

Retail Competition

Book Chapter in
Retailing in the 21st Century (2005)

Edward J. Fox and Raj Sethuraman

Cox School of Business, Southern Methodist University, Dallas, USA

Introduction

Forty years ago, a consumer who wanted to buy prescription medicine in the US or many other western countries would have visited a local independent drugstore. Today, a US customer can fill prescriptions at any number of drugstore chains (e.g., Walgreens or CVS), supermarkets (e.g., Kroger or Albertson's), mass merchandisers, or supercenters (e.g., Wal-Mart or Target) in town, not to mention mail-order providers (e.g., AmeriCan Meds 1-800-469-0955) and online pharmacies (e.g., www.Drugstores-Online.com). The increased number of options for purchasing pharmaceuticals illustrates the high intensity of retail competition in today's consumer goods marketplace, driven by discerning consumers with heightened expectations and varying tastes, along with technological advances that facilitate efficient distribution of products and provision of retail services.

As the above example shows, most product categories can now be purchased in several different retail formats. A *retail format* is comprised of stores that offer the same, or a very nearly the same, variety of product categories.¹ Formats that have emerged in recent years, mass merchandisers, supercenters (supercenters include both a mass merchandise store and supermarket under one roof), warehouse clubs, and dollar stores, are collectively known as *nontraditional formats*. Formats with a longer history, such as grocery, drug, and department stores, are more *traditional formats* (see also chapters by Ahlert, Blut, Evanschitzky; Weitz, Whitfield; Dawson in this book).

Perhaps the most important trend in retail competition is the increasing competition between retailers of traditional and nontraditional formats in the product categories that they offer in common. We refer to this type of competition as

¹ Stores of a given retail format offer generally similar promotion, pricing, assortment, store location, and merchandising strategies. However, differences in those strategies are important factors in within-format retail competition.

between-format competition and will devote considerable discussion to this emerging trend. Of course, retailers of the same format also compete with each other for market share and consumers' "share of wallet," a phenomenon that we term *within-format competition*. As noted, stores of the same format offer very similar varieties of merchandise. For example, all department stores sell primarily apparel and goods for the home; all supermarkets sell perishable and dry grocery products along with health and beauty items; and all warehouse club stores sell a wide variety of products, including food, packaged goods, apparel, and durable goods. Though the variety of products is very similar within one format, retailer prices, assortment, and store location strategies can differ substantially.

The objective of this chapter is to investigate the two types of retail competition – within- and between-format – by identifying key trends, offering insights and predictions about the future, discussing open issues, and highlighting topics for future research. Our discussion of retail competition will focus primarily on retailers of packaged goods products, such as grocery stores and mass merchandisers. The discussion is organized around four key dimensions of retail competition.

- *Price* – Prices of items within and across categories, which may vary from week to week as a result of promotions
- *Variety* – Breadth, or number of categories typically carried by the outlet
- *Assortment* – Depth, or number of items within a category
- *Store location* – Where the retail store is located and how this affects cost of shopping to consumers

The next section discusses the impact of nontraditional formats on retail competition. Then, for each dimension of competition, we draw on the available research to assess its effect on consumer shopping behavior and highlight trends in competition within and between retail formats, making predictions about the future and identifying questions that are as yet unresolved.

The Impact of Nontraditional Formats

Open Issue: Are Traditional Formats in Decline?

The catalyst of competition between formats has been the emergence of hyper-efficient mass merchandisers, in particular Wal-Mart, which carry an exceptionally wide range of products. Mass merchandisers (and the supercenter format they pioneered) offer packaged goods categories in common with supermarkets and drugstores and apparel and home categories in common with department stores, and overlap with the offerings of most category specialty stores (also known as "category killers"). As a result, mass merchandisers and supercenters are in competition with supermarkets, drugstores, department stores, and category killers for

many purchases. Because of Wal-Mart's well-publicized cost advantage (which is also enjoyed, to a lesser extent, by other nontraditional format retailers), competition for these categories has prompted many to sound the death knell of traditional formats. Although predicting the demise of these formats is premature, there is evidence to support this concern. This evidence includes (1) the dramatic inroads that Wal-Mart's supercenters have made in grocery sales in the last decade – Wal-Mart now sells more grocery products than any other retailer in the world, and 28% of US shoppers now claim to shop for groceries regularly at mass merchandisers or supercenters (Food Marketing Institute 2002, p. 23); (2) recent high-profile bankruptcies of category killers such as K-B Toys and Toys 'R' Us; and (3) the general malaise among department store retailers.

