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Article

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The “Social Construction of the Market” in a Transitional Economy. The Sugar Industry in China in the Context of Globalization

By Louis Augustin-Jean

Within the fields of economic sociology and heterodox economics, one of the most discussed topics is the “social construction of the market”. The pioneering work of Mark Granovetter (1985), freely inspired by the masterpiece of Karl Polanyi (1944), has stimulated a large amount of academic work. With his sense of formulation, Karpik has pointed out one of the major differences between the two authors: “for Polanyi, the market is embedded in social relations; for Granovetter, it is embedded in networks” (Karpik, 2007). Beyond the differences, the phrase also shows that, for the two authors, there is an indetermination related to the structure of the markets, due to the great diversity of social relations and networks: the certainty of the market of the neoclassical tradition is replaced by the uncertainty of social exchanges and networks that are always changing.

This tension between the impossible market of neoclassical economics and the concrete and too diverse markets of sociologists could not lead to a common theoretical corpus. Moreover, this tension also hides the conceptual differences between the many definitions of the market (Boyer, 1997). This is best visible, but not really analyzed, from what has been termed “transitional economies”. The terminology underlies a temporary stage during which “planned economies” are to be transformed into “market economies” or “capitalist economies” – the word being often and wrongly used in a similar way. In the words of Cao and Nee (who do not favor this interpretation), this “strong version” of market transition “involves two teleological arguments: 1) that a market society in line with existing capitalism is the inevitable outcome of the departures from state socialism and 2) that the “generic” effect of markets – reward distribution based on individual’s relative fitness to a competitive environment – is the eventual outcome”. In this version, the “hybrid mixed institutional formations surely may exist, but their impact is either transitory or unsustainable” (Cao and Nee, 2002: 5).

Pushed to its ultimate logic, this vision of the evolution (rather than transition) of these economies is close to the “end of history” of Francis Fukuyama, with the dismissal of the socialist economies and the triumph of the “market economy”, whatever sense it can take. It obviously hides the fact that “market economies” have a very different shape, that capitalism is an historical process with its own internal dynamic quite different from the logic of the neoclassical market, and that the outcome of the reform process in the former socialist economies is not only unclear but takes very different trajectories depending on the countries and/or industries.

The focus on the question of the transition masks equally important issues related to the structure of these economies, which are marked by their history, as well as their future. Concerning China, despite plethora of research on market reforms, there is a clear lack of analysis of market structures; the original work of Victor Nee (Nee, 1985; 1992; Cao and Nee, 2002; etc.) does not really answer that kind of question as he is mainly interested by “hybrid” forms of organization that are “neither markets nor hierarchy” (Powell, 1990).¹ It is actually surprising that, despite numerous researches related to institutional changes and market transition, so little has been done about market structures. Using the example of the sugar industry in China, this article aims to fill this gap. The first part briefly introduces some of the reasons for the choice of this industry; the second one tries to adapt theories of the “social construction of the market” to the Chinese economy, while the last part presents some sketched features from the Guangxi sugar industry.

1. The sugar industry and the internationalization of China’s economy

If the gains from globalization have been unequal (Kaplinsky, 2000; Stiglitz, 2002), China can probably claim to be a major winner. The “open door policy,” initiated in 1978, generated opportunities for China² to get in-

volved in international trade. The culmination point is probably 2001 when, after 13 years of negotiations, she was admitted into the WTO. This membership was perceived by the international community as a signal that China was continuing her transition towards a "market economy". Indeed, China agreed to speed up her reform process and, most notably, to partly liberalize her agricultural sector – a sector that causes the Doha round of the WTO to be in the low point. Thus, China's position may be seen as paradoxical. In order to gain market access for her growing industrial production, contrary to other countries, China apparently agreed to liberalize her agriculture; the consequences in terms of market structures as well as the consequences for the local population in producing are worth analyzing.

