

FACTORS CONDITIONING THE COMPETITIVENESS OF THE SLAUGHTER AND SWINE MEAT PROCESSING INDUSTRY IN THE MINAS GERAIS STATE¹

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ABSTRACT

The objective of this study is to identify and analyze the factors that determine the competitiveness of the slaughter and swine meat processing industry in Minas Gerais State. The study is based on the competitiveness model developed by Porter (1993), that examines the competitive advantage by means of the following four ample factors: demand conditions; factor conditions; strategy, structures and rivalry of the companies; and correlate and support industries. Associated to the government's performance and at random, these factors will determine the competitiveness of the industry in the State. The results of the analysis show that the competitive advantage sources are not found, in its totality, in Minas Gerais State to sustain all the prerequisites necessary to the characterization of the State as a leader, in potential, of the slaughter and swine meat processing industry. As verified, in Minas Gerais State there is no correlate industry provided with a strong support, that would be able to stimulate the State's industry growth. The production of the raw material still doesn't attend the needs of the sector companies. In spite of wide, the domestic consuming market

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doesn't present enough dynamism to stimulate new investments; the high tax load and the inspection lack have been reducing the companies' competitiveness. Besides that, the market structure, the lack of internal rivalry and the managerial deficiency have been contributing to the low performance of those companies.

Key words: Competitiveness, Agroindustry, Swine.

1 Introduction

Among all proteins from animal origin, swine meat has the greatest worldwide consumption, which is above 70 million annual tons.

Brazil is among the largest world producers of swine and has the fourth largest herd with 33 million heads approximately. However, due to its low slaughter rate its position in the world ranking is around the 14th position (INSTITUTO CEPA, 1995).

The Brazilian swine production is basically concentrated in the South and Southeast area of Brazil. Along the years, the Santa Catarina State has presented the largest production, given the predominance of the Italian and German colonizations that possess a great tradition in growing small animals (Talamini and Kinpara, 1994; Giroto et al., 1995). In this State, modern swine production already reached the productivity and cost indexes compared to those of the countries detaining the more advanced swine.

Minas Gerais is traditionally a state producer and consumer of pork, presenting the fourth largest herd of the Country (3,2 million heads), with a production of approximately 150 thousand ton/year and a consumption of 14 kg per capita/year. However, in spite of the important production level and the significant state consumption, the technified swine production with high productivity indexes, essential raw material of the processing industries, is minority in the State, participating with only 44% of the total production, which makes it a potential meat importer

from other regions, mainly from the South of the Country (EMPRESA DE PESQUISA AGROPECUÁRIA DE MINAS GERAIS - EPAMIG, 1995; Camargo, 1996).

Pork consumption is growing slowly, not only in the Country but also in the State of Minas Gerais. Among other factors that have been affecting the growth, the following may be cited: the loss of the population's purchase capacity; the relatively high production cost, that for the national patterns implies high proportion of the same income spent on the product; the price low levels of the substitute products; and the product image, that in the last years has been worn away, such as the conception that it presents high cholesterol rate. Associated to the high income elasticity of the product, these factors justify the high sensibility of the product demand to the variations of the income.

In Minas Gerais State, the swine agroindustry presented a growth decline of 24,7% during the period from 1981 to 1993, while in the Country as a whole it presented small growth (7,5%). This result was obtained due to the extraordinary performance presented by Santa Catarina State, that reached a growth of 51,8% in the analyzed period, so contributing to an average growth of 19,8% for the southern States (PRIMEIRO ranking, 1994).

Actually Minas Gerais State has about 11 slaughter and small- and- medium size swine processing companies in operation with slaughter around 100 to 500 animals/day. In general, these companies present a slaughtering capacity superior to the raw material supply and they could operate in its full capacity, given the pre-existence of an internal and external market.

In this State, the production of a more elaborated product is still small in reason of the remarkable characteristics of the industry, due to the low investment level in technology.

In Minas Gerais State, the greater unbalance of the slaughter and swine meat processing resides in the technological field. At the moment when the market goes through important transformations where the quality

is a factor that comes to substitute the quantity, given the dynamics of the modern market, the companies must pay attention to the differentiation of their products, mainly by means of technological innovation (Barkema, 1993).

