

VOLUNTARY MARKETING INSTITUTIONS IN FOOD MARKETING SYSTEMS: CHARACTERISTICS AND DEVELOPMENTS.

by

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Abstract

This paper addresses Voluntary Marketing Institutions (VMI's), defined as: *marketing institutions which are voluntarily established by companies and whose services are used by companies at their own discretion within the bounds of the formal relationship between company and VMI.* VMI's are analysed as a class of marketing institutions of which amongst others farmers' cooperatives, wholesaler sponsored voluntary chains and franchise organisations are important members. In particular we intend to contribute to the understanding of VMI's by: a) reviewing theories and research results from economics and marketing, being relevant to the study of VMI's; b) proposing a classification scheme of VMI's and a set of criteria to assess the viability of VMI's; c) analysing the evolution of VMI's in western food markets.

A conceptual framework proposed in order to classify and test the viability of VMI's has been applied to our analysis of future developments in VMI's. It is concluded that many trends in Western food marketing systems, in particular the increasing number of medium-sized and big companies, have a negative influence on the viability of VMI's. It is argued that VMI's have opportunities in Western food marketing systems yet: a) by offering specific marketing services to medium sized and big companies, which pursue their own marketing policies; and b) by planning and implementing the marketing program for the product of (a decreasing number of) small companies. It is argued that VMI's have also increasing opportunities in addressing problems due to externalities of food production and marketing. VMI's evolve to free form institutions, both with respect to their relationship with members and with respect to their legal structure.

1. Introduction.

Food marketing in Western countries has evolved from simple exchange processes at local markets into complex food marketing systems. Also in other countries food marketing has changed because of trends in consumer behaviour, new marketing methods, and a changing economic order.

Food marketing takes place within a specific network of institutions. In open markets the structure of this network is determined by factors related to marketing effectiveness, efficiency and equity. Occasionally companies have voluntarily established common marketing institutions, such as cooperatives, in order to improve marketing performance. Sometimes marketing institutions, for instance marketing boards, are imposed on a food marketing system by government. In some countries government enhances the establishment of common marketing institutions by subsidies or tax facilities.

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This paper addresses voluntary marketing institutions established by companies of their own free will. We define a *voluntary marketing institution (VMI)* as a marketing institution which is voluntarily established by companies and whose services are used by companies at their own discretion within the bounds of the formal relationship between company and VMI. VMIs traditionally play an important role in Western food marketing systems. Examples are farmers' cooperatives, wholesaler sponsored voluntary chains and franchise organisations. The role of VMI's is changing as a result of changing markets and marketing strategies.

Marketing institutions have been studied at length in the agricultural marketing literature. Marketing textbooks (e.g. Kohls, Uhl, 1990) offer an in depth treatment of marketing boards, marketing orders/agreements and cooperatives. In particular marketing boards and cooperatives have been investigated extensively. Marketing boards have been studied regularly (e.g. Morley, 1967; Hoos (ed.), 1979; Forbes, 1982; Meulenberg, 1986; Veeman, 1997; Wallace and Schroder, 1997). There is a continuous stream of research on farmers' cooperatives (e.g. Cobia (ed.), 1989; Nilsson and van Dijk, (ed.), 1997; Bekkum and Dijk van (ed.), 1997). In this paper it is tried to take a more general look at these marketing institutions by focusing on VMI's as a class of marketing institutions of which marketing boards and cooperatives are important members. It is not our intention to offer an up to date picture of VMI's. Rather we analyse general characteristics of VMI's and present structural developments of VMI's as a result of a changing marketing environment and marketing strategies. In particular we intend to contribute to the understanding of VMI's by:

- reviewing theories and research results from economics and marketing, which seem helpful in the study of VMI's,
- proposing a classification scheme of VMI's and a set of criteria to assess the viability of VMI's,
- analysing the evolution of VMI's in western food markets.

Our paper is organized as follows. Firstly, a concise description of VMI's in Western food markets is given. Afterwards concepts and findings of economic theory and marketing relevant to VMI's are reviewed. A classification scheme of VMI's and a framework to assess the viability of VMI's are proposed. Next, main trends in the Western marketing environment and in the companies of food marketing systems are described. The impact of these trends on VMI's in Western food markets is analysed. Some conclusions close the paper.

2. Voluntary marketing institutions in Western markets, a concise description ²⁾.

In many food marketing systems VMIs are operating which perform specific marketing functions, such as price discovery, or which even perform the complete marketing operation for an agricultural/food product.

- *Cooperative auctions* contribute to price discovery in agricultural markets. Dutch auctions (auction starts at an offer price higher than any bidder is willing to pay and which is lowered until a bidder accepts the offer) are in use in markets of fresh horticultural products, flowers, fruit and vegetables and fish. English auctions (auctions start at a low offer price; bids are publicly made; a bidder who makes the highest bid receives the offer) are in use amongst others in selling cattle. Auctions fulfil also an important logistical function by concentrating physical supply and demand.

²⁾ Section 2 borrows heavily from Meulenberg and Visene (1998)

Product differentiation and relationship-marketing diminish opportunities for selling through auctions since in selling through an auction no special relationship between supplier and buyer can be developed. On the other hand, better communication facilities increase the access to the auction process, and therefore the opportunity, for auctioning products at an international scale.

- *Futures markets*, sometimes established with the support of companies operating in the relevant agricultural sector, have been popular in the US for a long time as an institute to hedge price risks for commodities such as corn, soybeans and wheat. In Europe commodity futures exchanges are of limited importance yet, but various developments stimulate the interest in commodity futures trading:

- * the trend towards big and specialised farms which operate in more open markets and receive less price support by CAP;
- * bigger food companies, which are concerned about price volatility of their agricultural inputs.

Actually, in many European countries, such as France, Germany, Hungary, Netherlands, Spain and the United Kingdom, futures markets have been started, or will start soon.

Various marketing institutions market agricultural products on behalf of participating farmers. Important institutions in this respect are *marketing cooperatives* and *marketing boards*.

- *Marketing cooperatives* started out as organizations, which tried to improve farmers' product prices by increasing bargaining power of farmers, or by better product quality. They are defined as user-owned and user-controlled businesses that distribute benefits on the basis of use (Barton, 1989). Three concepts distinguish cooperatives from other businesses: a) the user-owner principle: persons who own and finance the cooperative are those that use it, b) the user-control principle: control of the cooperative is by those who use the cooperative and c) the user-benefits principle: benefits of the cooperative are distributed to its users on the basis of their use. Cropp and Engelsbe (1989) indicate potential classifications of cooperatives based on functions performed, structural arrangements, organizational or financial structure.