The study of sugar is particularly well suited for this purpose. First, sugar is major agricultural commodity that is used as a main input by many agro-food industries. Second, sugar is also widely traded internationally, although its trade has been characterized, from the start, by political interventions. Currently, the volume of sugar traded in the international market oscillates between 25 percent and 30 percent of the global production (in comparison to about 7 percent for the rice). It is also one of the few commodities for which producers from developing and developed regions alike are competing for market shares (even though it is made from two different crops).

Third, the Chinese production increased dramatically since 1978, from 2 million tons to over 11 million tons in 2006/07, and China is now the 3rd largest producing country in the world. If this spectacular surge is not specific to the sugar industry, it is worth noting that, while many industries are dispersed throughout the country (an inheritance from policy of autarky of the Maoist years as well as a consequence of provincial protectionism), sugar production is concentrated in the southern province of Guangxi (over 6 million tons annually, a 24 fold increase since 1978). This impressive growth has been generated not just by market forces, but it was also engineered by the central and provincial governments in the final years of the Maoist era.³ Thus, the current situation is the reflection of two dynamics: a path dependency from the collectivization years; and the "rule" of comparative advantages (the province is the best suited for sugar production in China). Despite this impressive growth and the specialization resulting from realizing its comparative advantages (about 40 percent of the province's population is involved in sugarcane and

cane sugar production), Guangxi remains the 4th poorest province in China out of the total 31 provinces or administrative units of the same rank.⁴ Differently stated, the mobilizing of comparative advantage did not help Guangxi to be lifted out of poverty or, at least, to catch up with other richer provinces.

There are multiple reasons for that. A major one is that this specialization coincided with the building up of competitive advantages in other provinces: the creation of the "sweatshop of the world" in Guangdong and Fujian, with the production of garments, shoes or electronics, earned China an important place in the international division of labor. In other words, the development of Guangxi's comparative advantages and the related profits generated by sugar were no match in comparison with the gains from China's insertion into the international division of labor. Additionally, the internationalization of China's economy had a negative impact on Guangxi, as its sugar industry has to (partly) compete domestically with overseas production, which is as difficult as to shift specialization.⁵ Like she did with the agricultural sector as a whole, the PRC had to accept to liberalize this industry to some degree, even though sugar remains one of the most protected commodities in the world (the recent changes in the European sugar regime did not significantly alter this statement) (Oxfam, 2003).

Thus, in addition to the place of sugar in human consumption and for (agro-food) industries, the study of sugar in China has to be contextualized within the framework of internationalization, deregulation and partial privatization. These institutional changes that accompany economic growth have also led to a modification in the balance of power between the main actors of the industry: some of them had or believed their position to be threatened, as changes brought new opportunities to others categories of agents. In turn, the new distribution of power brings new market relations, which have some effect on the evolution of the institutional framework. The way markets change and the shape they take are therefore at the centre of the evolution of transitional economies. The fact that the sugar industry did not escape the usual price fluctuations of commodities and came to a growth crisis in the 1990s only add justifications to the need of analyzing this evolution of the market structures.

2. The social construction of markets in "transitional economies"

As indicated, the mirage of the "transitional economies" can be theoretically questioned on several grounds. The expression suggests that "a market society in line with existing capitalism is the inevitable outcome of the departures from state socialism" (Cao and Nee, 2002: 5). If "hybrid systems" exist, they are either transitory or unsustainable (*ibid*). This statement is not in line with historical experiences and studies have shown that economic systems, even those usually defined as "capitalists", do not only differ but are also not converging (Hollingsworth and Boyer, 1997). A second and related point is that it remains unclear if the transition period would lead to a "market economy" – as an ideal aim or as a concrete objective that has yet to be defined while, once again, market economies are extremely diverse – or to "capitalism" (which is different from market economy).

