TRENDS IN CONSUMER SHOPPING BEHAVIOR AND THEIR IMPLICATIONS FOR RETAIL GROCERY MERGER REVIEWS

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Trends in Consumer Shopping Behavior and their Implications for Retail Grocery Merger Reviews

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Retail grocery mergers in the United States most often have been evaluated by the FTC. Through those investigations and litigations, FTC staff economists and experts have established one of the most detailed and well-understood programs of econometrics for merger evaluation. This program generally focuses on the estimation of measures of substitutability and price competition among proximate grocery store locations. In this article, we review the FTC’s approach to retail grocery merger reviews and discuss how recent changes in grocery competition and consumer shopping behavior may significantly affect the way the FTC evaluates such mergers, especially in the post-COVID world.
I. INTRODUCTION

In the United States, retail grocery mergers most often are reviewed by the Federal Trade Commission ("FTC"). The FTC’s economic and econometric evaluation of such mergers generally has been flexible enough to adapt to differences across retail grocery mergers with regards to relevant competitors and consumer preferences. However, recently, rapid technological advances and a global pandemic have significantly changed the way consumers shop for groceries, which may force larger adjustments to the FTC’s standard approach than previously have been required. In particular, the FTC may need to rethink its approach to product and geographic market definitions in light of, among other factors, the growing strength of competition traditional grocery stores face from wholesale club stores and online retailers. The FTC likely will also want to adapt its approach to market definition for retail grocery mergers to account for changes in consumer shopping behavior over the last decade, which have been further accelerated by the COVID-19 pandemic.

II. TRADITIONAL APPROACH TO RETAIL GROCERY MERGER REVIEW

The FTC has developed a standard approach to reviewing retail grocery mergers. Consistent with the analytical framework set forth in the Horizontal Merger Guidelines,2 the FTC’s approach generally involves evaluating the potential competitive effects of a merger for a set of overlapping products and geographies. For grocery retail mergers, this involves identifying merging party stores that are competitors in plausible geographic markets and then assessing the potential for increased prices arising from the consolidation of stores in those markets.

A. Product Market Definition

Grocery retailers can be differentiated across many different dimensions, including product offerings, pricing, store size, accessibility, quality, convenience, and shopping amenities made available to consumers. For example, some grocery retailers employ “High-Low” pricing strategies, where regular every-day prices are occasionally reduced to “featured prices” (which may be promoted in the store’s weekly flyer). Other grocery retailers use “Every Day Low Pricing” or “EDLP” strategies where prices are maintained at “low” prices every day. The need for retailers to compete with Walmart, which employs an EDLP strategy, has increased the popularity of EDLP. Brand focus is another feature of grocery retailers that affects pricing strategy. For example, so-called “Hard Discounters” sell mostly private-label products at lower prices, while “Premium” grocery retailers offer rarer brands at higher prices.

In addition to pricing strategies and product quality, supermarkets can differ in (i) size, (ii) breadth of product offerings; (iii) store configuration, including the size of their produce, deli, meat, cheese, frozen foods and, increasingly, and prepared foods sections; (iv) convenience, including location, shopping hours, on-site parking and, increasingly, home delivery and online ordering options; and (v) shopping “experience,” including the knowledge and level of service provided by store clerks and merchandisers, as well as amenities offered at the store.

Collectively, the features described above make up a grocery retailer’s “format,” which is used in determining relevant product markets. Store format may affect the extent to which consumers consider grocery retailers to be substitutes if, when shopping, consumers consider more about their shopping experience than just where the items on their grocery lists can be found. Indeed, the FTC has written that “investigations have found a strong correlation between store formats and other evidence of competitive interaction, on the one hand, and customer substitution on the other hand.”3

Consumers’ considerations of substitutes to the merging parties’ stores often can be found in merging parties’ ordinary course documents, including, for example, surveys of customer shopping behavior (where the merging parties may try to estimate customer shopping frequency and share of wallet going towards competing banners), price-monitoring reports (where the merging parties may compare prices at their stores to those at competing stores), and real estate planning documents (which will often contain notes on the locations of proximate competing stores).

Historically, the FTC has limited relevant product markets to “traditional supermarkets,” which it defined as full-line retail stores that “provide a distinct set of products and services for consumers who desire to one-stop shop for food and grocery products,” by carrying a wide variety of grocery items and nonfood items across a broad range of product categories, typically with more than 10,000 different SKUs and at

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least 10,000 square feet of selling space. This definition excludes other types of stores that sell grocery products, such as neighborhood grocery stores, stand-alone specialty food stores (e.g. greengrocers, butcher shops and fish and seafood markets), convenience stores and wholesale clubs, on the basis that consumers shopping at traditional supermarkets would not likely to turn to these types of stores in response to a small price increase because none of these other stores “enable consumers to one-stop shop for food and grocery products.”

