



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Trends in Food Distribution: The Retailer

T. M. Hammonds

This year I have been on leave from the University stationed at the National Association of Food Chains in Washington. I have been able to view the industry close-up for the last twelve months and am very anxious to share my observations with you. Since my comparative advantage lies in retailing, my remarks will be directed specifically to that sector.

Five basic economic trends underlie our discussion. First, the decline in rate of domestic population growth. This phenomenon caught everyone, including food retailers, off guard. As a result, new store construction has outstripped demand over at least the last five years. Average sales per square foot of selling space deflated by the food-at-home portion of the consumer price index were 3.57 in 1972, 3.33 in 1973, 3.13 in 1974 and 3.03 in 1975 (S.M.I.). Overcapacity is a fact in this industry.

Second, the energy crisis. No other industry in the United States is more concerned about the impending energy shortage and no food retailer believes the crisis has gone away. Programs developed in response to the problem have already started to have an impact on industry structure. More about this later.

Third, the capital crisis. Almost every serious industry analyst predicts a serious capital shortage for food retailers over the next ten to fifteen years (McKinsey). Our economy in general will experience a capital shortage over this period due primarily to new expenditures needed to finance higher energy costs, new environmental protection programs, and new safety standards. In times of capital shortage, food retailers rank decidedly below average in their ability to attract funds. Investment bankers and institutional fund managers tell us there are many reasons for this, but the T. M. Hammonds is an Associate Professor of Agricultural Economics at Oregon State University and Visiting Staff Economist at National Association of Food Chains.

most significant is the industry's susceptibility to destructive price wars (McKinsey).

Fourth, the failure of food retailing to bring about productivity improvements. USDA data show labor productivity in food retailing to be at the same level in 1974 as it was in 1964.¹ Over this period, labor cost as a share of total operating expenditures grew from 55.3 percent to 65.4 percent (in 1975 the share rose to 67.2 percent) (Earle and Hunt). Most industry innovations now on the horizon are attempts to reverse this trend.

Fifth, shifts in consumer attitudes. Consumers have been very price-conscious over the past five years and seem destined to remain so, although with diminished intensity, for the foreseeable future. At the same time, increased mobility and an increased proportion of working women have shifted more and more meals outside of the home. It seems highly likely that this trend will continue.

Intense Competition Ahead

Now, where does this leave us with respect to the future? One inescapable conclusion is that the super market sector is in for a period of intense competition between now and at least 1980. Overcapacity, declining sales in real terms, a high proportion of fixed costs, and the consumer focus on price as a competitive tool all guarantee intense competition. There are now approximately 32,000 super markets in the United States (Progressive Grocer). In my opinion, the demise of inefficient

¹ Although there is no generally accepted measure of productivity in food retailing, the USDA data are probably the best currently available. The August 1975 *Marketing and Transportation Situation* shows that the index of manhours per unit of farm food marketed improved from 103.4 in 1964 to 82.6 for food processing; improved from 100.4 in 1964 to 96.7 for food wholesaling; but remained virtually constant at 102.7 in 1964 and 102.2 in 1974 for food retailing.

operators at all size levels will push the number close to 25,000 by 1980. This does not necessarily mean that large chains will increase their market share. In fact, a recent survey of industry executives indicates that they believe wholesaler affiliates and medium-sized regional chains will be in the best position, because of their merchandising flexibility, to meet the competitive challenge (Walzer).

Recent trends confirm this judgment. Approximately 46.6 percent of all grocery sales in 1975 were accounted for by chains, with 49.1 percent going to wholesaler affiliates and 4.3 percent to convenience stores. The 1974-75 sales growth rates were 9.0 percent for chains, 9.4 percent for wholesaler affiliates, and 16.5 percent for convenience stores (Progressive Grocer).

Industry concentration is very likely to increase. However, with non-chains and convenience stores gaining market share relative to chain operators, I do not see this trend as cause for public concern.

