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# NORMALISING COMPETITION IN AGRICULTURAL MARKETING - THE CASE FOR RED MEAT IN SOUTH AFRICA

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#### Abstract

During the past fifty years, the controlled marketing system in South Africa created inflexible marketing structures. These structures inhibited growth in the demand for agricultural products, increased the farmers' exposure to risks, limited private enterprise and effectively reduced competition in agricultural marketing. Contrary to the objective of the Marketing Act to reduce marketing risk for the farmer, it actually rendered the trade effective protection. Proponents of controlled agricultural marketing wrongly believed and are still believing that to limit effective competition in agricultural markets by restricting the number of traders and controlling the whole distribution channel, farmers as well as the consumers would gain from such systems. A study of concentration in the marketing structure of red meat showed that the red meat industry is virtually controlled by only three organizations. Excessive horizontal as well as vertical concentration exist and were effectively created, promoted and maintained by the red meat scheme. Oligopolistic and oligopsonistic structures were found throughout the red meat marketing system and market shares of 40 per cent plus, for the largest organizations are not uncommon. Market sharing in the form of joint ventures, supply control and restrictive registration limited competition while exemptions to deregulation of the red meat industry and normalising private enterprise due to the barriers of entry created by the concentrated structure of the marketing system.

#### Hittreksel

Normalisering van mededinging in landbou bemarking - die geval van rooivleis in Suid-Afrika.

Die beheerde bemarkingsstelsel in Suid Afrika het, gedurende die afgelope 50 jaar, onplooibare markstrukture geskap. Die strukture het groei in die vraag na landbou produkte beperk, produsente blootstelling aan risiko's vergroot, private inisiatief aan bande gelê en mededinging in landbou bemarking effektief uitgeskakel. In teenstelling met die Bemarkingswet se doelwit van risiko-vermindering vir die produsent, bied dit egter effektiewe beskerming aan die handel. Voorstanders van beheerde landbou bemarking het verkeerdelik geglo en glo nog steeds dat die uitskakeling van mededinging in landbou-markte, deur totale beheer van die distribusiekanaal en beperking van die getalle middelmanne, die produsent sowel as die verbruiker sal bevoordeel. 'n Studie van konsentrasie in die bemarkingsstruktuur van rooivleis toon aan dat die hele bedryf feitlik deur slegs drie firmas beheer word. 'n Hoë mate van horisontale sowel as vertikale konsentrasie kom voor, wat effektief deur die rooivleis bemarkingsskema geskep, bevorder en onderhou word. Oligopolistiese en oligopsonistiese strukture is regdeur die bemarkingsstelsel gevind, en markaandele van 40 persent en hoër is nie ongewoon vir die grootste firma nie. Markdeling in die vorm van gesamentlike ondernemings, toevoerbeheer en beperkende registrasie beperk mededinging, terwyl die toegewings aan Klas 2 en Klas 3 abattoirs hierdie markstrukture versterk. Die gebrek aan mededinging mag die deregulasieproses en normalisering van private inisiatief beinvloed weens toetrede beperkinge wat deur die gekonsentreerde markstrukture geskep is.

#### 1. Introduction

Competition is the regulating force in a free market economy. Evaluation of competition is usually based on the number of firms, the extent of product or service differentiation and the nature of exit from or entry into the industry. Firm size is generally associated with the number of competitors and the extent of economic power (Nicholls, 1941). Concentration, integration, collusion, mergers, conspiracy, power and free entry determine the extent of competitive conduct (Armstrong, 1982). Market structure models such as perfect competition, monopoly, oligopoly, monopolistic competition and variations thereof were developed to explain the nature of competition in an industry (Robinson, 1933; Nicholls, 1941). Armstrong (1982) argued that competition is a behavioral concept (as oppose to structural theory), with freedom of entry as the most important safeguard against misconduct, which can result from excessive concentration in an industry, while the rate of innovation (offer improvement) judged by free choice is the test for performance.

