

Strategy and Policy in the Food System: Emerging Issues

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Julie A. Caswell and Ronald W. Cotterill

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

**10. Change and Research in the Food
Industry: A European Perspective**

Nigel D. Poole

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Food Marketing Policy Center
Department of Agricultural and Resource Economics
University of Connecticut

and

Department of Resource Economics
University of Massachusetts, Amherst

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Nigel D. Poole (n.poole@wye.ac.uk)

Wye College
University of London
Wye, Ashford
Kent TN25 5AH, UK

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Change and Research in the Food Industry: A European Perspective

*Nigel D. Poole*¹

Introduction

This paper is the result of an invitation to present some ideas on the subject of “food systems convergence” between North America and the European Union (E.U.). Expressly not the results of research, it is a discussion document, thinking aloud on changes in European food industries, and in the research that is being undertaken into vertical coordination and supply chain management. The objective is illustrative, rather than to provide an exhaustive coverage of all developments in European industries, “to introduce issues and individuals to each other so that over the next five years we can increase communication between us as a group and, possibly, conduct some joint research.”

Within the E.U., the emphasis will be on the food industry of the United Kingdom (U.K.). Gaps there will be, therefore, but it will be possible to pick out important features of the food industry that are driving change and also driving an economist’s research agenda. Our discussion concerns food systems in North America. While the inclusion of Canada might be informative, to include Mexico surely would involve a fundamental shift. Perhaps we should recognize that in this case, the comparator to the E.U. is the U.S.

It is not redundant to stress the socioeconomic diversity between the current 15 member states of the European Union. The relative importance of agriculture and the economic significance of the food industry vary from one country to another. So, too, do the structures of the respective food systems.

Therefore, in the first section I want to explore what I consider to be the factors which are driving food industries and changing business practices. The implications are that:

- The food industry drivers are similar across countries;
- The effects of the industry drivers are different, and are country or region-specific;
- Individual commodity sectors are converging towards a single pattern;
- E.U. food industry markets and structures will remain heterogeneous for some time to come.

The second section discusses changes in food supply chain organization, and the third section opens up the research issues and challenges.

Food Industry Drivers

Demand Factors

Wealth. The E.U. now comprises 15 member states. Average per capita income is high relative to the rest of the world, but somewhat lower than the U.S. and other major non-E.U. OECD nations. The

average is brought down by the poorer nations who are specifically Greece, Ireland, Spain, and Portugal. Among the member states (MS) there is also considerable diversity.

Economic convergence is a cornerstone of E.U. policies and substantial resources, the so-called Cohesion Funds, are oriented to bring the poorer MS up to the level of the others. At the moment per capita incomes are not increasing rapidly in the E.U. and the market is static or “mature,” certainly so in comparison with other economic areas including the U.S.

Population. The population of the E.U. is also more or less static: growth rates of most MS are less than 1 percent per annum. The demographic structure is of an aging population profile, but which is not so acute as in Japan, for example. The older population profile will mean lower per capita income, lower food consumption, and lower food expenditure.

Foreseeable Changes. The E.U. now has association agreements with ten Central and Eastern European states: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia. It is envisaged that expansion to include the first set of aspiring nations will not take place before the year 2002. The effects of the next enlargement will be multiple, and agriculture is one of the sticking points. The most obvious changes in demand will be:

- Expansion of the E.U. domestic market by tens of millions;
- More consumers, whose per capita income will be low but rising;
- Faster growing population;
- Greater diversity.

There will also be important supply effects that are part of the difficulties of planning E.U. enlargement: a significant expansion of lower cost, currently inefficient agricultural supply.

There are other longstanding aspirants to E.U. membership, such as Turkey, Malta, and Cyprus. The latter two countries hope to be admitted before or with the first wave of Central and Eastern European countries. The E.U. preference is for a single Cypriot entity rather than the current partitioned state. Turkish accession is also politically problematic. Also the relations with other non-E.U. Mediterranean states is an issue which concerns particularly the southern states. While the E.U. is preoccupied with Central and Eastern Europe, and the politics of the Balkans, other issues are taking second place.

