Strategy and Policy in the Food System: Emerging Issues

PART THREE: Are Food Marketing Systems in North America and the European Union Converging?

9. Comments on the Structural Convergence Hypothesis

John M. Connor

Comments on the Structural Convergence Hypothesis

John M. Connor (connor@agecon.purdue.edu)

Department of Agricultural Economics
1145 Krannert Building
Purdue University
West Lafayette, IN 47907-1145

Keywords: Market convergence, food systems, North America,
European Union

9

Comments on the
Structural Convergence Hypothesis

John M. Connor[1]

In this comment I address four related questions. What is vertical structural or behavioral convergence in an international context? How do we measure a movement toward structural convergence? Is grocery convergence measurable? And, if it is occurring, what are the forces driving it?

The Convergence Hypothesis

Structural convergence has been hypothesized and studied for quite some time in the branch of economics known as comparative economic systems. The convergence hypothesis is the doctrine that economic development will result in countries with widely dissimilar political organization becoming socially and economically similar (Eatwell et al. 1987: 643-645). As this macroeconomic convergence prophecy has largely come true, this branch of economics has largely been replaced by the analysis of "transitional economies."

Attention has also shifted to studying the convergence among nations or cultures of more microeconomic phenomena. Convergence of nutrition patterns or food consumption mixes is one such topic. In terms of general indicators of convergence, two types are distinguished in the literature: *beta* and *sigma* convergence (Gil et al. 1996). Beta convergence is roughly equivalent to the "regression towards the mean" concept, whereas sigma convergence measures whether variation is growing closer over time. The former concept is probably more interesting for channel convergence. That is, the primary question being asked today is whether the vertical arrangements between grocery retailers and food manufacturers observed in high-income countries are converging toward some single model. The U.K. and U.S.A. were held up as more or less polar extremes in these vertical arrangements, with other national markets falling somewhere in between. I inferred that the hypothesized convergence is likely to occur in about 20 years.

The hypothesized convergence of vertical arrangements is illustrated in Figure 9.1. This diagram is intended to represent the typical or average arrangements for the leading grocery supermarket chains in a given geographic or national market, say the top five companies in the U.K. and the top 40 or 50 in the U.S.A. These arrangements refer to companies primarily operating conventional, medium-service supermarket or super-store formats, not warehouse, box, or convenience stores (Marion et al. 1986: 304). The unit of measurement indicated for the horizontal axis is the number of private-label stock keeping units (SKUs) sold by the typical supermarket.[2] In the U.S.A., the number of private-label SKUs is about 1,000 to 2,000, which presently corresponds to about 14 or 15 percent of retail grocery sales. In the U.K., on the other hand, the major grocery retailers stock 8,000 to 12,000 SKUs of own brands, which account for 40 to 50 percent of total grocery turnover.

FIGURE 9.1 Vertical Arrangements in Grocery Retailing: Alternative Convergent States
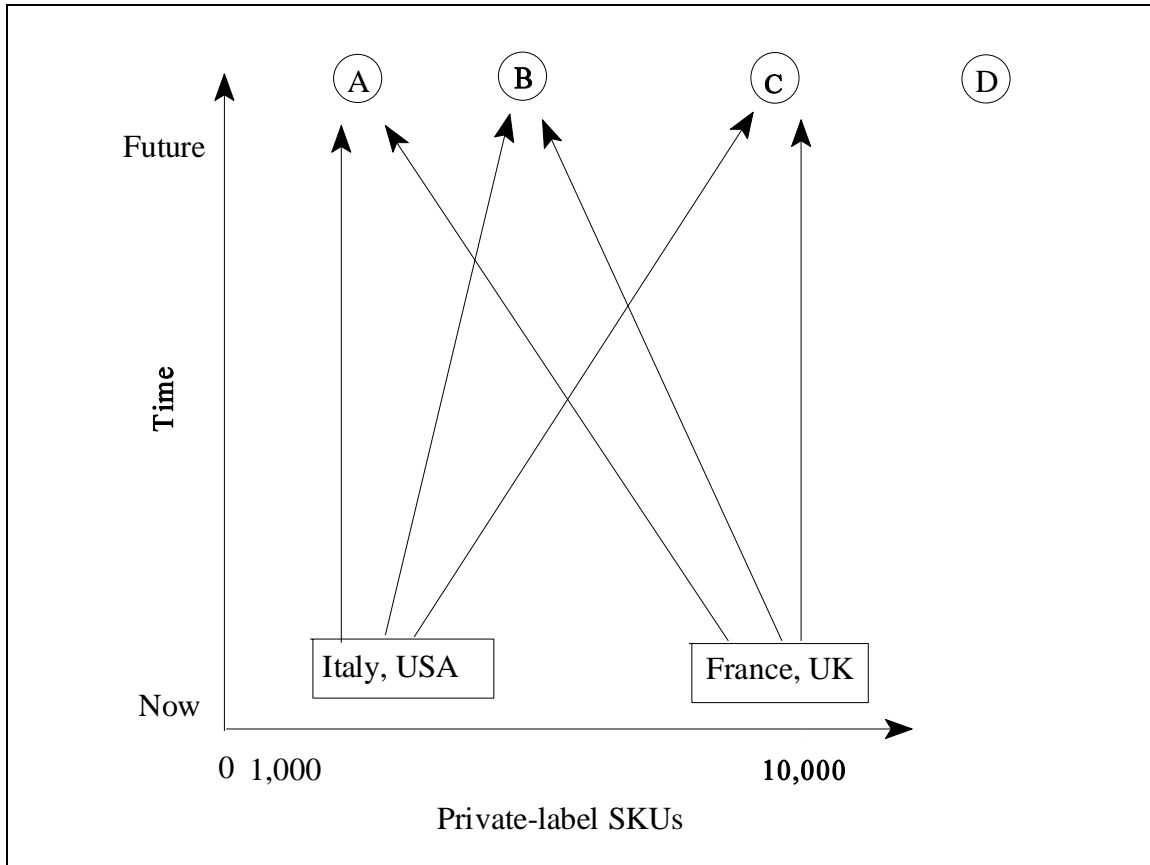
Note: An SKU is a stock keeping unit, the most specific description possible for a single grocery item (generic category, brand, flavor, size, case pack, and so forth). A typical European or North American supermarket offers a total of about 15,000 to 25,000 SKUs in stores having 10,000 to 30,000 square feet of floor space.