Table 1
Market shares of agricultural co-operatives in the EU¹⁾

| Market shares (%) | dairy | fruit & vegetables | meat | farm inputs | credit | grain |
|-------------------|-------|--------------------|-------|-------------|--------|-------|
| Belgium | 50 | 70-90 | 20-30 | - | - | - |
| Denmark | 93 | 20-25 | 66-93 | 64-59 | - | 87 |
| Germany | 55-60 | 60 | 30 | 50-60 | - | - |
| Greece | 20 | 12-51 | 5-30 | - | - | 49 |
| Spain | 35 | 15-40 | 20 | 50-60 | - | 20 |
| France | 49 | 35-50 | 27-88 | 70 | - | 75 |
| Ireland | 100 | 41 | 30-70 | 15 | - | 69 |
| Italy | 38 | 41 | 10-15 | 75-95 | - | 15 |
| Luxembourg | 80 | 70-96 | 25-30 | 40-50 | - | 70 |
| Netherlands | 82 | 35 | 50 | - | - | 60 |
| Austria | 90 | 35 | 68 | 40-60 | - | - |
| Portugal | 83-90 | 60 | 79-81 | 75 | 34 | - |
| Finland | 94 | 60 | 20-25 | - | - | 75 |
| Sweden | 99 | 35-45 | 20 | - | - | 20 |
| U.K. | 98 | - | - | - | - | - |

¹⁾ Source: Bekkum, O.F. van en G. van Dijk (ed.), 1997, p. 29.

VMI's are either formal, well established, organizations or sets of rules/norms/constraints.

* For the analysis of VMI's the distinction made between institutions dealing with the institutional environment (rules of the game) and institutions of governance (the play of the game) seems useful, since the evolution of both types of institutions differs substantially in food marketing. Also the scheme of social analysis in four levels proposed by Williamson (1998, p.26) seems helpful to understand different types of VMI's: 1) ...the social embeddedness level, where the norms, customs, mores, traditions, etc. are located. 2) ...the institutional environment... the rules of the game within which economic activity is organized... the polity, judiciary, and bureaucracy of government... 3) the institutions of governance... second order economizing applies: get the governance structures (markets, hybrids, firms, bureaus) right... 4) ...from discrete structural to marginal analysis... the level with which neo-classical economics and, more recently, agency theory has been concerned. Williamson argues that New Institutional Economics is concerned in particular with level 2 and 3 of his scheme.

The analysis of VMI's is in particular concerned with the levels 2 and 3, of Williamson's scheme of social analysis: the institutional environment and the institutions of governance.

* According to Coriat and Dosi (1998, p.6,ff.): "...institutions not only 'parameterize' and 'constrain', but, given any one environment, also shape the 'visions of the world', the interaction networks, the behavioural patterns, and, ultimately, the very identity of the agents." They make a distinction between weak and strong institutionalism: "...ranging from weak forms retaining a lot of the canonic microfoundations to strong forms wherein institutions have much more life of their own and also much more influence on what microentities think and do." The former type of institutionalism is characterised by: "(1) Role of institution; parameterize system variables; contain menu of strategies.(2) "Primitives" of the theory: ...rational self-seeking agents; institutions as derived entities.(3) Mechanisms of institution-formulation: Mainly intentional, "constitutional" processes.(4) Efficiency properties: Institutions perform useful coordinating and governance functions;..."

Our approach of VMI's is, in the terminology of Coriat and Dosi (l.c., p.8), primarily "Weak" institutionalism since companies in Western food marketing systems evaluate their participation/cooperation with a VMI increasingly on the basis of rational criteria.

* Theories focusing on rules and organisational structures at macro-level may be useful in the analysis of VMI's. An example is the discussion of corporatism by Visser and Hemerijck (1997, p. 65, ff.): "Corporatist governance has two analytically distinct properties: the degree of institutional integration of organized interests into the framework of public policy formation; and the degree of societal support for corporatist policies offered by organized interests." The authors classify corporatist institutional change on the basis of these two criteria:

| | | | |
|---------------|---|--------------------------|-----------------------------|
| | | societal | support |
| | | + | - |
| institutional | + | "responsive" corporatism | "immobile" corporatism |
| integration | - | "innovative" corporatism | "corporatist" disengagement |

The shift towards market orientation in food marketing requires cooperatives to adopt a customer-oriented marketing policy. A corner stone of such policy is an agricultural supply of farmer-members which fits to the marketing concept of the cooperative processing/marketing company. Essential for such policy is also farmers' willingness to invest in the cooperative, in particular in its markets and R&D. Adoption of modern marketing and management procedures by cooperatives influences the cooperative structure.

The following organizational changes, amongst others because of the shift toward market orientation, can be observed:

- company size is increasing,
- quality of management is improving and the rights and responsibilities of top management are better defined,
- special financial structures are developed to generate the necessary risk bearing capital for the cooperative enterprise,
- some cooperatives have transformed their companies into limited companies, whose shares, at least a majority of shares, are in the hands of the cooperative union/farmer-members.

Foregoing developments enhance a more rational and less emotional relationship between farmers, in particular young and modern farmers, and their cooperative.

- In various countries agricultural marketing boards and commodity boards contribute to the marketing of food and agricultural products of a sector. Marketing boards which are responsible for the total marketing operation of an agricultural/food product are rather the exception than the rule in Western countries. However, promotional boards which support the marketing of generic food products have been set up in many European countries. Sopesa in France and CMA in Germany are examples. Product differentiation and large company size stimulate marketing efforts for the brand of individual companies at the cost of marketing efforts for the generic product of a sector. On the other hand, new marketing problems emerge for some food products, such as a poor image of meat, which have to be tackled by marketing activities of the sector.

3. Theories and research results from economics and marketing relevant to voluntary agricultural marketing institutions (VMI's).

Voluntary marketing institutions (VMI's) perform functions and coordinate processes in food marketing systems. Their role in western food markets is changing. Theories and research results from economics and marketing are instrumental in understanding this changing role. In this section some important theories and research results are concisely reviewed from the perspective of their relevance to VMI's.

- Contributions from institutional economics.