Consumption Patterns. Changes in consumption patterns within the E.U. are associated with the relatively high disposable income, a better educated and more adventurous consumer, and changing demographic structures that are driving market segmentation, new product development (NPD), and advertising and promotion. Consumption is affected by:

- Demand for higher added value products;
- Demand for greater convenience and pre-preparation of food products;
- Greater presence and diversity of ethnic foods;
- Increasing female participation in the workforce;
- More and smaller households;
- More out of home consumption;
- Increasing preoccupation with consumer health;
- Increasing preoccupation with food safety in production and distribution.

Culture. These shifts in consumption patterns are common to many countries. What is not clear is that within these overall consumption trends there are strong national and regional preferences. Indeed, the cultural attributes of food are likely to be the most enduring features of consumer preferences. These differences in consumer preferences may or may not be eroding, but at present they form considerable obstacles not only to global new product development and marketing, but probably also to the structural convergence towards a common food manufacturing and distribution system. The increasing use of designations of origin for food products in the European Union will serve to delay the processes of convergence, and preserve and promote market niches.

TABLE 10.1 Importance of Store Selection Factors in Some European Countries

Factor	Country	Favoring
A clean and tidy shop	Spain, France	Traditional retail formats
Location	France, Germany	Greater convenience
Speed and customer service	Italy	Personal approach

Source: *Financial Times* 1996b.

Dietary patterns vary: We talk of the Mediterranean diet that is high in fruit and vegetables and the use of specific food items such as olive oil. Consumer preferences for retail format vary across Europe as well and intercountry comparisons show differences that will not be quickly eroded (Table 10.1).

Eco-ethics. Consumption patterns have been strongly influenced by the dependence of a modern, affluent society on the use of the automobile. Modern retailing is dependent on out of town centre shopping and the use of a car, and retailers are dependent upon frequent and long distance store replenishment.

However, the ethics of the dependence on the car has been questioned on environmental grounds, and so have the ethics and economics of a strategy of wide geographical sourcing and distribution incurring high transport costs. There is “watchdog pressure” from environmental lobbyists to reduce the public cost of private consumption patterns (fuel consumption, traffic density, road building, air pollution) that, at least in the U.K., is leading to more local sourcing—and possibly local distribution. Change is more likely if “watchdog pressure” is converted into consumer pressure.

Consumers in Europe indicate that they want to buy products that are produced in an environmentally sensitive way (Davies et al. 1995). Preferences for organically-produced foods are clearly expressed by some consumers, albeit a minority at the moment. So eco-labeling becomes an issue that to date is confused in the E.U. by the wide use of environment-friendly designations. The E.U. scheme is due for review in 1997.

Traceability. The food safety issue responds to the concerns of the consumer and has become enshrined in the U.K. in the Food Safety Act (1990). All handlers of food have imposed on them the legal obligation to exercise “due diligence” about food safety. The threat of food safety scares and consequent consumer censure arguably impose much greater obligations on retailers whose brand-identity is their strongest competitive strategy.

This has led to the requirement for traceability: the ability of food handlers to trace back to the origin all the products handled, and thereby ensure quality and reduce uncertainty about production and processing methods. Much contracted produce can now be traced back to the farm of origin in the U.K. Cattle in the U.K. now have passports (spurred on somewhat by the BSE/CJD scare). These changes are rapid, because up to last year it was estimated that only 10 percent of beef and lamb was produced, marketed, and retailed in complete sectorally linked schemes (Palmer 1996).

Biotechnology: Revolution or Evolution? Changes in the British diet over the last 50 years have led to discussion of a “consumer revolution.” However, an alternative view is that there have been no major innovations in the European diet since the introduction of maize, sugar, coffee, tea, and potatoes in the sixteenth century (Ray 1994). Whilst we have seen an immense increase in new products, new food ingredients are few.

The fruits of biotechnology are at the entrance to the food store, but it is not clear how consumers will view the products. Is the development of genetically modified organisms (GMOs) a development of current technology—an evolutionary advance—or is it a real innovation—a revolutionary advance? For example, is the transgenic Calgene tomato perceived as just another variety, or as a different and “unnatural” product?

Transgenic herbicide resistance is the first large scale application of genetic engineering likely to arrive at the market place (Houghton 1996). It is likely that Monsanto’s Roundup-tolerant soybean will be more easily accepted than a genetically modified tomato because it is not such a near-market product.