Following the tendencies of regionalization and globalization now under way, signalized by the world market, favorable to the expansion of the production as well as the trade of agroindustry products (Abreu and Loyo, 1994), it is necessary that the slaughter and swine meat processing industries in Minas Gerais State be adapted to the new reality in order to be equipped with productive and commercial strategies which will assure them a space in the intransigent national and international competition.

The State of Minas Gerais is located near the large consumers' markets (as example, São Paulo and Rio de Janeiro cities), and it presents climatic and technological conditions favorable to good performance of the activity. However, the slaughter and the swine meat processing have been growing slowly in the State. So, there is a need for analyzing the internal and external factors to the industry of this State, as well as the factors that interfere in the competitiveness of those processing companies.

The general objective of this study is to identify and analyze the factors that are restrictive to the competitiveness of the slaughter and swine meat processing industry in Minas Gerais State. Specifically, it is intended: a) to analyze the competitiveness of the slaughter and swine meat processing industry in Minas Gerais State, by analyzing its decisive factors, in face of the technological dynamics and the market perspectives; and b) to analyze the technological and the test market strategies adopted by those companies, as well as to suggest action lines and instruments to face the competitive challenges.

2 Methodology

2.1 Theoretical Model

The growing concern with the competitiveness matter is originated from the changes that are happening in the world economic scenery in the last decades, when the national products are confronted with the foreign ones of the same or superior quality to a more competitive price. This stimulates the companies to look for alternatives through technologies, reduction of costs, among others, as a way to defend themselves against this competition.

According to Coutinho and Ferraz (1994), the competitiveness can be seen as the productivity of the companies linked to the governments' capacity, to the society's behavior and to the natural and built resources, and conferred by national and international indicators, allowing to conquer and to assure market segments.

It is well known that the companies of certain countries or states reach technological superiority, since they produce more differentiated goods or of better quality, or products that attend to the consumers' needs, than other ones. In general, these characteristics are effects from four broad attributes: factor conditions, demand conditions, presence of both correlated and support industries, as well as of the strategies, structure and internal rivalry of the companies (Porter, 1993).

The determinants (attributes), individually and as a system, create the context in which the companies of a country rise and compete, promoting or hampering the competitive advantage. Those four elements, taken as a system, constitute the so-called "diamond" of Porter, that is:

a) Factor conditions - they are the input necessary to the production, which can be grouped in several wide categories: human resources, quantity, capacity and personnel's cost; physical resources, abundance, quality, accessibility, the earth cost, water, electric energy sources, climatic conditions, location and geographical size; knowledge resources, stock

of scientific and technical knowledge; infrastructure, type, quality and use value of the infrastructure; capital resources; and cost of the available capital for the financing of the industry. The form and conditions in which these factors are acquired by the companies will largely determine the competitiveness of the industry.

b) Demand conditions - it is frequently said that the buyer's satisfaction is the key for the success in a commercial enterprise. The satisfaction of the consumer's needs is effectively a pre-requirement for the viability of an industry and the companies inside it. The buyers need to be willing to pay a price for a product above its production cost, since otherwise the industry won't survive in the long term. The condition of the demand determines the direction and the character of the improvement and innovation of the companies in the country. Three attributes of the demand are significant: the composition of the demand, the size of the demand and the growth pattern.

c) The correlated and support industries - are the industries that supply the machines and equipments, and it is necessary that these industries are competitive at the international level. In this case, they present advantages such as an efficient, precocious and fast access, and sometimes preferential to most of the economically profitable inputs, as well as they receive larger help relatively to the innovation and improvement (competitive suppliers help the companies to perceive new methods and opportunities).

d) Strategy, structure and rivalry of companies - it is the context in which the firms are created, organized and managed, as well as the nature of the internal rivalry.