There are alternative measures one might devise for the spectrum of vertical arrangements encapsulated in the horizontal axis of Figure 9.1. The basic concept being represented is the relative bargaining or market power held by retailers as compared to that held by manufacturers in this channel of the food system. In this sense, the U.K. was presented as a retailer-led vertical system, whereas the U.S.A. tended to have a manufacturer-led system. It appears that France has vertical competition along the lines of the U.K. model. From what I know of the Netherlands, Finland, and the other Scandinavian food systems, they also gravitate toward the U.K. end of the spectrum. In Italy, on the other hand, the situation now resembles the manufacturer-dominated channels seen in the U.S.A. Perhaps Switzerland is an in-between case. Business-management researchers have proposed looking at the relative profit-ability of grocery retailers and food manufacturers as an indicator of relative market power in a vertical channel (Farris and Ailawadi 1992). The profitability of U.K. retailers was reported to be quite high by U.S. grocery-retailer standards, probably higher than U.K. food manufacturers (Burns and Henson 1995). In the U.S.A., profits of manufacturers appear to be higher than grocery retailers (Marion et al. 1986).

Another possible measure of relative channel power might be the intensity of advertising on branded food products, especially television advertising. As far as I know, product-level advertising is in the hands of the food manufacturers all over the world. In a manufacturer-led food system like that of the United States, television advertising of food brands is quite extensive and intense, partly because there are so many television networks (including cable and direct-satellite systems) and stations that accept advertising. As the number of private-label SKUs increases, the scope for manufacturer advertising declines *a fortiori*. In countries like the U.K. or France, with at most two or three private television networks, the number of food brands able to be extensively advertised is limited by the small number of slots. As there are plans to increase the number of independent television channels in the U.K. and other European countries, one might expect the position of the U.K. to shift a bit to the left on Figure 9.1.

Alternatively, one might measure the relative power of manufacturers and retailers by which spends most on product development, decides on product formulations, monitors quality control, and designs packaging. In short, which controls the physical characteristics that determine (physical) product differentiation? In contrast to the U.S. system (even U.S. private label products), the major U.K. grocery retailers are taking the lead in managing new product development.

Finally, and hardest to measure, relative power might be indicated by the degree to which food manufacturers or grocery retailers gathered and *analyzed* information on consumer buying habits. In the 19th century, when all groceries were sold in clerk-assisted stores, the retailers were clearly dominant. Brands were few and weak, packaging was minimal, and processors knew only what little information their traveling drummers could wrest from the retailers. The supermarket revolution transferred most control over aggregated consumer-response data to the manufacturers, but the advent of electronic check-out technologies have the potential for reversing the repositories of information once again.

Going beyond the private-label and relative-power shares just discussed, a third measure of convergence might possibly be developed from retail format data. For example, an index might be constructed from sales shares of, say, three to five types of grocery stores: small stores, conventional supermarkets, hypermarkets, warehouse depots, department stores, or other such categories. If the percentage distribution of sales or selling areas among formats is growing more similar between two countries, the convergence is established to the extent that vertical relations are correlated with retail types.