The subject of genetic engineering has raised concerns among European consumers, but there are also differences between countries. Consumers and producers of some nations are more wary of new technologies than others. Different technologies are viewed as more or less favourable. The experience with BST indicates not just the politics of food and agriculture but also a genuine reluctance on the part of E.U. consumers to embrace such new technologies. There is no doubt that consumers in Europe are concerned about the ethical, safety, and environmental issues of new production technologies. Even stock market investors are shown to be sensitive to the same issues.

There are wide ranging differences in attitudes of public administrations among E.U. MS towards the introduction of biotechnologically-generated products such as transgenic herbicides, just as there are between MS and the E.U. Commission.

Notwithstanding public environmental and safety implications, it is consumers’ perceptions above all that will determine how quickly GMOs and the underlying technology are adopted. The fundamental consumer receptiveness to biotechnology will be influenced by the regulatory framework and, not least, the food labeling. Consumer receptiveness will also be influenced by the alternative: no GMOs, and a genuine constraint on world food supply. Therefore the marketing of biotechnologically-generated foods will be crucially important.

Scenarios for the uptake of biotechnology can be imagined:

- GMOs will be regarded as just another form of new product development and consumer acceptance will be rapid, leading to expansion in biotechnology, intense R&D and firm rivalry, and important property rights issues.
- Consumers, sensitized by poor marketing, will perceive GMOs as unnatural and different products; GMOs will therefore be tainted by a negative view of high technology, loss of biodiversity, and unsustainability rather than as sustainable, economic, and environmentally friendly.
- Or something else—probably specific to products and markets—that we don’t know?

The Public Perspective. The development of the retail sector depends on local planning and other legislation, retail concentration, and consumer and lobbyists’ power. Such factors vary between European Regions (Table 10.2).

Planning requirements are being tightened in many European countries, particularly for stores above 1000m². In Spain, where fast retailer growth is under way, the new Internal Commerce Law (1996) has imposed severe restrictions on opening hours and Sunday opening, on procedures for opening stores of more than 2500m², and on sale periods. Critics have described the law as interventionist, inflationist, and a major step backwards from the modernization of the Spanish economy (Oxford Institute of Retail Management 1996).

Differences in the public perspectives and in legislation arise from different national attitudes to change in the food system, and from change in the global policy environment in general. For example, it was reported in June 1996 that the Mexican government intends to liberalize that national institution, the *tortilla* market. Grants to maize growers and millers, and retail price controls are to be removed. It has been predicted that supermarkets, which currently have only 2 percent of the market, could see sales quadruple within a year (Economist 1996). Take bread as another example: Fresh bread is used as a loss leader by major retailers in the U.K. whose price structure undercuts that of traditional bakeries and allegedly forces them out of business.

TABLE 10.2 Retail Format Drivers

	Planning Requirements	Actual Retail Concentration	Consumer Purchasing Power	Watchdog Pressure
Northern Europe	High	High	High	High
Scandinavia	Intermediate	High	High	High
Southern Europe	Intermediate	Intermediate	Intermediate	Intermediate
Eastern Europe	Low	Low	Low but increasing	Low

Source: Adapted from *Financial Times* 1996b.

In France, however, policy and culture are closely intermingled. There is limited reliance on the price mechanism to meet food system objectives. Moreover, of these objectives, apparently technical efficiency is less important than socio-cultural or gastronomic identity. In March 1996 the government took action to prevent the supermarkets from engaging in predatory pricing and redress the balance of power which it claimed had shifted too far towards the large retailers (Financial Times 1996a). Legislation curbing the expansion of hypermarkets has prompted the contested Docks de France by the Auchan chain in June 1996, as a means whereby Auchan can achieve its strategic objectives, rather than by organic growth.

At the macroeconomic level, governments in Europe, as elsewhere, are heavily committed now to low inflation and fiscal rectitude. The strict European Monetary Union convergence criteria, and what appears to be a shift into an era of low inflation, mean that one potential source of increases in firm profitability—high margins—has been removed. If prices are stable, there is room only to cut costs.

Finally, domestic public policies are still somewhat attuned to an era of spot markets that is receding. The shift towards more extensive use of contractual forms of vertical coordination is not yet reflected in public policies, and a reduced—but continuing—role for public intervention.

The Process of Business

Information Technology (IT). The explosion in information technology has multiplied the potential efficiency gains in the food supply chain through improvements in the logistics of transportation and store handling. As for distribution to the final consumer, IT has made possible relationship marketing, which is the ability to target individual consumers on the basis of data derived from store loyalty cards which record their consumption patterns.

