Strategic focus areas and emerging trade arrangements in the South African agricultural industry since the demise of the marketing boards

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Abstract

This paper investigates the responses of agribusiness managers to drastic changes in the policy and marketing environment of South African agriculture. The process of deregulation and liberalisation of agricultural markets exposed agribusiness managers to international trends, which required new institutions and relationships. Based on a survey conducted among business managers, we explored emerging growth strategies, strategic focus areas and coordination preferences. Results suggest that managers prefer a growth strategy based on market penetration and market development. Important strategic drivers are value-adding and power drive. Managers expressed their preference for increased coordination and cooperation resulting in relation-based contracts and equity-based alliances.

Keywords: agribusiness, strategic focus areas, institutional arrangements, South Africa

1. Introduction

The repeal of the Agricultural Marketing Act, 1968 (Act No. 59 of 1968) in South Africa fundamentally changed the way business is conducted in the agricultural sector. The Act profoundly affected the marketing and prices of agricultural products over the previous 50 years (Groenewald, 2000). The repeal of this Act introduced the marketing of agricultural products in deregulated and relatively free markets with minimal government intervention.

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The deregulation of agriculture and agri-food trade is a worldwide phenomenon introduced by the Uruguay Round of trade negotiations (which started in 1986 and resulted in the Marrakech agreement signed in 1994). Since then, the increasing liberalisation of world agricultural markets as well as the range of domestic market reforms in developing countries, has had a considerable impact on agricultural supply chains across the world. The liberalisation efforts, the harmonisation of standards and the encouragement of foreign direct investment continue to present significant challenges to producers to make use of the new marketing opportunities created by these reforms (Stanton, 2000).

Deregulation of the South African agricultural sector commenced in the 1980s and gradually changed the structure and responsibilities of the actors in the sector. This process of deregulation and liberalisation exposed farmers and agribusinesses alike to international trends. Farmers and agribusinesses had to shoulder responsibilities and risks in agricultural markets that were previously assumed by government agencies (various authors have recorded this process, including Van Zyl *et al* (1996), Vink & Kirsten (2000) and Bayley (2000)). And yet the process has not proved an easy one. The complexity of issues related to new marketing systems, institutions and relationships required new approaches and research programmes.

South African agribusiness managers had to assess the options for innovation in governance structures in the face of increasing domestic and international competition, a new political environment and a social environment based on equity principles and increasingly complex consumer demands. At that time, the agribusiness companies were emerging from a strategic exercise aimed at identifying how they could improve their ability to compete in current and new markets with new competitors while focusing on expanding their market presence and power based on value-added products. Overall, agribusiness firms had to pass through an inward-looking phase and their strategic choices pointed to more coordination and cooperation with other participants in the agricultural supply network.

Against this background this paper looks at the changes in the strategic thinking of agribusiness managers. The paper explores the response of these managers and agribusinesses to the drastic changes in the policy and marketing environment of South African agriculture. We start with a discussion on institutional challenges and present the results of a survey conducted among agribusiness managers. A new institutional economic framework is used to analyse the results.

2. Institutional challenges: from government control to private control

After 1994 the agricultural marketing boards and state trading organisations were abolished as part of the liberalisation process. These marketing boards used to direct the functions in the marketing of agricultural produce to a greater or lesser degree. Farmers and the agribusiness sector therefore never had a direct responsibility in marketing their produce. When the marketing boards were abolished, producers had to devise and establish new institutional structures and arrangements to govern the marketing of food and fibre products to replace the functions and institutions of the marketing boards (Bayley, 2000; Vink & Kirsten, 2000).

Groenewald (2000) gives an extensive overview of the changes in agricultural policy. The Marketing Act of 1937 marked the increasing government control over the agro-food sector, where marketing schemes were developed for individual agricultural products or groups of products. Five types of control schemes were put in place with the goal of stabilising prices and reducing the marketing margins between producers and consumers, namely: (1) single-channel fixed-price schemes (the board and minister set a price at which the total production would be purchased, marketed and sold by the control board e.g. maize and winter cereals); (2) single-channel pool schemes (control board was the only buyer and seller e.g. oilseeds and leaf tobacco); (3) surplus removal scheme (in case of a surplus, the government could remove products from the market e.g. red meat and eggs); (4) supervisory schemes (e.g. canning fruit and cotton); and (5) publicity schemes (Groenewald, 2000;Vink & Kirsten, 2002). An estimated 80% of the agricultural products (in value terms) were subject to the control of the marketing boards (Groenewald, 2000). The majority of the controls were managed by 17 marketing schemes under the auspices of the Marketing Act (Bayley, 2000).

The demise of the Marketing Act of 1937 was a fact when a new marketing act, the Marketing of Agricultural Products Act, 1996 (Act No. 47 of 1996), came into effect. Trade reforms had already started earlier, including the dismantling of six control boards and many relaxations between 1987 and 1996 (refer to Vink and Kirsten, 2000 for an expansive discussion on the deregulation of the agricultural industry). Furthermore, many pressure groups (including consumers and agribusinesses) called for policy changes (Groenewald, 2000). Groenewald (2000, 394) stated as follows: "*By the beginning of the 1990s, the Marketing Act had become as controversial as ever. […] It was also said that the Marketing Act was there to further*

the interests of the white commercial farmers to the detriment of black farmers who were left out, and to the detriment of the consumers. The degree of monopolisation engendered and entrenched by the Marketing Act was a source of concern. […] There were calls by some farmers to be allowed to market freely […]."

Moreover, changes were needed to comply with the WTO regulations. The agreement signed in Marrakech called for the tariffication of all agricultural produce as opposed to quantitative measures, and a phased reduction in the tariffs. South Africa reduced its tariffs at a faster rate than required by the Uruguay Round of the GATT. The government also negotiated new agreements with the Southern African Development Community (SADC) and the European Union. South Africa became a member of the Cairns Group which supports the unilateral liberalisation of agricultural trade (Vink & Kirsten, 2000). The net effect of these changes is that the South African agricultural sector is increasingly exposed to the vagaries of international markets.