The "social construction of markets" offers a possibility to avoid this trap and to analyze the implementation and extension of markets (Coriat and Weinstein, 2005; Powell, 1990; Swedberg, 1994; etc.). The "social construction of markets" not only focuses on "concrete markets" and the importance of their organization on economic performances, but it also provides normative concepts of their emergence and extension. Even though there are theoretical disagreements, since the pioneering article of Granovetter (1985) efforts have been made to unify the analytical framework.⁶ While this theoretical body has not been established with reference to "transitional economies", it does specify the conditions of existence of a market. It is thus possible to see whether these conditions are fulfilled in countries like China while markets are constantly growing – and if they are not, what explains the discrepancy with the theory.

To fully answer this question, a complete literature review of the "social construction of markets" would be necessary. Considering the constraint of space here, I will only base the discussion on Coriat and Weinstein (2005), who, based on existing literature, have arguably provided the most concise analytical framework for the "social construction of markets". In the first stage, the authors acknowledge that exchanges usually do not occur between two insulated individuals, and that markets have a permanent structure with a host of specific institutions and regulations, leaving room for the flow of

information. After this preliminary observation, they proceed in two steps: first, they establish the conditions for market transactions to exist; second, they pinpoint the fact that while transactions are necessary, they are not sufficient to the existence of markets, so that other prerequisites need to be stated.

According to Coriat and Weinstein, for the transactions to occur, three conditions are necessary. 1. a good definition and a general agreement over ownership rights; 2. a mechanism that guarantees the respecting of these rights. In most societies, the state is in control of this mechanism. More importantly, the way these ownership rights are protected (and recognized) is a reflection of the power relations that exist within the market and beyond (which may lead to an "asymmetry of exchange"). The market is like a political device, not the neutral instrument presented in the neoclassical tradition. 3. A good definition over the object that is going to be traded. This definition is also a (social) construction, and requires that the respective rights and obligations of the sellers and buyers are precisely described – which is not always the case – as well as certainty over the quality of the good to be exchanged. For example, uncertainty over quality might in the worst cases prevent the realization of the exchange to occur (Akerlof, 1970).

Second, "market transactions" do not equal "markets", which require repeated and multiple transactions incorporated into a specific institutional framework. "Speaking of a market presumes bringing together a group of transactions held to be similar" (Coriat and Weinstein, 2005: 2). The situation is in reality more complex, because transactions are more and more individualized: "the individualization of transactions and products has become one of the major dimensions of competition" (Coriat and Weinstein, 2005: 2; see also Karpik, 2007). Consequently, the market is unified or even created, by a common set of rules and regulations (or procedures or devices). The construction of the market is social (and political), and the development of the rules and regulations, as well as their stabilization (which Fligstein (2001) has defined as a "field") is also the reflection of power relations among the main actors in that market (these power relations are not only related to economic competition, as suggested by Fligstein, but are political and social as well). In particular, the market needs either a specific location (such as the stock market or the wet market) or either to be unified by complex instruments, institutional devices, etc. that link producers to consumers.⁷

The answer related to whether the conditions of existence of market transactions are fulfilled or not is not simple. In China, there is a certain indetermination concerning property rights, especially in the property/land market. In 2008, a new law was implemented to regulate the legal transfer of the rural land, but it failed to clarify all the uncertainties. And the question of the land ownership is not the only pending issue: intellectual property rights, the respective rights of investors in the case of a private/public joint venture (especially in the countryside), etc. can also be unclear. In fact, it is increasingly difficult to draw a line between the private, the collective and the state sectors (Augustin-Jean, 2000). Second, with its WTO membership, China implemented many new rules and regulations. Nevertheless, these laws and regulations remain somewhat confusing and their enforcement, especially at the local level, is doubtful. Some of these rules are contradictory, while the fairness of others has been put into question. Third, concerns over quality remain the rule. The problems are here manifold, from the development and the enforcement of standards, to the establishment of a food safety law, the implementation of procedures of control, etc. There are considerable difficulties in establishing and enforcing norms and standards that define the product precisely and allow the market to exist. In short, the construction of quality is still on-going for many agro-food markets, and the process is slow, due to the multiplicity of interests at stake.