* In economic theory institutions are defined in different ways. Schotter (1994, p.5 and following) distinguishes the following three meanings of institutions: "...conventions, sets of rules that constrain the behavior of social agents in particular situations, and an organization - usually a large, well-established organization." A similar classification is given by Coriat and Dosi (1998, p.6): "... formal organizations, patterns of behaviours that are collectively shared, negative norms and constraints".

conclude also that the role of governance as a means of adapting to uncertain environments receives mixed support.

Concepts and theories of transaction cost economics contribute to our understanding of VMI's (see for instance: Zylberstajn, 1996). Transaction costs influence companies' decision about whether or not to establish a VMI. Transaction cost economics also improves our understanding of the type of relationship between companies and their VMI. Asset specificity and information dissemination are important in this respect. "Non-egotistic" factors seem relevant to VMI's which have strong social/emotional links with participating companies.

• *Integration is associated with increasing levels of asset specificity, difficulty of performance evaluation and uncertainty (e.g.: Anderson and Schmittlein, 1984; Liliten 1979). Ownership and complete control over neighbouring stages of production or distribution (e.g.: Porter, 1980), the creation of barriers to entry for competitors (Bain, 1956), and the acquisition of private information (Perry, 1989, p. 208) are other reasons for vertical integration.*

Between vertical integration and anonymous spot market exchange there is a great variety of vertical "controls" between firms in different stages of the marketing channel. For example, vertical contractual relations, such as quantity dependent pricing, ties, royalties, requirement contracts and exclusive dealing, resale customer restraints, resale price restraints (Katz, 1989, p.656,ff.) are used to improve profits in vertical marketing relationships.

Concepts and theories on integration and vertical contractual relations are relevant to companies' decision making about outsourcing functions to a VMI.

• *Models have been developed which are concerned with aspects of the relationship between a principal and his agent, e.g. models on moral hazard, on incentives to agents and on monitoring of agents (Holmstrom, Tirole, 1989, p.67). Also models have been proposed which search for a wage structure stimulating agents' efforts. Free-rider problems and the division of proceeds from a joint output have been investigated.*

Principal-agent models, such as those concerned with moral hazard, giving incentives to agents and monitoring agents, are instrumental in analysing the relationship between VMI's and participating companies.

• *Reputation has been recognized as an important asset of companies, in particular when it is impossible or too expensive to sign comprehensive contracts (Holmstrom and Tirole, 1989, pp. 76,ff.). In that case reputation offers an implicit promise for a fair fulfilment of a contract when unexpected events occur that are not covered by contract.*

Since mutual trust is extremely important for the relationship between a VMI and its target companies, the reputation of a VMI is a valuable asset for a successful relationship with the related companies.

- Contributions from marketing theories.

The role of marketing institutions in the channel has been a central topic of marketing theory. Meulenber (1997) reviewed major contributions from marketing theory in this field by using the classification of marketing schools by Sheeh et al. (1988).

• *It is not surprising that in particular the institutional school, focusing on "...the organizations that actually perform the functions required to move the goods from the producer to the consumer." (Sheeh et al., 1988, p. 74), contributes in particular to the theory of marketing*

The analytical scheme for analysing corporatism by Visser and Hemerijck (l.c.) seems helpful to characterize a VMI and to derive warranted strategies.

• *Also discussions about market- and non market regimes offer food for thought about VMI policies. Wolf (1993, p.87) summarizes market failures as: externalities and public goods, increasing returns, market imperfections, distributional inequity (income and wealth), and non-market failures as: disjunction between costs and revenues, redundant and rising costs, internalities and organizational goals, derived externalities, distributional inequity (power and privilege).*

The analysis of VMI's can profit from economic theories about the failures of market and non-market institutions at the national/sector level. In particular these theories may be helpful in understanding the influence of externalities of production and marketing on new opportunities for VMI's, and the influence of internalities and organizational goals, respectively distributional inequity (power and privilege) on policies and management of VMI's.

- Contributions from industrial economics.

• *A centre-piece of industrial economics theory is the well known transaction cost economics theory of Williamson. This theory regards the firm as a governance structure. It is based on (e.g. Williamson, 1989, 1998) the behavioral assumptions of bounded rationality and opportunism and considers frequency, uncertainty and asset specificity principal dimensions of transactions. Williamson (e.g. 1989, p. 146; 1998, p. 37, ff.) proposes a scheme for the analysis of contracting which starts out by determining the degree of asset specificity. In case of asset specificity safeguards might be provided, such as penalties, to prevent a breach of the contract, or the transactions might be organized under unified ownership. Information is considered a prime source of transaction costs, in particular as a result of specialisation in production and marketing (Holmstrom, Tirole, 1989, p. 64).*

Nootboom (1998, p. 172) argues that the transaction costs economics theory of Williamson is not complete, because it is comparative static and not dynamic: it does not take into account learning. In order to integrate the outlooks of transaction cost economics and IMP(Industrial Marketing and Purchasing (Hakansson,1982)) Nootboom makes a distinction between egotistic and non-egotistic sources for cooperation both at the macro- and micro level:

| | | |
|---------------|---|---|
| | macro | micro |
| egotistic | coercion or fear of sanctions from authority(god,law) | material advantage or "interest" |
| non-egotistic | ethics: values/norms of proper conduct | bonds of friendship, kinship or empathy |

He argues that while the New Institutional transaction cost economics focuses on the egotistic sources, Neo-institutionalism aims at incorporating the non-egotistic sources.

In a review of transaction costs analysis in marketing research Rindfleisch and Heide (1997) conclude that firms seek to minimize transaction costs through vertical integration when faced with the need for safeguarding specific assets invested in an exchange relationship. They

institutions. Many scholars have analysed marketing channels and marketing institutions from the efficiency point of view (Alderson, 1954; Stigler, 1951; Bucklin, 1965, 1970). In fact, in the case of *perfect competition* costs will ultimately determine channel structure and consequently the institutional set up. In other market structures effectiveness and/or equity are also important criteria for building a structure of marketing institutions. Various studies emphasizing marketing efficiency as a criterion for the channel structure have also included effectiveness as a criterion (e.g. Bucklin, 1965; Bucklin, 1966). Models from management science (see for instance: Lilien et al., 1992, pp. 415, ff.; Stern and El Ansary, 1992, pp. 304, ff.) analyse channel structure by focusing on the relationship between a profit maximizing manufacturer and a retailer under different assumptions about the degree of integration, the type of market structure, the profit function of the manufacturer and the profit sharing arrangement.