Trend: Traditional and nontraditional formats are competing for store visits rather than for customers. A recent study found that a supercenter opening cost a nearby supermarket 17% of its business, primarily because customers made fewer visits to the supermarket (Singh, Hansen, Blattberg 2004). Most of the consumers who patronized the supercenter continued to shop at the supermarket, albeit less frequently. This study highlights the point that competition between retailers of traditional and nontraditional formats is competition for store visits, not for customers. Another study shows that the more mass merchandisers a household visits, the more grocery stores it also visits (Fox, Montgomery, Lodish 2004). This suggests that a visit to a mass merchandiser is not necessarily a substitute for a grocery store visit; rather, consumers use both formats as part of their shopping strategies. Traditional format retailers must therefore focus on defending the "share of wallet" of their customer base in order to remain viable.

Trend: Greater consolidation across retail sectors. In response to the growing competitive threat from nontraditional formats, traditional formats are consolidating. This consolidation is due more to mergers and acquisitions than to organic growth. A few recent examples are the sale of much of the Eckerd drugstore chain to CVS, the sale of May department stores to Federated, and the purchase of Kmart by Sears. The underlying rationale is that larger retailers will have the scale necessary to reduce costs so that they can compete with Wal-Mart and other low-cost mass merchandisers. As a result, retail concentration has increased significantly, with Kroger, Safeway, and Albertsons now comprising 53.4% of supermarket sales; Walgreen's, CVS and Rite Aid representing 73.2% of drugstore sales; and Costco and Sam's Club making up 89.5% of warehouse club sales (shares of various retail sectors in 2003 are computed from Troy 2004 and the Top 150 Annual Industry Report 2004).

For consolidation to be successful, however, the larger firms that remain must exploit their scale to reduce costs. This requires eliminating overhead and redundant functions, centralizing operations, and negotiating concessions from their suppliers. Without such changes, consolidation results in retailers that are bigger, but still do not have lower cost structures.

Retail Price Competition

Consumers Emphasize Value

In recent years, the proliferation of nontraditional retail formats, a weaker global economy (especially since the 9/11 terrorist attack), and the availability of price information on the Internet have all resulted in greater consumer price consciousness. Consumers exhibit price consciousness by purchasing items on special promotions, shopping across stores and formats in search of bargains, patronizing discounters, and purchasing more low-priced private-label products (Sethuraman 2003). The phenomenal growth of Wal-Mart is a testament to the increasing emphasis on value.

At the aggregate market level, consumers' emphasis on value can also be understood from the household income distribution. The distribution of US household incomes in the year 2000 is shown in Figure 1. The distribution is highly skewed – although the average income is \$55,409, the median household makes only \$41,486, and over 58% of US households earn less than \$50,000 per year. Because the majority of households have limited disposable income, they are likely to be price sensitive. Moreover, high-income households buy no more in most packaged-goods categories (e.g., toilet tissue, detergent, salty snacks) than low-income households of the same size. In fact, because high-income households spend more on money eating out, they may actually buy fewer grocery items. As income levels continue to polarize because of the growth of low-paid service jobs, price sensitivity is likely to increase, at least for frequently purchased consumer goods. In order to serve the mass market of consumers in coming years, retailers must therefore price their goods so as to offer the value these consumers seek.