Those operators who survive the competitive battle will be those who find ways to improve efficiency. However, the easy productivity gains have already been adopted. Further attempts at improving productivity bring food retailers into direct conflict with other powerful groups within our society. These conflicts coupled with a capital shortage mean that improvements will come slowly—productivity gains will be evolutionary rather than revolutionary. Let's look at some examples.

Perhaps the most publicized attempt at improving productivity is the electronic scanner. This concept can increase speed and accuracy, and holds the potential for eliminating much of the labor now required for individual item price marking. Organized labor, fearful for job security, and organized consumers, who prefer item price marking to shelf price marking, are both actively opposed. After a thorough study of this issue, the food retailing public policy committee has recommended that scanning installations maintain conventional price marking. All 69 of the current scanning stores have followed this recommendation. In spite of the pricing controversy, I believe electronic scanners will continue to spread through the industry. The potential savings associated with checker productivity, checker accuracy, automatic inventory control, and the ability to generate item sales data seem to be enough to make this investment pay off even without the labor savings

which would be possible with the elimination of item pricing.

There is a possibility that electronic scanners could have a structural impact. Scanner systems are expensive and could therefore confer a competitive advantage on those stores large enough to afford them. However, this does not appear likely. Scanners are declining in price and seem to be subject to the same cost-saving technological leaps that have characterized the calculator market. Industry analysts feel that scanning systems will soon be within the budgetary reach of even small operators.

Another innovation with tremendous potential for productivity improvement is modularization of secondary packages (shipping containers). Automated or mechanized warehouses cannot be truly functional unless such a modular system is developed. Since a unionized order selector in a grocery warehouse (a job which requires one day's training) can earn up to \$20,000, mechanization is a high-payoff item. The problem currently limiting the application of this technology is the difficulty of stacking cases from different manufacturers onto pallets for shipment to individual stores. Since these cases are not size-related by standard multiples, load stability is a major problem. This is a critical problem because current government warehouse sanitation standards leave no margin for breakage due to unstable loads. As an illustration of the container variety which now exists, a recent dry grocery warehouse study conducted by A.C. Nielsen found 2,587 different secondary container sizes in a typical warehouse stocking approximately 5,000 items. The conflict which arises here is between retailers who would share in the benefits along with consumers, and grocery manufacturers, who would bear the cost. There is ample room for improvement and the general public has much to gain if this issue can be resolved.

Electronic funds transfer is another concept which could improve productivity through increased speed and accuracy of check cashing and handling. This innovation once again brings retailers into conflict with customers who often operate on float, with bankers who control system design, and with regulatory agencies who are struggling with the definition of a branch bank.

More examples could be given but the point has been made. Productivity improvements are

not easily implemented and certainly cannot be put into place by unilateral action on the part of retailers.

Implementing Energy Conservation

Let me turn now to implications of the energy crisis. As indicated earlier, food retailers feel strongly that this problem has not gone away. As a result, industry leaders have been studying the question of conservation in cooperation with many government agencies. The conclusion as of this date is that the largest potential for conservation lies with employee training and waste heat recovery. Neither new technology nor equipment redesign can match the gains which could be realized in the short run from proper use of existing equipment. Industry-wide training programs are now being designed in response to this need.

In the area of new energy technology, without question the number one priority has to be redesign of compressors. Let me give you some rough estimates of energy use. In a super market, approximately 55 percent of the energy is used for refrigeration, 10 to 15 percent for air conditioning-heating, 15 to 20 percent for lighting, and 10 to 15 percent for miscellaneous uses such as bakeries, conveyors, electronic door openers, etc.² Clearly the priority area is refrigeration. Of the 55 percent of energy used for this function, approximately 35 percent of this (19.25 percent of the total) is used to run compressors. Large screw compressors are more efficient than the piston compressors now used in retail grocery operations. If these could be redesigned to operate in smaller sizes compatible with individual store needs, considerable savings would result.