* Also the *organizational dynamics* school of thought in marketing which is analysing marketing channels from the behavioural point of view has contributed to the understanding of marketing institutions. Initiated by Stern (1969), marketing channels have been analysed on the basis of power (see for instance: Brown, et al., 1995), conflict and satisfaction in the relationship between channel partners. Frameworks for the analysis of marketing channels have been proposed. (Stern and Reve, 1980). Marketing channels have been classified on the basis of the relationships in the channel, for example vertical marketing systems are classified in administered, contractual and corporate systems (Stern and El Ansary, 1992). Transaction cost economics has been widely used to understand marketing channels (see Rindfleisch and Heide, 1997).

The coordination between marketing institutions in a marketing channel has been analysed (Celly and Frazier, 1996). Much attention is paid to franchising, e.g. its motivation by the "resource constraints" or by the "incentive" argument (Lafontaine and Kaufmann, 1994). Factors determining continuity in channel relationships (Anderson and Weitz, 1989), and trust in marketing channels (Geyskens, et al., 1998; Kumar, et al. 1995) have been investigated.

Theories on marketing channels and marketing institutions are by definition relevant to VMI's. They offer in particular insights in the process of establishing a VMI and in the relationship of VMI's with participating companies.

4. Criteria for analysing voluntary marketing institutions (VMI's).

- Voluntary marketing institutions, a classification scheme.

* We focus in this paper on *Voluntary Marketing Institutions (VMI's)* which we define as:

a marketing institution which is voluntarily established by companies and whose services are used by companies at their own discretion within the bounds of the formal relationship between companies and the VMI.

Participation of companies in a voluntary institution is at the discretion of companies.

However, by taking part in a voluntary institution companies commit themselves to the rules of the game.

* VMI's take an intermediate position on the spectrum of marketing institutions from:

Government-owned marketing institution — Government controlled marketing institution
 — Government-supported common marketing institution — Voluntary marketing institution (VMI) — Individual company.

* VMI's can be classified on the basis of the following criteria:

- *horizontal versus vertical VMI.*
 e.g. farmers marketing cooperative versus a wholesaler sponsored voluntary chain.

- *hierarchy of VMI's, one-, two-, multilayer structure.*

e.g. a primary marketing cooperative set up by farmers versus a secondary national marketing cooperative established by regional cooperatives.

- *purely voluntary versus hybrid (voluntary and public).*

e.g. a cooperative established by farmers versus a commodity board based on public law but established by majority vote of the representatives of an industry.

- *permanent versus temporary VMI.*

e.g. farmers' cooperative (intentionally permanent) versus a temporary marketing organization set up by a group of companies to explore a new market.

- *strength of the link between a VMI and its target companies,*

e.g. a relatively loose relationship between retailers and wholesalers in a wholesaler sponsored voluntary chain versus a strict relationship in a franchise organisation.

- *degree of VMI-involvement in marketing a product,*

e.g. marketing cooperatives being in charge of the complete marketing operation of a product versus a promotional board taking responsibility for promoting the generic product only.

These classification criteria seem helpful in understanding the role of a VMI in a food marketing system. However, they are descriptive and not instrumental for assessing the viability of a VMI. In the following section we propose criteria for assessing VMI's.

- Criteria for the viability of a Voluntary Marketing Institution (VMI).

Companies can transfer their complete marketing operation to a VMI, or specific aspects of the marketing operation only, such as aspects related to product, price, information/communication, or distribution. Decision making on that matter can use concepts and theories from economics and marketing, as reviewed in section 3. It may also profit from assessing the viability of a VMI by the following criteria.

We distinguish *necessary* and *sufficient* conditions for the viability of a VMI (Meulenber, 1986). Necessary conditions are conditions to be fulfilled in order to make a VMI meaningful. In addition to the necessary conditions a number of sufficient conditions, not necessarily all, have to be met in order to make a VMI viable.

* Necessary conditions for the viability of a VMI.

Condition 1. *Products/needs of companies served by a VMI are homogeneous.*

VMI's are viable only if they offer products and services which suit the participating companies, e.g. the members of a cooperative. Consequently, companies served by a VMI should be homogeneous with respect to the marketing object of a VMI, say the product of the companies or specific product attributes only, such as nutritional aspects.

This condition will be met in many agricultural markets, but is increasingly a problem in food markets because of product differentiation. Nevertheless, also differentiated food products may

be homogeneous on specific attributes, such as the environmental friendliness or healthiness of a product, at least from the consumers' point of view.

Condition 2. There are market opportunities and threats for the "generic" product of companies related to a VMI.

Without opportunities and/or threats for the generic product there is no reason for companies to join a VMI. In food marketing systems this condition seems almost always fulfilled; markets for many generic products, such as bread, poultry meat, beef, etc., are dynamic.

Condition 3. Marketing by a VMI is superior to marketing by individual companies on either efficiency, effectiveness, or equity.

Marketing is a basic function of every company. However, a company may transfer the marketing function fully or partially to a VMI if this transfer increases its profits. It requires superior marketing by a VMI either on efficiency (costs), effectiveness (sales) or equity (share of profit).

These "Necessary" conditions for viability of VMIs are often met in food marketing systems because of product-similarity between companies and the importance of small and medium sized companies.

* Sufficient conditions for the viability of a VMI.

Condition 1. Companies prefer to respond jointly instead of individually to market opportunities and threats.

In a free market economy a company is responsible for marketing its products and services. Whether a company will outsource marketing functions to a VMI depends amongst others on its size and the related economies of scale and scope in marketing. However, even when a joint marketing operation through a VMI could be more effective, a company might prefer its own approach for reasons of independence and flexibility. For instance, a food company might prefer to carry an own environmentally friendly brand to using an industry-wide environmental label.

Condition 2. The product marketed by a VMI is important for the income formation of the related companies.

A company will not be motivated to join a VMI if the product in question is contributing to its income to a minor extent only.

Condition 3. Free rider problems are negligible.

Companies hesitate to join a VMI, e.g. a promotional board, if non-participants will profit from that VMI too.

5. Environmental changes relevant to voluntary marketing institutions (VMIs).

Developments of VMIs in Western food marketing systems, such as marketing cooperatives and marketing boards, depend on trends in the environment of western food marketing systems. We will highlight main trends and their consequences for food marketing systems.