3. New institutional economists' framework of governance structures

By 1996 international food and agribusiness trends became a reality for the South African markets. The challenge facing the South African agricultural sector is still to achieve and maintain competitiveness in order to survive in the new competitive environment. Porter (1998) notes that to sustain competitive advantage, firms must achieve more sophisticated competitive advantage over time through providing higher-quality products and services or producing more efficiently. To achieve competitive success, firms must possess a competitive advantage in the form of either lower costs or differentiated products that command premium prices. A firm should therefore have the ability to create and deliver value through cost leadership or differentiation. The key to value creation is an intimate knowledge of and rapid response to the complex nature of consumer demand (Ortmann, 2000). In addressing these challenges, the evolution of coordination mechanisms to improve effective cooperation and vertical coordination could provide opportunities for individual firms and industries to enhance their competitiveness (O'Keeffe, 1999; Young & Hobbs, 2002).

Since Coase (1937) new institutional economists have investigated the *nature of the firm* and the emergence of governance structures among market agents as well as the influence of institutions on economic growth at macro level (Ménard, 2004). Focusing on a transaction between two agents as unit of analysis, Williamson (1991) describes how costs associated with this transaction explain its governance system. He characterises market exchange, hybrid forms and vertical integration.

Exchanges on a spot market are associated with low transaction costs, in principle resulting from low asset specificity, low levels of uncertainty and high frequency of transacting. On the other hand, when levels of asset specificity and uncertainty are considerable, managers could decide to vertically integrate different stages of production, processing and marketing. Hybrids have characteristics in between these two extreme governance forms. The term hybrid covers the "*set of arrangements […] from loose clusters of firms to quasi-integrated partners […] that rely neither on markets nor on hierarchies for organising transactions*" (Ménard, 2004). Although Ménard's description is somewhat confusing due to a lack of clear scope, it encompasses many of the contractual arrangements and alliances between firms that have become important for the South African agribusiness sector.

Peterson *et al* (2001) described the continuum between the spot market exchange and the vertical integration as summarised in Figure 1. Coordination mechanisms to the left of the continuum have low intensities of control ("invisible hand") while those on the right have high intensities of control ("managed coordination"). At the spot market end of the continuum control intensity is very low with *ex ante* control focusing on price negotiation. Both parties can terminate the transaction at this stage and the only *ex post* transaction decision would be whether or not to repeat the transaction. In a specification contract more *ex ante* control is exercised as the parties negotiate and agree on specific conditions for exchange beyond price. In relation-based alliances the parties adopt a longer-term approach beyond the current transaction. Parties are *ex ante* interested in mutual benefit that might arise from the transaction and *ex post* monitoring that the relationship continues and delivers the envisaged mutual benefits. There are usually several parties involved in equity-based alliances, for example, joint ventures, a partial ownership arrangement, and clans. The *ex ante* priority for equity-based alliances is to negotiate formal decentralised *ex post* governance structures, i.e. the property rights of all the stakeholders. *Ex post*, the execution of governance policies and procedures focuses on the resolution of coordination concerns. Finally, vertical integration *ex ante* control focuses on the integration of two entities into one organisation. The *ex post* control is concerned with the internal implementation of policies and procedures (Peterson *et al*, 2001). This framework is used to identify the current and future coordination preferences of managers in the agribusiness sector, which are discussed in the next section.

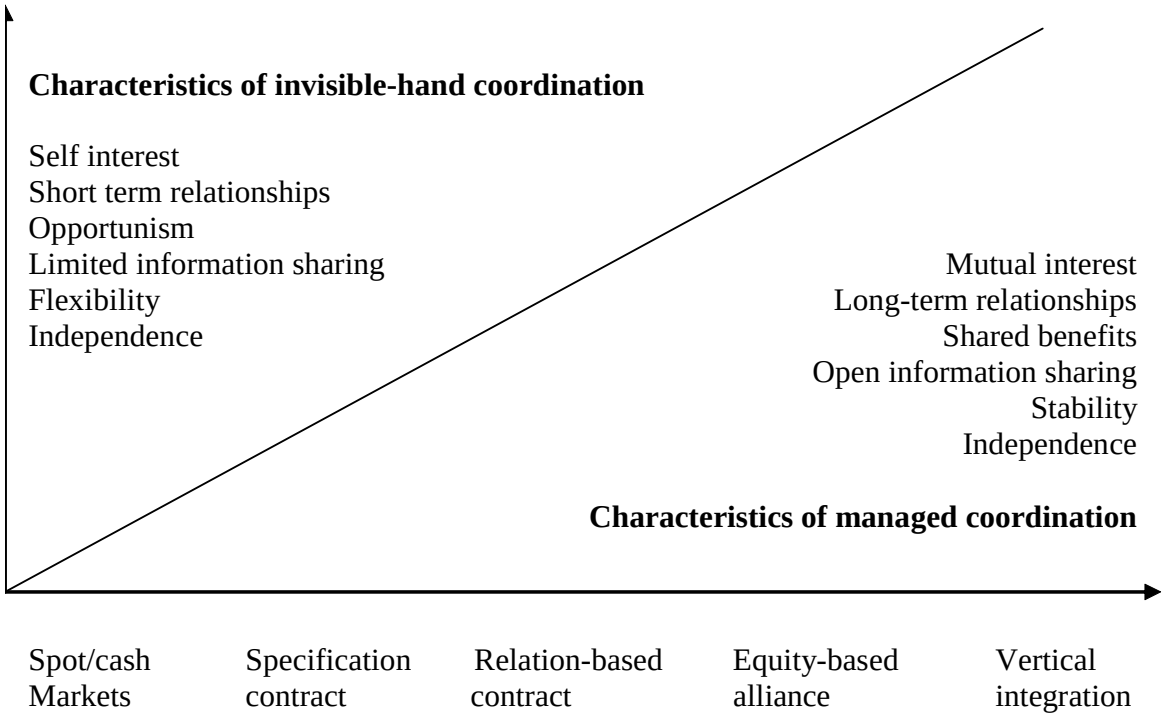

Figure 1: The vertical coordination continuum
Source: Peterson *et al*, (2001)