Nevertheless, China is still developing new markets. The so-called "watershed ecological compensation mechanism" in the Beijing-Hebei region of China is such a market, in which people located downstream are compensating people upstream, even though the rights of the parties are weakly defined (Wang, 2010). Similarly, markets of goods have to deal with these uncertainties. The solution, as pointed out by Granovetter, is to rely on networks, which are somehow stabilizing the markets and reducing risks: the market is not only embedded in networks, without the networks, markets could just not exist. These networks also shape the "architecture of the market" – including the set of rules and regulations that organize the relationships between the market players. With regards to the sugar industry, this is the topic of the last section. Due to space constraints, the development that follows is mainly from the end of the 1990s, when the negotiations of China's entry into the WTO heated up.⁸

3. The emergence of the sugar market in Guangxi and market transactions

3.1. The situation at the beginning of the 1990s

The transformation of Guangxi into a major world producer of sugar was not achieved without pain, and difficulties appeared during the mid-1990s in the form of fluctuations in prices and production (He, 1999). Locally, this was interpreted as a short-term growth crisis (with production increasing more quickly than consumption), and was linked to market deficiencies that could be restored with additional market reforms (ibid.). Nevertheless, the crisis was more severe and was also structural. The lack of mechanization, the small size of the fields, high transportation costs, a backward technology for the mills (even in comparison with Thailand or Mexico – Ma, 2001), and the lack of economies of scales were (and still are) some of the most salient features of an industry that grew up too quickly. These were not mere economic or even organizational problems, but also social ones.

Since the end of the 1970s, the increasing demand for sugar has pushed up the production of sugarcane and prompted the creation of numerous small state-owned sugar mills (which numbered over 110 at the end of the 1990s).⁹ There was an interrelation between the local authorities and the state-owned enterprises (SOEs) on the one hand and farmers on the other hand. The interest of the first group was to maximize the profits for the mills: in the context of decentralization, the local authorities, which were made responsible for their own budgets and could not rely on financial transfer from the Central Government, depended on the profits of the sugar mills.¹⁰ Therefore, both sides had an interest in stimulating production, while at the same time keeping the price of sugarcane, which represents more than 50% of the production costs,¹¹ at its lowest possible level. This system was sustainable as long as farmers could enjoy a limited margin of profit. Social control mechanisms were implanted to ensure that farmers would continue to produce growing quantities of sugarcane and would not shift production to other crops. This was actually a challenge because, at an international price of 9 cents per pound (or 1,587 RMB per ton) which is not uncommon, the local industry is barely competitive.

At the same time, at the beginning of the 1990s, mills were also under pressure in the context of low interna-

tional prices and were operating at a loss. The liberalization of sugar prices in 1991 (while the price of sugarcane remained fixed) increased the pressure on the mills. As the mills were losing money, they could not pay the farmers and issued "white tickets" (i.e. IOUs) to be paid at a later stage. This tension created the conditions for social strife, and the risk of this was especially high, since the problems of the industry were systemic and not short-term.

Therefore, reforms were necessary, but they were complex. For example, it may seem possible for the mills to rely on advanced technologies and to achieve economies of scale. But then, these mills could end up with excess production capacity (cf. below). "Full" liberalization would also push down the price of sugarcane, at least in the short term, and create disturbances that could threaten social order and the survival of the sugar industry – Guangxi's main industry. Reforms had to be carried out in a way that takes into account the market structures and the existing networks within the value chain, where many kinds of actors are locally involved in the sugar business: farmers, as well as workers and managers in nearly 100 sugar mills, management teams at the sugar groups' headquarters, local and provincial authorities, consultants, wholesalers and retailers, and middlemen of all kinds, etc. – in total, about 40 percent of the Guangxi's 48 million people.

