

THE SUGAR AND ALCOHOL SECTOR DEREGULATION AND THE NEW FORMS OF THE STATE'S ACTION¹

*Márcia Azanha Ferraz Dias de Moraes*²

ABSTRACT

From the analysis of the characteristics of sugar cane, sugar and alcohol markets, we try to identify market failures which would justify the State's action in the sugar and alcohol sector, considering the new effective institutional environment. The theoretical tool used was Microeconomics, in its Industrial Organization branch. We concluded that the State cannot completely stand off the sector due to existing market failures, although its course of action is totally different from the intervention performed until then.

Key words: Deregulation, sugar and alcohol, market failures, State's action

1. Introduction

The objective of this paper is to reflect on how much the State would be able to stand off the Brazilian sugar and alcohol sector and on the required new ways of action by the State in the new deregulated environment.

The sugar and alcohol agroindustrial chain certainly used to be one of the most controlled administratively by the Brazilian State, because the government would have established production since the 30's (including the establishment of sugar and alcohol production quotas for each industrial unit), taken care of the products commercialization (dictating cane,

¹Based on the author's Doctorate Thesis on Applied Economics at ESALQ/USP.

²Mechanical Engineer/ UNICAMP, Doctor and Professor at the Department of Economics, Administration and Sociology- DEAS/ESALQ/USP

sugar and fuel prices and determining the respective purchasers and suppliers for the alcohol fuel). It was also responsible for all sugar and alcohol exports.

This way, the deregulation of this sector affected the relations among the agents of the whole productive chain: sugarcane producers, the mills and distilleries, fuel distributors, as well as consumers of the final products (alcohol and sugar), as analyzed in Moraes (1999).

The beginning of the deregulation which the sector is going through took place during the Collor government, when the Sugar and Alcohol Institute was extinct, and reached its top with the Statement of the Ministry of Finances no. 275, dated October 16, 1998, which liberated, from February 1st, 1999 on, the prices of the ton of sugarcane, standard sugar and alcohol of all types.

With the institutional changes, many functions previously exercised by the government became a responsibility of the several segments of the productive chains, evidencing deep changes faced by them, and the need of a complete reorganization of the system as a whole.

In this paper, two main links of the sugar and alcohol chain are focused: those formed between sugarcane suppliers and sugar and alcohol producers, and between alcohol producers and fuel distributors.

From the study of sugarcane, sugar, and alcohol markets characteristics, we attempted to verify the existence of market failures and the requested forms of state action. The theoretical instrument that supported the work was the Industrial Organization branch of Microeconomics.

2.Theoretical References

A quite important subject to be directed is the redefinition of the State's role as a promoter of economic development. In the agricultural area, where governments have in general a tradition of long and intense intervention, the challenges of this change are great.

According to Petit (1995), the definition of the roles of governmental

and private sectors in order to guarantee a sustainable economic development is the great obstacle to be faced, mainly when the growing fiscal deficits in many developing countries are considered. As a consequence, more attention to the options of market liberation and privatizations is required.

Farina et al. (1997) points out that, according to normative theories of regulation (which have the competitive market and the agents' limitless rationality hypothesis as a reference standard), the State intervention is necessary when the impersonal transactions via market based on the prices system fail to provide an efficient system of resource allocation. In this case, the equilibrium price would not reflect the consumer's evaluation or the costs of the economic resources used in the manufacturing of the product accurately, and the intervention of the State would try to control existing market failures.

The type of government intervention will depend on existing market failures, such as: the existence of public goods, the presence of externalities, asymmetry information problems, the existence of monopolies, and the protection to the "just born" industries. For each type of market failure, there is an adequate course of action adopted by State. Among them are: social regulation; economic regulation; political antitrust; and industrial politics.

Social regulation is used in the case of existence of public goods, externalities and information problems. The existence of public goods justifies a social regulation, since its supply by private companies will hardly be efficient. According to Pindyck & Rubinfeld (1994), public goods can be simultaneously *non rivals* and *not exclusive*, that is, once produced, the number of consumers does not change the production cost and there is no way of excluding the agents from consumption.