The rivalry among the existent competitors assumes the dispute form for position, that is the use of tactics, as competition of prices, publicity disputes, introduction of products and increase of the services or warranties to the customer. The rivalry happens because one or more competitors feel themselves pressed, or they notice the opportunity to improve their positions. The meat agroindustry can be identified as a

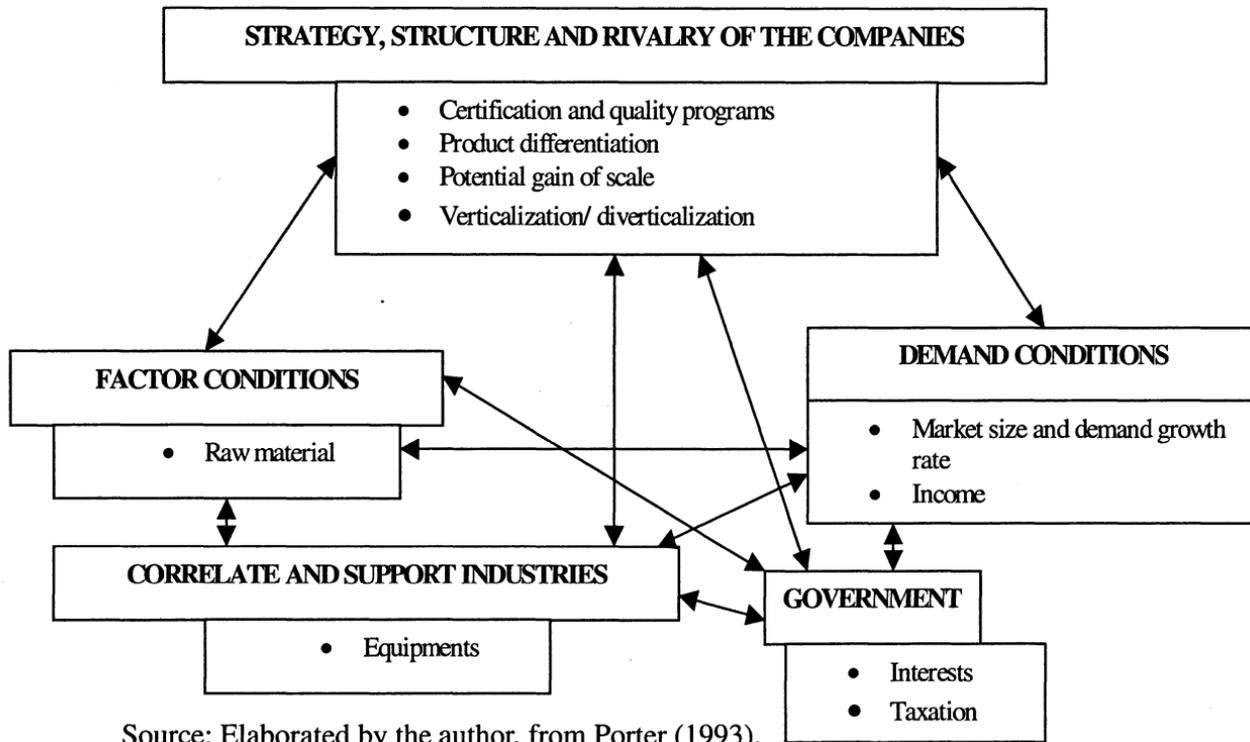
good example, that is, when there is innovation on the part of a cold-storage by introducing a new product in the market, its competitors soon are mobilized in order to guarantee its participation in that market, and this incentives a “stimulus” to the development of another similar product.

Companies of a state have more probability of obtaining success in industries or segments of industries where the “diamond” is more favorable. This doesn’t mean that all the companies of the State will reach competitive advantage in an industry. The “diamond”, represented by the four described variables, is according Porter (1993) a system mutually strengthener, that is the competitive advantages are rarely resulted from an unique determinant. The effect of a determinant depends on the state of the others, and the existence of advantages in a given determinant provides advantages in others.

In agreement with Porter (1993), other two variables that influence the system are the chance and the government. In general, the first one is given by factors that are out of the company’s reach, such as technological discovery, war and random factors out of the company control. The second, the government’s performance via politics, can improve or worsen the advantage, although its role is to obtain competitive advantage by the companies.

2.2 Analytic Model

The variables that compose each one of the determinant factors of the competitive advantage are presented in Figure 1. From the inter-relationship of these variables it will be possible to draw conclusions of a competitive dynamics that makes possible the growth of the slaughter and swine meat processing industry in Minas Gerais State.



Source: Elaborated by the author, from Porter (1993).