4. Observations from industry

4.1 Data

A survey was designed to determine the views of agribusiness managers[5] on the shape and drivers of the South African agri-food complex in 2001. The questionnaire asked for the coordination preferences, strategic direction, strategic focus areas and the shape of the agrofood industry and the major factors driving these trends. Of the 450 questionnaires distributed, 124 were returned and of these 94 were usable. Managers from the field crops, horticulture, animal product and service[6] sectors contributed to the survey, representing 33%, 24%, 15% and 28%, respectively. Firms participating in the input supply (45%), production (10%), processing (18%) and marketing (28%) functions of the supply chain were represented.

4.2 Growth strategies

The Ansoff product-market expansion grid is a useful framework to elucidate intensive growth strategies (Kotler, 2000). Agribusinesses can opt for one of three

[5] Agribusiness managers refer to business managers in activities that take place in production, input supply to producers, processing, distribution and retailing of agricultural products and commodities.
[6] Agribusinesses that provided services to several agricultural sectors at a time.

intensive growth strategies. The first is the market penetration strategy where the firm attempts to gain more market share in current markets with current products. The second is the market penetration strategy where the firms try to enter new markets with existing products. The third is the product development strategy where the firm seeks to develop products of interest to its own market. The diversification strategy is not seen as an intensive growth strategy as the opportunities are found outside of the current business.

South African agribusinesses' growth strategies for the future are mostly centred on market penetration (34% of respondents) and market development (36% of respondents). The strategy of agribusinesses in South Africa is therefore to use current products to penetrate current and new markets. Only 17% of the managers indicated that they would follow a product development strategy in future, with 13% opting for the diversification strategy.

When the matrix is considered in terms of the product and market dimension it is interesting to note that the division of the strategic focus between current and new products is 70% and 30%, respectively, and the division between current and new markets is 51% and 49%, respectively. We can therefore argue that agribusiness managers will focus more on new markets than on the introduction of new products (Table 1).

Table 1: Frequency table on growth strategy as expected by the agribusiness managers (n=83)

	Frequency	Percent
Improve existing products for existing customers/clients	28	34
New products for existing customers/clients	14	17
Introduce existing products to new customers/clients	30	36
Introduce new products to new customers clients	11	13

4.3 Strategic focus of the organisation

Porter (1980) identified three generic strategies to ensure the competitiveness of the firm, namely overall cost leadership, differentiation and focus. The same strategies are employed by various authors in the supply chain management

discipline (e.g. Hagelaar *et al* (1998); Champion & Fearne (2001)). Zuurbier (1999) proposes four strategy drivers for a firm, namely:
1. *the cost drive*, through economics of scope, economising downstream and upstream coordination costs, and improved scale economies;
2. *the value-adding drive*, similar to the differentiation drive and especially the development of products with bundles of attributes close to new consumer claims;
3. *the power drive*, building market share through horizontal and vertical expansion, increase profitability, guard risk profile, portfolio of produce that establish differentiation as the basis for successful competitive advantage; and,
4. *the surf drive*, integrating new developments in information and communication technology into business systems to facilitate the change from mass customisation to mass individualisation, electronic markets and expanding tracking and tracing capabilities.

The importance of the cost drive strategy to South African agribusiness firms can be observed in Figure 2. The power drive was second to the cost drive, but the agribusiness managers expected power to be the most important drive in future as they positioned themselves in the market. Furthermore, it is believed that value-adding would play an important role in future.