Since the early 2000s, the FTC has expanded the relevant product market to also include superstores (i.e. the supercenter format of mass merchandise stores that combine a supermarket under the same roof as the department store, such as Walmart Supercenters). However, in doing so, the FTC pointed out that only the supermarket portion of these superstores’ sales (rather than their total sales across all product categories) would be relevant to its analysis of supermarket mergers.

The FTC often has excluded wholesale club stores from the relevant product market, with some exceptions – e.g. Walmart’s acquisition of Supermercados Amigo in Puerto Rico. However, when making such exceptions, the FTC has been careful to note that its decision to include club stores in the relevant market was case-specific and did not represent a change in its general approach to supermarket mergers.

On the other hand, the FTC has also defined markets that are narrower than all supermarkets. For example, the FTC limited the relevant product market to “premium natural and organic supermarkets” in connection with its review of Whole Foods acquisition of Wild Oats. In that case, the FTC argued that premium natural and organic supermarkets were so differentiated from conventional supermarkets (on account of offering a distinct set of products and services, including store ambience and amenities, to a distinct group of consumers) that the merging parties’ customers were not likely willing to switch to conventional supermarkets in response to a small price increase.

B. Geographic Market Definition

Geographic market definition for grocery retailers depends on consumers’ willingness to travel, and how far apart (either in terms of physical distance or travel time) are alternative stores that consumers consider when making their decision about where to shop.

The FTC’s approach to geographic market definition in the context of grocery mergers has evolved from evaluations of market concentration and competitive interaction over somewhat broad geographies to something closer to a store-by-store analysis. This evolution has been facilitated by the increased availability of customer draw data and sophisticated software tools. For example, while the FTC had concluded that geographic markets were as large as MSAs in the through the 1990s, it more recently has alleged store-level markets ranging in size from one-tenth of a mile to up to ten miles around the merging parties’ stores, depending on the consumer density of the area (e.g. urban, suburban, or rural).

A common analysis of consumer willingness to travel looks at drawing catchment areas based on the distance within which the vast majority (e.g. 80 percent) of a store’s customers reside. This information often is available through grocery retailers’ loyalty-card data (which

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5  Ibid. ¶¶15-18.


7  Federal Trade Commission Complaint, In the Matter of Walmart Inc. and Supermercados Amigo Inc., available at https://www.ftc.gov/sites/default/files/documents/cases/2002/11/walmartamigocmp.pdf. The FTC included wholesale club stores in the relevant product market because such stores commanded a large sale of Puerto Ricans’ weekly grocery purchases and there was evidence showing that Puerto Ricans viewed club stores as substitutes for supermarkets.


12  Care should be taken in interpreting the results from catchment areas analysis. Such catchment areas will contain the demand actually served by the stores (which is the result of competitive interactions), and therefore would be smaller than both the area that contains a store’s addressable demand (which may, in certain cases, be more relevant to assess the area over which competition occurs) and the area in which the store’s competitors reside.
can tie a consumer’s purchases to a mailing address), or customer surveys (which often include background questions about a customer’s address) conducted in the ordinary course of a grocery retailer’s business.

C. Competitive Effects Analysis

In their analysis of the competitive effects of grocery retailer mergers, the FTC uses several standard tools, such as measures of market concentration, regression analyses, and upward pricing pressure metrics.

As a first step, the FTC typically will use Nielsen or other third-party data to calculate market shares (or competitor counts) in a variety of possible product and geographic markets. These market shares are then used as a screen to identify potentially problematic mergers. In instances where data is not readily available, the FTC will instead assess the post-merger market structure by looking at the number of remaining competitors in a market. As discussed below, most of the divestitures that have been required in recent grocery mergers have occurred in putative geographic markets with less than 5 remaining competitors.

One approach to evaluating the likely competitive effects of a proposed grocery merger is to econometrically estimate the effects of prior acquisitions or entry / exit events on grocery prices or profitability. Such analyses require detailed data on store entry, exit, and changes in store ownership, which can be combined with information on store pricing or profitability. For example, the FTC may use estimates of changes in store profitability following changes in local grocery market structures to estimate the likely competitive effects of a prospective merger where similar changes in local grocery market structures have been proposed.

In addition, the FTC frequently assesses the likely competitive effects of grocery mergers (and retail mergers more generally) using estimates of diversion ratios, upward pricing pressure metrics, and more formal merger simulations. For example, as mentioned above companies collect detailed data about their customers through loyalty card programs. The FTC may combine these and other data to estimate diversion ratios, calculate upward pricing pressure metrics, or simulate merger outcomes. However, because modeling competition among grocers often requires strong assumptions on demand characteristics, marginal costs, and the nature of competition among firms, such methods typically are used in conjunction with the other tools described above.