Figure 1 - Competitiveness determinants on the competitiveness of the slaughter and swine meat processing industry in Minas Gerais State.

The variables used in this research to evaluate the determinants upon the competitiveness of the slaughter and swine meat processing industry in Minas Gerais are the strategy, the structure and rivalry of the companies (certification and quality programs, differentiation of the product, potential gain of scale and verticalization/diverticalization); correlate and support (equipments) industries; factor conditions (raw material – swine carcass); demand conditions (revenue and market size and demand growth rate); and government (interests and taxation).

The certification and the total quality programs should be a constant concern of the company, if the products are associated to the agricultural sector or not. Total Quality is a permanent objective that involves all the employees, acting areas, suppliers and resellers of a company, aiming at the internal and external customers' satisfaction through the continuous improvement of everything that is produced.

Quality certification is the process through which a certification-competent organism accomplishes an internal audit in the organization which supplies goods and, or services in order to verify if the implemented quality system is in agreement with one of the norms of the series ISO. These norms establish the minimum requirements for warranty of the quality that allow the evaluation of companies supplying goods and services.

In the analysis of the potential gain of scale, it is necessary to discriminate the data for industrial plants. Treating the data in this way, it is possible to affirm that if the size of the plant (slaughtering capacity) is increasing with time, then there are indications that there are production physical facilities, what demonstrates there to be potential economies of scale.

Relatively to the production verticalization, in Brazil it is observed that the dynamics of the agricultural activity became significantly determined by the industry-agricultural and stock raising integrated sector, responsible for the formation of the called agroindustry complexes. In the productive chain of the national swine production, the structure of the

free market has been substituted by vertical contracts, an almost integration among slaughter houses, input companies, swine growers and distributors of the final product. The contracts of vertical integration allow to decrease the exposition to the risk, guaranteeing the offer of animals for complete use of the equipments in the processing phase, and the inputs and services as well.

In the context of the correlate and support industries the variable equipments is inserted. The regional presence of the supply industries, internationally competitive, creates certain competitive advantages in the other related industries.

In respect to the production of the raw material in this work, the emphasis was upon the swine carcass in reason of its greater importance in terms of the total value of the final product. To stimulate the competitiveness, it is expected that in the area there is raw material with quality and in enough quantity to attend the industrial demand.

The size of the market can be defined as the absorption capacity for certain merchandise in the different forms, in the internal and external market. While the demand growth rate represents the evolution of the consumption of frozen, cold, in pieces and processed meat in certain period of time, the income of the population is defined as the capacity of each individual's consumption.

In a wide sense, the rate of interest indicates the remuneration that the borrower should pay to the owner of the borrowed capital, and the taxation represents the obligatory rates that are paid to the State as well as should be reverted to the collectivity under the form of benefits of general interest and are divided into two great groups: the direct taxes and the indirect taxes.

2.1 Data Source

The used data come from two main sources. The first was constituted of the companies that compose the slaughter and swine meat processing industry in Minas Gerais, totalizing 11 companies with

slaughter SIF (Federal Inspection Service), and was obtained by means of interviews and questionnaires⁵ previously elaborated and tested. From the second source, the data of the swine producers' associations as well as those of the slaughter house associations of Minas Gerais State were used. The other information were obtained from magazines and specialized periodicals.

3 Results and Discussion

3.1 Characteristics of the Slaughter and Swine Meat Processing Companies

In Minas Gerais State, 70% of the companies from the branch of swine meat freezing are of family origin. In this type of organization, the direction of the business is passed from father to the son, a behavior that could be one of the growth inhibitor factors since it contributes to the reduction of the company's competitiveness, in general transforming it in a less receptive structure to innovations.

Another important observation is that 70% of the executives who are in the direction of the companies in Minas Gerais State are members of the family, while 60% have just the first or the second degree of formal education. Such fact signals the need for restructuring the managerial system on the part of the companies, as a modernization factor of the modern administrative strategies, which is not obtained only by means of the experience along the years, but mainly by a formal knowledge.