- Economic environment

In spite of a steadily increasing income in Western countries, the per capita consumption of food (in volume) is rather stable. Income elasticities of the demand for various food products are small. Income elasticities of the demand for food quality and services are higher.

The tendency towards a more skewed income distribution offers in many Western countries opportunities for market segmentation and product differentiation.

Economic developments suggest that farmers and food companies should reinforce their market position by more added value and by focusing on specific target groups.

- Demographic environment

The EU population is expected to increase only slightly in the period 1995 to 2000 (from 371.5 million to 375.0 million) and is even projected to decrease in the first half of the next century. On the other hand the global population is expected to grow substantially yet.

People in Western countries get older. However, food consumption pattern of old people does not differ substantially from the rest, except of a lower and nutrient poorer food intake, less energy need and more need for services (Senauer, et al., 1991).

The trend towards smaller families, of which both partners have a job, stimulates the demand for convenience and "away from home" consumption.

Also demographic trends stimulate marketing strategies of more added value (services) to the product and of focusing on specific target groups.

- Social environment

Trends in values and life styles have a great impact on food marketing. From the well known list of trends proposed by Popcorn (1992) "fantasy adventure, save our society, small indulgence and staying alive" seem in particular relevant to food consumption.

New values, such as "Self fulfilment ethic", "Better quality of life", and "Work to live" (Plummer, as quoted by Engel, et al. 1995, p. 627) influence food consumption. Concern about the environment and about animal welfare affect food marketing not only through consumers' wants and needs, but also through actions of consumers' groups and environmental lobbies.

Changes in lifestyle because of more outdoor working housewives, increasing mobility and more free time influence consumer behaviour.

Trends in values and lifestyles bring product positioning, product innovation and adding more services to the product in the forefront of food marketing.

- Physical Environment

Ecological problems have become a major social issue. Many consumers are environmentally conscious, but do not behave environmentally friendly. Environmentally friendly behaviour is promoted in particular by environmental lobbies and consumer groups.

Ecological problems are acute in some agricultural sectors, e.g. manure problems in pig and poultry raising, use of pesticides/insecticides in horticulture, and land degradation in arable farming. The present wave of biotechnological inventions reinforces discussions about the sustainability of food systems.

Food marketing will have to pay more attention to the sustainability of the food marketing system. It will increasingly approach sustainability as an opportunity and not as a threat.

- Political environment

Less trade barriers and market intervention, respectively more involvement in environmental and health issues are trends in government policies with respect to food marketing. Member

countries of GATT are committed to a reduction of market intervention, to improved market access (replacement of non-tariff barriers by "equivalent" tariffs and reduction of tariffs) and reduction of subsidised exports. The future EU membership of some middle and east European states will shift the CAP further from market intervention to income support. The CAP will pay more attention to rural and environmental policies.

Food marketing systems become more market oriented and rely less on market support from government.

- Technological environment

Technological advances in IT (information technology), computer science, biotechnology, and transportation offer new opportunities to food marketing. New information technologies improve the speed and precision of exchange processes. Computerization of production and logistical processes reduces costs. Biotechnological inventions create opportunities for new products. However, many Western consumers are suspicious about food produced by modern biotechnological methods.

Advances in technology increase marketing efficiency and stimulate product innovation in food marketing systems. Consumer bias against new sophisticated methods of food production and marketing increases the importance of communication and company-image in food marketing.

6. Changing companies and strategies in food marketing systems.

Changes of companies in food marketing systems affect the potential role of VMI's. They result from environmental trends, but also from endogenous developments in companies themselves, such as technological inventions and new management techniques. In spite of the variety in Western food marketing systems, the developments in retailers, food manufacturers, wholesalers and farmers, show similar trends. Major trends being relevant to VMI's will be discussed concisely in this section.

- Food retailers.

Trends in European food retailing result from policies aiming at higher effectiveness and efficiency. In conjunction with these policies the organisational structure of retail companies has changed.

* *Marketing effectiveness* of food retailers has been increased by market oriented retail policies. Width and depth of product assortment are cornerstones of such policies. They characterise to a large extent the store type, such as hypermarket, supermarket, discount store and speciality shop. A focus on specific target markets, and a constant search for new products and services are characteristic of modern food retailing. Private labels have become an important marketing instrument of retailers. Being in the past a cheap alternative to national brands, they are currently positioned as products of good quality, being substantially cheaper than national brands. Retailers also try to improve marketing effectiveness by new assortments, better services or new outlets such as food shops in petrol- and railway stations.

* *Marketing efficiency* is extremely important in a highly competitive Western food retail market. Costs of carrying a large number of items per store (Aldi has about 600 lines, Sainsbury and Tesco stores between 10,000 and 20,000 lines (Corstjens and Corstjens, 1995, p. 197)) make logistical efficiency of paramount importance. Advances in IT, such as the use of bar-codes, scanning at check-outs and electronic data interchange contribute to efficient logistics.

Contracting-out of logistical functions has decreased logistical costs too. The drive for efficiency has also stimulated a purchasing policy of obtaining price discounts. A strong bargaining power of retail chains vis-à-vis food suppliers is instrumental in this respect.

* *Organizational structure of food retailing.* Food retailing has shifted from small independents, such as grocery stores and greengrocers, to large retail chains. Some retail chains are a member of a holding company. Small independents try to stay in business either as a speciality shop, as a member of a wholesaler sponsored voluntary chain, such as Spar, as a member of a retailer sponsored voluntary chain, or by participating in a franchise organisation.

- Food industry.

European food industry has been characterised by Lindå(1988) as widely diversified in the form of product extensions, geographic diversification and functional diversification. Innovation, mergers and joint ventures are means to materialize the diversification process. At present many food manufacturers try to build a competitive position in international markets on the basis of their core competences in production and marketing.

While multinationals such as Danone, Kraft, Nestlé and Unilever have been operating on an international scale already for a long time, a great many other food companies, which have traditionally set up production plants and management facilities in the domestic market only, are also internationalizing their businesses. A case in point are dairy cooperatives such as MD foods in Denmark, Sodial in France, Campina-Melkunie in the Netherlands and Avonmore in Ireland. In spite of the concentration and internationalisation in the European food industry a great many small and medium sized food manufacturers (SME's) remain competitive by focusing on market niches, by serving regional markets or by producing under private label of retailers.