Super markets certainly seem to be good candidates for solar energy because of their large flat rooflines. Appearances are deceptive. Super markets have several features which sharply limit solar energy potential. One is the nature of their inventory. As opposed to a general merchandise store, almost all of the inventory weight in a grocery store is made up of water. This means that large amounts of energy are needed to alter internal temperatures. Another feature is the nature of traffic patterns. Food retailing outlets are open to the public, and with typical shopping

² Data supplied by NAFC member firms.

patterns, have heavy peak load demands. Finally, food retailers find that internal air temperature and relative humidity must be finely balanced with the operation of refrigerated display cases. There is little margin for error if efficient equipment operation is to be maintained. While a typical office building housed in a super market structure would indeed be a good candidate for solar energy utilization, a super market itself is not. The energy generating capacity and efficiency of this technology must be improved greatly before it becomes viable in food retailing.

I mentioned earlier that energy programs are already having an industry structural impact. Firms find that higher gasoline prices mean they can no longer support stores long distances from their distribution centers. As a result, they are closing outlets and contracting around their centers, or are using local wholesalers to supply their distant stores. The phenomenon of large chains utilizing independent wholesaler facilities is an interesting one. In my opinion, this will strengthen wholesalers and improve their ability to service the independent affiliates. In turn, the stores closed by chains represent a major opportunity for independents to strengthen their operating base. In 1975, 3,000 super markets were closed with 900 of them subsequently reopened under new management. Of those reopened, 82 percent were originally operated by chains but only 13 percent were reopened under chain ownership. The remaining 87 percent were reopened by independents (Progressive Grocer and Walzer).

Super Markets to Remain

Allow me to make some observations about individual store types. I see no strong challenge in the foreseeable future to the super market concept. Telephone shopping, for example, was tested and failed in San Diego and Louisville. There are, however, two variations of the super market concept which have earned their place within the industry, although they are not likely to become a dominant force: convenience stores and warehouse markets.

Convenience stores have been the real success story of the food retailing industry over the past decade. Current sales growth rates for this sector are almost double the rate for super market chains and the number of convenience stores has more

than doubled from 11,620 in 1969 to 25,000 in 1975 (Progressive Grocer). This trend is made all the more interesting by the fact that this sector considers itself as an entity distinct from super markets. There is very little feeling of mutual identity. Convenience stores have their own trade association, their own industry trade publications, their own personnel training programs, and their managers seldom come with super market experience. I see this sector continuing to increase its current 4.3 percent market share, although at a decreasing rate.

Warehouse markets fit nicely with the recent high price consciousness among shoppers. It is interesting to remember that super markets, as we now know them, got their start in a form which we currently define as a warehouse market. Seen in that light, this trend is hardly new. What is new is heightened price awareness among a sufficiently large group of consumers to make no-frill food retailing viable. The concept seems likely to remain viable for a small market segment, but the growth potential is low.

What about the other end of the spectrum, hypermaches? This innovation has had little or no success in North America. It does not appear to be a growing trend, although a very limited number may eventually prove viable in the United States.

Within the conventional size categories, small stores (less than \$500,000 per year) regardless of type of ownership, are likely to decline in number. One major reason for this is item assortment. Food retailers make very little on the standard staple items. Higher margins are available on those items which a small store hasn't the room to carry, an extensive assortment of non-foods for example. As a result of this and other factors, small stores owned by both chains and independents are decreasing in number.

On the other hand, large stores (more than \$4 million per year) are doing very well. There are now just over 7,000 stores in the United States which fall in this category. This is up 1,800 from one year ago. Their sales in 1975 were \$41.6 billion—equivalent to the entire retail grocery industry of 20 years ago (Progressive Grocer). Most significant of all, the sales gain of this category was the highest of any market segment last year, 33.8 percent versus an average of 9.5 percent for all food stores (Progressive Grocer). This segment of the market is going to continue to grow rapidly.

As small stores are closed and larger stores are opened, selling acreage is likely to increase even though the total number of stores will decline.

