

Strategic Response to Beef Standards: a retail focused analysis

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Summary

The role of stricter standards should be the upgrading of processes and products. On the other, it underlines the emergence of supply chains characterised by a high concentration and domination of large retailing firms and brand holders. These compete amongst themselves for continuing minor innovations in products and packaging, and on maintaining strict quality criteria and on price. This paper reports the findings from two exploratory case studies of beef supply chains in Brazil. The focus is on the management of the processor – retailer relationship, emphasizing issues such as governance and market power along the chain. A comparison between supplying small and large retailer is presented using a marketing margin analysis. Both cases present similar organisation. The link holding the information takes higher value added of the final product. This link may be the processor (when supplying a small retailer) or the supermarket. Results suggest that benefits and upgrading alternatives in supply chains are limited.

Keyword: supply chain management – market power – case studies – beef chain - supermarkets

1.Introduction.

Brazilian beef production is a relatively low cost producer whose comparative advantage lies in extensive on natural pasture, but a high age of slaughter (4 years). Beef processing basically consists of a disassembly process that adds value to smaller cuts. The Brazilian supply chain is still far from using electronic transmission systems such as EDI and ECR. The information is transmitted by telephone and personal contact. There are no contracts regulating the transaction, but an assumption of trust, tradition and goodwill. Roughly, market shares can be split on 3 channels as follows: 11% export, 39% supermarkets and 40% small retailers. An important structural change within the food chain is that retailers are getting more concentrated and exercising a strong bargain power. As food retailing has becoming dominated by a few major players, retailers have focused on themselves as the brand with which they want customers to identify. However, market power is getting stronger due to the concentration on retail sector. On other hand, small retailers are developing customised services to compete.

The aim of this paper is to compare two different marketing channels and existing supply chains. In addition, standards governing supply chains are assessed, highlighting structural and market changes brought by the retail concentration process. Marketing margin analysis is used to compare different links of the chain, thus enabling an understanding of alternative chains implications not only for the Brazilian Beef chain, but also to other supply chains coping with demanding markets. This analysis can help beef processors to decision making about marketing channels.

This paper is organized as follows: Section 2 discusses the theoretical framework; Section 3 presents the methods used; Section 4 summarises the results of the case studies and interviews collected in the period 2001-2002 and, finally, Section 5 draws some conclusions and suggestions for further research.

2.Theoretical Background

Supply Chain Management

Rosenbloom (1999) identifies several flows emerging when a marketing channel is developed. These are product flow, negotiation flow, ownership flow, information flow and

promotion flow. They are responsible for linking agents together in the distribution of goods and services. Information flow is two-directional and all parties participate in the exchange of information and the flow can be either up or down. Many marketing channels may exist as there are separate sources and/or destination for each product. A supply chain is a vertical arrangement to cover each marketing channel.

The objective of a supply chain is 1) to focus on satisfying end customers 2) to formulate and implement strategies based on capturing and retaining end-customers 3) to manage the chain effectively and efficiently (Smith, 2001). Changes in quality and/or prices are the most important information for an efficient supply chain.

Casson (1997) emphasizes the influence of collecting information and communicating it over firms. There are different prices in the market, corresponding to different links. For example, raw material supplier's price, processor's price, wholesaler's price and retailer's price. Casson (1997; 17) explains:

“It is through negotiations over these prices that links share their information with each other and so co-ordinate the flow as a whole. Consumers share their information on consumption preferences and retailers share this information with producers and so on. As negotiations in different markets proceed in parallel, each owner can share with others not only what he discovered by himself but his learning from other negotiations. The information exchanged in one market is therefore linked to the information exchanged in the others. In this way, the economic system as a whole is co-ordinated by information flow through the market system”.

There are basically two kinds of information along the chain, the market information and the technical information (where do standards come and what is the nature of the information-technical or market). Basically standards are a reflection of government (public health, environment etc) as well as market-based concerns for food safety. The first one deals with customers, competitors or suppliers, activities of others in the system by which the profitability of the investment, directly or indirectly, is influenced. The second kind deals with all other conditions, which do not consist of plans and actions by other people – such as the production possibilities.

For Richardson (1990), the importance of making a distinction of both kind of information, technical and market, is because of the difference in the way of each is available. “The extent to which an entrepreneur can obtain market information can be shown to depend on the nature of the prevailing economic organisation in a way in which his access to technical information does not” (Richardson, 1990; 30).

Cunningham (2001), in a first review of agrifood chain management research, identified 123 articles in selected international journals from 1987 to 2000. His findings show an increase of articles in 1995 and especially in the period from 1996 to 1998. Meanwhile, the establishment of two journals, the “Supply Chain Management” and “International Food and Agribusiness Management Review”, emphasize research on this specific topic. Cunningham's review (2001) also point out beef as the most studied chain. Another important finding is that 63% of the papers came from developed countries and only two from South America, an area where there is still a gap of supply chain management research.