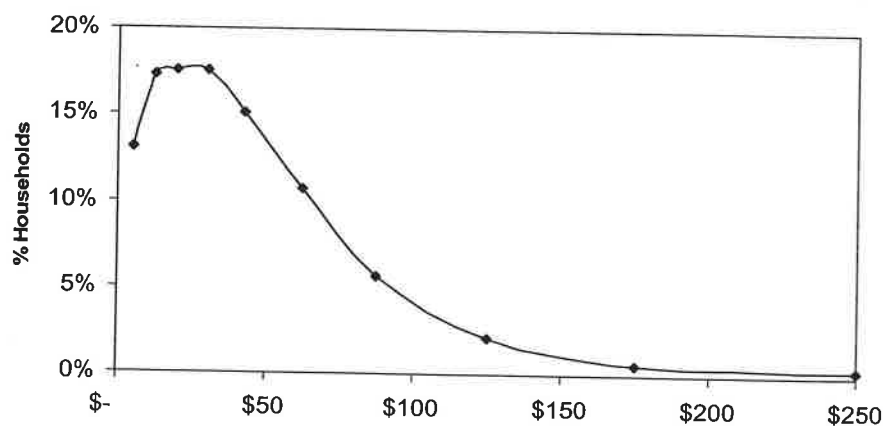


Fig. 1. US Household Income Distribution for Year 2000* Within-Format Price Competition

Open Issue: Promotional or everyday low pricing? To offer value to customers, retailers generally use one of two pricing strategies: (1) frequent promotional discounts, known as HiLo pricing, or (2) everyday low prices, commonly abbreviated as EDLP. On average, EDLP stores offer lower prices than HiLo stores, but discounting by HiLo stores allows opportunistic shoppers to pay lower prices there than in EDLP stores. The interplay between these two pricing strategies can be illustrated in the context of competition between supermarkets. By offering temporary price promotions each week, HiLo supermarkets price discriminate between opportunistic shoppers, who are willing to invest time and effort searching for bargains, and those who are not. Consumers whose costs in terms of time are low and/or enjoy greater benefits from searching for low prices will gather information from different supermarkets, and may even shop at multiple stores. They gather information about weekly price deals by studying the feature advertisements of competing retailers and may even be willing to visit multiple stores to take advantage of price deals at each store, a practice known as cherry-picking. In fact, a recent industry study finds that one-third of US households shop at multiple grocery stores in an average week (Food Marketing Institute 2002).

We can shed some light on price competition between EDLP and HiLo stores by understanding who shops at EDLP stores and why. EDLP retailers require scale economies to make it possible for them to offer low prices, so they operate fewer stores in a geographic market (to draw customers from a larger trade area) than do HiLo retailers, though their stores are larger (to gain scale economies and accommodate the traffic). As a result, for most shoppers, visiting EDLP stores requires more travel than visiting less distant HiLo stores. EDLP stores are also more time consuming to shop, because of their larger size. Shoppers who are loyal to EDLP supermarkets have one or more of the following characteristics: (1) low opportunity costs of time – these shoppers are willing to spend more time shopping, perhaps because they have lower wage rates or fewer time constraints; (2) greater benefits from shopping at low-priced EDLP stores – the lower prices found at EDLP stores can be applied to the needs of a larger family (Bell, Ho, Tang 1998; Briesch, Chintagunta, Fox 2005); (3) big-basket shoppers – infrequent shoppers buy a large basket of goods when they visit a supermarket (Bell, Lattin 1998), so that the lower prices available at EDLP stores are effectively magnified by the big basket²; and (4) brand loyalty – brand-loyal shoppers are unwilling to buy whatever brand a HiLo retailer offers at a discount as a substitute for their preferred brand, which limits their ability to be opportunistic.

A substantial segment of shoppers switch between EDLP and HiLo supermarkets, depending on the purpose of their shopping trip (Fox, Metters, Semple 2003). These shoppers sometimes stock up and sometimes simply fill in between major trips. When stocking up they will be willing to travel to a less convenient EDLP

² Big basket shoppers also have less flexibility to delay purchases, which prevents them from changing the timing of their purchases to accommodate the deal schedules of HiLo retailers.

store. However, if they intend to purchase only a small amount, these shoppers will choose a more convenient HiLo store (Bell, Ho, and Tang 1998). Thus, the more often consumers shop, the more likely they are to choose HiLo stores; the less often they shop, the more likely they are to select EDLP stores. EDLP supermarkets can influence consumers' shopping frequency by providing incentives for big-basket shopping, which are basically volume discounts, frequent shopper programs, and other, less narrowly targeted, means.

