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## Is There a Future for Wholesaler-Supplied Supermarkets?

By Robert P. King

Food industry analysts are looking closely at the long-term viability of grocery wholesalers and the independent supermarkets they supply. Growing demand for food away from home has slowed supermarket industry growth. New competitive pressures are coming from other food service providers, convenience stores, and supercenters operated by mass merchants such as Wal-Mart and Target. Many believe independent retailers are vulnerable to these threats. New information technologies are helping lower supply chain costs through closer collaboration between retailers and suppliers. However, this collaboration may come easier in self-distributing chains, which own and operate both supermarkets and distribution centers.

Future success for the wholesaler-supplied supermarket industry will depend on how independent retailers adapt to changing market forces and on effective collaboration between stores and distribution centers. How well are independent retailers positioned to compete in their local markets? How well has the wholesaler-supplied system adopted new technologies and business practices? How does store-level performance of independent supermarkets compare with that of distributor-owned stores?

Data from the 2002 Supermarket Panel respond to these questions. The Panel is an annual survey of supermarkets by The Food Industry Center at the University of Minnesota (King, Jacobson, & Seltzer, 2002). The Panel collects detailed data on store characteristics, operating practices, and standard store performance measures for a random sample of the nearly 32,000 supermarkets in the United States. The 2002 Panel includes 866 stores located in 49 states. These stores reflect the wide range of store formats and ownership structures in the supermarket industry. Weighted responses from stores account for differences in sampling intensi-



ties and response rates across company sizes and regions. Thus, our results are representative of the industry.

### Store and Market Characteristics

Table 1 profiles the store and market characteristics for wholesaler-supplied and self-distributing stores. The differences are striking. Although 46.1% of U.S. supermarkets are wholesaler-supplied, those stores account for only 32.3% of annual supermarket sales. On average, wholesaler-supplied stores are smaller and older than self-distributing stores; they are owned by much smaller companies. The median proportion of full-time workers is similar for the two groups, but wholesaler-supplied stores

**Table 1.** Profile of wholesaler-supplied and self-distributing stores.

	Wholesaler-supplied	Self-distributing
<b>Number of stores represented<sup>a</sup></b>	14,944	17,481
<b>Aggregate annual sales (\$ billion)</b>	\$148.8	\$311.3
<b>Store characteristics:</b>		
<b>Median selling area (sq. ft.)</b>	18000	38000
<b>Median weekly sales</b>	\$117,000	\$300,000
<b>Median sales per transaction</b>	\$17.50	\$23.53
<b>Median store age (years)</b>	27	15
<b>Mean ownership group size<sup>b</sup></b>	20	922
<b>Human resources:</b>		
<b>Proportion full-time employees</b>	41.5	41.2
<b>Percent with union workforce</b>	18.7	45.1
<b>Median hourly payroll expense</b>	\$10.26	\$12.50
<b>Labor intensity (weekly hr./sq. ft.)</b>	68.6	63.2
<b>Market characteristics:</b>		
<b>Median annual household income</b>	\$43,493	\$45,473
<b>Median population density (per sq. mi.)</b>	224	658
<b>Percent located in an SMSA</b>	59.1	70.5
<sup>a</sup> The unweighted sample includes 521 wholesaler-supplied stores and 345 self-distributing stores.		
<sup>b</sup> A store's ownership group size is the number of stores operated by its parent company.		

are less likely to have a union workforce and have lower hourly payroll expenses.<sup>1</sup> Wholesaler-supplied stores are also located in less-populated areas with lower median household incomes. Relatively low population density and household income are commonly associated with supercenter locations, and a higher percentage of stores in self-distributing groups do report that they face supercenter competition.