Supply chain management is, for research purposes, a descriptive construct, which provides a sequential framework for generation of data. It is also important to understand the relationships and forces inside the chain to have an analytical approach to the object of study. Other issues as governance, standards and market power are discussed in the next sections. The marketing margins of the individual firm are assessed to, in a static way, try to measure performance.

Governance and Standards

Governance is a term used by several authors (such as Dolan et al, 1988; Gereffi, 1994; Kaplinsky, 2000) to define the key actors in a chain who take responsibility for the inter-firm division of labour and of the capacities of particular participants to upgrade their activities. It has a broader scope than co-ordination of the chain. Kaplinsky (2000) uses the term value chain and identifies three forms of possible governance. The first is the legislative governance, where the basic rules define the conditions for participants in the chain need to be set. The judicial governance means an audit of the performance and check compliance with these rules. A more proactive form of governance is the executive one, which provides assistance to chain members to meet to follow the proceedings. The governance can be provided from within, or without, the chain. This work is focusing on the governance (or co-ordination) within the chain, so an adaptation of Kaplinsky's table is presented below:

Table1: Examples of legislative, judicial and executive value chain governance

	Exercised by parties internal to chain	Exercised by parties external to chain
Legislative governance	<ul style="list-style-type: none">• Setting standards for suppliers in relation to on-time deliveries, frequency of deliveries and quality	<ul style="list-style-type: none">• Environmental standards• Child labour standards
Judicial governance	<ul style="list-style-type: none">• Monitoring the performance of suppliers in meeting these standards	<ul style="list-style-type: none">• Monitoring of labour standards by NGOs• Specialised firms monitoring conformance to ISO standards
Executive governance	<ul style="list-style-type: none">• Supply chain management assisting suppliers to meet standards• Producer associations assisting members to meet these standards	<ul style="list-style-type: none">• Specialised service providers• Government industrial policy support

Source: Kaplinsky, 2000.

The importance of the table above is to show different roles for establishing and/or monitoring of standards. Identifying who is the co-ordinator along the supply chain to set or monitor the compliance of standards is fundamental to understand a supply chain dynamic.

Farina and Reardon (2000) says that standards (along with grades) can be outcomes (product characteristics) or manufacturing processes related to quality, safety, authenticity and "goodness of the production process". Usual food product characteristics (or attributes) are pathogens, toxins, hormones, food additives, and fat content, among others. And a process standard may be animal welfare, traceability, feed, growth enhancers and biotechnology. Standards are developed to signalise quality. According to Northen (2000), the perceived quality is split in intrinsic and extrinsic cues, which are used to predict attributes. Applying to the beef, the intrinsic cues are colour, smell, leanness, marbling, cut and juice. Extrinsic cues are package material, information/labels and place of purchase.

Farina and Reardon (2000) emphasize that the establishment of standards may provide product differentiation to reach market niches, communicate quality and safety and reduce costs maintaining quality. Standards can be crucial for the survival of companies or, more than this,

to the whole supply chain. Nowadays, supply chains established standards to all levels to join an assurance quality scheme/ label or be able to reach a sophisticated market.

An example of standards established within a supply chain is given by Northern (2000) based on one of the UK Quality Assurance Scheme. It is summarised below:

Table 2: Requirements for Effective Communication of Extrinsic Cues (Quality Signals) to Customers

Level of Supply Chain	Requirements
Farm	Clearly written standards, covering all necessary areas in sufficient detail, developed by experts in the industry.
Transport	Transparent inspection protocols with inspections undertaken by independent, competent inspectors.
Abattoir	Strictly upheld rules in case of failure to attain standards
Processing Plant	Assesment of scheme standards and inspectors by an independent, competent third party.
Distribution	Where necessary, integration of QMS through supply chain to allow full traceability.
Retail	Where necessary, integration of QMS through supply chain to allow full traceability.

Source: Northern, 2000.

Standards can exclude companies but can also open up new markets. Another study, focusing on Brazilian case studies (Reardon and Farina, 2002) concludes that private standards can turn to public when enforced by the government. Generally, private standards are imposed by transnational companies and “become” the rule of the market. When standards may exclude companies or nations from the international trade, they are also called non-tariff barriers and mainly affect developing countries, late movers in the Globalisation process. The responsibility for establishing and/or monitoring standards is related to market power. This issue is detailed in the next section.

Market Power

Cox (1999) argues that a discussion about the power structure within the supply chain is fundamental to understand its dynamic appropriately. He argues that there are conflicts of interest between participants since each one is seeking to appropriate value for themselves if able to do so.

The power within the chain affects the information flows. For Rosenbloom (1999), power is the capacity of one party to control or influence the behaviour of another party or parties. According to this author, power in a marketing channel is “ the capacity of a particular channel member to control or influence the behaviour of another channel member(s)”. This means that a manufacturer and a retailer can both try to establish the terms of the transaction (delivery, frequency, price, quality). Both agents will try to exercise power to influence other behaviour. But power can have different bases as summarised below:

Table 3: Kinds of Power

Kinds of power	Definition
Reward power	Rewards are given to any agent as a result of conforming to the wishes of another agent. This reward could be a product promotion (manufacturer) or a premium price paid (retailer).

