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AGRICULTURAL TRADE LIBERALISATION AND RURAL POVERTY: BRAZIL AND CHINA COMPARED

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Introduction

The aim of this paper is to analyse, using a comparative perspective, the impact that agricultural trade liberalisation has on rural poverty by comparing two large economies with sizeable rural populations, namely Brazil and China, which both have undergone an important process of reform, and belong to the major emerging economies in the world. The paper focuses on, firstly, the development strategy adopted in the two economies before opening up to external trade (and domestic market), and secondly, the way in which agricultural trade liberalisation took place in the two cases and the degree to which it had an impact on rural poverty.

Many factors make the idea of a comparative analysis of the agricultural trade liberalisation process in Brazil and China an interesting prospect - from an academic as well as a policy-oriented point of view. Both are characterised by a large domestic market which enabled, under different conditions and at a different moment in history, the successful application of the ISI model. In both countries, agricultural (and, more generally, rural) sectors directly and indirectly play a key role in national economic growth and development. In the past few decades, both were faced with two central challenges -economic growth with poverty reduction, in which poverty is principally a rural phenomenon. Both maintained a closed and protected economy for a long time; both faced in a similar period (Brazil in the late 1980s, China in the mid-1990s and strongly in 2001 following entry into the WTO) but under different conditions - a new challenge represented by entry into the international market and the greater openness of the domestic market. Finally, in both cases, there is a concern that liberalisation is negatively affecting rural sellers who depend solely on agricultural produce, and that it might cause rural poverty trends to worsen.

There is growing evidence (and particularly taking into account Latin America's openness experienced during the 1980s) that hasty and illplanned liberalisation, without appropriate flanking measures, can damage the livelihoods of poor people in developing countries, by slowing down and even compromising a sustainable development process. Considering our case studies, it should be noted that Brazil and China moved towards a liberalised agricultural market – internally and externally - following a different development strategy path, which created distinct initial entry conditions. We believe that the path of the development strategy which anticipated the adoption of a more open economy and entry into the WTO strongly influences the way in which agricultural trade liberalisation affects rural society and the rural poverty trend, allowing –in the Chinese rural context– a better mitigation of the human costs of the liberalisation process than in the Brazilian case.

We also believe that behind the two development strategies we will be analysing, the State plays a clearly identifiable, different role. In particular, the Chinese experience from the initial phase of reform (1978) until the present demonstrates that between strong state interventionism and what Susan Strange (1996) called in a famous book "The Retreat of the State" there is a viable middle point: the State could be less interventionist, maintaining "...a more indirect, albeit activist, public role with regard to this (agricultural) important sector" (Spoor, 2000: 6).

These brief but central considerations give us the opportunity to put into perspective a comparative analysis of the (agricultural) trade liberalisation in Brazil and China that has been taking place and to compare them. They also enable us to reflect on the academic debate between neo-liberal ideas, on one hand, and those originating from neo-institutionalism and even neo-structuralism on the other; between the so called "minimal-state" and the opportunity of a "proper interventionism", and questioning whether openness is, by definition, good for the (rural) poor.

The paper is organised as follows: after this introduction, Chapter 2 reviews the fundaments of the development strategies in Brazil and China from the 1970s until the late 1980s. The purpose of this section is to underline particularly two key arguments. First, the Chinese agricultural

(and rural) sector benefited from a long-term pragmatic development strategy, which started with pro-poor agricultural reforms (price and market reform) in 1978, producing in a few years a dramatic reduction in absolute rural poverty, a notable improvement in rural households' livelihoods, and, in the long term, constant economic growth. With the exception of the second phase of reform (1984-1989), China achieved a relatively constant reduction in rural poverty. Meanwhile, in the Brazilian case, the lack of a long-term, constant, clear development strategy is reflected on the unstable trend of growth and poverty indicators. This lack of strategy was a consequence of both internal factors (such as financial crises, macroeconomic and political instability and historical structural problems - like inequality - which seriously jeopardise the success of any kind of development strategy that does not take this into consideration) and external ones (such as the political conditions imposed, by the IMF in 1982-83 and, particularly, in 1987, following the Washington Consensus). We also believe that the *quality, level* and *direction* of public spending in the agrarian and rural sector during the whole period studied played an important role when it comes to determining why rural China benefited from a long-term pragmatic development strategy and Brazil did not.