Competition is generally associated with the perfect competitive model, and deviation thereof as market imperfections. Agricultural markets are believed to resemble perfect competition models in terms of many small farmers and homogeneous products (Nicholls, 1941; Sarkar, 1989). This is an illusive reality because of cooperative bargaining, concentration of agricultural commodity buyers (Nicholls, 1941), the extent of vertical and horizontal integration (Wassenaar, 1977), the uniqueness of agricultural production (biological and

climatological), infexibilities which prevent the control of production, (FAO, 1960), capital investments which restrict entry into and exit from an industry, seasonality in production and government intervention such as support programs and regulations. The advantages of economies of scale encourage growth and concentration of which some extent is necessary for significant technological innovation (Armstrong, 1982).

The cause and effect relationships between market structure and competition are complex because a market structure can result in a certain form or magnitude of competition or the nature of competition can result in a certain market structure. Horizontal concentration generates economic power for individual firms and thus alter the competitive structure within a marketing stage, while vertical integration usually takes place to alter the competitive structure over marketing stages or acquire economic power or control in multiple markets (Branson & Norvell, 1983). This study is aimed at investigating the degree of horizontal and vertical integration in the Red Meat Industry, which is believed to be the results of infeasible objectives of the scheme and main causal factors for an inflexible market structure.

#### 2. The red meat marketing scheme

The Red Meat Marketing Scheme was introduced during the 1930's with the Livestock and Meat Industries Acts (no. 29 of 1932 and no. 48 of 1934), and subsequently incorporated under the Marketing Act of 1937. While some were dissatisfied with its performance, (Richards, 1938, Kelly *et al.*, 1938; Tinley,

1940; Rees, 1979; Lubbe, 1980; Nieuwoudt, 1985; and Elliot, 1986), others defended it assuming that the objectives were pure and economically sound (McLoughlin, 1938; Cilliers, 1979). Goals and objectives of the Marketing Act and Red Meat Scheme are: (RSA, 1976; Livestock and Meat Industries Control Board, 1940).

- to increase the efficiency of agriculture and related processing, marketing and distribution industries by eliminating labour and capital waste,
- (ii) to stabilise prices,
- (iii) to increase the producer's share in consumer spending on agricultural products by rationalising the marketing processes,
- (iv) to increase and promote the demand for agricultural products,
- to create a fair distribution system which is to the advantage of both producer and consumer (by limiting retail outlets to reduce wasteful competition) and
- (vi) to promote research, disseminate information and engage in consumer and industry education.

Controlled marketing was thus the creation of statutory producer controlled monopolies to "secure gross monopoly revenue", "rationalize by eliminating wasteful trading and overlapping of services rendered in distribution", protect the farmer against the "uncontrolled forces of competition", and give agriculture bargaining power (McLoughlin, 1938). Higher producer prices and reasonable consumer prices due to extensive cost savings were envisaged. The following restrictive regulations, which act as legal barriers of entry into the industry, were introduced to exercise control. Some of these regulations were however relaxed during the past three years.

- (i) Permits and quotas (distributed by agents) to control supply to the controlled markets.
- (ii) Marketing only through registered agents.
- (iii) Entry into the agency business subject to registra-
- (iv) Import and export permits to Meat Board approved agents.
- (v) Slaughtering for the controlled markets only at the controlled abattoirs (ABACOR).
- (vi) Restrictive entry into the abattoir business because of several laws, bylaws, health regulations, capital requirements, meat scheme, and necessity of government approval.
- (vii) Restrictive registration of the trade which include processors, wholesalers and retailers.
- (viii) Control of the movement of meat between controlled areas.
- (ix) Restrictions on buyers at auctions which include registration, bank guarantees, special transport facilities and chilling facilities.
- (x) Price fixing (floor and basis prices) and surplus removal from controlled markets.
- (xi) Grading according to quality for the purpose of price discrimination and producer remuneration.

#### 3. Data and methods of analysis

#### 3.1 Data

Analyses were based on secondary data from published sources, previous research on red meat marketing, information supplied by personnel of the Meat Board and individuals in the meat industry (1990 and 1991) and data supplied by the Meat Board. Analyses were done after aggregation over affiliations and different markets (locations).