	Generally monetary incentives are used.
Coercive power	Usually used by large firms or in highly concentrated industries, which dominates weaker agents through threats or coercion.
Legitimate power	When norms dictates what an agent has to do and it is recognised by him as legitimate. The franchise relationship is one example.
Referent power	When two agents have the same goals. E.g. retailers wanting to be recognised as prestigious and will attend requirements from manufacturers with high quality products.
Expert power	An agent is influenced by the knowledge or expertise of another one.

Adapted from Rosenbloom (1999).

All bases of power, except coercive one, tend to promote a more cooperative channel relationship. Usually, power is determined by the size of the companies, the organisation of the channel (existence or not of contracts) or the differentiation of the product (a commodity or not). When more value is added to the product, more balanced is the relationship and vice versa.

In this paper, it is assumed that the agent (or link of the chain) transmitting information take higher shares of the value added in the channel/chain and that the information possession increases market power during the transaction. But it is also true that market power is also the power in terms of holding vital information, for example, on consumer perception.

Market information supports the setting of standards and it can be used to increase market power. The knowledge of the consumer behaviour will determine the future strategy of the chain and each individual firm participant. Co-ordination of theses separate strategies to reach a common aim is the challenge.

Besides, new standards can change traditional ways of transaction. An example is given by Loader and Hobbs (1999), saying that “the concern over food safety creates an information asymmetry between successive buyers and sellers along the supply chain”. It means that one agent in the transaction knows more than the other. The information asymmetry provides more power to bargain during the transaction. Usually the seller knows more about the true quality of the product than the buyer. But buyers have been developing mechanisms to possess this information. The authors point out two kinds of responses to solve this problem. The first one is a private one, the firm-level response (internal the chain), meaning a certification or label to guarantee safety and quality. The second one is a public response through the legislation (external the chain) regulating the labelling and pathogen-reduction standards. Both responses aim to guarantee true information to the buyer and final consumer about the origin of the product, how it was produced, whether it is free of diseases.

3. Method

As market concentration increases and samples become smaller in the agricultural sector, more case studies seems relevant to the development of agribusiness theory (Sterns et al, 1998). Thus, this study adopts a qualitative approach to describe and compare two beef supply chains supplying both a small retailer and a supermarket.

The case studies were conducted analysing documentation, through focused interviews and direct observation (site visits). Documentation analysed were secondary data (such as thesis, dissertations, journals, newspapers and technical magazines) and promotional brochures provided by the companies visited. When available, production costs and annual report were also analysed.

The focused interviews (Merton et al, 1990) took between 1,5 and 2 hours following a group of questions. When allowed, the interviews were recorded on tape. The sessions focused

particularly on the following issues: activities carried out by the company, interactions with other links (suppliers, customers) and to what degree, inputs and outputs features, how is information on this collected, how are prices determined and problems perceived on the supply chain.

The usual limitations of the case study method (Yin, 1994) apply in this study. Results do not intend to establish policies to the “cases”, they are descriptive and not focusing on analysis of economic feasibility of the activities. However, they can be analytically generalised, but not enumerating frequencies. The marketing margins analysis can vary in each different transaction although those calculated in this paper just represent the moment when the information price was collected, meaning a static analysis. Other important links (such as ranchers and wholesalers) part of the supply chain, are not covered in this study, even recognising their critical influence, but it deliberately focuses on the processor- channel interface.

3.1 Empirical Evidence

Background

The Brazilian beef structure can roughly be described by the following figure:

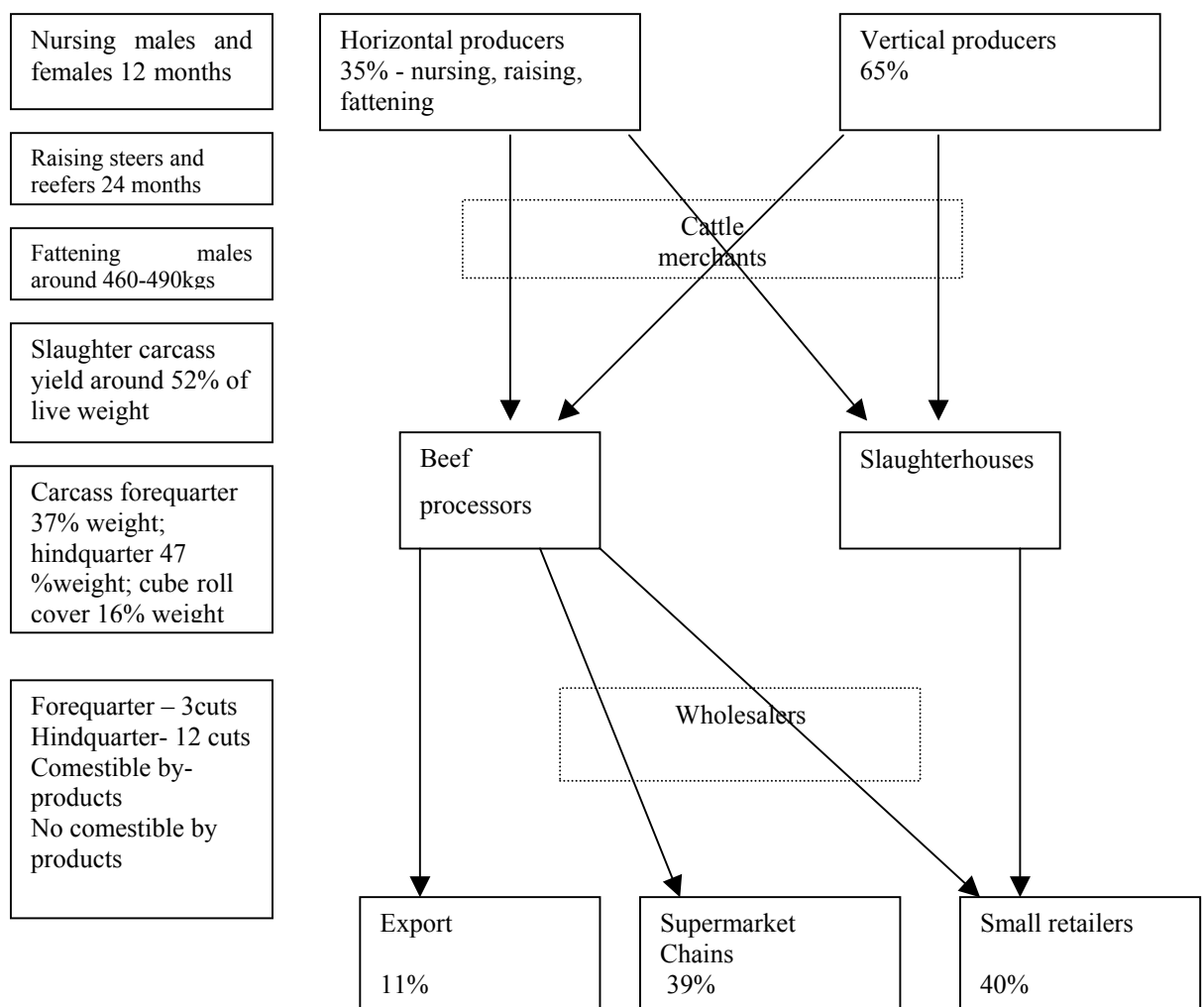


Figure 1: The Brazilian Beef Chain

The process of economic liberalisation initiated in 1990 has produced significant changes in Brazil's foreign trade, resulting in a more competitive economy. This process was accelerated with Real Plan in 1994. Imports have increased as a result of generally lower tariffs and reduced non-tariff barriers, as well as the strength of the Brazilian currency relative to the dollar. Imports were composed of a wide range of industrial, agricultural and consumer goods. From mid-1994 to January 1999, Real lost competitiveness and the liberalisation policy has led to a trade deficit since 1995. As a result, some sensitive sectors have asked for and the Brazilian Government has imposed trade restrictive measures to fight resulting deficits. But still most markets can be characterised by competition and participation by foreign firms through imports, local production and joint ventures. Yes by can you put a simple table showing the general economic indicators like GNP per capita, GDP, exchange and inflation rates, trade balance- from 1995 or earlier if data is available to 2001/2002

Following the European trend, retailers are becoming more concentrated and exercising a strong buying power. As food retailing has becoming dominated by a few major players (Tansey and Worsley, 1996; 125), retailers have focused on themselves as the brand with which they want customers to identify. Own brands do not identify the manufacturer but give the buyer some indication that the product has met the standards imposed by that retailer. Supermarkets also identify and promote niches through their own brand.

Because of the increasing competition between supermarket chains, it is fundamental for them to have lower prices products and frequent sales promotions. On the other hand, for the suppliers this means an even tighter margin, difficulties in investing money on advertising their brand or innovation (R&D). Processors are trying to spread their sales over different buyers, reducing sales to supermarkets. This sales effort needs more logistically speaking, because of the delivery of products on daily basis to several small retailers.

The top five Brazilian supermarkets in Brazil are Pao de Acucar, Carrefour, B, Bom Preco/Ahold and Sendas. Their total sales accounted for 27% of market share (retail sales) in 1997 and reached 39% in 2001. Because of the strong competition between these supermarket chains, low price products and frequent sales promotions are a key-point of their strategy. However, for the food processors, it means even tighter margins, difficulties to invest money on advertising their brand or innovate (R&D). Processors are trying to spread their sales over different buyers, reducing sales to supermarkets. This sales effort is logistically more demanding due to the delivery of products on daily basis to several locations instead of a distribution centre. Beef traditionally is a product with low differentiation or no brand. Big retailers or wholesalers always established the price. A survey sponsored by ABRAS (Brazilian Association of Supermarkets) identified beef as one of the most frequent food purchased in the supermarket. 66% of the Brazilian consumers buy beef in the supermarket and from this amount, 9% buy it daily and 57%, at least, once per week. Besides, the third most important fact for a Brazilian consumer to choose a specific supermarket is the quality of the fresh beef, according to 85% of the interviewees in the same survey (FMI and ABRAS, 1999).