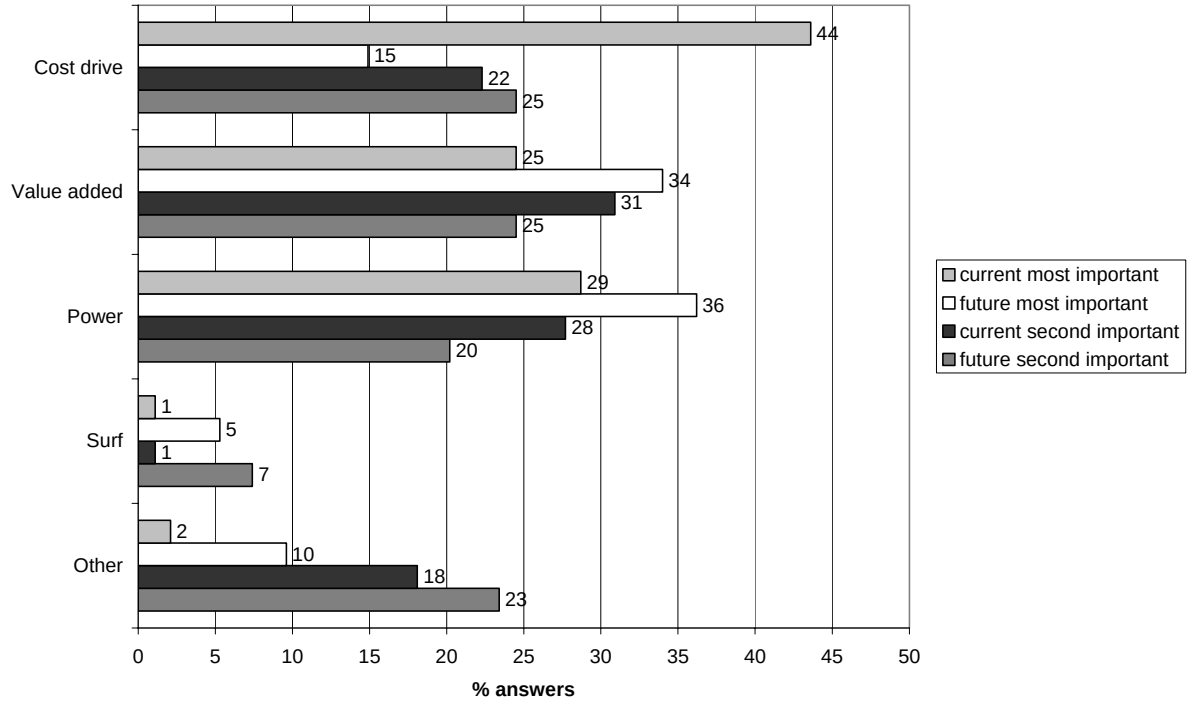

Figure 2: Importance of strategic focus areas of a sample of South African agribusiness managers (2001) (n= 94)

Managers were asked to give their assessment of the importance of 19 focus areas on a seven-point scale. The variables were introduced in a principal component analysis with the aim of finding an underlying structure in the answers provided by the managers. Table 2 shows the factor loadings that resulted from the analysis. The following six independent components were identified (these are factors with an Eigenvalue greater than one). The first component bundles variables referring to the value added to products to meet the consumers' requirements. The second component reflects the surf drive. The third component depicts the power drive, including variables towards increased market share, optimising profitability and risk profile, finding new markets and improving services. Variables loading high on component 4 have in common that they describe cost reduction in production and marketing. Finally, components 5 and 6 are less strong. Component 5 describes diversification in production and contracting in order to lower operational costs. Also, the variable "serving a big market" is loading high on this component. Component 6 refers to the rationalisation of the company.

Table 2: Rotated component matrix (Factor loadings)

	Component					
	1	2	3	4	5	6
Coordinating with downstream companies to ensure better service/ products	0.58			0.43		
Developing new value-added products	0.69					
Value-adding to address unique consumer requirements	0.87					
Providing new and more convenient products to consumers	0.70	0.30				
Computer systems linked with suppliers and buyers		0.79				
Providing agricultural and food products over the internet	0.33	0.78				
Selling products on electronic markets		0.76				
Increased market share			0.70			

Optimising profitability and risk profile			0.75			
Finding new markets			0.71			
Improving service to existing markets	0.31		0.49	0.31		
Coordinating upstream to plan and implement marketing strategies				0.68	0.39	
Accounting systems to control costs better		0.31		0.61		
Reducing marketing costs				0.68		
Serving a big market to reach a large number of customers			0.45		0.53	
Expanding/contracting processing capacity to lower operational costs					0.76	
Developing and presenting a diverse portfolio to produce					0.64	
Rationalisation of business						0.79
Always buy produce at lowest possible prices				0.46		-0.55
Eigenvalue	3.92	2.20	1.94	1.65	1.29	1.03
% Variance explained	20.65	11.57	10.23	8.70	6.80	5.45
Extraction method: Principal Component Analysis						
Rotation method: Varimax with Kaiser Normalisation						
N= 84						
KMO measure of sampling adequacy: 0.670						
Bartlett's test of sphericity: approx. χ^2: 456.16 (Sig. 0.000)						

Note: only factor loadings above 0.30 are mentioned in the table

Figures 3 to 5 represent the managers' perceptions on each focus area grouped in the three most important components. The results in Figure 3 show that all managers attach great importance to the variables reflecting the value added to the products. New value-added products, value-adding towards consumer requirements, and new and convenient products alike are considered to be important. Furthermore, managers feel inclined to increase coordination downstream, which is directly linked to being better informed on the consumers' requirements.

Figure 4 shows the importance attributed to the surf drive variables. Interestingly, the managers assess computer systems that link with suppliers and buyers as particularly important. Buying and selling products via the Internet are perceived to be less important. Figure 5 shows that managers consider power drive of great significance. More than half of the managers give the highest score to the focus area of optimising profitability and risk profile, and almost 50% consider improving service of existing markets as a top focus area. Moreover, a highest score is also given by a third of the managers to increased market share and finding new markets. These three components explain how the managers want to pursue a strategy towards market penetration and market development. Surf drive is not recognised by all, yet it is reasonable to think that the use of ICT will expand in the near future.

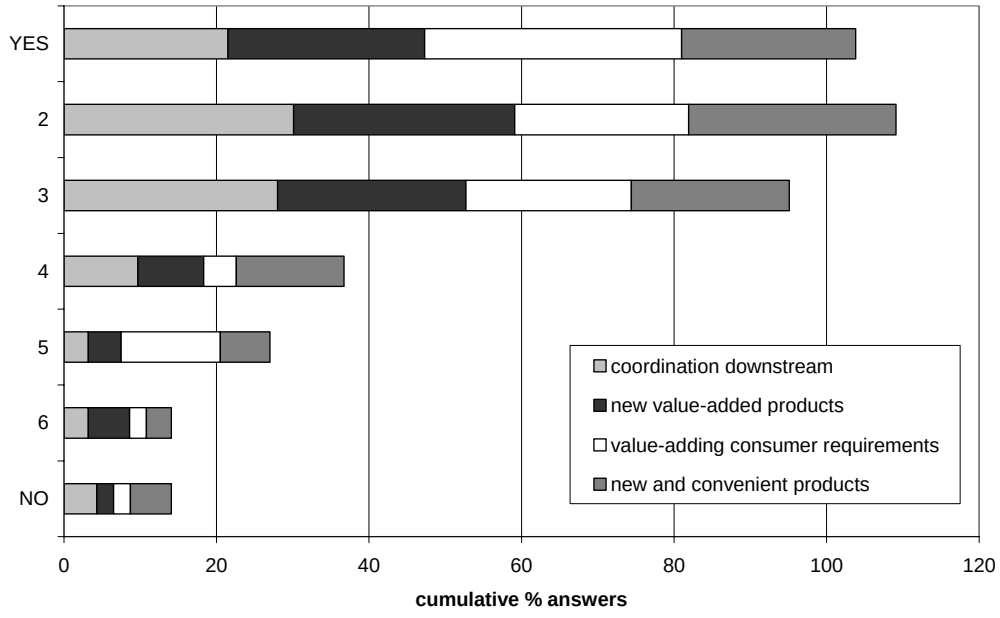

Figure 3: Evaluation of strategic focus areas in component 1 of a sample of South African agribusiness managers (2001) (% by level of importance given on 7-point scale) (n = 84)