- Wholesale companies

As a result of concentration and specialisation in food marketing systems the need for some wholesale functions, such as assembling, has diminished. The execution of other functions, such as regrouping, has been integrated by retail chains. For example, sorting out and accumulation of eggs upstream in the marketing channel disappeared with the advent of specialised poultry farms. Allocation and assorting of groceries, traditional functions of wholesalers, have been taken over by distribution centers of large retail companies.

Wholesalers have responded in different ways to market opportunities and threats. Distributive wholesalers have integrated food retailing, e.g. wholesaler sponsored voluntary chains.

Wholesalers in commodities, such as merchants of grain, have become global players. Other wholesalers stay in business as agents of specific food manufacturers or food chains.

Specialisation on particular wholesale functions, such as Cash and Carry, is another type of response to market opportunities and threats.

Wholesalers are not only challenged by concentration and specialisation in food marketing systems. Also technological innovations and new types of food outlets create opportunities and threats.

- Farmers

Concentration and specialisation are main trends in Western agriculture. Large specialised farms have emerged in the production of wheat, milk, pigs, broilers and horticultural products. This trend towards concentration and specialisation is continuing yet. Partly in response to the predominant position of specialised commercial farms, mixed farming experiences a revival, particularly in the production of organic and regional foods. Not only needs and wants of environmentally conscious consumers but also rural planning policies stimulate this development.

- Strategies of food marketing systems.

Changes of food marketing systems and their environment go together with a shift from "selling commodities" to "marketing products". In this context food marketing systems increasingly operate on the basis of well defined strategies. Basic strategies have become:

Market orientation, "...the organization wide generation of market intelligence, pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization wide responsiveness to it" (Kohli and Jaworski, 1990, p. 6),

Market segmentation by targeting on consumers with specific needs and wants; companies often strive for market leadership in chosen target markets,

Product differentiation on the basis of specific attributes of products and services,

Innovation in order to serve changing consumer wants and needs and to capitalize on technological inventions,

Policy coordination between decision makers of a food marketing system, *chain strategies*,

Internationalisation of businesses in order to realise necessary economies of scale and scope in production and marketing, in particular with respect to the exploitation of core competences.

7. The impact of changes in the strategies and environment of food marketing systems on voluntary marketing institutions (VMI's).

Changes in the environment, companies and strategies of food marketing systems have been concisely reviewed in foregoing sections. Their impact on the viability of VMI's will be discussed in this section. In this context we will make use of the criteria proposed in section 4.

- The impact of changing strategies on VMI's.

Market orientation. Market orientation implies that marketing plays a central role in policies of agricultural and food companies. Therefore VMI's, responsible for marketing the products of participating companies, should get a leading role in determining quality and quantity of product supply. However, the willingness of companies to accept a leading role of VMI's is negatively correlated with company size: bigger companies are more able and willing to respond in their own way to market opportunities and threats. Consequently, market orientation makes VMI's less viable vis à vis large companies, but reinforces their role for small companies, which lack necessary marketing skills. It makes *moral hazard* in the relationship between a VMI and participating companies a more serious issue, since the reliability of companies' product supply to the VMI is crucial for marketing success.

Market segmentation and Product differentiation. Marketing policies of market segmentation and product differentiation by individual companies increase the heterogeneity of an industry. As a result, the condition "*Products/needs of companies served by a VMI are homogeneous*." will be less easily fulfilled.

However small companies, having limited marketing capacities, might use a VMI as a vehicle for policies of market segmentation and/or product differentiation. Producers' groups are a case in point.

Innovation. Many food companies have become big enough to adopt a policy of product innovation, which is some type of product modification. This development diminishes the viability of VMI's; the conditions "*Products/needs of companies served by a VMI are homogeneous*." and "*Companies prefer to respond jointly instead of individually to (specific) market opportunities and threats*." are not easily fulfilled.

On the other hand, companies become increasingly aware that basic research paves the way for a continuous stream of new products. In spite of ongoing concentration in food marketing

systems, many companies are too small yet, or even do not want, to engage themselves in basic food research. As a result, there is a common need for basic research and a willingness to consider collective action. Therefore, a VMI in charge of basic research might be viable in spite of increasing product heterogeneity due to product innovation.

Policy coordination / Chain strategies. Serving consumers by specific products and services requires effective policy coordination in the food chain. In fact, chain marketing, i.e. a coordinated marketing policy of two or more subsequent companies in a food chain, is receiving much attention. VMI's can perform coordination tasks, but big companies, such as retail companies, often prefer to carry out such tasks themselves, also if coordination concerns one aspect of a marketing strategy, such as product quality, only. However, when many small companies participate in a food chain, a VMI can be instrumental in coordinating their strategies, e.g. a wholesaler sponsored voluntary chain. Under such circumstances the condition of "*Products/needs of companies served by a VMI are homogeneous*" is fulfilled by the very mission of the VMI, namely the development and implementation of a uniform marketing strategy of the participating companies. Franchise organisations are a case in point.

Internationalisation. Many VMI's serve companies of a specific country or region. Commodity boards and farmers' cooperatives are a case in point. However, international companies with foreign subsidiaries have a broader scope and are not interested in nationally oriented VMI's. As a result the condition for a viable VMI, "*Products/needs of companies served by a VMI are homogeneous*", will not be met. A solution of this problem is internationalisation of VMI's. VMI's with an international membership are scarce yet, but will become more important, e.g. farmers' cooperatives with an international membership.

- The impact of environmental trends on VMI's.

Trends in the environment of food marketing systems influence VMI's through their influence on food marketing strategies. From that point of view their impact has been discussed in the foregoing section. However, the following trends create opportunities for VMI's, irrespective of the distinguished food marketing strategies:

- increasing concern about health and safety in relation to agricultural and food products,
- increasing concern about ethical and social issues related to agriculture and food production,
- increasing concern about the sustainability of agriculture and food production.

These trends often concern the generic product. For instance: consumers are worried about the cholesterol content of eggs or about residuals of pesticides on fresh fruit and vegetables; society is suspicious about the ecological consequences of genetically manipulated plants and animals; many people are critical of the environmental pollution by some types of animal husbandry.

Food marketing systems have to respond to such trends by developing products and procedures which are socially acceptable. VMI's can be instrumental in this respect by defining criteria and controlling their implementation. Examples are: VMI's which develop and implement environmental labels; VMI's which are in charge of decreasing the amount of package waste; or VMI's which define and control the implementation of animal welfare criteria. Such VMI's seem viable since all companies of an industry face the same generic problem which can effectively be handled by a collective approach. However, instead of joining a VMI some big companies prefer their own individual approach to such generic problems, amongst others to support their own company and brand image.