#### 3.2 Methods

Absolute, relative and distributional measures of concentration were calculated (Du Plessis, 1977; RSA, 1977; Hepplewhite, 1983). Absolute measures include Concentration Ratios of the aggregate market share of the N largest firms in a market ex-

pressed as a percentage of the total market volume. Relative measures include Lorenz curves by fitting cumulative market shares to the cumulative percentages (or absolute numbers) of firms which accounted for that shares, and relate these fitted curves to the 45° line which represent equally distributed market shares. Gini Coefficients (GC) are the ratios of the areas between the Lorenz Curves and the 45° lines to the total areas under the 45° line. IF GC = 0 then firms are of equal size while a monopoly exists if GC = 1. Distributional methods include frequency tables in combination with descriptive statistical methods of location, dispersion and skewness (Hines & Montgomery, 1980). Due to differences in managerial ability, resource quality, consumer preferences and product as well as service differentiation it can be expected that firms will differ in size which is related to market share. The distribution of market shares will be normal if no external barriers to entry exist, while the market power or ability of each firm to influence the market likewise would thus follow a uniform distribution. Standard scores (Z-scores) are used to compare market shares and relative domination. Positive Z-scores imply relative strong firms, while negative Z-scores imply weak firms (0 is equal to mean market share).

#### 4. Results

The unavailability and inaccuracy of some data as well as the extent of mergers, takeovers, joint ventures, firms trading under different names, various satellite firms, subsidiaries and affiliates complicated the identification of linkages and the aggregation of market shares. These results thus only represent concentration minima. Selected results are summarised in Tables 1 and 2, and illustrated in Figures 1 and 2.

### 4.1 Livestock (cattle) supplies to the controlled markets.

From Table 1 it is evident that, during 1989/90, the Phase Marketers represented the majority of the total suppliers (90.7 per cent), feedlots were less than one percent (0,7 per cent) and the Planned Marketers, on which the permit system is based and maintained (Meat Board, 1989), only 8,5 per cent. The feedlots, however, supplied 53,8 per cent of the total volume (kg meat) in 1989/90 compared to 13,8 per cent and 32,4 per cent by the Planned and Phase Marketers respectively. An increase of 16 per cent in the number of feedlots was experienced from 1983/84 to 1989/90, while the number of firms in the other two supplying groups tend to vary approximately in accordance with the beef cycles (Lubbe, 1990b). The market share of the feedlots increased by almost 100 per cent from 1983/84 to 1989/90, while the Phase Marketers' share decreased with about the same percentage.

Although the feedlot market share of the top 9,2 per cent feedlots (about 6 organizations) apparently remained constant at about 55 per cent from 1983/84 to 1989/90, their domination relative to the total supply of beef increased from 16,1 per cent to 30,8 per cent. During 1983/84, 9,9 per cent of the Planned Marketers supplied 45.6 per cent of the volume compared to 8,2 per cent of the firms supplying 59,3 per cent in 1989/90. A slight increase in this group's contribution to the total supply was experienced for the same period. The market share of the top 10 per cent of the Phase Marketers remained virtually constant from 1983/84 to 1989/90, but their contribution to the total supply however decreased from 43,5 per cent to 22,8 per cent over the same period.

The decrease in supplies from Phase Marketers coincided with an increase in supplies from feedlots instead of individual Planned marketers. This is possibly because of the degree of horizontal and vertical integration in the industry and fixed marketing quotas of feedlots.

Research by Elliot (1986) supported this by indicating that farmers are of the opinion that the current Red Meat Marketing Scheme discriminates against them in favour of feedlots to whom they are effectively forced to supply.

Table 1: The supply of cattle to the controlled market by different marketing classes and concentration within each class for 1983/84 to 1989/90

		1983/84		1989/90						
(i) Percentages of total volume supplied by marketing classes.										
Marketing Class	Number Total of firms volum (%)		Class volume (%)	Number of firms (%)	Total volume (%)	Class volume (%)				
Feedlots Planned marketers Phase marketers Total	0.5 7.4 92.1 100.0	28.9 10.6 60.5 100.00		0.7 8.5 90.8 100.0	53.8 13.8 32.4 100.0					
(b) Percenta	ges of volu	mes suppl	ed within (	classes						
Feedlots Planned marketers Phase marketers	9.1 9.9 10.0	16.1 4.8 43.5	55.6 45.6 71.9	9.4 8.2 10.0	30.8 8.2 22.8	57.3 59.3 70.3				

Table 2: Concentration coefficients and market shares at different marketing stages of the red meat industry.

