online and delivered to supermarket customers digitally, the marketing benefits of retail density are less compelling than when promotions were only advertised in local newspapers. Are there compensating increases in other benefits of store density, perhaps from e-commerce fulfillment or delivery? If not, retailers might be able to compete effectively in geographic markets with fewer stores and lower density.

Area for Future Research: Store Networks

• Have technology-driven changes in marketing, promotions, and shopper loyalty program capabilities reduced the benefits of retail density within geographic markets?

Information Technology. One of C&S's limitations identified by the Court was its lack of integrated IT systems capabilities and its need to rely on the merged Kroger-Albertsons for various IT capabilities through the so-called Albertsons 'tech stack clone.' The divestiture would have led C&S to vastly expand its retail operations, with stores operating under eight different banners across 21 states and the District of Columbia. C&S's patchwork of acquired IT systems would have had to be integrated not only between ecommerce and store platforms, but also within and across different banners and geographic markets. The complexity of IT systems integration in the supermarket context could offer interesting research opportunities for technology and operations researchers.

Area for Future Research: Information Technology

 How has the growing importance of IT integration for larger (i.e., multi-banner, multi-market) retailers changed their systems requirements? **Pricing, Promotions, and Retail Media Networks.** Kroger's highly publicized promise to make a billion-dollar price investment in Albertsons stores suggests interesting research opportunities to update our understanding of retailer pricing policies and their implications.

Large-scale, virtually real-time monitoring of competitor prices using web scraping technology makes it easier for retailers to respond rapidly to competitor price changes. At the same time, leading supermarket retailers have adopted a rule-based pricing approach focused on key supermarket competitors and Walmart (in markets they share). How do competitor-focused pricing rules affect retailer prices and profits? Could a rule-based approach not focused on percentage price gaps be more effective and ultimately more profitable? Given that Kroger and Albertsons (and presumably other large supermarket retailers) are using rule-based pricing approaches, how could pricing models inform or supplement their approaches? Further, does Kroger's proposed billion-dollar price investment imply that assessments of the profitability of retailer pricing policies reflect long-run profits, requiring the use of dynamic pricing models? Finally, how can the reported 10 % to 12 % price gap between Kroger- and Albertsons-operated stores happen in equilibrium, without a substantial quality difference between their stores?

Kroger's promise to make a billion-dollar investment in lowering Albertsons' prices highlights another research topic for the management of retail brands—price image (Hamilton & Chernev, 2013; Lourenço, Gijsbrechts & Papp, 2015). "Kroger officials indicated the \$1 billion in savings won't benefit all shoppers: The money would go toward lowering prices on acquired Albertsons stores." (Coolidge, 2024). Which banners and which product categories or types should receive the so-called price investment in order to most effectively drive store traffic and long-term profitability?

The changing landscape of retail promotions also offers potentially interesting research opportunities. The placement of feature ads in local newspapers is clearly on the wane, with Kroger and other leading non-supermarket retailers abandoning the practice completely. Leveraging their increasingly pervasive and sophisticated shopper loyalty programs along with their growing ecommerce platforms and paid subscription loyalty programs, retailers are now delivering targeted advertising and promotions digitally. How do these developments affect shoppers' product, brand, and store choice decisions and consumer welfare? How do suppliers structure and fund retail promotions?

Finally, the Court identified the retail media networks as an attractive new source of revenues and profits for large supermarket retailers. Yet important questions remain about how suppliers, typically CPG manufacturers, fund the supermarkets' retail media networks. More specifically, do the funds come from CPG manufacturers' trade spend allocations, which would otherwise be used to fund weekly promotions, or from brand marketing funds? In the former case, retailers are not accessing incremental funds for their retail media networks; in the latter case, retailers are accessing a new (and presumably incremental) supplier funding source. From a dyadic perspective, the growth of retail media networks will almost certainly increase retailer power relative to manufacturers. What are the implications of this power increase from an industrial organization perspective? In a similar vein, would the concentration of retail markets result in similar or even greater concentration in retail media networks, particularly if the cost of entry into retail media proves to be substantial? If so, what are the competitive implications?

Areas of Future Research: Pricing, Promotions, and Retail Media Networks

- Now that supermarkets have access to a full range of competitors' prices almost in real time, should they respond differently to competitor price changes than in the past?
- How have changes in the marketing of retail promotions, in particular the shift from feature advertising in newspapers to delivering individually-targeted promotions via email, text, and app, affected how promotions are structured and funded?
- How does the advent of retail media networks affect the economics of supermarket retail? Will it affect supermarkets' profit margins?

The research topics we have identified reflect insights drawn from the abandoned merger of Kroger and Albertsons. However, they hardly represent a comprehensive list of possible research opportunities that benefit from those insights. We leave it others to identify research opportunities we did not.

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