VMI's which take care of marketing problems resulting from the societal concern about the production and marketing of a generic product, develop and implement *behavioural rules* for participating companies. In this respect they differ from "classical" VMI's, such as farmers' cooperatives, which *actively participate* in the marketing process.

- Reaction of VMI's to changing strategies and environment. VMI's, in particular big VMI's, challenged by a changing environment try to stay in business, even if their relevance for participating companies is decreasing. Goal and time path of transforming such VMI's have to be planned carefully, in order to avoid poor solutions, such as "too little, too late" or even a "mission impossible". For example, a cooperative auction cannot transform itself into a true marketing cooperative without a fundamental change in its marketing organisation. In fact, while big VMI's, challenged by a changing environment, appear to be very well able to adopt new technologies, they often seem to have big problems in changing their management organisation and business culture.

The approach to transforming/adapting a VMI can, in analogy to the scheme of Visser and Hemerijck (1997, p.65,ff.; see section 3), be clarified by the criteria *institutional importance* (potential role of a VMI for the income formation of participating companies) and *institutional capacities* (capacities of a VMI in production and marketing):

| | | | |
|-----------------------------|--|-------------------------------------|--------------------------|
| | + | - | INSTITUTIONAL CAPACITIES |
| + | INTENSIFY ACTIVITIES | IMPROVE CAPACITIES or QUIT | |
| INSTITUTIONAL IMPORTANCE | ORGANISATIONAL CHANGE or QUIT | QUIT | |
| | - | | |

Finally it is interesting to note, that VMI's in responding to fundamental environmental changes sometimes evolve towards hybrid types of VMI. Examples are amongst others: a farmers' cooperative owning a majority share in a limited company which has no direct formal link with cooperative members; a industry research institute which is doing basic research for generic products on the basis of public-private partnership.

8. Conclusions.

- Conceptual frameworks have been proposed which are helpful in classifying VMI's respectively in assessing the viability of VMI's.
- Many trends in Western food marketing systems have a negative impact on the viability of VMI's. In particular the increasing number of medium-sized and big companies, pursuing their own marketing policies, has a negative influence on VMI's.

VMI's have opportunities in Western food marketing systems yet, by:

- offering specific marketing services to companies, which pursue their own marketing policies: a "facilitating" VMI;

- planning and implementing the total marketing program for the product of member companies: a "strategic" VMI; this option is realistic only vis à vis small companies.

There are increasing opportunities for VMI's, which address marketing problems due to externalities of food production and marketing.

VMI's evolve from

- having business relations with member companies only; member companies assess the performance of their VMI on the basis of product prices paid by the VMI;

to

- having business relations with both member and non-member companies; member companies assess the performance of their VMI on the basis of the total money (both product prices and other earnings) received from the VMI.

Hybrid VMI's, such as public-private partnerships or cooperatives operating through limited companies, become more important.

References.

- Alderson, W., 1954, Factors Governing the Development of Marketing Channels, in: Clewett, K. (ed.), 1954, Marketing Channels for Manufactured Products, R.D.Irwin, Homewood, Ill.
- Anderson, E. and B. Weitz, 1989, Determinants of Continuity in Conventional Industrial Channel Dyads, Marketing Science, 8, pp. 310 - 323.
- Anderson, E. and D. Schmitzlein, 1984, Integration of the sales force: An empirical examination, The Rand Journal of Economics, 15, pp. 385 - 395.
- Bain, J. 1956, Barriers to New Competition, Harvard University Press, Cambridge Mass.
- Barton, D., 1989, What is a cooperative? in: Cobia, D.,(ed.), Cooperatives in Agriculture, Prentice Hall, Englewood Cliffs, N.J., pp. 1 - 20.
- Bekkum, O.F. van, and G. van Dijk (ed.), 1997, Agricultural Co-operatives in the European Union, van Gorcum, Assen.
- Brown, J.R., Johnson, J.L. and H.F. Koenig, 1995, Measuring the sources of marketing channel power: A comparison of alternative approaches, International Journal of Research in Marketing, 12, pp. 333 - 354.