In summary, consumers shop most often at HiLo stores, because they value the convenience of HiLo stores and/or because they can take advantage of the price discounts. In the grocery sector, those who shop at EDLP stores do so because they have low opportunity costs of time (e.g., low wage rates), and/or they can apply EDLP stores' low prices to larger shopping baskets. Still others switch between EDLP and HiLo supermarkets, depending on whether the purpose of their shopping trip is to stock up or to fill in supplies between major purchases.

Between-Format Price Competition

Trend: Increased price competition between formats. The consumer trend toward price consciousness, together with the implementation of information and supply-chain technologies by retailers, suggests that price competition between retail formats has increased. The industry has recently witnessed the implementation of several retail technologies that reduce operating costs, allowing retailers to lower prices to consumers (Sethuraman, Parasuraman 2005). For example, customer-operated check-out registers reduce front-end labor costs; cross-docking reduces inventory and storage costs; collaborative planning, forecasting and replenishment (CPFR) reduces supply costs; and radio frequency identification (RFID) technology offers the promise of reducing product tracking and inventory costs. According to one Sainsbury (UK) manager, RFID tags have reduced their receiving-function time from two and a half hours to 15 minutes.

Prediction: Mass merchandisers will keep prices low and enjoy a widening price advantage. Mass merchandisers, though they do not all use an EDLP strategy, offer significantly lower average prices than other formats for a given basket of goods. Because they are less reliant on promotions, mass merchandisers sell fewer discounted items than supermarkets or drugstores do. The only available study with a bearing on price competition between formats shows that mass merchandisers could increase short-term revenues by raising their overall price levels, while supermarkets and drugstores would lose revenues by raising prices (Fox, Montgomery, Lodish 2004). Interestingly, the study also finds that mass merchandisers could increase short-term revenues by offering more promotions. Why do mass merchandisers keep their prices low, despite the revenue they could gain by raising prices and the already substantial gap between their prices and those of other formats? The mass merchandiser business model depends heavily on scale and its associated cost advantage — the greater the scale, the greater the cost ad-

vantage. Preserving and extending this advantage is critical to their long-term success. To date, mass merchandisers, particularly Wal-Mart, have maintained an almost single-minded focus on cost efficiency. Moreover, by concentrating their capital investments over the next few years on building supercenters, Wal-Mart and Target have shifted the product mix of their stores toward lower-margin grocery products in pursuit of store traffic and sales volume. The investment in lower margin supercenters is a credible commitment to maintaining low prices. Given the apparent success of their strategy, there is no reason to believe that mass merchandisers will raise their prices in the foreseeable future.

Trend: Small-store formats are becoming more cost efficient and offering lower prices. "Big box" retail formats, such as mass merchandisers, supercenters, and hypermarkets are not the only retailers undercutting traditional formats on price. Dollar stores, including Dollar General and Family Dollar, have rapidly become profitable purveyors of general merchandise in the US, while hard discounters such as Aldi and Lidl have made major inroads in the market for groceries in Europe. These formats operate large numbers of small stores located closer to consumers. By using flexible logistics, information technology, and effective centralized management of inventory and personnel, however, they are able to match the cost structures of operators of larger stores.³ Metters, Ketzenberg, Gillen (2000) argue that "tightly linked networks of small stores ... can actually enjoy the same scale advantages as those of superstores." Wal-Mart obviously agrees, having announced plans to roll out its own small-store Neighborhood Market format, offering products at the same prices as its supercenters.

Retail Variety Competition

Consumers Prefer One-Stop Shopping

Shopping convenience has several aspects, from spatial convenience to transactional convenience to one-stop-shopping convenience. One-stop shopping enables consumers to be efficient by buying everything they need from a single store. A survey conducted by Information Resources, Inc. (2002) finds that 54% of shoppers prefer one-stop shopping.