Secondly, both countries adopted a "price discrimination policy" against agricultural products: Brazil did this during the ISI period (1970s) and also until the mid-1980s; China did so strongly during the collective system period (1952-1977) and, under different conditions and combined with productivity and social policies, after the start of a new wave of agrarian reform (1978>). Furthermore, China continued to emply a mixed price discrimination policy, even in recent years and despite the country's entry into the WTO, while continuing to show very high rates of growth¹. Both achieved important goals, in terms of agricultural growth and rural poverty reduction.

1. See IDB, 2005.

Particularly in the case of Brazil (and, in general, in the case of Latin American countries), this pricing policy model has been strongly criticised in academic literature as well as by the IFIs, and has often been blamed for causing reduced growth and poor export performance². We argue that in the case of Brazil (and also, partly, that of China) there is insufficient evidence of bad agricultural performance under the price discrimination policy period. Furthermore, both achieved important goals at that time in terms of rural poverty reduction, since price discrimination was combined with a package of support measures such as public investment, agricultural services, subsidies and a rural loan system. In the case of China, following the price and market reform (which took place in 1978), the government did not give up its policy of "price correction"; it was, to be more precise, a "reorganisation" of the State's role in the agricultural price and market system (during the first phase of the reform -1978-1984- the household production responsibility system and the "two-tier" pricing system were introduced). This means that the poor performance of the Chinese agrarian sector in the 1970s was not simply the result of a price discrimination policy but of bad policy combination as a whole. This also means that one of the central arguments utilised by supporters of trade liberalisation against protectionism and State interventionism -the "price discrimination" argument (such as given in Schiff and Valdez, 1991)- is only partly relevant in the cases of Brazil and China.

Chapter 3 analyses the decade of the 1990s, and focuses on the way agricultural trade liberalisation took place in each case. In Brazil, this

^{2.} See Krueger, A.O., M.Schiff, A.Valdés (1991). *The political Economy of Agricultural Pricing Policy*. World Bank/Johns Hopkins University Press, Vol I: Latin America.

came about as part of the Structural Adjustment Deal, which was signed with the International Monetary Fund and the World Bank in 1988; in China, meanwhile, it was part of a domestic process of reform. China only became a member of the WTO in 2001, though it had -in anticipation of its upcoming membership- already begun implementation (starting in the mid-1990s) of a number of measures to restructure and liberalise its agricultural trade. We consider that an analysis of "how and what" was reformed -in each case and using a comparative perspective- is also useful in order to explain what impact agricultural trade liberalisation has had on rural poverty, in both Brazil and China. Not only have the reforms implemented in each case in order to move towards an open market economy been dissimilar, but also the degree of openness achieved is substantially different. China's liberalisation process has been gradual and it has not yet been completed. In contrast, in the Brazilian case the process has been extremely quick. In just a few years Brazil, the country that maintained the highest protectionist level within the Southern Cone (and for longer than the other Latin American countries) became a substantially liberalised economy.

Chapter 4 provides a picture of the rural social structure and poverty trends in both countries during the entire period of analysis (from the 1970s until recently). While Chapter 2 and 3 essentially adopt a macroeconomic approach, the aim of the fourth chapter is to focus in a very direct way on the people working in and around the agricultural sector; that is, in the Brazilian and Chinese rural society.

We will provide a multidimensional description of the initial conditions of inequality within each country, focusing on, firstly, the relation between growth, inequality and poverty; secondly, on the way in which inequality affects a rural society's ability to take advantage of the benefits of greater openness; and thirdly, on the effect of greater openness on inequality.

The second part of Chapter 4 analyses changes in the rural labour market and their implication for the livelihood of rural households.