As argued, previous studies are showing the retail sector is on a concentrating process (Jank, Farina and Galan, 1999; Farina and Reardon, 2000). The entrance of transnational companies (the French Carrefour, the Dutch Royal Ahold and the Portuguese Sonae) through merger and acquisitions during the nineties increased sales concentration. In 1997, the five largest retail companies were responsible for 27% of the total sales. In 2001, this amount was 39%. This scale gives them powers to impose standards and sales requirements. Supermarket chains require not just punctual delivery, price and quality but discounts for new products, promotion sales on special days (Mother's day, Easter, Christmas and other holydays) and free products for new stores when opening new sales points. Three supermarkets chains were interviewed to illustrate this study.

On the other hand, small retailers (shops with one check-out) are local suppliers offering customised services. For small retailers, beef, as for supermarket chains, is an attractive and strategic product. However, beef demands investments on efficient chilled equipment and a skilled and competent butcher. Usually, beef processors deliver a half carcass and the small retailer's customer chooses which piece he/she prefers. A specialised butcher is fundamental to provide this customised service. Other increasing small retailers are convenience shops located next to petrol stations. They sell chilled packed beef. The location of these small stores is extremely important to the success of the business. Another important characteristic is their closeness to the supplier and customer. The end-customer information tends to flow clearly along the links. The transaction is usually made directly by the owner of the shop. Two small retailers are used to illustrate this study.

Case Study A

Beef processor A is the largest Brazilian exporter selling to North America, Chile, Orient Extreme, the European Union and Middle East. It possesses five processing plants. Its total slaughter capacity is 5.100 heads per day and debones 11.700 of forequarters and 11.000 of hindquarters. At the time of the visit, total slaughter was around 3.500 heads per day. Just one of the processing plants was visited and it had the capacity to slaughter 1.500 heads and debones 3.000 hindquarters and forequarters.

In 2001, A group exported US\$ 260 million and their strategic plan was to increase 10% for 2002. A sells directly to Portuguese, Italian and German supermarkets (around 200 tons per month). It also has different investments related to the beef processing such as a tannery, safety materials factory, shops to commercialise beef, seven farms, a hotel, cannery and dog toys manufacturing company.

A employs 11.000 persons. Usually, beef processing estimates 1 person per cattle head. The company adopted an innovation process to de-bone a whole bull in two levels, a method developed in Australia, reducing labour necessity. Input supply is made individually in each plant processing. The company buys directly through telephone. The supply manager calls firstly its traditional suppliers and pays day price. The price is based on deadweight and payment is made after 30 days of delivery. When there is some difficulty buying livestock with the standards required, A has to pay cash on the spot market. The company buys within a radius of 250 km of the processing plant. According to the manager, even without formal contracts, there is trust and goodwill established to some of the regular suppliers. A has seven farms where it produces high quality livestock used as security stock in case of price distortions or lack of supply (uncertainty) to cover orders.

A sells 55% production to the Brazilian market and 45% abroad. It is the largest beef exporter in the country and it also supplies large supermarket chains. Usually, forequarters are exported and hindquarter sold to national retailers.

A is investing on its own brand to increase the bargain power vis a vis supermarkets; nowadays, the company can deliver beef in differentiated packages (ray vac) ready to the shelf. However those packages are being supplied mainly to small retailers, who give back information about end consumer acceptance of the package. Using this information, A test and adjust the package before introducing them to supply large-scale markets. The group also joins other beef processors to promote the Brazilian beef as a brand.

The supermarket A is the leader retailer in Brazil. It is a Brazilian ownership group from the 1950's. Since then, A has expanded, opening new shops or acquiring existing ones. The group has also diversified its activities, investing on restaurants, poultry production and transport. In 1999, A signed an investment contract with a French retail chain, which acquired 25% of the Brazilian company. Nowadays, the group possesses branches in eleven Brazilian States within 416 supermarkets. The total sales in 2001 were over US\$ 2,20 billions (more than 8 billions Brazilian currency - reais) and an increase on sales of 8,7% (Maiores e Melhores, 2001). A is

also the first one to delivery orders received by Internet. This supermarket buys beef equivalent to 30.000 bulls per month in the whole country and has established a partnership with a group of ranchers and beef processors, mainly from the Midwest Region, to supply its own brand beef. A establishes a guideline about the following issues: adequate pasture, water, labour, facilities, fences, tools, scale, weight and road access. The aim is to produce an environmental friendly output. For the producer, all these standards are a rise on production costs, but they expect to have a differentiated product in the long term. A future plan is to pay 3% over the market price to male animals in a near future.