In dealing with the situation, the Central Government had many conflicts of interest to negotiate. First, the government needed to protect the interests of farmers, and to find a solution to absorb the "white tickets". Second, it had to restore the profitability of the industry in general and the mills in particular, which was not only a necessary condition to fulfill the first objective, but also a way to guarantee enough revenue to local governments. Lastly, China had also to take into account the pressure from the international community. She was negotiating with her international partners for entry into the WTO, and the sugar industry was only a small slice of her international trade. In short, Beijing felt it necessary to fulfill her partners' wishes and liberalize the sugar industry. But how far could the liberalization go, what were its effects and how did it transform the relationships among agents, especially at the local level?

From the beginning, a full liberalization of the sugar industry was not seen as a practical solution, as China was not in a position to compete efficiently.¹² At best,

full liberalization would lead to a short-term deterioration of the economic and social situation, and perhaps to unrest. Even though consumers would eventually benefit from cheaper prices, there was a danger against the survival of the industry, which had been so fundamental to the provincial economy. For this reason, the provincial authorities wanted to keep control over the industry, especially since sugar was seen by local agents as having been abandoned by Beijing during the WTO negotiations¹³ (sugar is also a powerful element of economic control at the local level).

On the other hand, a certain liberalization was necessary. Enterprises were in need of capital, which could not be injected by the Central or provincial governments. Technological improvements were also needed. Partial privatization was thus seen as a necessary evil, and the creation of enterprise groups was encouraged. Groups were seen as a way to save on costs, create economies of scale, ease the way for the introduction of new technologies, and, in the end, restore profitability. In the short term, they were tasked with absorbing all the remaining "white tickets" and restoring the balance of the local budgets. In a few years, 15 major groups were constituted with the encouragement of the provincial government, including private groups from Guangxi and elsewhere in China, state groups (some listed in the stock exchange), and foreign groups.

These reforms increased the organizational complexity of the sugar industry, as well as the number of categories of agents who interact at the local and provincial levels. While some of these categories of agents are new, they are often composed of former bureaucrats or agents from the state system who previously worked in the industry. In fact, wearing "two hats" (or two functions, usually one in the industry and one in the bureaucracy) was (and is still) not rare, especially among "semi-retired" people. In this period of rapid institutional changes, there is increasing confusion about sorting individuals under predetermined categories. Agents belong to an increasing (and sometimes conflicting) number of groups, which they manipulate. Thus, the modification of the institutional context is not only due to the top down process, but to a reinterpretation of rules at the local level based on renegotiations among agents: the networks of Granovetter are as competitive as they are collaborative. Consequently, there is no evidence that reforms automatically lead to better performances, as they are "manipulated" at the local level by

agents who tend to favour their immediate interest rather than the general and long-term benefit of the market (an adaptation of the "tragedy of the commons" – Hardin, 1968): decisions made by individuals to protect themselves from risks may paradoxically lead to an increase in these risks later on.¹⁴ This can be best illustrated at the local level.

3.2. Reforms and Markets at the Local Level

An urgent task for the governments was to restore the confidence of the farmers, badly hurt by the difficulties encountered during the 1990s. This was partly achieved in two ways. First, the price system remained unchanged, with sugarcane prices fixed by the provincial authorities. This measure aimed to guarantee and index farmers' profits to the prosperity of the industry.¹⁵ When the market price of sugar increases, the minimum price of sugarcane automatically follows. The result of this system has been to integrate farmers more deeply into the organization of the production (which was seen as indispensable to stimulate their zeal for growing sugarcane); however, in an industry in which the cost of the sugarcane exceeds 50% of the production cost, it has the disadvantage of suppressing an element of flexibility for the mills.

The second means was partial privatization. Some mills were sold to private groups, which were able to repay the IOUs to the farmers. Further mechanisms guaranteed swift payments to the farmers for their sugarcane (payments had to be made no later than two weeks after the sugarcane was delivered to the mills). Nevertheless, these measures only displaced the problem: the long-term survival of the industry goes hand-in-hand with its level of profitability. Private or not, groups cannot inject money continuously. This is a difficult matter because of the serious fluctuations of sugar prices nationally and internationally, and because the mills cannot adjust according to the prices of their inputs (sugarcane, labor, energy, etc.).