The emergence and dramatic growth of the rural non-farming sector played a key role in development and poverty reduction in the Chinese rural sector, as it provided farming households with an additional source of income, as well as mitigating income fluctuations through a diversification of the risks intrinsic in agricultural farming activity (due, for example, to natural disasters or unfavourable atmospheric conditions) and improving their living standards (Anderson et al, 2004; Janvry et al, 2005).

We will also analyse the main arguments that explain why the rural non-farming sector —and the rural labour market— developed more in China than in Brazil; these include —access to rural credit, rural human capital development, the immigration argument and rural public investment.

In summary, we believe that, from a comparative perspective, China seems to be more able than Brazil to mitigate the human costs of agricultural trade liberalisation and even to make better use of the potential benefits.

However, in China, the weaker members of the rural society –mainly the small farmers– are being penalised by recent policies adopted by China in order to meet WTO commitments. Principally, the decline of public spending in the agricultural and rural sector and the convergence between part of agricultural domestic prices and international ones are negatively impacting on farm income levels (in the event that no additional income from rural industry is available).

The paper concludes by stressing that compensating measures to protect the most marginalized rural groups are needed, particularly in Brazil but also in China, and the State has to play a central role, by promoting social policies and stimulating competitive production by small farmers, who are now being faced with great difficulties.

The Fundamentals of Development Strategies in Brazil and China

In the 1960s, it would have been hard to predict the rapid development that China experienced in later decades. Instead, Latin America, which was performing particularly well in terms of both growth and poverty reduction, was attracting the attention of development economists: it seemed as if the region had found the right track to growth and development. The area experienced a dramatic economically dynamic phase and sustained growth under the ISI (*Import Substitution Industrialisation*) policy regime, a development model promoted by ECLAC in the early 1950s and continued until the late 1970s (and longer in some cases - such as that of Brazil). The model was based on a number of key founding elements: the protection of domestic markets against competing imported commodities, using tariff barriers and quantitative restrictions in trade (such as import quotas for industrial goods) in order to protect infant industries, and the promotion of domestic capital accumulation and labour productivity.

Within the Latin American region, Brazil, with an average annual rate of 9% for the industrial sector and 5% for agriculture (Brandao and Carvalho, 1991) was one of the "lead countries". It seemed at that time that Brazil - and the whole Latin American region - could be used as a model for the rest of the developing countries.

Actually, the development strategy adopted in China after the Reform initiated by Deng Xiaoping (1978>) shares, in many respects, the main characteristics of the Brazilian ISI period, albeit with several specific differences:

– In Brazil, the ISI model maintained a fairly stable structure during the entire period that it was employed (1950s-mid-1980s): protectionism combined with relatively free trade in imported inputs. Meanwhile, in China, the model underwent gradual changes.

The following timescale could be presented. 1) Before the 1978 agricultural reform, protectionism was absolute. Furthermore, not only the external agricultural market was closed but also the internal one. 2) During the first and second phases of agricultural reform (1979-1984/1984-1989) a partial internal openness took place. 3) Finally, in the 1990s, and following the example of its successful neighbours, China adopted a mixed model that combined protectionism of its Import substitution policy with an Export Oriented strategy.

- In both cases, the government played a central role within the policy regime. Government institutional capacity could have an affect on internal private power structure, and one of the factors that explains power distribution is the way in which productivity assets (such as land) are allocated. With regard to this factor, there are substantial differences between Brazil and China that are worth examining. Brazil's economy has been dominated for centuries by small elites who control vast tracts of land for large-scale agricultural production, with a latifundio-style logic. In the Chinese case, land was being confiscated by the government without any compensation, and freely allocated to peasant farmers following the 1949 revolution. This different land distribution favoured, in the Brazilian case, a tendency towards a vertical, private power structure, while in the Chinese case, power was more horizontally distributed. According to this argument, we believe that China's institutional capacity was less dependent on any highly-concentrated private interest group, while in the Brazilian context, power plays between a few dominant interest groups "captured" public interests more easily in favour of private and specific interests. We also consider that this factor affected the way the ISI model has been implemented in each case.

In any case, in both cases, the element of the ISI model that most directly touched upon the agricultural (and rural) sector and the

livelihood of the people working in and around the sector was the socalled "price discrimination policy" against agriculture.