Structural convergence would occur if the countries arrayed along the horizontal axis were to move upward through time to some common point in the future. If one accepts a chauvinistic American view of the future, the future equilibrium point is A in Figure 9.1 (Cotterill and Guinand 1995). On the other hand, a nationalistic British view would have most of the industrialized world moving to point C, the U.K. model (Burns and Henson 1995). Of course, some intermediate, blended future state is also possible at point B. This concept of temporal convergence is immensely flexible, because whether the future evolves to point A, point C, or any point in between (B), it is still a convergence. If one takes a chauvinistic U.S. point of view, the vertical arrangements of most high-income economies are trending toward point A; if the working hypothesis is that the U.K. model is the most likely form of vertical competition in the future, then convergence toward point B is prescribed. It is even possible that some point to the right of C (point D) might become a future international equilibrium, so long as the number of private-label SKUs does not exceed the total number of SKUs in the typical store. Point D represents a state in which brand manufacturers have a negligible role, such as in the Soviet Union in the 1950s. If a convergence of vertical structures does take place, it might lie somewhere along the horizontal axis.[3]

Drivers of Change

A number of forces may be cited as likely sources of an international convergence of food manufacturer-retailer coordinating mechanisms. Principal among them is the role of technology. The

adoption of computerized electronic data interchange (EDI) between manufacturers and retailers in order to place orders and optimize inventory control appears to be occurring in several countries. Retail formats developed in one country are quickly tested and adapted for use in another national setting, typically within five or ten years. One example is the French Casino *hypermarché* developed in the 1970s and adopted within ten years in New Jersey and other U.S. locations. Aldi's "box store" concept from Germany was being replicated with some success in the United States soon after the Tengelmans took control of A&P in 1979. The warehouse and super-warehouse designs developed by American grocery wholesalers in the early 1980s were soon popping up in the U.K. In addition to the diffusion of EDI and retail format designs, one might mention the spread of global communication technologies, the availability of novel consumer-behavior analytical systems, and the universality of rapid retail-sales-data-gathering techniques.

The fast diffusion of these new technologies and designs can occur within a multinational grocery retailer's organization. Also common in the diffusion process is the licensing of a technology, training of technical staff by management consultants, or contracting for such services with specialized business-services enterprises. In other words, a second driver of convergence is the appearance of *institutions*, broadly conceived, that assist in global transfers of ideas, designs, and technologies that spur diffusion.

Companies like A.C. Nielsen and Information Resources, Inc., already operate globally. Their information gathering techniques on grocery product sales are sold to food manufacturers and retailers as soon as demand develops. An example of how quickly these business-services companies move is given by Hungary (Connor 1995). Between 1991 and 1994, more than 45 percent of the assets of Hungary's food-processing industries were sold to Western multinationals. Australian and German grocery retailers were also major investors in Hungary. By the time I had interviewed officials and businessmen about the situation in late 1994, A.C. Nielsen had already opened an office in Budapest and had 140 employees working in-country, selling their services to the same companies that formed their customer base in the United States and Western Europe. This example may be repeated with others involving big law firms, accounting firms, advertising agencies, and food-industry management consultants of all kinds.

A third force driving food systems toward structural convergence is the movement toward harmonization of business laws and enforcement practices. It is clear that U.S. and European Union (E.U.) laws on restrictive business practices (the antitrust laws) and food safety regulations are becoming more similar over time. Both jurisdictions are developing comparable standards on market definition, both are strict on price-fixing and vertical price restraints, and both are lax on price discrimination and vertical qualitative constraints. Food standards, labeling requirements, and safety standards are also growing more similar. For example, recent legal decisions in both the U.S. and U.K. have reduced the scope for private-label manufacturers to copy the designs (including color) of brand packaging. The convergence of food-system regulation is ensured by formal liaison arrangements between the U.S. and E.U. competition agencies.

Although the legal and regulatory environments appear to be converging in many ways, one can easily overstate the case. Substantial differences exist between the Anglo-Saxon and Napoleonic legal traditions, particularly in the areas of commercial contracts and torts. Concepts of liability affect vertical arrangements fairly directly, and I see little tendency toward harmonization of commercial laws in this instance, even though multinational food companies would wish it. Harmonization of commercial law is particularly important in the case of multinational marketing "alliances" like the one between Nestlé and General Mills to sell breakfast cereals in Europe. These alliances are a special kind of joint venture, but they are like "virtual corporations" in that they hold few if any fixed assets. They are long-term agreements to jointly produce and market some food product, including private-label items.