This way, firms do not get to have profits in their production, what requires the government to supply directly or finance the production, since, otherwise, the offer will be sub-optimal. In this case, the State can also use its power to establish taxes, so that both, direct and indirect beneficiaries would pay for it. Examples of public goods are programs of

agricultural plagues eradication, basic research, information (for example census data).

Externalities, whether negatives or positives, that happen when some production or consumption activity imposes costs (or appropriates of benefits) to other agents that are not part of the activity, being this effect not reflected on market prices, also request government action, in the sense of correcting the balance among production, demand, and the inadequate allocation of resources through regulations or taxes in order to reduce (or to enlarge) their effects.

Another market failure that justifies state regulation comes from asymmetric or imperfect information, for it can make the agents take inefficient or potentially dangerous decisions in relation to the goods, services or works. According to Noll (1989), the regulation in these cases can bring two types of efficiency gains: the first is the increase of information, which reduces the uncertainties in the decision-taking, by improving the efficiency of the market in assisting consumers and suppliers; the second is that through minimum standardizations, it can protect uninformed participants from bad results.

The trade of several products (medicines, food, safety items, toxic substances, among others) demands state regulation due to the risks that asymmetric or imperfect information imposes on the consumers.

When the market failure comes from natural monopoly, the demanded State action is economic regulation in order to avoid anti-competitive behaviors and less efficient results. According to Farina (1994), when the monopoly or oligopoly results from the presence of sub-addictiveness of costs, efficient production is done in few or even only one firm (natural monopolies), in order to take advantage of existing scale and scope economies.

However, in these cases, there is no guarantee that the consumer will benefit from lower costs production, since the competition does not exist to guarantee the optimum level of prices, and the economic regulation (or the operation by state companies) will substitute absent market for-

ces. In the natural monopolies, the economic regulation is made through government agencies, which control the supply of goods or services, establishing quality standards and prices of the products.

In turn, when the monopoly power derives from oligopolistic market structures, the action of the State should be towards adopting a political antitrust, in order to avoid the exercise of the monopoly power. According to Scherer (1980), to reconcile the maximizing profits behavior of private companies with the interest of consumers, the government can make use of the antitrust legislation, which aims at protecting or intensifying competitive forces of the markets, since, hypothetically, this is the best way of reaching economic efficiency.

The antitrust laws deal with the exercise of the power of monopoly in two ways: the first is by approaching the market structure competitively (for example, avoiding mergers, acquisitions, etc.); the other is prohibiting certain undesirable types of behavior by the agents.

Regarding the control of market concentration, the imprecise contribution that the economic theory supplies to the control of the market structures weakens the anti-merger and acquisitions legislation, and makes the empirical determination of the optimal level of concentration compatible with the efficiency difficult.

Concerning industrial politics, the promotion of some new industries, which have a reasonable probability of profit in the long run, was traditionally the argument used for its adoption. In this case, the chosen sector was promoted through temporary government subsidies, necessary, for example, to face the scale economies, which do not make the operations in the initial operation stages of the firms competitive, or to deal with some barrier type that hindered its entrance in the market. Besides these, industrial politics was also an instrument used to eliminate international competition in order to stimulate domestic production.

However, current discussions on industrial politics indicate that its new version no longer protects nascent industries, but identifies politics needs that allow industries from the developed nations to maintain their

competitiveness before external competition (Farina et al. ,1997). When analyzing the determinant of the competitiveness of the nations, the existence of great corporations is justified by the importance of scale gains and the involved scope, and by its capacity to promote research and development activities.

Notwithstanding, at the same time the efficiency and strength of the technological progress are objects of the current industrial politics, these subjects imply the acceptance of oligopolistic sectors, with consequent problems associated to the market power emerged.

This way, in this new version of industrial politics, in order to face the external competition, it tries to become certain sectors more competitive through exactly by the increase of its concentration (stimulating mergers and certain cooperative practices among the agents), what can be conflicting with the antitrust politics.

When dealing with markets regulation, the literature usually considers just two alternative organizations - the market and the State – being the latter responsible for the regulation. However, the existence of market and government failures may lead organizations of private interest to have important coordinating functions towards certain activities. Other organizations, such as associations, unions and the firm itself have different incentives to deal with market failures, whose relative efficiency depends on the type of existing imperfection to negotiate.