Market stage  Variable analyzed	Standing capacity (%)	Abattoir agents		Controlled abattoirs (Including Classes 2 & 3)					Processors Auction buyers		
		Cattle (%)	Pigs	Capacity units (%)incl Abacor	Cattle (%) incl Abacor	Pigs (%) incl Abacor	Cattle (%) excl Abacor	Pigs (%) excl Abacor	Meat used (%)	Beef (%)	Mutton
Statistics	1990	1990	1990	1989/90	1989/90	1989/90	1989/90	1989/90	1988/89	1989	1989
Mean (%) Std dev (%) Median (%) Gini Coeff. No of firms  Market shares Top 5 Top 3 Firm A Firm B Firm C	5.90 6.40 3.80 0.55 17 70.30 55.00 21.40 20.00 5.50	5.56 12.12 0.54 0.81 18 94.57 84.04 50.56 18.50 14.98	5.56 14.64 0.11 0.87 18 98.48 94.41 56.54 34.72 2.67	7.69 16.98 0.95 0.78 13 95.24 88.17 11.47 4.39 11.79	8.33 17.31 2.12 0.75 12 93.19 85.68 7.31 4.86 14.05	10.00 12.78 1.39 0.65 10 96.95 86.46 33.36 9.08 23.06	9.09 11.22 5.81 0.59 11 87.01 73.48 20.49 13.61 39.38	11.11 16.42 1.97 0.70 9 97.61 93.63 47.69 12.98 32.97	1.79 6.48 0.16 0.86 56 80.13 72.99 45.64 3.55 17.36	0.21 1.12 0.05 0.80 470 42.41 37.93 7.15 10.77 20.01	0.21 1.29 0.04 0.83 470 48.73 44.73 9.36 12.32 23.01
Z-scores Firm A Firm B Firm C Other	13.60 (D) 2.42 2.20 -0.06 1.20 (D)	3.72 1.07 0.77	3.47 1.97 -0.20	64.95 ABC 0.22 -0.19 0.24 3.37 ABC	64.31 ABC -0.06 -0.20 0.33 3.23 ABC	30.04 ABC 1.83 -0.07 1.02 1.57 ABC	1.01 0.40 2.70	2.23 0.11 1.33	9.99 (Q) 6.77 0.27 2.40 1.27	6.22 9.47 17.75	7.10 9.39 17.68

#### 4.2 The feedlot industry

Data of only 18 of the about 64 registered feedlots, which included the larger and more important ones, were available for analysis. The results in Table 2 indicate a relative high degree of concentration.

There are only four major organizations involved of which firms A and B clearly have the most significant market shares concerning standing capacity for 1990. Competition is based on grading performance while market sharing is based on fixed quotas to the controlled markets.

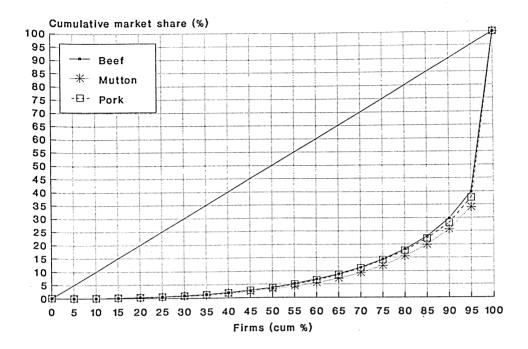


Figure 1: Lorenz Curves for the primary demands of beef mutton and pork aggregated for the controlled area auctions during 1989.