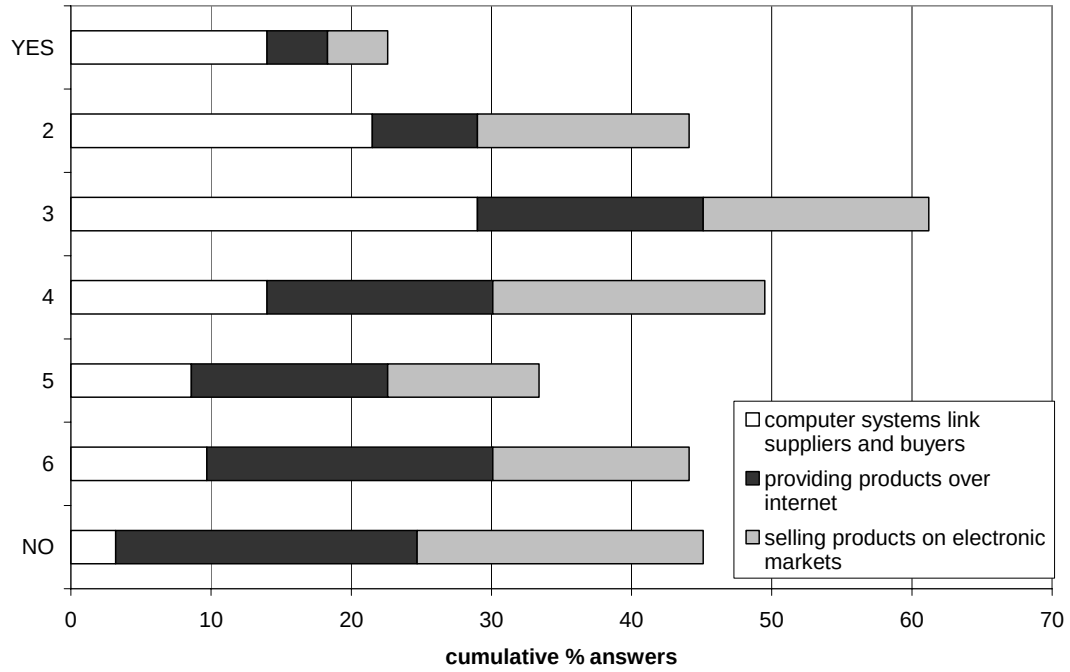

Figure 4: Evaluation of strategic focus areas in component 2 of a sample of South African agribusiness managers (2001) (% by level of importance given on 7-point scale) (n=84)

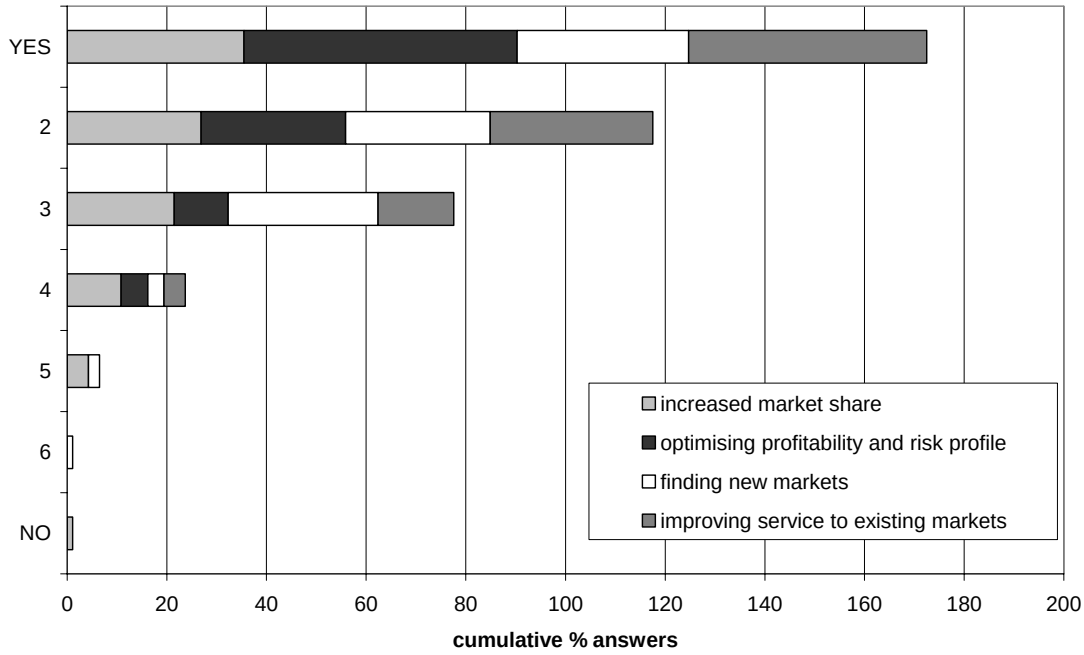

Figure 5: Evaluation of strategic focus areas in component 3 of a sample of South African agribusiness managers (2001) (% by level of importance given on 7-point scale) (n=84)

The final three components are more related to a cost drive strategy. Reducing marketing costs is not a main focus area, whereas accounting systems to control costs and coordinating upstream are. Managers appear to have mixed feelings about the importance of expanding and/or contracting to lower operational costs. Not all managers attributed high scores to the variable of diversifying production portfolio. Yet, there is a better consensus regarding the importance of serving a bigger market, a variable which would actually fit better in the third component. Finally, the cost drive by rationalising the business and produce at the lowest cost is only considered as important by a small group of managers.