Saes (1998) points out that goods or services with the characteristics of public goods, of generating externalities, or that present problems of imperfect information, instead of being provided by the State, can present advantages if supplied by the associations of private interest. The advantages are related to the continuity of the action, which is not subject to the periodic change of governments, to the broader knowledge that the associations have of the sector and of its problems; and, to the largest agility to take the decisions and to implant politics.

3. Methodology

Twenty eight interviews were performed involving leaderships of the sugar and alcohol sector, mills and private associations leaders, sugar cane suppliers representatives, consultants of the sector, congressman and members of public bureaucracy, who, in the current institutional scene, have influence in the determination of politics and sector-related government decisions.

The interviews were made in the period of January to August of 1999, and their objective was identifying, firstly, if the interviewers considered that the standing-off of the State should be total or partial, the reasons presented in each case, and which would be the new requested form of the State action then. Besides, we tried to identify the characteristics of sugarcane, and sugar and alcohol markets which could indicate some market failure that would justify an action by the government.

Among the leaderships, we chose to interview the participants of the Advisory Committee of the Interministerial Council of Alcohol (CIMA), which are representatives sugar and alcohol producers, sugar cane suppliers, and a Senator of the Republic. From the Technical Chamber of CIMA, four consultants were heard, and the the Director of the Department of Alcohol and Sugar of the Ministry of the Development, Industry and Trade spoke for the government.

Regarding the choice of the sample of the industries, we tried to make as broad as possible, within the limitations of the work. Firstly, we considered the existence of four differentiated “subgroups “ in relation to sugarcane acquisition: the first is the one in which the whole cane come from suppliers; in the second, there is a portion of their own cane and another one from suppliers; the third is composed exclusively of cane belonging to the mill; and in the last one, the cane is from land lease. It was attempted, with this selection, to verify the differences and relative difficulties to the implantation of the new model of remuneration of the cane of sugar (CONSECANA), exposed in Burnquist (1999).

Besides, we tried to talk to both representatives of the traditional

State of São Paulo), as the State of Paraná, a relatively new producer, whose production has grown a lot in the last few years. As to the Northeast area, leaders of the industrial sector and sugarcane suppliers were heard.

Concerning the suppliers, besides the President of the Federation of the Planters of Sugarcane of Brazil, the presidents of the two largest associations of suppliers of cane of the mid-south (Sertãozinho and Piracicaba), and of the association of Jaú were heard.

The tabulation of the results was made by primarily dividing the answers according to the three markets: sugarcane, sugar, and alcohol. Within these blocks, we separated the answers according to the interviewee's category: sugarcane suppliers, industries, technicians of the sector, parliamentary, and members of the government. The questionnaires of each category present small differences, and they can be found Moraes (1999).

For each one of the markets, we tried to identify, through the answers of the interviewees' groups, the existing failures of the markets, the degree of standing-off and the new type of action considered appropriate, given the the new institutional environment.

4. Results and Discussion

From the obtained data, we analysed the characteristics of the institutional environment and of the sugarcane, sugar, and alcohol markets that indicated the existence of market failures which could show the need for state regulation.

Regarding the degree of the State's standing-off the sugar and alcohol sector, it is interesting to notice that approximately 89% consider that it is not completely possible. Although the arguments presented for the partial removal are quite different, and the interference degree that each one considers ideal also varies a lot, only three interviewees think that the State should totally stand off the sector. Even so, they point out that before the State stands off, letting market forces act freely, the problem of the lack of competitiveness of the alcohol in relation to gasoline should

be solved through a tributary mechanism.

With the sugarcane market as a start point, we verified that, although the existing specificities in the product and the historically conflicting relationships among suppliers and industries, as pointed out in Moraes (1999) and Belik et al. (1998), could imply the need for state intervention, theoretically this course of action is not justified, mainly when the installed institutional environment is considered.

In this case, one expects that the relationships among the parts are governed by contracts (given the existent bilateral dependence), and that the eventual verified disagreements are resolved in justice.