The ability to finance investment in IT has given large firms, both manufacturers and retailers, a competitive advantage over others unable to reduce costs, trace customers, and adopt customer-specific marketing. However, the use of IT at the retail level is not uniform across Europe.

Self-scanning has already been introduced in U.K. stores on a trial basis. Another development taking place is home shopping, already significant for non-grocery goods. The next stages in retailing will be interactive shopping, computer-networked or cable television purchase and distribution systems, and virtual retailing. Three of the five major U.K. multiples already have Internet sites offering selected lines and a delivery service.

It is likely that economies of scale will favour the major retailers who are at the forefront of IT retailing. But there are implications for the retailers' capital costs that have been expended, if warehouse shopping by telephone or e-mail were to become the norm.

Business Strategy

Retailers and manufacturers are faced with opportunities and threats that are pushing them towards a range of strategies.

Product Extension. The E.U. market is not one exhibiting dynamic growth. It is highly competitive in the business sense, markets are becoming saturated in terms of shopping area per 1000 inhabitants. Strategies of major manufacturing and retailing firms reflect that there are some opportunities to exploit the growth potential and relative immaturity (with respect to the wealthy MS) of some markets. But the real growth markets are outside the E.U. 15.

European retailers are responding in different ways. The French and German chains are more international than the British. Carrefour now has more outlets outside France than inside and has expanded as far afield as China and Taiwan. Three of the top four Spanish retailers are of French capital. Promodès, one of those in Spain, is also in Germany, Greece, Italy, Turkey, Morocco, and Mauritius. The Belgians and Dutch established a firm presence in the US before the British. Of the retailers which are already truly global (including Wal-Mart, 7-11), Carrefour, Promodès, and Makro are European—but not British.

For the U.K. the following examples give an idea of the strategies being followed:

- Marks and Spencer: major European and other cities;
- J. Sainsbury: U.S. East Coast;
- Tesco: establishing chains in France and Eastern Europe—Hungary, Poland, Czech, and Slovak Republics; also own label products to Australia;
- Waitrose: own label products to Japan;
- Argyll and Asda: focused entirely on the U.K. market.

TABLE 10.3 European Food Retailing Groups—Top 10 by Turnover

Company	Listing	Turnover (\$b)	Net Income (\$m)	Market Capitalization (\$b)
Carrefour	France	27.82	680.17	13.13
Promodès	France	19.24	192.74	4.76
Karstadt	Germany	17.51	123.01	3.09
Asko	Germany	17.38	146.44	2.40
J. Sainsbury	U.K.	17.15	808.61	10.47
Ahold	Netherlands	16.86	238.27	6.22
Tesco	U.K.	15.25	573.80	9.11
P'Printemps	France	14.97	290.46	6.81
Kaufhof	Germany	13.81	89.28	2.57
Casino	France	12.33	121.76	2.41

Source: *Financial Times* 1996b.

Product Diversification. Major retailers are increasingly conglomerates, in the sense that they have expanded out of grocery retailing into unrelated product lines. Their expertise is in retailing, and this has been used to exploit markets such as books and magazines, videos, clothes, fuel, and financial services.

In the U.K., supermarkets have 20 percent of the automobile fuel market. Marks and Spencer announced in June 1996 an improvement in their financial services. In the same month Tesco offered a financial account for holders of their loyalty card that will pay more interest than the traditional building societies, and much more than the high street banks. In France, Carrefour is the country's biggest seller of micro-computers and Leclerc claims to be the second largest seller of books.

Will it end? Is there any reason why expertise in retailing should not be applied to any retail market? After all, J. Sainsbury have also diversified into Homebase, a do-it-yourself/garden requisites chain. After financial services, why not diversify into utilities and even white goods?

An important reason why the diversification will be specific and may not continue indefinitely is the question of retailer profitability and enterprise financial structures, illustrated in Table 10.4, which explains some of the anomalies in Table 10.3.

The implications are threefold:

1. The balance sheet and profitability constraints upon retailers vary with chain store format and region.
2. The U.K. retailers are locked into a strategy of high margin/high asset/low gearing.
3. Price and non-price marketing strategies are linked to the financial structures of the enterprises and to market segmentation.