Particularly in the case of Brazil (and, in general, in the case of most Latin American countries), this strategic path of the ISI model has been strongly criticised in academic literature as well as by the IFIs (International Financial Institutes), and has often been blamed for causing reduced growth and poor export performance³. We argue that in the cases of Brazil and China, insufficient evidence exists of poor agricultural performance under the price discrimination policy period. Furthermore, both countries achieved at that time important goals in terms of rural poverty reduction because of compensative policies promoted by central and regional governments.

The Agricultural Pricing Policy in Brazil and China

The Brazilian agrarian pricing policy maintained a fairly constant line of action from the 1950s onwards, when it was adopted as the central instrument of the ISI development model, and until the early 1980s. The aim was to produce cheap food and cheap raw materials for the domestic industrial sector in order to stimulate the process of industrialisation and urban development. This was done by giving agricultural products an fixed price (decided by the state procurement agency), which led to the taxation of the agricultural sector and, at the same time, in an implicit way, depressing exports through quantitative restrictions, export taxes and overvalued exchange rates.

This evidently worsened the domestic terms of trade (agriculture/indus try) in favour of urban consumers and the industrial sector.

3. See Krueger, A.O., M.Schiff, A.Valdés (1991). The political Economy of Agricultural Pricing Policy. World Bank/Johns Hopkins University Press, Vol I: Latin America.

In any case, during the three decades that have been studied, many policy instruments -particularly production-oriented policy, but also social programmes- have been used in order to compensate the unfavourable effect of the price discrimination policy on the agrarian sector and on the agrarian society. The 1950s was a decade marked by large public investment in rural infrastructure (mainly roads, but also investments to increase storage capacity). A more comprehensive agricultural policy was introduced in the 1970s and new compensatory instruments were adopted, such as minimum prices for the farmers, rural credit systems, incentives to use fertilisers, a rural extension service and agricultural research. Brandao and Carvalho (1991) analysed the effects of the Brazilian Agricultural Pricing Policy as a whole -price discrimination against agricultural products, though also compensative policies, on the other hand- and concluded that insufficient evidence exists of a net resources transfer from the agricultural sector to the industrial sector during the ISI period. Furthermore, taking into account the rural credit policy within the compensative policy, the authors highlight a positive transfer to the agricultural sector.

In the Chinese case, agricultural pricing policy worked in a different way. At first, before the 1980s agrarian reform, the Chinese countryside was characterised by economic autarky and a traditional economy. The industrial sector was the priority, and farmers were heavily taxed, which meant that an enormous agricultural surplus could be transferred to industrial investments. The socialist planning system kept farmers' real income artificially low by "over-pricing" manufactured products at the same time as "squeezing" agricultural prices (Janvry et al, 2005).

With respect to compensatory policy, China's investment in the agricultural sector has experienced many ups and downs over the last several decades. Particularly, before the agrarian reform, government spending in rural areas was principally centred on research and irrigation systems, while there was no significant investment in social policies such as education, and rural infrastructure (Fan et al, 2002).

Farmers had no insurance of any kind that could be compared to the "minimum price policy" adopted in Brazil, and productivity compensatory policy before the agrarian reform was limited, and focused on areas that impacted positively - mainly in the long run - on agricultural growth and farmers' livelihoods. Price discrimination against agricultural products was particularly strong (and the agricultural procurement price particularly low) and in fact, in the Chinese case, before the reform a net resources transfer existed from the agrarian sector to the industrial one, which was reflected on the poor performance of the sector. An estimated 30 million people died of starvation during the Great Famine (1959-1961), one of the largest-scale human tragedies in history.

In the early 1960s, under Zhu's government, these policies began to change and the collective system started to be slowly dismantled.