In spite of having been pointed out by the interviewees that the slowness of the tribunals hinders its use, due to problems with the duration of the cane, some initiatives by the agents are already verified to reduce this problem. For example, in São Paulo, the adoption of CONSECANA (which was the private solution to matters of the trading of this product after the liberation of the prices), foresees that the negotiations of the sugarcane are made by contracts based on the Law of the Judgement by Arbitration, according to which the parts define the components of the Chamber of Judgement by Arbitration, as well as specify the periods of the judgement, what solves the problem of the slowness of the courts.

Another point observed by the interviewees to justify the presence of the State in the trade of sugarcane was that the category of suppliers is the weakest link of the chain, and they cannot compete with the industries in case of litigation, since they take advantage on its economic power to exercise pressure on the suppliers.

The adoption of a private action, through the organization of the suppliers, may lessen this problem, since bargain depends on parity. If they get together and negotiate, the negotiations will certainly be given in more favorable bases for the category. In this sense, the cooperatives and associations of suppliers have an important role to carry out.

Besides, in the new deregulated environment, the professionalization of suppliers associations is essential, so that market-related matters (both

internally and externally) that affect the sugar and alcohol chain – and had little importance when the government dictated the prices of sugarcane – be analyzed and transmitted to its associates, in order to allow a better planning of the production. This way, they will be lessening any existing information asymmetry in the chain.

Another solution for the negotiation between suppliers and industries may be the use of sectorial chambers (for example, in the State of São Paulo, Sugar and Alcohol Sector Sectorial Chamber), where the parts can talk and negotiate, having the Government of the State the role of coordinator.

Regarding the existence of oligopsonies in some sugarcane plantation areas, which indicate the occurrence of market failures and the consequent need for state action, it is a subject that needs to be evaluated. Some characteristics of the structures of the relevant sugarcane markets (which are quite different among the areas, even within the State of São Paulo), are indicative of market failures and decisive so that the action of the State can take place.

However, in this case, if abuse of economic power by one of the parts is verified, the course of action recommended by economic theory is the application of the antitrust legislation, and the agents should make use of the existing mechanisms to negotiate the subject. The free market environment is subject to the regulating action of the State, in order to avoid the current disloyal practices of trade from the market power.

Therefore, concerning the sugar-cane market, given the existent bilateral dependence among the agents, and the conflicts that always permeated the relationship among the two categories, the conclusions of this work is that the most efficient form of commercialization of the sugarcane is by use of contracts; and that the current role of the State in this link in the chain is to guarantee the adequate operation of the free market, through its available instruments (whether as a coordinator of sectorial chambers or for the application of the existing antitrust legislation).

In relation to the sugar market, if it were not for its connection to

the alcohol market, and the need of knocking down the existing external barriers, the State would have its role quite reduced. The found market structures (both on the supply as on the demand sides) are appropriate, and the available commercialization mechanisms (use of the future and stocks exchange, the use of contracts, etc.) seem to meet the needs of the agents in a satisfactory way. The adoption of competitive strategies is already verified, such as the differentiation of products, meeting the demands of niche markets.

Although sugar is an essential product, it might need the State to guarantee its provisioning at appropriate price levels, the fact of being a commodity produced in several parts of the world facilitates its import in case of internal needs. Besides, in order to direct the production to the domestic market, the Federal Government can use the sugar tax export, whose value varies from zero to 40%, to guarantee the internal provisioning.

The possibility of producing sugar or alcohol in a great part of the productive units can be a factor that requires the State intervention in the market of sugar, by using the available instruments to direct the production, since the relative prices of both products are the important factor for the decision of producing alcohol or sugar.

However, in order to align the production to meet the needs of the Country (whether concerning the lack of sugar in the internal market or the lack of alcohol fuel), it is essential that governmental decisions in this sense are not taken randomly, but by starting from a planning together with the private sector.

In relation to the international market, the State has an important role to carry out. External negotiations, that are done among governments, are essential so that the countries which are importers of the product remove their restrictions to the imports, as those that subsidize their exports stop doing so.