- Bucklin, L.P., 1965, Postponement, Speculation and the Structure of Distribution Channels, Journal of Marketing Research, 2, pp. 26 - 31.
- Bucklin, L.P., 1966, A Theory of Distribution Channel Structure, University of California, Berkeley, Institute of Business and Economic Research.
- Bucklin, L.P., 1970, The Classification of Channel Structures, in: Bucklin, L.P., (ed.), 1970, Vertical Marketing Systems, Scott, Foresman and Company, Glenview, Ill., pp. 18 - 31.
- Celly, K.S. and G.L. Frazier, 1996, Outcome-based and Behavior-based Coordination Efforts in Channel Relationships, Journal of Marketing Research, 33, pp. 209 - 210.
- Cobia, D., (ed.), 1989, Cooperatives in Agriculture, Prentice Hall, Englewood Cliffs, N.J.
- Cornat, B. and G. Dosi, 1998, The institutional embeddedness of economic change: an appraisal of the 'evolutionary' and 'regulationist' research programmes, in: Nielsen, K. and B. Johnson, (ed.), 1998, Institutions and Economic Change, Edward Elgar, Cheltenham, UK., pp. 3 - 32.
- Corstjens, J. and M. Corstjens, 1995, Store Wars, John Wiley and Sons, Chichester, New York.
- Cropp, R. and G. Engelsbe, 1989, Structure and scope of agricultural cooperatives, in: Cobia, D., (ed.), 1989, Cooperatives in Agriculture, Prentice Hall, Englewood Cliffs, N.J., pp. 35 - 67.
- Engel, J.F., Blackwell, R.D. and P.W. Miniard, 1995, Consumer Behavior, 8th edition, the Dryden Press, Forth Worth.
- Forbes, J.D., 1982, Societal Control to Producer Marketing Boards, Journal of Macromarketing, 2, pp. 27 - 37.
- Geyskens, I., Steenkamp, J.-B.E.M. and N. Kumar, 1998, Generalizations about trust in marketing channel relationships using meta-analysis, International Journal of Research in Marketing, 15, pp. 223 - 248.
- Hakansson, H.(ed.), 1982, International Marketing and Purchasing of Industrial Goods, an Interaction Approach, John Wiley and Sons, Chichester, New York.
- Holmstrom, B.R. and J. Tirole, 1989, The Theory of the Firm, in: Schmalensee, R. and R. Willig, (ed.), 1989, Handbook of Industrial Organization, Volume 1, North Holland, Amsterdam-New York, pp. 61 - 134.
- Hoos, S. (ed.), 1979, Agricultural Marketing Boards: Prices, Profits and Patterns, Baitinger Publishing Company, Cambridge (Mass.).
- Katz, M.L., 1989, Vertical Contractual Relations, in: Schmalensee, R. and R. Willig, (ed.), 1989, Handbook of Industrial Organization, Volume 1, North Holland, Amsterdam-New York, pp. 655 - 721.
- Kohli, A.K. and J.B. Jaworski, 1990, Market orientation: The construct, research propositions, and managerial implications, Journal of Marketing, 54, pp. 1 - 20.
- Kohls, R.L. and J.N. Uhl, 1990, Marketing of Agricultural Products, 7th edition, Macmillan Publishing Company, New York.
- Kumar, N., Scheer, L. and J.E.B.M. Steenkamp, 1995, The Effects of Perceived Interdependence on Dealer Attitudes, Journal of Marketing Research, 32, pp. 348 - 356.
- Lafontaine, F. and P.J. Kaufmann, 1994, The Evolution of Ownership Patterns in Franchise Systems, Journal of Retailing, 70, pp. 97 - 113.
- Lilien, G.L., 1979, Advisor 2: Modelling the market mix decision for industrial products, Management Science, 25, pp. 191 - 204.
- Lilien, G.L., Kotler, P. and K.S. Moorthy, 1992, Marketing Models, Prentice Hall International Inc., Englewood Cliffs, N.J.
- Linda, R., 1988, The food and drink industry: large firm strategies, in: de Jong, H.W., (ed.), 1988, The Structure of European Industry, 2nd Revised Edition, Kluwer Academic Publishers, Dordrecht, pp. 127 - 156.
- Meulenbergh, M.T.G. and J. Viaene, 1998, Changing food marketing systems in western countries, in: Jongen, W.M.F. and M.T.G. Meulenbergh, (ed.), 1998, Innovation of Food Production Systems, Wageningen Pers, Wageningen, pp. 5 - 36.
- Meulenbergh, M.T.G., 1986, Food marketing at the sector level: the case of Dutch commodity boards, in: Kaynak, E., (ed.), 1986, World Food Marketing Systems, Butterworths, London, pp. 209 - 221.
- Meulenbergh, M.T.G., 1997, Evolution of agricultural marketing institutions, a channel approach, in: Wierenga, B., van Tilburg, A., Grunert, K., Steenkamp, J.-B. E.M., and M. Wedel, 1997, Agricultural Marketing and Consumer Behavior in a Changing World, Kluwer Academic Publishers, Boston/London/Dordrecht, pp. 95 - 108.
- Morley, J.A.E. 1967, Marketing Boards, in: Warley, K. (ed.) 1967, Agricultural Producers and their Markets, Basil Blackwell, Oxford, pp. 341 - 352.
- Nilsson, J. and G. van Dijk, (ed.), 1997, Strategies and Structures in the Agro-Food Industries, van Gorcum, Assen.
- Nooteboom, B., 1998, Governance of transactions: a strategic process model, in: Nielsen, K. and B. Johnson, (ed.), 1998, Institutions and Economic Change, Edward Elgar, Cheltenham, UK., pp. 172 - 200.
- Perry, M.K., 1989, Vertical Integration: Determinants and Effects, in: Schmalensee, R. and R. Willig, (ed.), 1989, Handbook of Industrial Organization, Volume 1, North Holland, Amsterdam-New York, pp. 183 - 255.
- Popcorn, F., 1992, The Popcorn Report, Harper Business, New York.
- Porter, M.E., 1980, Competitive Strategy, The Free Press, New York.
- Rindfleisch, A. and J.B. Heide, 1997, Transaction Cost Analysis: Past, Present, and Future Applications, Journal of Marketing, 61, pp. 30 - 54.
- Schotter, A., 1994, Microeconomics, Harper Collins.

- Senauer, B., Asp, E. and J. Kinsky, 1991, Food Trends and the Changing Consumer, Eagan Press, St. Paul.
- Sheih, J.N., Gardner, D.M. and D.E. Garrett, 1988, Marketing Theory: Evolution and Evaluation, John Wiley and Sons, New York.
- Stern, L.W. and T. Reve, 1980, Distribution Channels as Political Economies: A Framework for Comparative Analysis, Journal of Marketing, 44, 3, pp. 52 - 64.
- Stern, L.W., 1969, Distribution Channels: Behavioral Dimensions, Houghton Mifflin Company, Boston.
- Stern, L.W. and A.I. El Ansary, 1992, Marketing Channels, 4th ed., Prentice Hall Inc., Englewood Cliffs, N.J.
- Stigler, G.J., 1951, The Division of Labor is Limited by the Extent of the Market, Journal of Political Economy, 54, pp. 185 - 193.
- Veeaman, M.M., 1997, Marketing Boards: The Canadian Experience Revisited, American Journal of Agricultural Economics, 79, 5, pp. 1554 - 1562.
- Visser, J. and A. Hemerjck, 1997, 'A Dutch Miracle': Job Growth, Welfare Reform and Cooperation in the Netherlands, Amsterdam University Press, Amsterdam.
- Wallace, L.T. and W.R. Schroder, 1997, Government and the Food Industry: Economic and Political Effects of Conflict and Co-operation, Kluwer Academic Publishers, Boston/Dordrecht/London.
- Williamson, O.E., 1989, Transaction Cost Economics, in: Schmalensee, R. and R. Willig, (ed.), 1989, Handbook of Industrial Organization, Volume 1, North Holland, Amsterdam-New York, pp. 135 - 182.
- Williamson, O.E., 1998, Transaction cost economics: how it works, where it is headed, The Economist, 146, 1, pp. 23 - 58.
- Wolf, C., 1993, Markets or Governments, 2nd edition, The MIT Press, Cambridge (Mass.).
- Zylbersztajn, D., 1996, Governance Structures and Agribusiness Coordination: A Transaction Cost Economics Based Approach, in Goldberg, R.A. (ed.), 1996, Research in Domestic and International Agribusiness Management, Volume 12, JAI Press, Inc. Greenwich, Connecticut, pp. 245 - 310.