4.4 Coordination preferences

The survey clearly showed that there is a significant trend towards cooperation and coordination in South African agribusiness supply chains. Half of agribusinesses indicated that they would implement their strategic direction for the future in cooperation or partnership with other enterprises; 41% said they would base the implementation on their own competences; 7% indicated that they would take over or merge with other companies, while 2% indicated other strategies for implementation.

Agribusinesses were asked to indicate their current and future coordination preferences according to the coordination continuum suggested by Peterson *et al* (2001), namely spot/cash market, specifications contracts, relation-based alliances, equity-based alliances and vertical integration. The most popular coordination mechanism for South African agribusinesses is the specifications contract, followed by the spot or cash market (Figure 6). There is a clear trend towards the right of the vertical coordination continuum, although the managers indicate that vertical integration would be reduced in future. These results are in line with expectations and show that South African agribusinesses are re-engineering their coordination systems to be more responsive and better controlled. This implies that agribusiness governance or coordination systems will increasingly be based on mutual interest, long-term relations, shared benefits, open information sharing and interdependence according to the Peterson *et al* (2001) continuum. In the Williamson paradigm this would imply that firms will increasingly engage in asset-specific investment.

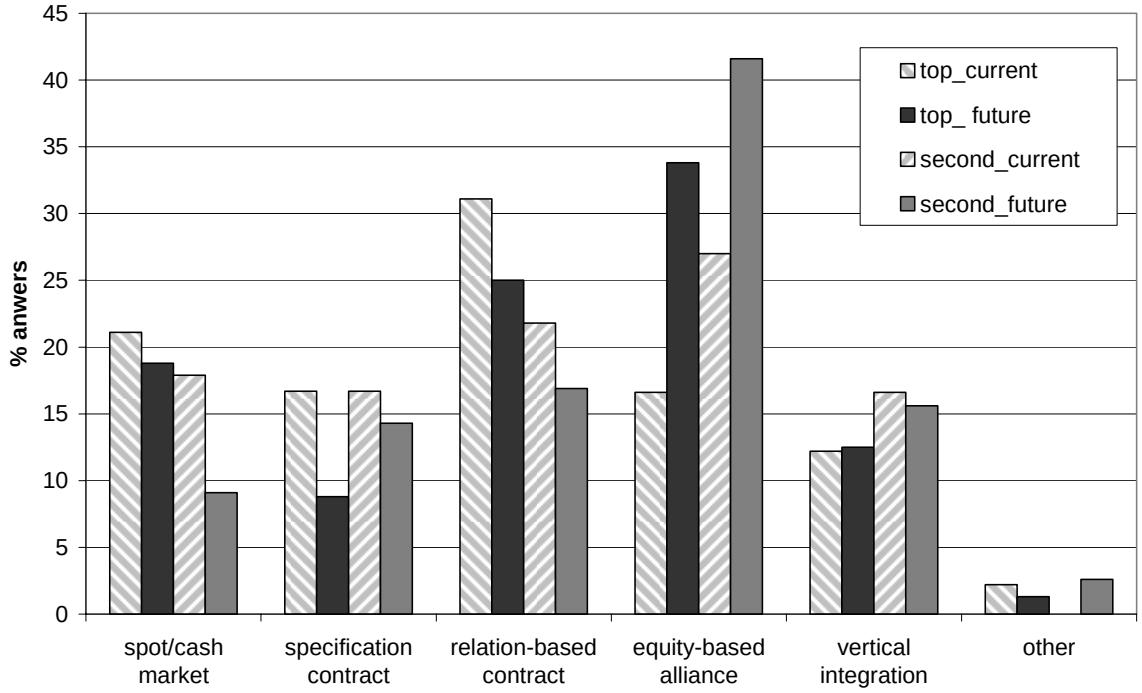

Figure 6: Top en second priority of coordination preference of a sample of South African agribusiness managers at the time of research (2001) and in the future (N=90)

Interesting differences are found when the coordination preferences are compared over the sectors. In the sector of field crops, the most important governance structures at the time of research were spot markets and relation-based contracts (Figure 7), yet the managers indicated a definite shift for the future. As a top priority, they chose to trade along relation-based contracts and equity-based alliances. This trend is even more explicit when the second priority is considered where it is clear that spot market and informal contracts are not favoured by the respondents.

Similar trends are found for the other sectors. Fruit and vegetables were traded at the time of research with formal contracts and equity-based alliances, which are considered even more preferable for the future (Figure 8). Interestingly, spot markets remain important for some of the managers, while informal contracts and vertical integration are not preferred.

Managers in the sector of livestock and livestock products selected equity-based alliances as a top preference for the future, with relation-based contracts coming second (Figure 9). These formal contracts and arrangements will replace the very informal character of the current trade agreements. Managers perceive spot

markets as a second choice. Furthermore, the sector of livestock and livestock products is the only one which considers vertical integration, even if it is as a second choice.

Finally, Figure 10 presents the coordination preferences of the service sector within which relation-based contracts and equity-based alliances were already important. Interestingly, the managers have a clear preference towards equity-based alliances for the future.