Extra mechanisms were therefore added. For example, one of the functions of the state sugar reserve was to create a partial buffer for mills against the international price instability. Yet, the reserve has merely been an element of macroeconomic control, as it cannot by itself guarantee the profitability of the industry. It has to be complemented with measures at the micro level of the firms.

Therefore, it was rational for firms to rely on economies of scale to lower their fixed costs and expand their production bases, and this decision was supported by the provincial government. This was partly accompanied by technological upgrade, and indeed, the average daily pressing capacity of sugar mills increased from 2,400 tons at the end of the 1990s (Ma, 2001) to over 4,000 tons by 2004.¹⁶ Even before their adverse effects were known, these measures seemed necessary, but far from sufficient, to boost the productivity of the industry and to allow it to compete at an international level. As Kaplinsky notes:

In the context of the value chain, "when threatened by competition, there are four directions in which *economic actors* can move; these paths are not mutually exclusive:

- Increasing the efficiency of internal operations such that these are better than those of rivals
- Inter-firms linkages can be enhanced to a greater degree than that achieved by competitors
- Introducing new products or improving old products faster than rivals
- Changing the mix of activities conducted within the firm or moving the locus of activities to different links in the chain (...)" (Kaplinsky, 2000: 31).

The third point is difficult to fulfill in the current situation, while the last one is under consideration and its results are far from guaranteed.¹⁷ Therefore, changes have been mainly concentrated in first and second categories, which are "unlikely to realize a greater share of value chain returns" (*ibid.*). The second point (the constitution of groups) has already been scrutinized above.

Concerning the first point, economies of scale and technological improvements have consequences that are far beyond the abilities of simple technological change to encompass the overall local economic and social organization. With economies of scale, an increased supply of sugarcane for the mills is necessary, which can only be obtained by increasing the production of sugarcane and/or by buying them from more distant locations. Both methods come with potential problems.

Under the current cultivation methods, peasants find it difficult to increase their production enough to feed the

mills,¹⁸ whose daily pressing capacity had sometimes been multiplied fourfold.¹⁹ In order to stimulate their enthusiasm, and to prevent possible unrest, mill managers and local cadres are dispatched to the countryside. Some farmers have also been recruited by both parties during the year to organize the production (from seed distribution to harvesting and transportation to the mills) and to report on the general situation. This practice is facilitated by the fact that the brigades and teams of the Maoist period, which were formally dismantled in the 1980s, still informally exist, at least in some areas.²⁰

Despite these mechanisms, the production of sugarcane is far from enough to fulfill the requirements of the mills.²¹ The other solution is to buy sugarcane from more distant locations, but this is curbed by competition and institutional constraints. More precisely, mills are administratively forced to acquire their sugarcane from specified zones so that each one can secure a minimum amount of sugarcane for its operations. This policy is in direct contradiction with the economies of scale that should go with a reduction of the number of mills. The provincial authorities push for this rationalization, but with limited success. At the local level, the loss of a sugar mill entails lower revenues for the local government, and hence a greater difficulty for it to meet its expenses and a greater risk of social instability.

Consequently a "sugarcane war" has developed. The provincial regulation that peasants are only authorized to sell their sugarcane to a specified mill from which they receive inputs (seeds, fertilizer, etc.) is enforced by the police. Mills also have computerized mechanisms by which they control each field under their supervision (which is especially useful for coordinating the harvesting and the collection of the sugarcane). Despite these measures, which are hardly in line with the principle of a liberal economy, the problem intensified during the 2005/2006 pressing season due to the high price of sugar and therefore the high expected profits. Local governments put in place a coordinated cell, which included representatives from all bodies directly and indirectly concerned with the management of the pressing season (i.e. the sugar bureau, the tax office, the agricultural bureau, the police, etc.). Nevertheless, all these measures did not deter mills and farmers from "smuggling" sugarcane from one district to another.