Variety Competition Between Formats

By definition, stores of the same format offer essentially the same range of product categories, so we will consider variety competition only between formats.

³ Note that dollar stores reduce costs further through opportunistic buying, while hard discounters offer private-label products almost exclusively.

Trend: Growing popularity of broad-line retail formats. Retailers facilitate one-stop shopping by offering a broad range of product categories. For example, many consumers can now buy bananas, beer, frozen entrées, detergent, shampoo, blue jeans, television sets, and computers in the same store in which they can fill prescriptions, get their nails manicured and their hair cut, do their banking, rent a video, and eat a hot meal. The increasing popularity of broad-line retail formats such as mass merchandisers, supercenters, combination grocery and drugstores, and warehouse clubs reflects consumers' growing desire for one-stop shopping.

Trend: Blurring of retail formats. In general, retailers add categories that will increase store traffic. Examples include convenience stores and supermarkets offering freshly prepared foods for immediate consumption; supermarkets and mass merchandisers dispensing gasoline; grocery stores offering ethical drugs by adding pharmacies; and bookstores opening coffee bars. Because only a few categories can effectively drive store traffic, both traditional and nontraditional formats find themselves with more and more categories overlapping, a phenomenon known as format blurring.

Retail Assortment Competition

Just the Right Amount: Not Too Little, Not Too Much

When assessing consumers' preference for product assortment, it is important to understand that more is not necessarily better (e.g., see Broniarczyk, Hoyer chapter in this book). Deeper retail assortments (stocking more items per category) increase the time and effort consumers must expend when purchasing from a category and can cause consumers to become confused or frustrated. On the other hand, deeper assortments give consumers a wider range of items to choose from, increasing the probability that they will find the item they want. However, the items with widest appeal are the first to be included in an assortment, so that each additional item added will appeal to fewer and fewer shoppers. The benefit of adding additional items therefore diminishes as the number of items in the assortment grows.

For over a decade, the grocery industry has made reducing assortments a fundamental tenet of such cost-reduction initiatives as Efficient Consumer Response. Research on response to assortment has yielded mixed results. Though reductions in category assortments appear to have little or no negative impact on sales in the categories affected, they may reduce shoppers' willingness to patronize a store. Thus, the primary risk of reducing category assortments is the loss of store visits, not category sales. The question remains whether category assortments can be profitably reduced, and if so, under what conditions.

Within-Format Assortment Competition

Trend: Customizing assortments to meet local market preferences. It is well known that retailers modify the depth and composition of their assortments on the basis of demographics and other characteristics of households in their trade areas. For example: grocery stores in markets with larger Hispanic populations offer more authentic Mexican food items; drugstores in markets with more elderly populations carry larger assortments of incontinence products while drugstores in markets with more young children and families will carry larger assortments of diapers; and department stores in trendier urban markets offer more haute couture fashions. The practice of customizing assortments for individual stores is known as micro-marketing. To the extent that assortments can be customized for individual stores cost effectively, micro-marketing is a valuable competitive weapon. However, because micro-marketing is inherently ad hoc, we will not discuss it in further detail here. We will focus instead on how the size of assortments systematically affects within-format competition.

The assortment size that consumers prefer reflects the tradeoff between the benefit they enjoy from the availability of more items and the cost they incur when shopping from a larger assortment. Because consumers' opportunity cost of time drives their cost of shopping, consumers with different opportunity costs will prefer different assortment sizes (Briesch, Chintagunta, Fox 2005). To illustrate this point, Figure 3 shows the difference in the assortment sizes preferred by consumers with low shopping costs and high shopping costs. Consumers with low shopping costs (because they have low opportunity costs of time) prefer larger assortments. Consumers with high shopping costs (owing to high opportunity costs of time) prefer smaller assortments. When the idea of opportunity costs is related to consumer demographics (which are more easily measured), these findings suggest that stores with trade areas that have higher wage rates, more working women, and more single-parent households should offer smaller product assortments.