D. Remedies

Where feasible, the FTC often seeks to remedy potential anticompetitive effects of grocery mergers (rather than outright block the mergers) through the divestiture of stores in geographic markets of concern. Typically, the extent of the remedies sought depends on the extent of remaining competition in the marketplace, as well as the likelihood of significant entry by additional competitors into the relevant geographic markets.

The table below shows that between 2010 and 2016, the FTC’s traditional analysis of grocery mergers resulted in no divestitures in markets that were categorized as 4 to 3 or greater. However, in the more recent transactions, the FTC has required divestitures in markets where there were as many as 6 other competitors.

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### FTC Divestiture Orders in Recent Supermarket Merger Cases

<table>
<thead>
<tr>
<th>Merger</th>
<th>Number of Target Stores</th>
<th>Divested Stores</th>
<th>Geographic Markets</th>
<th>Change in Market Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahold &amp; Delhaize (2016)</td>
<td>1,291</td>
<td>81</td>
<td>46</td>
<td>3 to 1 4 to 2 5 to 3</td>
</tr>
<tr>
<td>Albertsons &amp; Safeway (2015)</td>
<td>1,332</td>
<td>168</td>
<td>130</td>
<td>2 to 1 3 to 2 4 to 3</td>
</tr>
<tr>
<td>Bi-Lo &amp; Delhaize (2014)</td>
<td>154</td>
<td>12</td>
<td>11</td>
<td>2 to 1 3 to 2 4 to 3</td>
</tr>
<tr>
<td>Albertsons &amp; United (2013)</td>
<td>51</td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Ahold &amp; Genuari (2012)</td>
<td>24</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Tops &amp; Penn Traffic (2010)</td>
<td>79</td>
<td>7</td>
<td>5</td>
<td>-</td>
</tr>
</tbody>
</table>


Although many factors are considered in the FTC’s review of grocery retailer mergers (as discussed above), it may be that the increased reliance on measures that quantify closeness of substitution on both product and geographic dimensions, like diversion ratios and upward pricing pressure metrics, have caused divestitures in markets that previously would have been considered sufficiently competitive based on structural metrics focused principally on geographic overlap. Regardless of the reasons for the increased number of divestitures in recent years, it is clear that merging parties will need to carefully consider the potential competitive implications of future grocery retailer mergers.

### III. MORE RECENT DEVELOPMENTS

The supermarket industry has gone through significant changes in recent years, including with respect of how and where consumers shop. The FTC historically has resisted rapid changes to their methods. However, given the speed with which competition in grocery retail is changing, the FTC may need to reconsider its approach to market definition in grocery mergers to encompass the broader set of alternatives that consumers are increasingly considering as substitutes to “traditional supermarkets.”

#### A. Superstores and Club Stores

Although large format retailers have been around for a while, the popularity of superstores and club stores as a substitute for traditional supermarkets has increased significantly in recent years.

In 1976, Price Club, which would eventually become Costco Wholesale, began operating as a wholesaler focused on selling to small businesses. Within a few years, the paid membership model emerged at Price Club and was adopted by Sam’s Club in 1983.18

In 1988, Walmart opened its first supercenter, and Kmart and Target quickly followed. These supercenters brought grocery retailing, general merchandise, and pharmacies under a single roof. Over time, they added more functionality to the one-stop shop experience, including eye care centers, photo centers, and fast-food chains. By 2000, the supercenter format was so popular that Walmart had amassed more than 800 locations with 11 percent of US grocery industry sales, with its share of the market peaking at 26 percent by 2017.19 Over the last decade, Walmart has continued to innovate by expanding its formats to include Neighborhood Walmart locations, which are smaller format grocery-only stores in urban areas or small towns that cannot support a supercenter.

Today, Walmart is ranked first by SuperMarket News’s list of “Top 50” retailers by annual sales, with Costco not far behind at fourth. Indeed, Costco’s sales of food and sundries ($91.9 billion) is larger than Albertsons total sales across all product categories ($69.7 billion).