The above pattern showed how the relaxation measures, like privatization and the determination of the price of

sugar by the market, did not lead to real market liberalization, but rather to a reinforcement of governmental control. Many interests worked to jeopardize this supposed liberalization – which could eventually lead to the death of the industry. The interaction of these different interests explains the current shape of this industry.

For example, the alliance between local authorities and mill managers is still strong, but it has been eroded by partial privatization and by the relationship of the mills with their headquarters. On the other hand, local authorities remain at the centre of the system, as they control rare resources and the population to a certain extent. Nevertheless, this population is still better off than before, thanks to the profits generated by the industry and because it can resort to "voice" or "exit," two options that are feared by the mills and local authorities. In this situation, the social order remains precarious. Even in the context of growth, the future is still uncertain.

Most interestingly, this evolution shows how a reform of the system influenced by a neoclassical paradigm could not be fully implemented. The existing conditions at the local level forced a compromise that led to increased uncertainty. In other words, the measures taken by the agents in order to protect them against this uncertainty ended up increasing it. This situation can be understood only by focusing on the networks between the agents in a systemic way. The multiplication of agents' categories, such as the local authorities, farmers, team leaders, the police, truck drivers, the private sector (or, more precisely, mill managers),²² etc. inflates the networks and helps us understand the shape of the markets.

Conclusion

In this article, it has been shown how the Chinese Government has been pushed to liberalize the sugar industry. This liberalization included the introduction of foreign capital, a certain level of privatization, the lowering of import taxes and duties, and moving into the stock market. The analysis demonstrated that these measures fell short of fulfilling their claimed objectives, due to existing social and economic constraints.

For example, the price liberalization could not be complete, and some mechanisms were introduced in order to link the profits of farmers to those of the sugar mills. It has been shown that the consequences have increased

social tension and the development of a "sugarcane war". There is thus an inherent contradiction in this industry which is under restructuring. As noticed by Kaplinsky, a value chain is a locus for power. With the current restructuring, this search for increased power from the main agents is especially visible, even though it remains difficult to determine which category (or categories) will be the leader(s) of the chain in the future. Many agents have to be included in the analysis – farmers, local authorities, managers, as well as agents who did not appear in the context of this paper, such as shareholders, wholesalers, etc. As a result, despite the huge increase in production, the future of the industry remains unclear, and will depend on future reforms.

In the context of transitional economies, the introduction of liberalization reforms has some interesting effects, since it might also mean a reinforcement of the control of the local government on the industry. In addition, the analysis from economic sociology helps determine the shape of the market. In China, the conditions of well-defined property rights, the respect of these rights and qualities are not present, and they impose a development of the market based on relationships of proximity and networks. More importantly, the type of exchanges – for example, in the case of the sugar industry, the triangular relations between farmers, bureaucrats and the mills' managers – are determined by a path dependency from the Maoist era. More research should be done at the provincial and city level to fully understand how the position of the agents before and after the reform helps shape this specific organization and how likely it will evolve in the future, but it is already clear that the organization of the sugar industry, is indeed in a transitional phase, even though the final outcome is not known. This should call for additional research related to the "social construction of markets" in the context of "transitional economies".

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Endnotes

1The notion of "hybrid forms of organizations", between "markets" and "hierarchy" which is now widely accepted, has been developed by economists and sociologists alike, following the pioneering research of Granovetter and Williamson (both in 1985). For the sociologist tradition, cf. for example, Powell (1990); for the economic views, cf. the debate on industrial districts and the Third Italy (e.g. Brusco). For an application to China, cf. Louis Augustin-Jean, 2000, 2006.

2In this article, the word China exclusively refers to the People's Republic of China (the PRC). It does not include the economies of Hong Kong, Macau, and Taiwan, which are separate economic entities.