#### 4.3 Abattoir and livestock agents

Supplies of livestock for 1990 to the controlled markets were analyzed. Regulations of the Red Meat Scheme mandate the use of abattoir agents for marketing to controlled markets (excluding the exceptions granted to Class 2 and Class 3 abattoirs which allow some meat to bypass auctions). Firm A is clearly in a dominant position concerning cattle and pigs with shares of more than 50 per cent for these markets. The cattle supply market resembles an oligopolistic market consisting of three major firms (firms A, B and C), with firm A in a dominant position, suggested by the high Z-score, while the pig supply market probably follows a duopolistic market (firms A and B). The GC coefficients of 0,81 and 0,87 as well as the other coefficients in Table 2 suggest severe concentration in both markets with the top 3 firms having 84,04 per cent and 94,41 per cent of the market shares in the cattle and pig markets respectively.

The Meat Board is the sole importer/exporter of livestock and red meat and perform these functions via permits to appointed agents. It is significant to notice that about 100 per cent if all the imports of cattle, calves, sheep and pigs are done by these three firms. During the 1990 season firm A had a 98 per cent share in the imports of cattle, 78 per cent share in the imports of both calves and sheep and a 99,2 per cent share in the imports of pigs to controlled markets.

#### 4.4 Concentration in the controlled abattoir industry

Only abattoirs with access to controlled market slaughterings were included in the analysis. They consist of the permit and quota regulated abattoirs (ABACOR & Maitland), the Class 3 abattoirs (situated in the controlled areas with special quotas) and the Class 2 abattoirs, (outside controlled areas), with quotas. Classes 2 and 3 abattoirs can supply meat to the controlled areas through and bypassing auctions. The Class 3 abattoirs and 7 of the Class 2 abattoirs belongs individually (or jointly) to the three firms in question, while the rest of the Class 2 abattoirs are spread amongst ABACOR (1), local municipalities (4) and independent firms (5). ABACOR had the major share (64,95 per cent) in slaughtering capacity (cattle units) for 1989/90, while firms A and C both had shares of

more than 11 per cent each. These three organizations had a 88,17 per cent share of the total controlled slaughtering capacity. The slaughterings shares for 1989/90 suggest that ABACOR is clearly the dominant organization in the controlled cattle market with firm C the nearest rival. An oligopolistic situation existed in the pig market consisting of three firms (firm A, ABACOR and firm C) with firm A the leading firm. Excluding ABACOR it is evident that near duopolistic situations within oligopolistic markets (firms A and C) for cattle and pigs exist.

#### 4.5 Concentration of the processor industry

It is apparent from Table 2 that firm A had the largest market share (45.64 per cent) of meat used for processing during 1988/89. His nearest rivals were firms C and Q. Hepplewhite (1983) reported the food processing industry to be highly concentrated with firms A, B and C in the ranks of the seven largest firms. Firm A apparently had a 60 per cent market share in the canned meat market during 1982.

#### 4.6 Concentration at the controlled abattoir auctions

The auctioning system had always been associated with a relative free market related price discovery system free from price setting or interferences except for floor prices, basis prices and sometimes ceiling prices. This argument is only valid for unregulated supply by many sellers, the presence of many buyers, sufficient and valid information and non-restricting facilities. It is evident from the report of the Commission of Inquiry on the Red Meat Price Discovery Process (1989), that buyers present at controlled auctions are small in number and consist mainly of professional buyers who buy on behalf of wholesalers and other firms

A three week survey conducted during April 1991 at the City Deep abattoir by the Meat Board, indicates that 18 of the 23 buyers on the beef auctions were regular buyers. This include 9 professional and 4 semi-professional buyers. The auctions were on average daily attended by only 16 buyers. An average of 70,2 firms per day were represented on the auctions (some by more than one buyer excluding affiliations), while a total of 170 firms operate through buyers (own or professional) at the

City Deep abattoir. Three buyers represented 50 per cent of all the firms buying at the auctions. About 46 per cent of the firms were represented more than 10 days (of 13) at the auctions, while 27,1 per cent was only sporadically (three days or less) represented at the auction. The presence of inadequate facilities and or inefficient management is possibly indicated by excessive waiting times for delivery vehicles at the abattoir (an average of 3 hours & 9 min. per vehicle). The existence of a small group of professional buyers representing a relative large number of firms may indicate possible concentration at the auctions.