B. Online Grocery Sales and Grocery Retail in the Post-COVID World

Over the last three decades, the retail grocery industry also has seen the growth of online grocery sales. Peapod began providing online grocery services in 1989, when consumers would load software onto their computers to order groceries for delivery.20 Today, Peapod is an “under-the-radar” giant in the grocery delivery business that pioneered many of the online grocery ordering tools used by millions of consumers today.21

Interestingly, while traditional grocers and superstores have been evolving to improve their online presence and capabilities, the world’s largest online retailer, Amazon, has been moving in the opposite direction — establishing bricks-and-mortar networks to facilitate grocery delivery. Amazon began offering Amazon Fresh grocery delivery service in select markets to Amazon Prime customers in 2007. More recently, Amazon expanded its presence in the retail grocery industry with the purchase of Whole Foods in 2017 and the launch of Amazon Go, a cashier-less grocery store, in select areas in 2018.22

The COVID pandemic significantly has impacted the way that millions of consumers purchase retail products, including groceries. For example, as a result of lengthy COVID-related restrictions, US consumers were encouraged to purchase groceries online instead of in physical retail locations. In response, grocery retailers began offering online ordering and pick-up as well as online delivery options. The figure below from a report by McKinsey notes that e-commerce penetration in the grocery industry accelerated from approximately 4 percent of sales before the pandemic to 10-15 percent penetration in late spring 2020, with urban areas seeing penetration rates of as high as 20 percent.23

E-Commerce Penetration in Grocery


These penetration rates have held steady through the pandemic, even as many areas of the US loosened pandemic restrictions, indicating that these industry changes may be here to stay. Indeed, recent surveys by Nielsen highlight that consumers’ preferences for online ordering and delivery options are interchangeable with the preferences for in-store shopping at traditional grocery retailers.  

IV. THE FUTURE OF SUPERMARKET MERGER REVIEWS

As the supermarket industry continues to respond and change to consumer preferences for convenience through online offerings, and as those offerings remain frequent and predominant ways that consumers shop for groceries, the FTC should continue evaluating the extent to which online retail grocers competitively constrain traditional grocers. And previous experience indicates that they will, at least on a case by case basis. For example, as noted above the FTC's approach to the evaluation of retail grocery mergers evolved to include supercenters and, on at least one occasion, club stores as participants in the same relevant markets as traditional supermarkets. Hence, although so far there is little precedent for the inclusion of online retail as a significant competitive constraint in the evaluation of traditional grocery retail mergers, given the rapid growth in the number of consumers conducting their weekly one-stop grocery shopping through online and non-traditional retailers (like Amazon) during the COVID pandemic, the FTC likely will need to consider expanding its relevant market definitions to include these options as significant competitive constraints on traditional grocery retailers.  

From an economics perspective, the types of data and analyses that are likely to be most useful in evaluating whether wholesale club stores and online grocery should be included in relevant product markets would be documents and data showing that consumers consider these options as substitutes to the merging parties stores. Direct evidence on customer preferences, such as surveys indicating how frequently the parties’ consumers shop for groceries in non-traditional supermarket options or the share of consumers’ grocery wallet that is accounted for by club stores and online grocery, as well as any switching analyses conducted by the parties in the ordinary course to assess the extent to which (and reasons for) their customers substituting to other non-traditional supermarket options, are a few examples of potentially useful evidence. If the parties’ offer their own online shopping and delivery options, combining data on the parties’ online sales and brick and mortar sales at the customer level (for example, by tracking purchases using loyalty cards) may be useful to gauge consumer willingness to shop for groceries online.

Indirect evidence of consumer substitution vis-à-vis the parties’ price responses to non-traditional supermarket options may also be useful. For example, the parties’ monitoring reports or price matching studies may provide insight into how closely they (or their consumers) compare pricing with club stores and online grocery. Insights can also be derived from an analysis of the parties’ cross-channel pricing strategy. The extent to which parties apply similar prices across channels or adjust prices on one channel to changes in the other channel (when they are present both in store and online) can be informative on how the parties perceive (and react to) cross channel switching and competition.

Additionally, case studies or more formal analysis of the effect from entry by a club store or the introduction of online delivery options into a local market on the parties’ strategic decisions in that market may be useful. Of course, adjustments to geographic market definition likely would need to be factored into the analysis, as club stores tend to have larger catchment areas than traditional grocery stores, and online delivery can reach as far away as can be travelled by truck from a central fulfilment center.

Ultimately, the question is “how large is the competitive constraint imposed on the market by non-traditional supermarket options?” Greater substitution to other options will lower any incentive the parties would have to increase prices following a merger. Thus, to the extent consumers increasingly view club stores and online grocery as substitutes for traditional supermarkets, the more important they will become for the analysis of competitive effects from grocery mergers.

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25 Of note is the French Competition Authority’s decision in Fnac Group’s acquisition of Darty, a rival appliance, electronics, and entertainment products retailer, where it defined product markets to include both in-store and online sales channels. (See, e.g. Autorité De la Concurrence Press Release, Retailing of “Brown” and “Grey” Products, July 18, 2016, available at https://www.autoritedelaconcurrence.fr/en/communiques-de-presse/18-july-2016-retailing-brown-and-grey-products.)

26 Even though the FTC has not explicitly included non-traditional grocery stores in its market definition, they may have implicitly included them in mergers where the concentration appears high, but the FTC found no competitive effects.

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