An aggressive politics is necessary, so that Brazil conquers the markets it deserves, mainly when the enormous competitiveness of sugar cane agroindustries and the producers lobbies in the countries of the

European Union and United States, which force their governments to apply the restrictions to free trade of these products, are considered.

It is important to point out that, in this sense, the producers, together with the State, also have important roles to play, acting in the international discussions, both supplying technical subsidies, so that the government can indeed accomplish the negotiations, as well as exercise political pressure internally and externally.

Therefore, in the market of sugar, the action of the State makes it necessary to monitor and to guide the production among the two alternative products (that can already be done with the instruments available), as well as to adopt a persistent politics in order to enlarge the market to Brazilian exports (for both sugar and alcohol).

In relation to the market of alcohol fuel, several arguments were presented by the interviewees to justify the need for state regulation. Firstly, the need of the State to define the energy matrix politics to be adopted in the Country, and to elaborate its energy matrix was pointed out.

From the definition of the energy matrix, which should consider the new existing technologies (for example, the existence of alcohol-fed buses, the addition of alcohol to the diesel, the use of cells of fuel, having the ethanol as raw material, the cellulose as base for any alcohol, etc.), it is possible to organize and plan the production of alcohol, what becomes particularly important when we consider that this product is made from agricultural raw material (involving the whole chain of the sugarcane).

This is a primordial subject from which the State cannot stand off, since it that affects all the planning of the sector. It is necessary to make it clear to the society what is the role of each one of the fuels in the long run.

The second subject mentioned by the interviewees is that at market prices, disconsidering the externalities of the product, alcohol does not compete with gasoline because its production costs are higher. From August, 2000 on, the support mechanism to the existing product (through the Specific Portion of Prices, PPE, account) will be ceased. Also the prices of fuels will be liberated in petrol refineries.

This way, the viability of the alcohol fuel depends on occasional factors, such as the level of petroleum prices in the international market, the exchange rate of the Real in relation to the dollar, of the agreements with the IMF concerning the internal policies of prices of petrol-derived goods, etc.

In the same way that this relationship of prices can make alcohol fuel extremely attractive to consumers (who is very sensitive to the difference of prices between the two fuels), in the inverse situation it can make its production unfeasible and damage the provisioning.

The level of petroleum prices in the end of 1999 (around US\$26 dollars a barrel²), that many consider compatible with its depletion levels, make alcohol fuel advantageous in managerial terms, even without considering its positive externalities (new jobs, ecological benefits, saving of exchange value, etc.). But the use of different fuels by society cannot only depend on its relative prices, guided by situational factors.

Therefore, from the definition of the energy matrix, if the use of alcohol fuel is considered interesting to the society due to its positive externalities, the social regulation of this market is necessary, since otherwise, its production it will be sub-optimal.

This regulation can be made through tributary mechanisms that make it competitive in relation to the other fossil fuels, and meet the established energetical policies. Both the Federal Government and the State can adopt tax systems that would be applied differently on the fuels, in order to direct its use.

The Federal Government can use a selective tax on the fuels, as in other countries, if it wants to motivate the use of non-polluent fuels. In turn, State Governments can adopt differentiated aliquots of ICMS on the fuels and on the automobiles, to adequate the use of fuels to the pre-established standards by the energetical policies. In the State of São Paulo, after the signature of the Pact for the Employment in Sugar and Alcohol

² In 1999, the increase of the value of the product in the New York Stock Exchange was 125%. ("OPEP mantém o planeta em suspense". *Gazeta Mercantil*, p.A10,28/01/00).

Agribusiness, in August, 1999, we could already notice some actions in this direction.

Therefore, to assure the offer of the fuels adequated to the demand, it is necessary that the relative prices of the products direct the way consumers to react to the established energy politics, that is to say, the price of the alcohol fuel should be compatible with its production costs and attractive to consumers, but it must, at the same time, facilitate that the standard of utilization of this fuel, pre-established by the Brazilian energy matrix.

Another subject that the interviewees consider to affect the operation of this market is the oligopsony found in the distribution market. Although now there are 170 dealers of fuels approximately, those affiliated to Sindicom dominate more than 80% of the market, which makes approximately 300 producers of alcohol face difficulties to trade their products at appropriate prices levels.