3.2 Strategy, Structures and Rivalry of the Companies

According to the data obtained, it can be said that certification and quality programs are considered disadvantaged factors by the companies of the State, in competitive terms, since 80% of these companies do not

⁵ The questionnaire used can be found in the appendix of the first author thesis, VELOSO(1998).

know the meaning of a quality certificate, while 10% know but don't intend to implant it. In this case, a lack of administrative vision on the part of these companies is perceived, and it could be inferred that they are not modernized and are not in adequate conditions for competing with the big companies of the sector. These companies are continuously looking for a better fit to those new forms of market demand.

On the other hand, relatively to the differentiation of the product, it is observed that only 30% of the companies invest systematically in propaganda, while 40% occasionally invest. However, 60% of the companies invested in package in the last five years, and these investments represent one of the alternatives for differentiation of products, besides positively influencing the company's profits, which can be measured and evaluated. This is an obligatory component of the product cost, and is one of the largest inventories of the company, besides promoting sales. In summary, it is a key factor in the company's competitiveness.

It is verified that no company in the State is classified among the largest of the sector in the Country, and the need for amplification of the participation in the market is only felt as necessary by a small number of them. For the others, the idea on economy of scale is still not very clear, being necessary a larger attendance of specialized organs.

In synthesis, which one can notice is that there is a lack for a future vision of the business on the part of most companies in the State, being necessary the elaboration of a strategic plan that can enlarge the field of performance inside the market, and that at the same time will open new ways for these companies.

In the State, a positive factor for the sector is the perspective of production amplification for next years, by 60% of the companies; in this case, it becomes fundamental that the companies to adopting modern systems of production and that they establish contractual forms that make possible the supply of the raw material to guarantee the productive scale.

Relatively to the verticalization/diverticalization, it is observed that the totality of the companies in the State did not still adopt the integrated

production system, a fact that happens due to a knowledge lack as for the lack of government support, in form of resources that make possible the implantation of this system.

In Minas Gerais State, it is observed that 80% of these companies do not identify in this contract form an alternative strategy for the best performance of the sector. The arguments presented for the no-adoption of this system are: a) the company already has exclusive suppliers, although just by means of verbal agreements; and b) the company has doubts concerning the benefits of a possible integration.

Ten percent of the other companies, nor at least know what is an integration system, what implies the need for a greater participation of the institutions associated to the sector with views in obtaining a larger explanation on new and modern administrative techniques. On the other hand, 10% see the contract system of the integration type as the only alternative for their permanence in this market, given the need for enlarging the productive capacity.

The great companies of the sector differently consolidated as leaders in the market by means of strategies such as vertical integration, horizontal diversification, that is other activity areas, and development of new technologies for management, sanitary control, etc. This integration system generated economy of resources to the first companies which adopted it by means of acquisition processes and increase of the scale. In few years these companies supplanted the others that acted as independent organization.

3.3 Correlate and Support Industries

Eighty percent of the total analyzed companies invested in new equipments, facilities and new technologies for products, while 20% did not make any investment type.

It was possible to observe that the equipments acquired by the companies of the State in spite of most being acquired in the own Country, the companies using them admit they are not the most modern ones.

The existence of correlated and support industries in the own State may represent an important source of competitive advantage. However, the totality of the companies did not know how to correctly inform the types of the equipments acquired in the own State, but at first they knew that these were not the most modern and they represented a very small number. On the other hand, they emphasized that they only acquired in the State those equipments with less advanced technology. Sixty percent of the slaughter houses argued that the lack of resources for acquiring these was the main argument for nonuse of more modern equipments.

According to the analysis of the results, relatively to the correlate and support industries it is observed that for their survive it is fundamental that the slaughter houses of the State adopt innovation measures the fastest possible. The acquisition of product and process technologies will be a determinant factor of the companies' competitiveness in the industry for the next years.

3.4 Factor Conditions

For the good performance of the slaughter and swine meat processing industry it is required that the State has raw material of high quality in the necessary quantity to attend to the demand of these companies.

In Minas Gerais State, 100% of the companies make verbal agreements. This relationship cannot affect the slaughter house production in several situations, in the case when for negligence or for other reason the producer does not fulfil his part in the agreement, since there is nothing that could impede him of doing it. On the other hand, for a producer who is disorganized and unable to negotiate, the contract of the integration type is the most guaranteed form of covering the costs.