Grocery A is located in the State of Sao Paulo, 100 kilometres from the capital. Its beef supply comes from several beef processors, among them, A. Nowadays, his shop follows requirements pointed out by the legislation, characterised by Kaplinsky (2000) as a legislative governance, but generally not adopted by others. These requirements are a specific entrance to the public, all rooms have air-conditioning and facilities have glasses where customers can see what has been done to the beef. Besides, the shop aggregates value to the product, smoking it or producing its own sausage. Another differentiation is that A grills steaks and other cuts to delivery by internet order. On the weekends, the shop delivers ready to eat grilled meat directly to customer's house. This is an innovation, during the research, it was not identified other grocery providing this kind of customised service.

The shop also cuts small pieces according to customer orders. So, the customer can buy a monthly ration receiving small packs to freeze. Grocery A also supply orders received by e-mail or telephone and even has a team to make a barbecue at customer's house. A is recognised for original ideas, even that the demand of these services is lower than expected.

A has two main beef suppliers. It just buys beef over 63 kilos and with a fat cover, preferably hindquarter cuts. According to the owner, advertising is the customised service offered. The customer is attracted both by the novelty and facilities of the place. According to the owner, to establish the final price, the butcher's shop calculates 29% of the hindquarter (de-bone rate) more than the margin that includes the operational expense (employees, energy) and usual retail rate. During the lowest season, it reduces the margin to obtain better sales. The company intends to grow by opening up a new shop in the same city adopting the same successful strategy.

Below, is a calculation of the marketing margin of a medium quality tenderloin cut. We used the ERS method to calculate retail meat prices. It means that a standard steer is cut up in a fixed way at the retail level. The total value of the animal at the slaughterhouse could be compared with the total value of the animal at wholesale and retail. It costs 517 grams (1,14 pound) processed beef to produce 453,6 g (1 pound) of retail beef. The purchasing and selling price was collected at the same day.

Table 4: Marketing Margins for Case A.

	Purchasing price R\$/kg	Selling price R\$/kg	Marketing margin (%)
Beef processor A	2,04		
To supermarket		3,40	40%
To small retailer		3,80	46 %
Supermarket A	3,40	5,40	37 %
Grocery A	3,80	5,20	27%

Beef processor receives more from the grocery, but the amount supplied should be assessed as well. The supermarket buys around 5 times more per month than 10 groceries together. The supermarket has the highest margin since it has more information, consequently, bargain power. Additionally, supermarket A establishes the price (not above the market one) and set product standards (age, leanness, colour and so on).

Case Study C

This beef processor, C, has a slaughter capacity of 60.000 heads/year, around 330 per day. It is in the Southern Brazil, and is strategically close to one of the largest Brazilian export port. It was basically an export company but when a foot-and-mouth outbreak happened in May 2001, C targeted Brazilian marketing channels, where food safety is not a priority. But not recognised as a traditional brand by local market, C dramatically reduced its slaughter from 7.000 heads to 3.000 heads per month.

According to the manager, an export driven company incurs 20 to 30% higher costs than companies serving the domestic market (mainly food safety costs). On the supply side, Beef processor C buys from 50 preferential partners. However, there are no contracts between them, the transaction happens based on tradition and goodwill. Another 200 farmers supply the company through occasional sales based on market price.

Nowadays, C supplies two supermarkets (Supermarket C and local one) and more than 400 small retailers (one of them, C). The company slaughters steers of up to 36 months (preference for 24 months) and price paid is R\$ 2,80 to 2,90/kg (usual market prices) these are spot prices and so they have to be time specific. Steers represent 40% of the slaughter and can cover Hilton quota standards. The de-boned beef is more valuable, so C tries to supply just it to add more value to the final product.

The company observes local supermarket's customers in order to obtain feedback. They informally collect market information from customers informally. The main issues during the data collection are both to learn beef cuts demand and to receive feedback about attributes such as taste, tenderness, colour and packages of the beef bought.

Small retailers demand more logistical support and inventory management advice because sometime they do not know how to maintain their beef stocks. On the other hand, the retailers provide the processors with market information about product acceptability and contribute with comments and suggestions. To supply local clients, Beef processor C uses its three chilled lorries and twelve regular lorries for transport.