Notwithstanding, in the same way that competitiveness differences among cane suppliers and industries is not a reason for the State to intervene in the commercialization of the sugarcane, the concentrated market structure in the distribution market cannot be solved, in the free market environment, through the regulation of the commercialization, but for the application of the antitrust legislation in order to avoid disloyal practices of trading, through the action of the Administrative Council of Economic Defense (CADE).

Besides, to solve this problem, private actions should not be underestimated, for they can be more efficient than the ones by the government, such as the invigoration of the productive class, for example, which can find better negotiation conditions when organized.

It is interesting to notice that, in this segment of the sugar and alcohol chain, there was an action aiming at the invigoration of the class of producers. Industries got together and created the Brazilian Stocks of Alcohol, where the commercialization of the alcohol is made jointly. This way, the parity among the two agents, producers and dealers, made possible

a better negotiation, hindering the disloyal practices of trade.

In turn, if abuse of market power is verified, both the conduct of the Brazilian Stocks of Alcohol (which can become inefficient, due to the increase of its market power resulting from high concentrations of the trade), and the grouped dealers at Sindicom can be subjected to intervention of CADE, through the application of the antitrust legislation.

Although it has been suggested in the interviews that, for being a strategic product, the government should impose, through regulation, the formal recruiting of certain portions of alcohol fuel, avoiding the purchases to be accomplished in the market spot, this solution would probably be juridically questionable according to the Federal Constitution of 1988. It seems clear that long-term contracts would benefit both parties (producers could plan their production, and dealers would have guaranteed the provisioning of their stations). However, this decision should be taken by the own agents involved in the transaction themselves.

Another existing difficulty in the market of alcohol fuel comes from the seasonability of the production (that is done from agricultural raw material), and the production is accomplished in 6 months to be marketed along the year, implying in high storage costs.

In the harvest, when resources needs of the producers increase, the offer of alcohol in the market is superior to the demand, making the prices of the product be somewhat reduced. Again the organization of the producers, through the Brazilian Stocks of Alcohol, enabled the problem to be lessened through the search of a private solution.

The fact that producers who joined BBA could only sell through this company, optimized the distribution of the offer along the year, since the sales are made through a pro rata of the monthly demand among the producers. Even so, although there is a larger control on the monthly sales, of course the problems of the stock costs still exist and they need a solution.

Stock costs can be financed by the Federal Government through warrant operations (that allow the retention of the stocks); or by the producers themselves, through the securing of receivables, which is a

warrant operations (that allow the retention of the stocks); or by the producers themselves, through the securing of receivables, which is a grant to the producers that have contracts with the dealers to the following months.

Besides, it is important that within the mechanisms used to increase the liquidity of the producers, and also to guard against of great variations along the year, the use of the future market is considered of the alcohol fuel (through BM&F, as already done with sugar).

The matter of the formation of strategic stocks by the government was considered essential for the interviewees. They consider that through the formation of the strategic stocks, the Federal Government could intervene in the market of alcohol, not only to assure the offer, but as a way of controlling the prices of the product. The government's stocks would be formed at that time of the harvest, through reference prices fixated by it (as what really happened³), and used along the year to assure levels of compatible prices with the desired demand.

Some considerations about the formation of the strategic stocks by the government need to be made. Although the existent legislation (Law No. 8176, dated February, 1991, that instituted the National System of Stocks of Fuels) specifies the formation of the government strategic stocks, it is necessary to evaluate if this is the most efficient option economically.

The question is comparing the costs involved in the formation of the government's stocks and the effectiveness of interventionist conducts by the State, with the use of other possible mechanisms, such as giving support to the formation of private stocks.

For another products (such as rice, bean, wheat, etc.) the legislation that establishes the formation of the government's stocks also exists, and for some of them, as what happens to alcohol, the existing amounts in the

³ In 1999, the Federal Government bought 700 million liters of alcohol to make up the government's stocks. Official estimates, in December, 1999 was that the volume of alcohol belonging to the government was of about 2 billion liters – enough to supply the market for two months. In December and January, part of this stock was auctioned in order to control market prices.

external market are not enough to supply the internal market. However, in these cases the Federal Government has been creating alternatives to the price-support system, which fit its budget, and reduce its operational involvement.