What can be clearly noticed with clarity is that the processing sector exercises a greater market power upon producers, discouraging swine carcass production, what is essential for future competitiveness of the sector.

The origin of the animals acquired by the agroindustries is one of the indicators that signal the possibility of the production growth in the State. The participation of animals arising from the own State could positively act upon the activity growth.

It is observed that 50% of the slaughter houses acquire raw material from other states, mainly the southern States, with Paraná State being the responsible for more than 70% of this supply. The high percentile of swine coming from other states evidences a potential of production growth in Minas Gerais State, a reason why a politics directed to the segment might bring great benefits as much for swine growers as for the agroindustries of the State, as well as more employment and revenue, culminating with a better life pattern in the field. For the slaughter houses, this improvement occurs by means of the availability of qualified raw material and smaller risks relative to its supply, and, for the State, in the form of higher levies and contention of the rural exodus caused by the unemployment in the field.

The fact of 100% of the slaughter houses do not execute any incentive program to the swine growers evidences the incentive lack to the productive sector of the raw material in the State, and such an incentive could come to improve the quality of the carcass and consequently the quality of the product. In this sense, the growth of the productive sector is only a duty of the swine grower who most of the time does not possess an infrastructure adapted to improve the quality of the supplied product and to increase the number of matrizes per producer.

The quantity of animals slaughtered by the slaughter houses can be an indicator of the larger or smaller availability of the raw material in the State. The information that 60% of the slaughter houses are disposed to enlarge their capacity indicates a probable increase of the raw material production.

On the other hand, 40% of the slaughter houses do not intend to alter their slaughtering capacity, under the argument that they operate on the limit of the facilities or are satisfied with the current market situation.

Another factor to be analyzed, mainly by public organizations, is that the small slaughterhouses without inspection act as competitive to the agroindustries providing loss to the State in reason of smaller levies. In relation to the slaughter houses, this competition is also disloyal because these will pay tributes for each inspected and slaughtered animal. The consumers are also affected, once they are submitted to the purchase of a product without good sanitary conditions and of unknown origin.

A question to be discussed is that in Minas Gerais State the producers, differently of those in the South, present certain resistance to the system of integration-type contract. This aversion can be reduced by combined performance of both the State and company aiming to break the existent barriers and to give more warranties of benefits of this production system.

On the other hand it is unexpected that the companies in the State, mainly those determined in enlarging their production, be not attentive to the need of making viable these producers so that in the next years they can obtain raw material with quality and enough quantity.

The lack of greater attention given to the producer is evident when the main requirement made by them are analyzed, among which stand out the reduction of the taxation load; the introduction of an evaluation on the more efficient carcass quality showing that the current payment system made by the slaughter houses has not been satisfying producers; a greater attendance mainly to the technical attendance; and finally, a better price paid per kilogram of the swine on the part of the slaughter houses because this is not enough to cover the production costs.

That last requisite indicates the existence of a productive structure with low productivity, when compared to the one of the South, since the same kilogram of swine meat is paid to those swine growers with a smaller differential of 30%, although they attain to maintain an adequate level of income.

3.5 Demand Conditions

The market size and the demand growth rate influence the consumed volume and the quality of the product. In Minas Gerais State, the consumed per capita volume overcomes the national average, but it should distinguish that in this state the consumption of the *in natura* product prevails, a behavior showing the fragility of the demand in competitive terms.

On the other hand, the main consuming center in Brazil, both in population terms and in terms of per capita income level, is located in the Rio de Janeiro-São Paulo axis and the proximity with this market is a factor that can bring benefits to the companies in the several segments.

Under this perspective, it can be said that the companies in Minas Gerais State are privileged, since besides the market of Belo Horizonte city having great consumption potential yet the proximity with the great mentioned consuming centers coexists.

The companies' perception relatively to the need of diversifying their products in order to attend the consumer reinforces the theory that serve as a base to this work, that distinguish the importance of a wide and dynamic market for the competitive advantage, since the composition of the demand will determine the way through which the companies perceive and interpret the buyers' needs and react to them.

In the last years, the meat demand is under constant change with the consumers' increasing awareness on the need of the ingestion of products with smaller fat content. In this case, the perception of these changes always reflects the quality need and better characteristic presented by the product.