The same situation is also present at the other controlled abattoir auctions (Commission of Inquiry on the Red Meat Price Discovery Process, 1989). This may pose as a barrier to entry and increase the possibility of price manipulation, which may have severe negative implications on competition. Considering that about 25 per cent of all the controlled marketed beef is auctioned at City Deep and prices realized there are indicators for the rest of the industry, effective price discovery and market clearing may also be influenced.

## 4.7 Concentration in the primary demand and wholesale industry

The market shares in Table 2 are smaller than for the other marketing stages because more firms (470) are involved. Data on volumes (kg) bought at the controlled auctions during 1989 were analyzed. High GC coefficients (0,80 and 0,83) and Z-scores indicate a relative high degree of concentration in the primary demands for beef and mutton. Firms A, B and C evidently form a oligopsonistic market with firm C in a dominant position. Figure 1 illustrates the relative concentration for beef, mutton and pork. It is evident from Figure 1 that 5 per cent of the firms have about 60 per cent, 63 per cent and 68 per cent of the market shares for beef, pork and mutton respectively. It is estimated that firms A, B and C have a combined share of 38,1 per cent for wholesale registrations in the controlled areas and 19,8 per cent in the non controlled areas. Firm C has the largest market share in both markets. Restrictive regulations were unofficially relaxed about two years ago.

#### 4.8 Concentration in the retail industry

Apart from owning several retail outlets, firms A, B and C also have joint retail ventures with the largest supermarket chains in South Africa. Cronje (1976) showed a positive shift in the number of supermarket and departmental store butcheries from 64 in 1965 to 430 in 1974. It was calculated from the registration lists that this figure increased to about 1429 in 1991. It is estimated that firms A, B and C have a combined share of 13,0 per cent in controlled areas, of which 40,2 per cent are supermarket or departmental store registrations, and a 13,1 per cent share in non-controlled areas of which 29,9 per cent is supermarket or departmental store registrations. Firm C is in a dominant position with a 8,0 per cent share in the controlled areas (27,3 per cent in supermarkets) and a 6,9 per cent share in non controlled areas (20,0 per cent in supermarkets).

#### 4.9 Concentration in by-product industries

No formal analysis was done due to the unavailability of sufficient data. Veenstra (1986) reported a 21,0 per cent share for Firm B, 23 per cent share for firm C and 40 per cent share for firm A in the hides and skins industry during 1980. Firms A, B and C thus had a combined share of 76,6 per cent which indicates a high degree of concentration. These firms also had a combined share of 46,4 per cent in the tanneries industry during 1980 and firm A a leading share of 24,8 per cent.

#### 5. Vertical integration

It is evident from the results that there is extensive vertical integration in the red meat industry. Firms A, B and C have the largest market shares in almost every marketing stage of the industry. The extent of vertical integration is illustrated in

Figure 2 with summaries of individual market shares for firms A, B and C as well as their combined share in different marketing stages.

#### 6. Discussion

The results indicate oligopsonistic and oligopolistic market structures in all the marketing stages if compared with the visible characteristics of oligopolistic markets.

- A few large dominant firms relative to the rest of the market.
- (ii) Relative high and inflexible price structures (Veenstra, 1986; Lubbe 1990b).
- (iii) Effective barriers of entry into the markets due to regulations of the Red Meat Scheme.
- (iv) The absence of free choice for producers, trade and consumers.
- (v) The existence of visible market sharing via legal quotas/permits and joint ventures.
- (vi) The presence of bargaining "competition" due to vertical representation not only on the Meat board but also producer- and trade- associations.

Controlled marketing schemes as well as farmer cooperatives are excluded from the Regulation of Monopolistic conditions Act of 1955, only in concern with the marketing of commodities, which render them legal monopolies (RSA, 1977). The Marketing Act of 1937, however, granted them powers to control and regulate all the marketing aspects of the products which include restrictive registration of the trade and even price fixing of consumer food products (eg. bread). These marketing schemes are thus monopolies of conduct or behaviour, with regulating powers to control the supply and marketing of products, but without real economic power or control of the resources (Rees, 1979). In the Red Meat Industry cooperative marketing and other large vertically integrated organizations effectively represent the economic power via the processes of vertical and horizontal integration. Even control of the policies of the Red Meat Scheme is possible because the same firm can represent different marketing stages (being vertically integrated). Pretorius (1984) reported that during 1984 apparently 8 of the 13 members of the Meat Board were affiliated to firm A.