According to Barros (1999), among these mechanisms are the Bills of the Rural Producer (CPR), sale of options on the Spot Market, and the Program of Production Releasing (PEP). Although it is recognized that such programs need improvement, we must not disconsider the development and use of new instruments of sectorial intervention in the alcohol market that are more meaningful to the established economic political scene.

Besides, producers should be aware of the size of the market of the alcohol fuel, and of the volume of alcohol that the government is ready to support. The planning of production is important to avoid excess, since involved public resources exist, and there is a limit for its use.

Thus, a sign to the agents of the market, including the government, about the expectations concerning the demand and production of sugar and alcohol is necessary, so that planning can be made in order to assure the appropriate offer. From the indication of the necessary offer to supply the market, the private sector must, through its Unions, be organized as well as its production.

Although these signs about the demand and the production needs be a responsibility of the Ministry of the Mines and Energy, and have the characteristics of public goods, according to Farina et al. (1997) the supply of information for the associations of private interest usually presents advantages, due to the continuity of the action, to the wider knowledge of the sector, and to a greater agility to take decisions and to implant the necessary actions.

From the monthly monitoring of the production and demand actually verified, the Federal Government can, if necessary, use the available instruments to take preventive measures to guarantee the supply of the products (for example through the elevation of the rate of export of sugar), and the producers can (re) plan its production.

However, in this case, we cannot look down on government failures, which make its actions sometimes inappropriate, nor the pressures of those agents that depend on the external market for the execution of its strategies, that certainly will influence the referring political decisions to the export tariff.

Other problems brought up by the interviewees was the adulteration of the fuels, and the fiscal defraudment in the distribution market, which permeated the deregulation of the sector of fuels, but that seem to be solved by the National Agency of the Petroleum. Although the effectiveness of the actions taken by the agency is questioned, as well as the relative importance of alcohol to the National Agency of the *Petroleum*, it must be made more effective in order to solve the related problems.

5. Conclusions

The questions we tried to answer in this work are to what extent the State can stand off the sugar and alcohol sector, and what are the new requested ways of the state action in the new deregulated environment in each of the three analyzed markets. The conclusion of the work is that there is an amount of market failures that does not allow it to stand off the sector completely.

In the sugarcane market, the best way of negotiating was verified through formal contracts, given the new institutional environment, the existing bilateral dependence, and the historically conflicting relationships among the parts. The role of the State in this link of the chain is to guarantee the adequate operation of the free market, to be a coordinator of the sectorial chambers, or to apply the existing antitrust legislation.

Regarding the production of sugar, given its relationship to alcohol, the State must monitor it and direct it (by means of the available fiscal instruments), in a way to assure the adequate offer of both products. Besides, it has the important role of opening external markets for the products of the sugar and alcohol chain.

Out of the three studied markets, the alcohol is the one which

requires the most the action of the State. Among the Federal Government's main actions are: the definition of the Brazilian energy matrix; the publication of the estimated demand and monitoring of the appropriate levels of production of alcohol; the directing of the production between alcohol and sugar in order to meet the demands for these products; the definition and use of a tributary mechanism allowing the coexistence of the two fuels at levels pre-fixed by the energy policies; and the external market opening promotion for the products in the sugar and alcohol agrichain.

The State Governments are using the tributary mechanisms (ICMS) on fuels and automobiles, in order to meet the demands for the products; to act as coordinators of the Sectorial Chambers, and, as the Federal Government, monitor the self-administration of the sugar and alcohol chain and of the agents involved in the market of fuels (automobile and fuels chain), considering job- and income-related questions involved in each State.

Thus, the standing-off by the State should be substituted by new mechanisms of sectorial coordination, having to the governments (Federal and State) roles of coordinators. In turn, the sector should plan and organize its production in order to meet the demands for alcohol and sugar. However, for such self-administration mechanisms of the sugar and alcohol chain to be efficient, the sector should overcome a great challenge, since its agents' union is not an outstanding characteristic of its history, which has always been marked by conflicts.

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