New Directions

What about competitive practices? Will we see more integration into production or more integration into fast-food operations? I think the answer is no. Remember that food retailers are going to face a capital shortage over the next ten to fifteen years. They will find more than ample uses for funds within their own sector. Fast-food outlets might seem to be a natural direction for food retailers since they have been losing market share to the food-away-from-home sector. In this regard, you must remember that although most retail outlets are not unionized, almost all large super market operations are. Since food retailers must pay higher wages under union contracts than independent fast-food operators, the food retailers venturing into fast-food outlets can rarely make a profit at current product price levels.

What about non-foods? This segment of the market seems certain to grow. Food stores, being basically a low margin business, have been able to offer a growing line of products at lower prices than can be found in conventional department or drug stores, yet at levels which are more profitable for the retailer than traditional grocery items. Merchandise suppliers are encouraging this trend. The reason is food retailers normally pay their accounts within 10 days while general merchandise store operators take considerably longer. There is another interesting trend which is building non-food volume: the increase in postage rates. We now see new magazines being developed specifically for super market sales which allow no subscriptions and therefore avoid the high cost of mailing. It is not an exaggeration to say that super markets are fast becoming the newsstands of America.

New household formations are increasing even though population growth rates are slowing. This creates a substantial market for non-food items such as household hardware, green plants, fabrics, and do-it-yourself aids including automotive goods. However, high land costs are causing retailers to abandon the notion of large separate non-food sections. Rather, these products are being integrated with traditional food items.

What about non-price competition? While price competition remains the chief competitive weapon of food retailers, two areas are now developing. One area involves meat merchandising. Many retailers are now offering various types of lean and/or tenderized beef instead of the traditional pattern of all USDA choice. Price competition certainly remains active in the meat case but these new forms have added another dimension to the picture. The other area involves super market games. These were very popular a few years ago but have now all but faded from the scene. Remember that in retailing there is always an advantage to being different. This means that with our improving economy and rising personal incomes, we are very likely to see games reintroduced as a competitive weapon.

Productivity Improvements Needed

A lot of ground has been covered in an attempt to give you a feel for the major issue confronting food retailers today. There is, however, one major theme which can be singled out as the most important issue for you to take away from this session. This theme is a familiar one to economists: the interaction between labor and capital, in a word, productivity. We are now talking about a concept which will be very important during the coming decade for the entire food distribution channel.

Throughout our economy it is an uncomfortable but undeniable fact of life that wage increases in excess of productivity improvements are inflationary. This means that any interruption in our normal productivity improving processes will make it that much more difficult to bring the inflationary fires under control. We are now facing just such an interruption in the form of a massive capital diversion over the next decade to meet already planned expenditures in the fields of energy, safety, and environmental protection.

In a labor intensive business such as food distribution, productivity improvements require capital.

As competitive pressures make it more difficult to generate capital internally, and as the expenditures mentioned previously begin to strain our capital funds markets, food distributors will be hard pressed to keep higher costs from translating directly into higher prices at the checkout counter. This is not an argument against expenditures for energy, safety, or environmental protection. Rather, it is an argument for an extraordinary effort to find new ways to bring about productivity improvements, particularly labor productivity, in food distribution.

No other single area offers as much potential for moderating the rate of food price increases. The industry has awakened to this fact and I hope the general public will as well. This effort will require major cooperative efforts between many divergent interest groups. It will also require a major research input that each and every one of you here today can be a part of. The need is there, the opportunity is there, and, I hope, *you* will be there.

References

- Earle, W. and W. Hunt, *Operating Results of Food Chains, 1974-75*, Cornell University, Ithaca, New York.
- McKinsey & Company, "Capital Crisis and Financial Strategies," presented at the 42nd Annual Meeting of the National Association of Food Chains, Washington, D.C.
- Progressive Grocer, *43rd Annual Report of the Grocery Industry*, New York, New York.
- Super Market Institute (S.M.I.), *The Super Market Industry Speaks*, 1976, Chicago, Illinois.
- U.S. Department of Agriculture, Marketing and Transportation Situation, August, 1975, Washington, D.C.
- Walzer, E.B., Address to the Annual Convention of the National-American Wholesale Grocers' Association, March 15, 1976, Chicago, Illinois.