Service. U.K. supermarkets have invested in new stores, warehousing and distribution systems, and new information technology. This means that they have invested in high levels of service. The ratio of turnover accounted for by services to that accounted for by goods has increased from 13.6 percent to 18.1 percent during the period 1983/84-1994/95 (Table 10.5).

TABLE 10.4 Retailer Financial Structures

	Net Profit/ Sales	Sales/ Assets	Assets/ Shareholder Equity	Return on Equity Capital (%)
Euro Hypermarket	2.6 low-medium margins	1.9 slow-moving product mix	3.9 high gearing/ capital cost	19.2
U.S./Euro Super- market	1.9 very low margins	3.1 lower assets lower sales/ft ²	3.8 high gearing/ capital cost	22.4
U.K. Supermarket	6.7 high margin own label	3.0 high assets high sales/ft ²	1.2 low gearing/ capital cost	24.1

Source: Hughes 1996.

TABLE 10.5 Turnover of Major U.K. Retailers and Split Between Goods and Services

	Goods	Services	Total
1983/84	9.0	1.4	10.3
1994/95	33.9	7.5	41.5

Source: *London Economics* 1996.

The Balance of Power in the Food Industry

The dominance of the retail sector in Europe has been established over a period of thirty years, and differs from the U.S. pattern of manufacturing-retailer relationships. Latterly this has been boosted by the growth of own label goods at the expense of the branded goods of the major manufacturers, through economies of scale in purchasing and distribution. Own label is a heterogeneous phenomenon, likely to develop into a tiered strategy with different price points, permitting firms to differentiate themselves from their horizontal competitors (Financial Times 1996b). The creation of a strong brand image and loyalty to their own label image serve to maintain retailers' advantage over their suppliers.

Threats. Influences on the balance of power include:

- The discount format is more conducive to the introduction of interactive shopping which does not require heavy investment in capital. This risk, however, is attenuated for the major retailers by the IT know-how and expenditures already under way.
- The major multinational food manufacturers are adopting strategies to reinstate the brand in the eyes of the consumer. Some manufacturers such as Heinz have already changed their promotional strategy to relationship marketing.
- Manufacturers are also promoting greater linkages with retailers that will have the effect of cementing the vertical relationships between suppliers and retailers.

Supply Chain Organization

Demand Driven

The search for value-for-money (VFM) is the perennial consumer driver: The discerning European definitely wants "more for less" and suppliers must deliver or lose customers. The demand for VFM combines with the other pressures on suppliers, forcing restructuring of the supply chain. And the pressures do not come only from the consumer, but from consumer watchdog groups, environmental watchdog groups, and the government sector.

The concerns of these interest groups are not just about products but processes, including the production systems. They are "green" issues:

- Environmentally-friendly and sustainable production and distribution technologies;
- Animal welfare;
- Food safety and health.

To the green issues must be added more traditional public concerns about the food industry:

- Demonstrably fair prices for consumers—it is assumed that competitive market pressures will keep prices low, but within closed supply channels this needs to be shown;

- Fair prices for producers—the role of the public sector in price regulation will continue to decrease, but concern for producers will not disappear;
- Sound contracts—“a workable environment in which parties in the food system can enter into binding contracts that make clear provision for nonperformance, with special concern for farmers that sign contracts with food processors and marketers” (Barkema and Drabenstott 1996: 216).

Vertical Coordination, ECR, and the End of the Rainbow

Firms are forced to respond to these pressures which impose upon the food chain additional responsibilities and costs. There is a demand for these “green” product attributes which are value added or “services” in addition to the standard marketing transformations of storage, transport, and processing. Costs in the supply chain multiply as “service” is added, and there is increasing pressure on firms to minimize the food industry costs. The demand for efficiency is summed up in the phrase “efficient consumer response” (ECR). Efficient response to consumer demands is the major contemporary driver of the structural changes in the organization of food and other markets in Europe.

ECR owes a lot to Japanese manufacturing methods and has come to the European food industry from the U.S. fast moving consumer goods sector. The food industry probably lags most manufacturing industries because of the variability of agrifood products. Variations in quality, quantity, consistency, continuity, and in the traditional price factor impose on the food industry complexities additional to those faced by producers trying to satisfy consumer needs in the markets for manufactured goods. ECR caught on first in Italy and elsewhere in continental Europe, but the European consensus is that the U.K. retail sector is already in advance of many ECR techniques, including those of the U.S. food industry.