Beef processor C produces for the supermarkets' own brand ("Supermarket C young steer") beef. This is an alternative adopted to maintain the production levels after not being able to export. The transactions terms consists on the supermarket establishing standards and Beef processor C covering them. Quality of the product is checked when the product is delivered at the supermarket to see if it meets the supermarket's standards/requirements. If is not according to what was previous arranged, the beef company could suffer sanctions. Technical information (carcass weight, yield, age, sex, fat cover and paid price) is transmitted to the beef processor by the supermarket chain. A veterinarian, retired from the Ministry of Agriculture, is in charge to establish and check these standards. Another set of information, such as retail sales, volume, cuts commercialised per periods and price to the consumer is not transmitted to the beef processor. The own brand scheme tries to establish standards and assure quality, although standards are imposed by the supermarket and not developed together. Beef processor C, on the other hand, has a sales guarantee of a monthly amount for a trusted client. The last supermarket chain studied, C, is just located in RS (Southern Region). Nowadays, the chain consists on 23 supermarkets and among them, six have a shopping centre format, renting spare space for other shops. All of them are located around Porto Alegre, the capital of the State. The company has 7.500 employees and total sales in 2001 were US\$ 403.40 millions. This supermarket chain has a high quality products reputation. Its beef suppliers are

spread over different locations: 40% from RS, 30% from MS and 30% from Uruguay (organic beef). C has developed a vertical alliance with eight slaughterhouses and a great number of ranchers from RS to produce beef according some standards under C's brand. There are no supply contracts nor exclusiveness but a supply guarantee. C used to monitor the beef processing to check the cover of requirements. A peculiarity is that the same beef processors producing under C's brand also supply this supermarket with their own label. According to a survey sponsored by C, it sells two times more beef than other supermarkets. Based on this strategy success, the company will open some sales point in Sao Paulo, the largest and most sophisticated market in the country.

The first case study is a small retailer established in an important urban and industrial area in the South of the country. Three beef processors supply C. The owner of C considers one of these suppliers a partner even there are no contracts between them. But they use to develop sales promotions of some beef cuts together.

This small retailer sells about 20 tons per month. The beef supply is received daily. Contacts with traditional suppliers are made by telephone and C has a slaughter forecast program to each of the three supplies. The carcass comes split in three basic cuts and C's butcher personally serves each customer orders. The beef suppliers are not able to delivery fresh cuts packed. The butcher is a specialised and expensive labour and has autonomy to check beef delivery, deciding if the beef is covering agreed requirements. The butcher speaks directly to the customers and knows exactly what each one want.

According to grocery C's owner, beef demand is less. For instance, Brazil exports large quantities of poultry to the Arabian countries. During war conflicts, all these export products are sold in the domestic market for lower prices. As consequence, it substitutes the beef consumption. All this market knowledge of the owner is empirical, brought by experience.

The highest costs are electricity costs (65%) to maintain the freezer temperature. The sales price compared with the big retailers is a bit higher, but this small retailer sells more forequarter cuts. The main competitor of this company is other same sized grocery.

Having three suppliers gives Grocery C some flexibility; when one of them wants to increase prices, C looks for one of the alternative suppliers. This supply flexibility increases C's bargaining position and reduces supply risk. However, if all of them are increasing prices so he pays the raise. The owner says that consumer behaviour is easily verified. For example, when the consumer receives his/her wage, he/she goes and buys quality beef (hindquarter cuts) and, on the other hand, when he doesn't have money (end of month) he buys the cheapest piece.

Beef is around 30% of the total sales of the market; it is one of the most important products (other are fruits and vegetables). Grocery C hires 10 full time and 3 part-time for weekends. The manager considers that his business is more dynamic than a large company. The owner is closer to the consumer and can respond to consumer concerns on time and effectively. Location is fundamental for the success of his sales point. He does not have any relationship with his competitors, but some information about new product, lower prices and sales promotions brought by customers. Grocery C made some layout improvements, investments on chilled technology and now is training human resources to provide a better attendance. He is also aggregating services such as orders by phone and delivering at home.

The same method as case A is presented in the table below to case C.

Table 5: Marketing Margins for Case C.

	Purchasing price R\$/kg	Selling price R\$/kg	Marketing margin (%)
Beef processor C	2,80		
To supermarket		3,50	25%
To small retailer		3,70	32 %
Supermarket C	3,50	5,40	54 %
Grocery C	3,70	5,35	44%

Discussion and Final Comments

During the interviews, each supermarket pointed out a different strategy to develop their own beef brand. A, located in the Southeast and Midwest Region, has developed a marketing alliance with large-scale producers and processors, establishing the requirements and prices and assuring the supplying. The third, C, focuses on a specific urban area. It has developed a marketing alliance with beef processors. The supermarket chain states standards and inspects the final product on the delivery. But C also provides a veterinarian with technical assistance and to supervise processing plants once in a while. When beef fails to meet the market standards, the beef processor is excluded from the supply chain. None of these supermarkets pay a premium price. The only advantage for their suppliers is a reduction of sales uncertainty. This study focused on regions where the so-called retail concentration process is more apparent (RS, SP). On one hand, small retailers (groceries and butcher's) are increasing their market share through a differentiation strategy. On the other hand, supermarkets are strategically developing closer relationships to assure quality and supply a premium product. Beef processors pay the same price for the input, there is no premium rewarding quality. However, beef processors have difficulty in attending all the requirements made by large supermarkets. In addition, marketing margins to supply big retailers are smaller than to supply smaller ones. The decision to which channel supply depends on the beef processor's capability to collect and disseminate consumer information. If the beef processor manager is focused on processing activity and has low flexibility to change the production process, it is less risky to supply large supermarkets and follow the standards required by them. However, it means smaller margins and less bargaining power. On the other hand, to supply small retailer requires more customisation (flexibility) and end market knowledge to establish successful standards. It means also a closer co-ordination of the whole supply chain. The leadership shifts from big retailer to beef processor