Among the different factors, the meat consumption is affected by the distribution of the income and the Country's per capita income.

In the last years there was considerable growth of the income availability for the Brazilian population's consumption. This evolution of the resource availability creates good perspectives for the slaughter and swine meat processing industry in Minas Gerais State.

This work was initiated from the analysis of the sale concentration in the slaughter houses in Minas Gerais State, as a form to notice if there is any type of the companies' advantages and if they are utilized by the fact of they are close to the axis Rio de Janeiro-São Paulo.

It is verified that the largest concentration of the companies' sales occurs in municipal, regional or state terms, totalizing 100%, 60% and 40% respectively, while only 30% of the slaughter houses attend to the interstate market, which characterizes the lack of the companies' s perception relatively to the opportunity of sale amplifications. Such a fact together with the lack of dynamism in the state market (a larger consumption of the *in natura* product), partially explains the reason of the companies' low performance in the State.

The behavior of the State's companies in relation to the attendance of a market interstate and international market evidences the lack of perspectives in the long term, given the tendencies presented by the market facing a greater globalization of the economy.

In synthesis the results presented on the determinant "demand condition", and according to the entrepreneur vision, point out that in spite of some pre-requirements giving it credit as dynamizer and stimulator of competitiveness, such as the size and rate of the market growth, yet one cannot classify it as such, in reason of the presence of some characteristics that limit the creativity and the stimulus of the companies.

3.6 Government

Under the viewpoint of the government's participation, it is noticed the need of a politics gone back to the section. This, in agreement with the companies, would come by means of larger inspection, with more rigid laws than they dismantle the discount without inspection, today considered the great problem of the section in the State; reduction of the tributary load; and programs of financial support, by means of financing at subsidized interest rates.

With respect to the taxation load, similarly to Canever's (1997), that analyzes the relative competitiveness between the Brazilian and Argentine chicken chains, this study points out the presence of high taxation load in the Country.

4 Conclusions

The analysis results allow to conclude that the competitive advantage sources are not found, in their totality, in Minas Gerais State to sustain all the necessary pre-requirements to the characterization of the State as a potential leader of the slaughter and swine meat processing industry. As observed, in Minas Gerais State there is no correlate and strong support industry able to stimulate the growth of the State industries; the production of the raw material does not still attend to the needs of the sector companies; in spite of wide, the internal consuming market does not present enough dynamism to stimulate new investments; the high taxation load and the lack of inspection have been reducing the companies' competitiveness; and the structure of the market, the lack of internal rivalry and the managerial deficiency have been contributing to the low performance of these companies.

So that the slaughter and swine meat processing companies in Minas Gerais could compete, in equality of conditions, with the great companies of the sector, it is fundamental that they adopt a more aggressive system of performance in the market, in such a way to overcome their vulnerabilities in competitive terms.

To do so, the actions of two different natures are identified. The first ones, with the eminently private character, should be unchained by Minas Gerais' industry. In this case, one begins from the verification that Minas Gerais' market presents preference for *in natura* products, thwarting the tendency of the regional markets which opt for more elaborated products. Minas Gerais's industry has been attempting to attend the demand of *in natura* products, so stopping to dedicate a greater attention to the processed products, what has been making unfeasible its penetration

in other markets beyond the state's and has more and more hindered its internal competitiveness, as the market, even the one of Minas Gerais, has been more and more demanding the processed or semi-elaborated products. penetration in other markets beyond the state's and has more and more hindered its internal competitiveness, as the market, even the one of Minas Gerais, has been more and more demanding the processed or semi-elaborated products.

To enlarge its participation in the market, initially the industry should increase and reorganize its interface with the swine growers, once the quality and the regularity of this input are preponderant factors in the industrial competitiveness. In that case, the contract adoption of the integration type between the industry and swine growers are suggested as well as the search of alternatives in other markets mainly in the axis Rio-São Paulo.

Relatively to the public-nature actions, the suggestions are a larger inspection as a form to restrain noninspected slaughtering that today comes as a greater competitor of the State's companies, besides technical attendance to the raw material producer by means of specialized public institutions as a form for viability of the raw material production, given the lack of resources of the small producer, and as an attendance form to all the environmental requirements.

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