## Management Practices

The Supermarket Panel collects detailed information on management practices in supply chain, human resources, quality assurance, and service offerings. Indices for each management area, rang-

1. *Labor intensity (measured by weekly labor hours per 1,000 square feet of selling area) is slightly higher in wholesaler-supplied stores.*

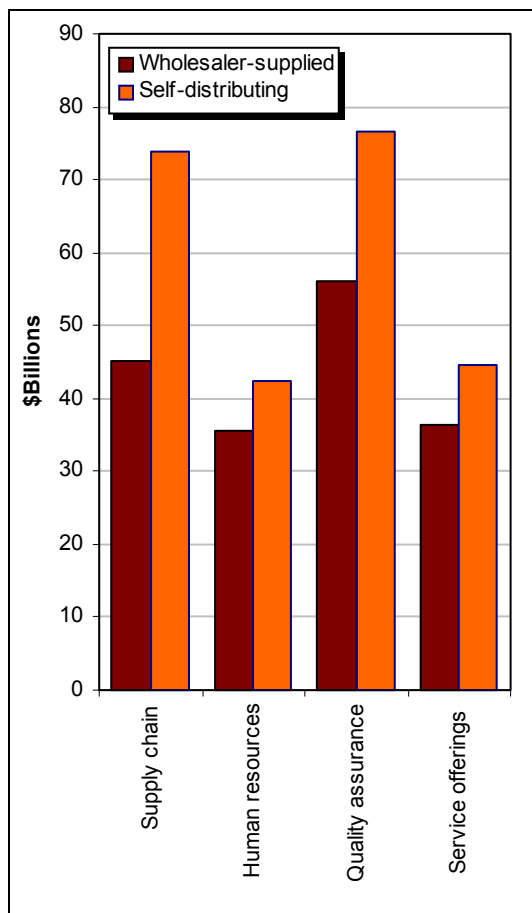
ing from zero to 100, measure each store's progress toward "best practices." Figure 1 indicates that wholesaler-supplied stores lag behind self-distributing stores in each area, especially for supply chain and quality assurance.

The supply chain index indicates a store's readiness to promote efficiencies in logistics and inventory management that benefit retailers, distribution centers, and manufacturers. Its two major components are technology adoption and decision sharing. Wholesaler-supplied stores lag in supply chain technology adoption and are less likely to involve external parties in pricing, advertising, shelf space allocation, product merchandising, and promotions. This hampers collaboration with key suppliers, creating competitive disadvantages for both stores and distribution centers in the wholesaler-supplied system.

The large gap in mean scores for the quality assurance index reflects two major components. The first measures the use of formal methods for assessing customer satisfaction. The second measures adoption of safe food handling practices. Mean scores for food handling differ little for the two groups, but self-distributing stores are much more likely to use focus groups, customer surveys, and mystery shoppers to assess customer satisfaction. These formal practices may alert corporate management of self-distributing stores to changing consumer practices. However, companies that operate ten or fewer stores own most wholesaler-supplied stores. This makes it easier for corporate managers to have direct, informal contact with customers.

Differences in mean scores for human resources and service offerings are relatively small. They do not indicate competitive disadvantages for wholesaler-supplied stores. The human resource index has four components: (a) training for new employees, (b) training for key employees (e.g., the store manager and the scanning coordinator), (c) the ratio of full-time to part-time employees, and (d) the use of incentive compensation and noncash benefits to motivate employees. Wholesaler-supplied stores devote fewer resources to key employee training, are less likely to use incentive compensation, and offer fewer employee benefits.

The service offerings index measures adoption of 16 common services that range from bagging and customer self-scanning to teller banking and



**Figure 1.** Management practice indices for wholesaler-supplied and self-distributing stores.

videos. Although wholesaler-supplied stores are much less likely to offer newer services (such as gasoline sales, customer self-scanning, and Internet ordering), they are more likely to offer home delivery, post office, and mailing services. These differences probably reflect store adjustments to typical market characteristics and customer demographics.

### Store Performance

The long-term viability of grocery wholesalers and the independent supermarkets they supply ultimately depends on store-level performance. On average, self-distributing stores are larger, newer, and located in more densely populated, higher income areas. They are also more progressive in adopting “best management practices,” but do these differences lead to superior performance?

Table 2 presents median values for six widely used supermarket performance measures. Although wholesaler-supplied and self-distributing stores dif-

**Table 2.** Median performance measures for wholesaler-supplied and self-distributing stores.

Median performance measures	Wholesaler-supplied	Self-distributing
Weekly sales per square foot of selling area	\$7.14	\$8.29
Annual inventory turns	16	16
Sales per labor Hour	\$100.00	\$129.31
Payroll as a percent of sales	10	9.8
Gross profit as a percent of sales	24	24
Annual percentage sales growth	1.8	1.8

fer importantly for two of these measures, the similarity in performance for the two groups is striking.