The two supermarkets possess an **expert power**, holding end consumer information and establishing beef standards, but it can be advantageous to the processor since he can reach or maintain an important and large-scale marketing channel for his products. Only technical information goes from supermarket to beef processor. Additionally, vertical alliances are developed but to promote the own supermarket brand. As a consequence, beef processors are developing closer relationships with small retailers. This relationship has been beneficial to both links since small retailers demand more logistically (sometimes, daily deliveries) but give marketing information feedback, characterising a **referent power**. The information flow is clear in this marketing channel/supply chain. Due to this, they can together develop new strategies to reach customers. So far, customers are taking advantage of this process due to lowering prices, customised and high quality products.

According to the result of the two case studies, while beef processors are supplying large retailers, they do not have bargain power and the governance of the chain is exercised by the

retailer. Alternatively, when the relation happens between beef processor and small retailer, the power is kept in the hands of the beef processor. Retailers (both size) are closer to the consumer and have access to the market information, but small ones do not take advantage of this. Therefore, it is suggested that the governance of the supply chain is related to the size of the company and the degree of concentration.

Further research to prove this hypothesis is necessary, such as survey studies. Also it can be studied other food chains to see if the same thing is happening in other sectors.

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Reference

Casson, Mark. **Information and Organization: a New Perspective on the Theory of the Firm**. Oxford: Clarendon Press: 1997.

Cox, A. Power, value and Supply Chain Management. **Supply Chain Management**. MCB University Press, v.4, n.4, p. 167-175, 1999.

Cunningham, D.C. The Distribution and Extent of Agrifood chain management research in the public domain. **Supply Chain Management**. MCB University Press, v. 6, n.5, p. 212-215, 2001.

Dolan, C. et al., Horticultural Commodity Chains: the impact on the UK market of the African Fresh Vegetable Industry. **IDS Working Paper 96**, 1998. 39 p.

Farina, E.M.M.Q. and Reardon, T. Agrifood Grades and Standards in the Extended Mercosur: their role in the changing agrifood system. **American Journal of Agricultural Economics**, n. 5. 2000.

Gereffi, G. and Korzeniewicz, M (eds). Commodity chains and global capitalism Westport, Conn London : Praeger, 1994. 334p

Jank, M.; Farina, E. and Galan, W. **O Agribusiness do Leite no Brasil**. Sao Paulo, editora Milkbuzz Ltd, 1999.

Kaplinsky, Raphael. Spreading the Gains from Globalisation: what can be learned from value chain analysis. **IDS Working Paper 110**, 2000. 37p.

Lambert, D.M. et al. Supply Chain Management: Implementation Issues and Research Opportunities. **The International Journal of Logistics Management**, v. 9, n. 2, p. 1-19, 1999.

Loader, R. and Hobbs, J.E. Strategic Responses to Food Safety Legislation. **Food Policy**, n. 24, p. 685-706, 1999.

Melhores e Maiores, Editora Abril, 2001.

New, S.J. The Scope of Supply Chain Management. **Supply Chain Management**. MCB University Press, v.2, n.1, p.15-22, 1997.

Merton, Robert K.; Fiske, Marjorie and Kendall, Patricia L Merton. **The Focused Interview: a manual of problems and procedures**. New York: Free Press London: Collier Macmillan, 2nd edition, 1990. 200p

Northen, James R. Farm assurance schemes in the United Kingdom livestock sector : their use as quality signals. Unpublished Thesis (PhD.), The University of Reading, Department of Agricultural and Food Economics, 2000.

Reardon, T. and Farina, E. The Rise of Private Food Quality and Safety Standards: Illustrations from Brazil. **International Food and Agribusiness Management Review**. Elsevier Science Inc. v. 4 n.4, p. 413-421, 2001.

Rosenbloom, B. Marketing Channels. Dryden Press, 1999.

Richardson, G.B. **Information and Investment: a study in the working of competitive economy**. Oxford: Clarendon Press, 2nd edition, 1990.

Sadler, I. and Hines, P. Strategic Operations Planning Process for Manufacturers with a supply chain focus: concepts and a meat processing application. **Supply Chain Management**. MCB University Press, v.7, n.4, p. 225-241, 2002.

Smith, G.C. Increasing Value in the Supply Chain. **Presented at the 81st Annual Conference of the Canadian Meat Council**. Vancouver, Canada, 2001.

Tansey, Geoff and Worsley, Tony 1995. **The food system: a guide**. London, Earthscan publications ltd, 1995. 253 p.

Yin, R.K. **Case Study Research**. London: Sage Publications, 1994.