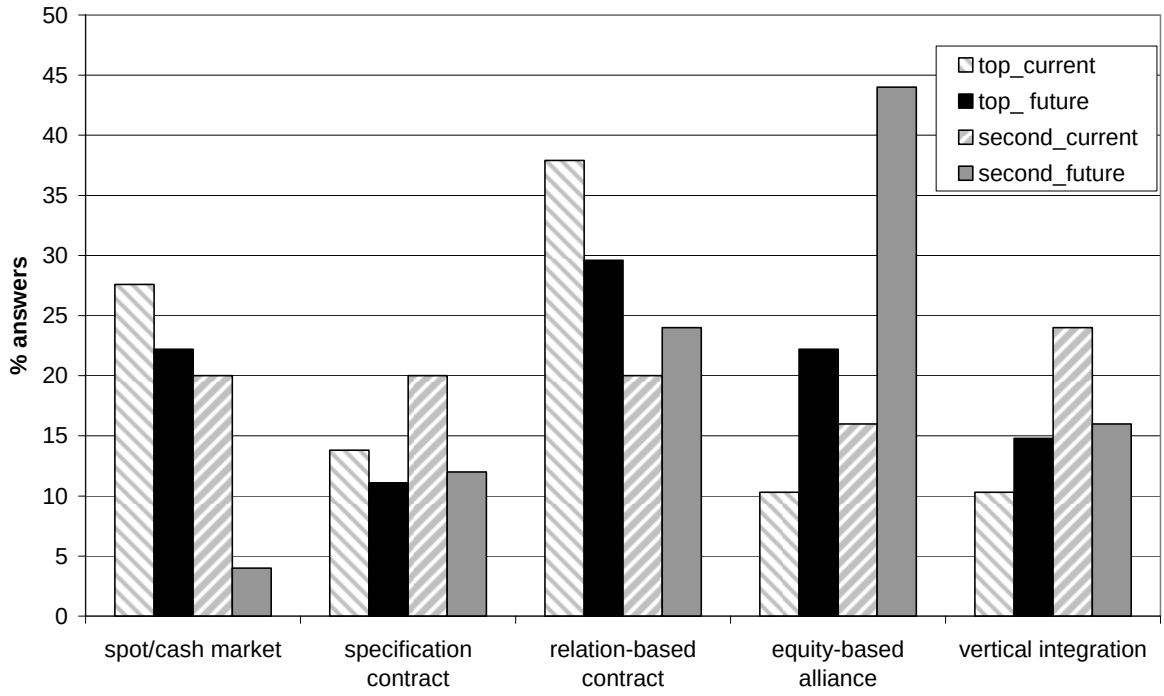

Figure 7: Top en second priority of coordination preference of a sample of South African agribusiness managers in field crop sector at the time of research (2001) and in the future (N=29)

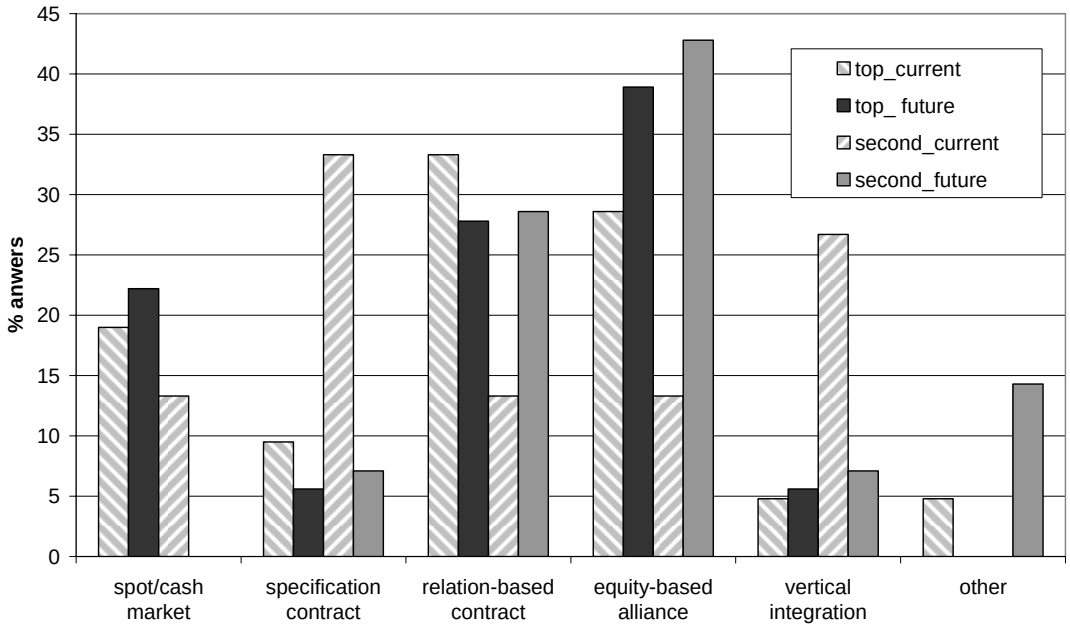

Figure 8: Top en second priority of coordination preference of a sample of South African agribusiness managers in the sector of horticultural crops at the time of research (2001) and in the future (N=21)