Weekly sales per square foot of selling area and annual inventory turns indicate average productivity for two key capital inputs in food retailing: shelf space and the inventory placed on store shelves. The median level for weekly sales per square foot is \$1.15 higher for self-distributing stores. This could reflect more effective merchandising, higher advertising expenditures, or more space allocated to higher valued products. However, store occupancy costs are generally higher in densely populated, higher income areas where the self-distributing stores are more likely located. More intensive use of space may be a natural reaction to higher costs.

Proponents of new supply chain management practices believe more effective inventory management is an important benefit. Given the large gap between the two groups of stores in adoption of supply chain technologies and related business practices, the absence of a difference in median inventory turns is surprising. Although this may indicate overestimation of benefits, a more likely explanation is that inventory management gains have been larger in distribution centers than in stores.

Effective labor management is essential for a successful supermarket. Sales per labor hour and payroll as a percent of sales are widely used to measure average labor productivity. Median sales per labor hour are considerably higher for self-distributing stores. This higher productivity level is offset, however, by higher costs. As reported in Table 1, hourly payroll costs are more than 20% higher for self-distributing stores. The net effect is to equalize payroll as a percent of sales the two groups of stores.

Cost of goods sold is the largest cost category for almost every supermarket operation. Therefore, gross profit—sales minus cost of goods sold—is a key driver of store profitability. Supply chain management can help stores increase gross profits in two ways. First, a store's cost of goods sold may fall if its distribution center passes cost savings for inventory management and logistics on to the stores it supplies. Second, a store might boost sales by using store-level and vendor information to fine-tune product offerings and sell more high-margin products. Despite higher adoption rates for supply chain technologies and practices by self-distributing stores, median gross profit as a percent of sales is identical for the two groups. Gross margins in self-distributing stores also could be affected by corporate accounting, because the cost of goods sold is an internally determined transfer price. Nevertheless, this result runs counter to expectations.

Annual sales growth indicates a store's competitive position in its local market. Median values for this performance measure are identical for the two store groups. This similarity in sales growth rates generally holds between the 10<sup>th</sup> and 90<sup>th</sup> percentiles. At the extremes, the wholesaler-supplied stores show less potential for sharp declines and more potential for larger increases in sales.

### Looking to the Future

Is there a future for wholesaler-supplied supermarkets? Findings from the 2002 Supermarket Panel say yes. Wholesaler-supplied stores are different, but competitive. They are older, smaller, and have lower sales volumes, but also have lower costs for labor and store selling area. Because they are usually operated by smaller, locally owned companies, wholesaler-supplied stores may better adapt to their customers' needs. Some analysts, including *Supermarket News* editorial director David Merrefield, attribute the recent unraveling of rapid growing supermarket chains to overemphasis on efficiency gains based on standardized operations and inattention to local marketing.

Despite these positive findings, the wholesaler-supplied system faces significant challenges.

- The first is disappearance of stores through attrition and acquisition. Based on estimates from the 2002 Supermarket Panel, 17.3% of self-distributing stores were built in the last five

years, versus 6.4% for wholesaler-supplied stores. If older, outmoded stores are not replaced, the density of wholesaler-supplied networks will fall, and distribution costs are likely to rise.

- Second, distribution costs will also rise if wholesalers do not strengthen linkages with the stores they supply. This will require stronger incentives to adopt new practices, such as electronic invoicing and vendor-managed inventory, that improve system-wide efficiency but have little impact on store-level productivity.
- Finally, human capital development is especially difficult for wholesaler-supplied stores, where training resources and career advancement are often limited. Stronger linkages between wholesalers and stores are critical for achieving economies in employee training. They can also be the basis for career path development programs that will produce the next generation of independent store owners.

Firms throughout the food system are faced with decisions about coordinating vertically linked activities. This look at the retail component highlights both the fragility and the robustness of non-integrated supply chains. The answers to questions about vertical coordination will be complex and context specific.

### For More Information

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