Between-Format Assortment Competition

Each format sells a different variety of categories, but may also offer different assortment levels within categories. As a result, categories that are sold in two or more formats are likely to have larger or smaller assortments in each. For example, the assortment of carbonated beverages in a warehouse club store may be less than one-tenth the size of the carbonated beverage assortment in the average supermarket.

There is evidence that shoppers' preference for assortment varies by format but is highly correlated with the assortment levels offered. In packaged goods categories, for example, supermarket assortments are roughly twice as large as mass merchandiser assortments, which are about twice as large as drugstore assortments. Consistent with the actual assortments, consumers' exhibit the highest preference for assortment in supermarkets and are far less sensitive to drugstore assortments (Fox, Montgomery, Lodish 2004).

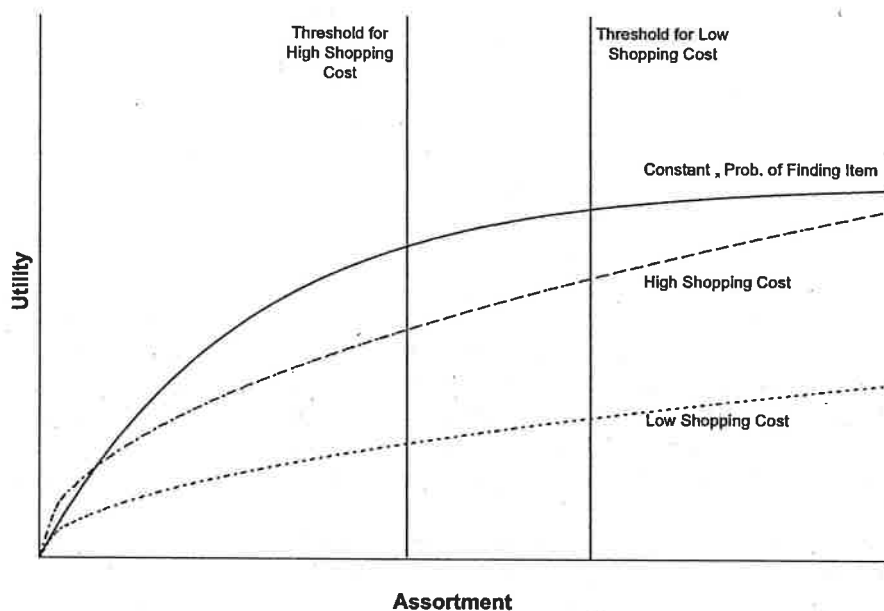


Fig. 2. Shopping Costs and Assortment Response

(Source: Briesch, Chintagunta and Fox 2005, p. 5.)

Prediction: Retailers will segment markets based on the purpose of the shopping trip. Consumers' preference for assortment is heavily dependent on the purpose of the shopping trip. When stocking up, shoppers prefer stores that offer larger assortments because the benefits of searching can be applied to a larger basket. For quick trips, on which shoppers buy fewer items, smaller assortments are preferred. As a result, stock-up trips are more likely to be made to supercenters and supermarkets, while quick trips are more likely to be made to convenience stores and drugstores. Currently, retailers segment markets primarily on the basis of customer-specific factors (e.g., demographics) market-specific factors (e.g., weather; region of the country), or store-specific factors (e.g., urban, suburban, or rural; presence or absence of competing stores). In the future, retailers will segment markets based on the purpose of the shopping trip, implying that a shopper may be in the target segment on some trips, but not on others. Wal-Mart's new Neighborhood Market format is an example of just that: its small-footprint stores attract quick trips, while Wal-Mart's supercenters are positioned for stock-up trips.

Prediction: Supermarkets will not reduce their assortments substantially. Trip-specific assortment preferences have additional implications for the competition between supermarkets and nontraditional formats. If supermarkets are to mount an effective defense against the nontraditional formats, they must compete for consumers' stock-up trips, which represent a disproportionate volume of sales. If

supermarkets were to cut their assortments substantially, they would risk relinquishing the stock-up trips to supercenters, warehouse clubs, and mass merchandisers. Cost savings from reducing assortments, which were promised by industry initiatives like Efficient Consumer Response and category management, do not justify this risk. Thus, supermarkets will not make substantial assortment reductions, at least not in the foreseeable future.