The processes of concentration and integration are however in line with the stated objectives of the marketing schemes (eg. to reduce the marketing stages and limit marketing firms). It is thus understandable that such a high level of concentration (vertical and horizontal) is present in the industry and not condemned when identified with inquiries in to the Red Meat Marketing Scheme (Report of the Commission of Inquiry into Slaughtering stock and red meat industries, 1981; Commission of inquiry into the red meat price discovery process, 1989).

True to the objectives of the scheme these firms also received preferential treatment under full implementation and after relaxation of some regulations (Commission of inquiry into the red meat price discovery process, 1989).

Experiences for more than 50 years with the scheme, however, indicate that it resulted in a inflexible marketing structure and a non-dynamic producer orientated marketing system (Lubbe, 1990a). It is questionable if either the producer or consumer really benefitted from the scheme. The consumer faced ever increasing retail prices and seldom benefitted in an oversupply situation due to the permit and quota system.

Even when farm prices are at the support level, an increase in the marketing margin and concurrent decrease in farm level demand result in higher retail prices and hence smaller quantities demanded at retail level (Veenstra, 1986).

Producers evidently still have relative ineffective bargaining power because the trade, which enjoys effective protection under the scheme, evolved as the dominant pressure group.

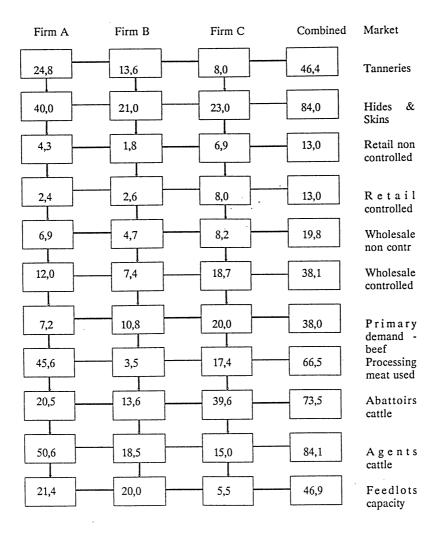


Figure 2: Vertical integration and market shares (%) of firms A, B and C, individually and combined, for different markets

Seasonal as well as cyclical price stabilization were not attained (Lubbe, 1990b). Support prices proved to be effective barriers against very low prices, but at a cost in lowering supplies to the control markets (permits, quotas and inadequate controlled slaughtering facilities, Meat Board, 1989). Supply control evidently also resulted in the deterioration of the natural resources in the beef producing areas (Meyer, 1988; Lubbe, 1990a) while marketing risk is effectively transferred from the trade to the producer. Limiting the number of middlemen did not increase the producer's share in consumer spending, nor was the scheme able to increase consumer demand. The producer's share in the consumer's rand decreased from 62 per cent in 1974 to a mere 48,5 per cent in 1990, while the per capita consumption of red meat decreased from 40,6 kg during 1955/56 to 25,78 kg in 1989/90 (Directorate of Agricultural Trends, 1990).

Normalizing competition in the Red meat industry would necessitate deregulation and privatization of controlled institutions. Although Armstrong, (1982), argued that free entry is the safeguard to free enterprise and competition, indirect restrictions like excessive health regulations must also be considered. Care must be taken not to transfer statutory monopolies to private monopolies (Groenewald, 1990). It is important to note that concentration in the red meat industry came about under circumstances of regulated, restricted and selective entry into the industry. Entry to any newcomers at this stage would

also be difficult due to the established interests, capital investment requirements and economic power of the established companies. Furthermore, it must be noted that the concentration took place over a number of years and under the absence of free choice. The key to successful normalization of competition would be based on free choice, unrestricted entry, rational economic choice, protection of fair business practices and a dynamic consumer orientated marketing system. In the light of increased urbanization and economic participation in an environment of a changing political dispensation, the current marketing system would not be able to maintain profitability for the farmer, promote private enterprise or feed the population at a reasonable prices.

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