A potential driver of convergence often overlooked is the role played by the foodservice channel. Overlooking the foodservice channel is perilous. Nearly half of U.S. household expenditures are devoted to the away-from-home segment. Although not as high as that in Europe generally, the ratio is rising

there (Hughes 1994). There is increasing U.S.-E.U. cross-investment taking place in the foodservice industry.

Anecdotes and case studies abound of how multinational management practices converge. Sainsbury's, the leading U.K. grocery retailer, has developed perhaps the broadest line of private label products in the U.K. or any other country; it has had notable success in introducing new private label products at a very rapid pace (Hughes 1995). Sainsbury's new product program has continued to be successful in part because it has implemented a "brand manager" system for its store brands (Hughes 1994). This management system was first developed by Procter and Gamble Company a few decades ago and was refined by many leading U.S. food manufacturers since then. Sainsbury's purchases of the New England grocery retailer Shaw's and the Washington-area retailer Giant presages a quick transfer of Sainsbury's private-label program to the United States. I am sure U.S. retailers will watch this development with great interest and adopt a similar strategy if it proves profitable. A comparable transfer of the luxury store-label strategy seems to be underway in the United States. Loblaw's of Canada has been quite successful in building a superior quality image with their President's brand (as has Marks and Spencer with its St. Michael's brand).

Not all entry by non-U.S. grocery retailers into the U.S. market has been successful. Investments by Weston's of Canada into the Midwest and by Sir James Goldsmith's companies into the Eastern United States (Grand Union, Colonial) did not prove particularly profitable ventures in the 1960s and 1970s. The German Tengelman family's investments in A&P and Aldi have grown rather slowly it seems. The Aldi format has not been widely copied in the United States.

A fourth important driver of convergence is the growing similarity of food expenditures by consumers in the major high-income countries. Can one doubt that a convergence of demand patterns will do anything but encourage a convergence of retailer-manufacturer vertical relationships? I have explored some of the determinants of consumer convergence in a 1994 paper (Connor 1994). The scanty evidence on food consumption and expenditures across countries appears to support such a convergence, albeit with a lag of five to ten years from the U.S.A. to Europe.

Notes

[1]Professor, Department of Agricultural Economics, Purdue University, West Lafayette, Indiana.

[2]By private-label product ("own brand" in U.K. parlance) I mean to include store brands or controlled brands sold in the dry, frozen, or refrigerated grocery areas of the store. Fresh meats and produce are excluded. For a more detailed discussion of the terms, see Connor et al. (1996).

[3]Of course international convergence may not occur if distinctive national structures are retained by reason of strong national preferences or legal constraints. Indeed, multiple vertical structures may persist even within the same geographic markets.

References

Burns, J. and S. Henson. 1995. The Food Manufacturing and Retail Food Distribution System of the Future: Convergence Towards the U.K. Model? Paper presented at NE-165, Reading University, Southampton University Conference, Reading, U.K., July 17-18.

Connor, J. M. 1994. North America as a Precursor of Changes in Western European Food-Purchasing Patterns. *European Review of Agricultural Economics* 21:155-173.

Connor, J. M. 1995. The Hungarian Food Industry and Foreign Investment. Unpublished manuscript, March.

Connor, J. M., Richard T. Rogers, and Vijay Bhagavan. 1996. Concentration Change and Counter-vailing Power in the U.S. Food Manufacturing Industries. *Review of Industrial Organization* 10:473-492.

Cotterill, R. W. and L. Guinand. 1995. The Food Manufacturing and Retail Food Distribution System of the Future: Convergence Towards the U.S. Model? Paper presented at NE-165, Reading University, Southampton University Conference, Reading, U.K., July 17-18.

Eatwell, J., M. Milgate, and P. Newman, editors. 1987. *The New Palgrave: A Dictionary of Economics*. London: Macmillan.

Farris, P. W. and K. L. Ailawadi. 1992. Retail Power: Monster or Mouse? Technical Working Paper, Report No. 92-129. Cambridge, MA: Marketing Science Institute.

Gil, J. M., A. Gracia, and L. Pérez y Pérez. 1996. Food Consumption and Economic Development in the European Union. *European Review of Agricultural Economics* 22:400-414.

Hughes, A. 1995. The Changing Organization of New Product Development for Retailers' Private Labels: A U.K.-U.S.A. Comparison. Paper presented at the NE-165 Conference at Reading University, Reading, U.K., July 17-18.

Hughes, D., editor. 1994. *Breaking with Tradition*. Wye, U.K.: Wye College Press.

Marion, B. W. and the NC-117 Committee. 1986. *The Organization and Performance of the U.S. Food System*. Lexington, MA: Lexington Books.