Retail Location Competition

Consumers Balance Convenient Retail Locations and Low Prices

Store location, perhaps the longest term decision that a retailer makes, is commonly considered the primary driver of retail competition. This is because convenience is the most important factor in store selection, and stores located closer to the consumer are more convenient. However, in order to locate its stores close to consumers, the retailer must have a large number of stores, each serving a small number of consumers. This means that scale efficiencies are lost (despite the protestations of Metters, Ketzenberg, and Gillen 2000) and more convenient stores are not able to offer prices as low as those in less convenient outlets. In other words, spatial convenience usually comes at a cost. Retail properties themselves have cost implications that affect pricing strategies and margins. For example, Wal-Mart's inexpensive rural store sites are an important component of its low cost structure. The consumer's store choice decision represents a balancing act between paying high prices for goods in more convenient outlets and paying low prices for goods in less convenient outlets.

Within-Format Location Competition

Open Issue: How much should stores of the same format agglomerate? Shopping convenience is multi-faceted; for example, shoppers' proximity to the store and the possibility of one-stop shopping both contribute to convenience. Another factor is agglomeration – locating stores near one another – which allows “virtual” one-stop shopping. The agglomeration of stores affords two benefits to consumers: (1) They can fulfill different needs on a single shopping trip, such as dropping off their dry cleaning, visiting a restaurant or café, doing their banking, shopping for apparel, food, etc. This is known as multi-purpose shopping, and is an important reason for agglomerating stores in shopping malls and retail centers. (2) Consumers can also search across similar stores to maximize the value or quality of the products they purchase. This second consumer benefit provides the rationale for locating stores of the same format close together. This is quite common in some types of retail, as suggested by the phrases “restaurant row,” “motor mile,” and “red light district.” For packaged goods retailers, however, within-format location competition is essentially a zero-sum game. The gains that one store realizes from

agglomeration with stores of the same format are offset by the losses of other stores. More research is needed to determine the conditions under which retailers should locate their stores near other stores of the same format.

Between-Format Location Competition

Spatial convenience – the proximity of stores to consumers – depends largely on the format (Fox, Montgomery, Lodish 2004). Drugstores typically have high market penetration, so that each store serves a small trade area. Grocery stores have only slightly lower market penetration, serving somewhat larger trade areas. Mass merchandisers, supercenters, and warehouse clubs all have substantially lower penetration levels, and stores of these formats serve proportionally larger trade areas. The reader is reminded, that for the shopper who intends to buy a large basket of goods, price looms larger than spatial convenience; if a smaller purchase is planned spatial convenience is relatively more important than price (Bell, Ho, Tang 1998). While consumers generally prefer more convenient locations, this preference is therefore stronger for drugstores than for grocery stores, and stronger for grocery stores than for mass merchandisers (Fox, Montgomery, Lodish 2004), supercenters, or warehouse club stores.

Trend: Retailers are moving off the mall. Malls have prospered because locating stores in a single shopping destination offers consumers the ability to satisfy multiple purposes on a single trip and search across stores efficiently. Yet malls are falling out of favor with consumers, and retailers are therefore shifting their stores off the mall. Examples include JCPenney and Bombay Company, both of which have changed their real estate strategies to locate more stores off the mall, and Sears, which has announced that it will close mall locations to open new stores on Kmart's sites off the mall (this was touted as a primary reason for Kmart's purchase of Sears). Why this off the mall trend? In part, because one-stop-shopping can be accomplished more efficiently in the emerging large-store formats, such as mass merchandisers and supercenters. The lower prices offered by these nontraditional formats have also reduced the consumer's return to price search. Furthermore, mall real estate can be quite expensive, and many urban malls require gentrification.

Final Questions About the Future of Retail Competition

Before closing, we will address three compelling questions about the future of retailing:

1. Will nontraditional formats be successful in penetrating urban markets?
2. Can Wal-Mart continue its current impressive growth rate?
3. Will major US retailers grow internationally, exporting successful formats and operations to other countries?