In brief, ECR is the use of IT and cooperative practices in the management of the supply chain from production, through manufacturing to retailing and consumption, in order to increase efficiency/reduce costs, or “fulfill consumer wishes better, faster, and at less cost.”

ECR Practices, Costs and Savings. ECR practices are:

- Efficient category management—managing a product category as a business unit;
- Efficient customer plans and promotions—joint programs to mutual advantage;
- Efficient innovation—increasing the success rate of new product development;
- Efficient replenishment—minimizing stocking and sell-outs.

Potential savings are estimated to be £100m for a major U.K. chain (Tesco), £2b for the U.K., and £21b at retail prices across Europe—4.8 percent of costs and 0.9 percent inventories (Grocer 1996). How do these savings arise? Through reductions in physical losses, time, inventories, uncertainty, and safety risks. The increases in costs of IT and monitoring are thought to be small in comparison with the potential savings.

What does it mean in practice? ECR is a way of doing business that depends on:

- Trust;
- Synergistic organizational cultures;
- Information sharing;
- Innovation;
- Sharing costs and benefits.

In other words, it is partnership between suppliers and customers, a relationship that will provide the highest value to the consumer and maximize market share and profits for both firms.

An example of the business implications are the changes envisaged in the supply chain for fresh produce by J. Sainsbury. These cover five areas of firm operations:

1. Logistics:
 - Reducing distance and cost of transport of U.K. produce;
 - Rationalizing import channels for overseas produce.

2. Product:
 - Higher quality, naturally ripened produce;
 - Whole chain refrigeration;
 - Better presentation; packaging, information, rationalized choice.
3. Suppliers:
 - Rationalize supply base—50 of the 350 suppliers account for 75 percent of volume;
 - Develop partnerships with key suppliers;
 - Pursue varietal exclusivity;
 - Ensure year round supply.
4. Depots:
 - Twice daily deliveries.
5. Stores—improved in-store service:
 - More frequent replenishment;
 - Better trained staff;
 - Improved display and category management.

Economic Implications. What are the economic implications of such business strategies? The key issues are:

1. Market structure—reduction in competition:
 - Reduction in numbers of sellers in the supply chain;
 - Increase in exclusive relationships and the establishment and exercise of property rights;
 - Increased flow of information but through restrictive channels.
2. Market conduct:
 - Vertical cooperation in the place of competition.

Supply chain rationalization is one of the most important results for suppliers. J. Sainsbury's commitment to reducing the number of suppliers points towards much greater concentration, especially in the fresh products sectors of the food industry where supply bases are more atomistic than in the manufactured foods sectors.

Reducing the Costs of Transacting. The costs that ECR aims to save sound very similar to the "marketing costs" that Coase wrote about in 1937 and that have been popularized since as transaction costs. The institutionalist viewpoint is that transaction costs are an important determinant of the distribution of economic activity between firm internal organization and the market place. The insight from Williamson is that the forms of vertical coordination are chosen to minimize the costs of transacting.

ECR practices are the antithesis of Williamson's original "organizational failures" framework (Williamson 1975) and the reductions in costs can be interpreted using transaction cost concepts of uncertainty created by asset specificity, bounded rationality, and opportunism.

What is Happening in European Research?

It is evident that European research has responded to the business perspective and depends substantially on a descriptive, case study approach. Much research employs transaction cost concepts to explore the economics of contractual relationships.

Current research reported at Wageningen in May 1996 tackled the following:

- Comparative analysis of vertical coordination mechanism and contract types, broadly within a Coase/Williamson tradition;
- Analysis of particular issues in supply chain management;
- Identifying and analyzing specific coordination problems;
- Information flows;
- Logistics;

- Consumer preferences, quality, product specifications and attributes;
- What businessmen actually do.

The Netherlands: Foundation for Agri Chain Competence

In the conference in the Netherlands, the Dutch model for research was presented by the *Foundation for Agri Chain Competence*. The ACC is a project running from 1993-1998. It constitutes a joint approach by the Ministry of Agriculture, Wageningen Agricultural University, national research institutions, and the business community. It is a public-private partnership involving 150 firms, 20 research institutions, and 25 consulting firms (Van Roekel 1996). There does not seem to be evidence elsewhere of other public-private research programs of this scale.