3Cf. *Guangxi tongzhi: tangye zhi* (Almanach of Guangxi: the sugar industry), 1998.

4In 2004, the GDP per head of Guangxi was only 7,196 yuan (or just over 700 euros). Cf. *China Statistical Yearbook*, 2005, p. 61.

5China's external trade of sugar varies greatly, but in recent years, imports exceeded exports by about one million tons. As we will see in the third section of this article, the huge price volatility greatly affects the profitability of the industry.

6Cf. for example, the literature review of Fligstein, 2001. More recent research related to the sociology of markets can be found in Steiner and Vatin, 2009.

7For the organization of "physical markets", cf. the classic study of Geertz in Morocco, and, more recently, the stimulating study of Abolafia on the New York Stock Exchange (1996). For China, only a few articles are concerned with such research, the most complete overview being the special issue coordinated by Isabelle Thireau, *Le retour du marchand dans la Chine rurale*, *Etudes Rurales*, 161-162, 2001.

8While there are only few analyses related to market structures in China, many studies are devoted to the evolution of the institutional background, especially in the 1980s and 1990s. For an overview of the reform process in China, cf. for example, Xu, 2009.

9Gu, 2000; Jiang, 2001.

10In some districts surveyed by the author; more than 50% of the district's income comes from tax paid by the sugar mills.

1151% of the final price of sugar in 2005 and nearly 55% in 2006, to which transportation costs and depreciation has to be added. The remaining parts are processing (including wages and financial charges), tax and profits (around 15%). These data were provided by the government of Guangxi.

12For example, the export subsidies of the European Union were considered dumping by a panel of the WTO in 2005. Subsequently, as well as for other reasons that are beyond the scope of this article, the EU has started implementing a deep reform on its sugar industry (Le Monde, 24th November 2005).

13 This grievance was voiced by nearly all agents (scholars to civil servant, consultants, factory managers, etc.) I met during my fieldwork from 2004 to 2006.

14 The implicit assimilation of the market as a common good favours this interpretation, as participants may not share the feeling that the market is a common good that needs to be protected (as opposed to a natural resource, for example).

15 The success of this measure is partial, and sporadic social troubles still occur. Many reasons are put forward: expropriations by the local authorities, corruption, constraints linked to the business practices, etc. Nevertheless, farmers seem now regularly paid, which removes an important source of protest (interviews at the local level with farmers, local cadres and factories' managers, February and August 2005 and March 2006). Other reasons for protest will be detailed below.

16 This is still low compared to international practices, but the number of mills with a daily pressing capacity of over 10,000 tons is increasing.

17 Ethanol, paper and fertilizer are by-products of the cane sugar industry. Their production is polluting, and subject to intense competitions. In the current situation of high international oil prices, the provincial government is pushing for the production of ethanol, copying the Brazilian experience (interviews with the provincial agricultural bureau, March 2006).

18 The yields are about 67 tons of canes per hectare, and the sugar content is about 13 to 14 percent. In Brazil, the yields were 68.3 tons of cane per hectare in the season 2005/2006, and were expected to recover their previous level of 70 t/ha in 2006/2007 (Gain, 2006). This shows that yields increases may be possible, but are relatively limited.

19 From 2,500 or 3,000 tons per day to over 10,000 tons.

20 The role of the "former" team leaders remains important (Wei, 2006). It is remarkable that the system and the solutions adopted are similar to the practices during the collectivization era. The main changes are that farmers are not forced anymore to produce certain goods, only "strongly encouraged" to do so, and they produce economic crops instead of rice. They also get more financial rewards from their work, which is an important element for stability (Wei, 2006).

21 The mills operate at only 70% of their full capacity (interviews with cadres of the provincial and local governments, as well as with mills' managers, August 2006).

22 Many managers are former cadres from local governments. The links that exist between these two pillars of authority explain their coordination of action, and provide a stabilizing element to the system. The place lacks to develop this argument further.

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