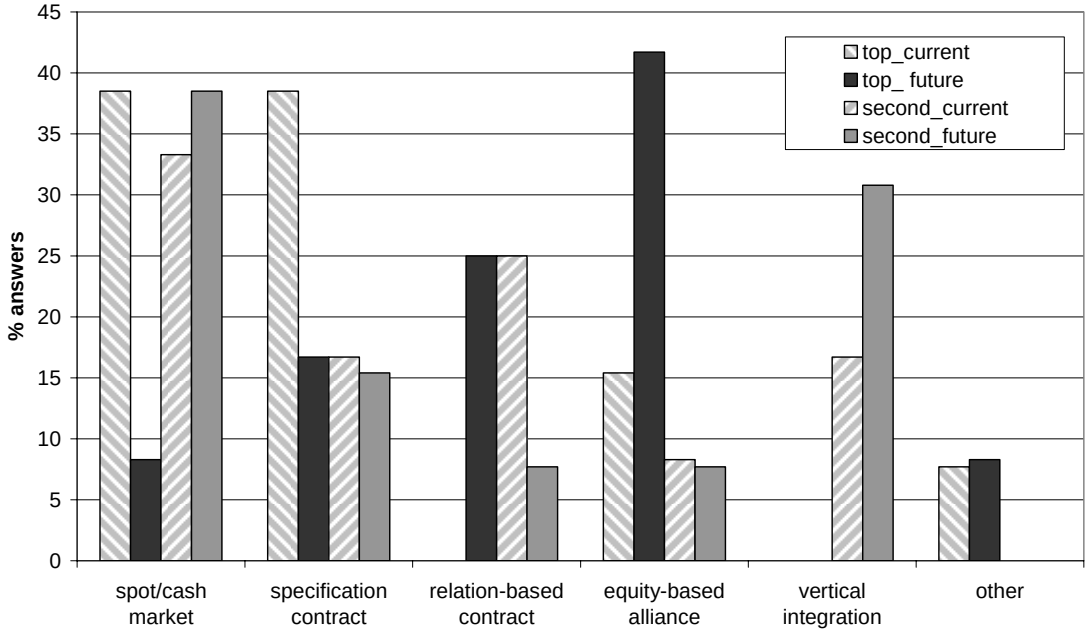

Figure 9: Top en second priority of coordination preference of a sample of South African agribusiness managers in the sector of livestock and livestock products at the time of research (2001) (N=13)

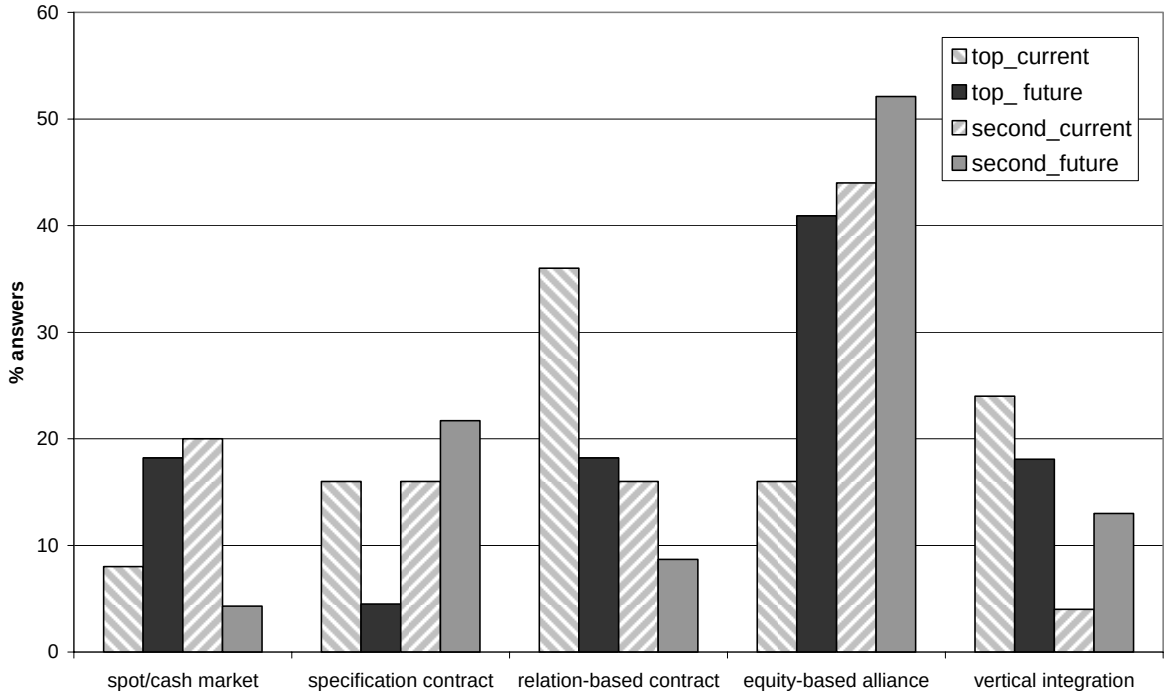

Figure 10: Top en second priority of coordination preference of a sample of South African agribusiness managers in the service sector at the time of research (2001) (N=25)

5. Conclusions

The governance structure in a supply chain is especially important since this is the structure or institution that facilitates the effective implementation and operation of the other chain dimensions. We asked agribusiness managers what they expect would happen in the near future and what type of strategies they will pursue. The results point to a clear growth strategy with market penetration and market development. Strategic drivers for the future include value-adding drive and a power drive. Managers furthermore expressed a definite preference for increasing coordination and cooperation, resulting in more relation-based contracts and equity-based alliances. These new hybrid governance structures are to fill the gap that resulted from the withdrawal of all government intervention in the market.

It is in this context that the paper identifies at least two responsibilities for the government. First, the government should create an institutional environment that is conducive to the development of new governance structures. A sound legal framework is important to accommodate the enforcement of new contracts,

joint ventures and strategic alliances. The government needs to introduce laws and regulations that can serve as a third-party controller in all new trading arrangements. Second, the government has a responsibility towards the previously disadvantaged producers and traders. Given the consolidation within the supply chains as explained above, the need of emerging commercial farmers to link up to more formal contracts is increasing. Emerging farmers traditionally trade mainly on spot/cash markets and through informal contracts. The government is likely to play an important role by using policy levers to ensure that governance structures also address the needs of previously disadvantaged farmers. However, it is worth mentioning that the study is somewhat dated (2001). A study based on a more recent survey may lead to different conclusions.

Institutional innovation to integrate small-scale emerging producers and traders into the existing supply chain also deserves more attention in research. This is especially true given the various land reform programmes and the Black Economic Empowerment policy in agriculture that is underway.

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