The basis of the project can be summed up as:

- A recognition that firms need to cooperate to meet consumers' needs and to enhance their own strategic position;
- For this, expertise is needed: chain competence;
- Participating firms need to switch from a supply orientation to a demand orientation;
- Participants undertake joint sectoral analysis;
- Leading to identification of constraints to coordination and dissemination of results;
- Training of participants.

Recent Developments in the U.K.

In the U.K., a new journal has been launched called *Supply Chain Management: An International Journal*, published by MCB Press. It will serve as a medium for the dissemination of research and for the exchange of experiences between both academics and practitioners. The *Journal* has a strategic focus, covering aspects of marketing, economics, logistics, organizational behaviour, and public policy.

The Important Questions: Costs and a Public Perspective

The problem with transaction costs is that they have “a well-deserved bad name” as being a residual for everything that cannot be quantified. If that is so, how can costs and benefits be analyzed? Even if it is possible to say that one form of organization is better than another, it is not possible to say by how much, or who benefits most.

It is prices, as well as goods and other information, that link producers and consumers. Transaction cost economics will remain price analysis applied to the immeasurable unless research is conducted into the financial and economic costs of firms and channels in the supply chain that are willing to cooperate and reveal their margins. Only through analyzing price and cost data will the benefits of ECR be proven. Data need to be based on activity based costing.

Therefore, two fundamental questions that supply chain management raises have yet to be tackled thoroughly:

- Quantifying the costs and benefits of new coordinating mechanisms;
- The public perspective—who benefits?

Two papers in Wageningen contributed in this respect: Bremmers and Hagelaar (1996) used accounting prices in a game theoretic approach, and Den Ouden et al. (1996) used a pork chain simulation model.

Link or Chain?

Another weakness of the case study approach is that the unit of analysis is not the chain—or system—but usually two vertically related firms within the chain. The importance of the chain approach

to agrifood supply is that finance, goods, and information flow up and down an entire chain. But the analytical focus is usually on one link. Again, the two papers cited above contributed to addressing this.

A Hybrid Paradigm? Business and Economics

Adopting a business approach to supply chain management and the search for efficiencies through ECR is an uncritical position. There are public policy issues, such as:

- The social, rural impact of concentration in agricultural supply;
- The lack of competitiveness of channel exclusivity;
- The sharing of information and cartelization of supply.

Traditionally these have been analyzed by economists within a neoclassical framework with perfect competition as a benchmark for efficient market performance. We know that the restrictive conditions for there to be perfect competition rarely if ever apply in the real world. Imperfectly competitive markets have been thoroughly analyzed and the justification for large firm size and market concentration due to economies of scale is well researched, for example.

In other respects, too, in perfect competition we have a benchmark which is less than helpful. If businessmen are right and vertical coordination through supply chain management and restrictive ECR practices is efficient, then the public perspective towards such imperfectly competitive markets needs to be revised. The following pointers may serve to reorientate market comparators and analytical techniques:

1. In evolving food markets, prices are not determined in an open market system by the forces of supply and demand. Prices are discovered in a closed system of competing marketing channels by cooperating firms.
2. Moreover, information about prices, consumer preferences, product attributes, and specifications are transmitted within closed channels.
3. Firms are not necessarily economically rational; supply chains comprise channels that are joint profit maximizing and joint risk bearing, but which are held together by loyalty, trust, and social cohesion. Efficiency is a necessary condition in a successful marketing channel, but not sufficient; in reality there are trust and loyalty.
4. Rather than the firm, it is the closed, cooperative channel which should be the unit of analysis. Researchers need the cooperation of the business community in areas such as product pricing and margin analysis that hitherto have been closed to external analysts.
5. The critical focus of competition policy (antitrust) needs to be directed towards the close vertical relationships described in this paper, as much as on the traditional concern with horizontal relationships. It must be shown that the efficiency gains of supply chain management through implementation of ECR practices are real, and are distributed in a manner which is compatible with the public interest.

To sum up with the words of an American:

“Models that lend insights to the negotiation process and how relationships develop may provide important tools in understanding the emerging food and agribusiness chain. Many of these relationships involve issues of trust building, negotiations, communications, information sharing, and mutual cooperation for joint benefits that traditional tools of economic analysis do not directly address. These dimensions of the transaction activities may be the greatest challenge for economists (Downey 1996).”

Note

¹Nigel Poole is a Lecturer in Food Industry Management at Wye College, University of London, U.K.

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