However, after the 1978 agrarian reform, the Chinese government did not give up its policy of "price correction", nor did it liberalise the agricultural pricing system. It was, to be more precise, a "reorganisation" of the State's role in the agricultural price and market system. During the first phase of the reform (1978-1984), procurement prices and subsidies for agricultural products were raised, procurement quotas were reduced and the so-called "household production responsibility system" was introduced. Under this system, farmers were free to make production decisions based on market prices, as long they fulfilled government procurement quotas at procurement prices. The main result was a dramatic increase in rural income. During that period, China achieved an impressive agricultural growth rate and the most dramatic reduction in rural poverty: according to the World Bank web-database, rural poverty dropped from 33% in 1978 (that is, 260 million residents in rural China) to 11% in 1984 (85 million residents in rural China).

Agrarian pricing policy could affect the rural poverty trend in both direct and indirect ways: directly, by affecting rural income, particularly

in the case of rural producers who depend solely on agricultural sales, and indirectly, by affecting the GDP and its growth trend (functioning, for instance, like a pro-productivity instrument). From the latter point of view, it is often assumed in the economic literature that economic growth could be a powerful instrument for poverty reduction, though it does not explain all the variation in poverty. In fact, a concern exists that in order to be pro-poor, growth needs to take place specifically in sectors in which poverty is concentrated, and that poverty-elasticity of growth is conditional on initial equal conditions, in terms of both productivity assets and income distribution (Cornia, 2003; World Bank, 2001; McKinley, 2001; Spoor, 2004).

As can be seen in tables 1.A and 1.B, both Brazil and China experienced enormous growth in terms of both gross domestic product and the agricultural sector during the period of price discrimination. In the case of Brazil, it is quite interesting to stress that the agricultural sector also did reasonably well when the national GDP did not - 1980-85/1985-1990⁴. Furthermore, both countries achieved a dramatic reduction in rural poverty between the 1970s and the 1980s. Brazil succeeded in reducing rural poverty from 78.6 % to 45.6 % between 1970 and 1980 (UFRGS, 2003) and China from 33 % to 11 % between 1978 and 1984 (IFPRI, 2000).

Table 1A. Annual growth rates (%) of national economy and agriculture sector Brazil (1970-2004)

Growth rates	1970-5	1975-80	1980-5	1985-90	1990-5	1995-00	2000-04
GDP (%)	10.2	6.9	2.6	2.9	2.0	2.5	2.6
Agr. GDP (%)	4.4	5.4	4.8	2.7	1.9	3.0	4.6

Source: Instituto Brasileiro de Geografia e Estatística, Sistema de Contas Nacionais (IBGE/SCN Anual)

^{4.} See Spoor, 2002.

Table 1B. Annual growth rates (%) of national economy and agriculture sector China (1970-2000)

Growth rates	1970-78 (pre-reform)	1979-84	1985-95	1996-2000
GDP (%)	4.9	8.8	9.7	7.9
Agr.GDP (%)	2.7	7.1	4.0	3.4

Source: Adapted from Zhang (2003), table 2.

The second phase of reform in China provides an example of a badly-managed price intervention. Between 1985 and 1989, the government cut the above-quota procurement price for grain. Meanwhile, input prices increased much faster than the government's output procurement prices, thereby raising production costs. The result was a slowdown of the rapid output growth of the previous five years, and a worsening to the rural poverty reduction trend (Fan et al, 2002)

Some observations can be made:

- It is quite evident that one of the central arguments utilised by supporters of trade liberalisation against protectionism and State interventionism focusing on "price discrimination" (such as Schiff and Valdez, 1991) is only partly relevant in the cases of Brazil and China. Agricultural pricing policy implemented before the opening of these economies has had largely positive effects in both cases on both sectorial (agriculture) and national levels.
- Both cases show that price discrimination policy could result in good allocation of resources, as long as it was complemented with compensatory policies. However, during some periods (as could be seen in the case of China), the balance was negative, to the detriment of the rural population. The case of China highlights both the opportunities and the risks present with a discriminative policy.

In addition, considering the more recent decade of the 1990s, some observations can be made on agricultural pricing policy in a comparative historical perspective:

- Brazil commenced a liberalisation process in the earlier 1990s, with its entry into MERCOSUL (also known as MERCOSUR or the Southern Cone Common Market) in 1991 and, even more strongly, its entry into the WTO in 1995. It was expected that openness could stimulate growth, particularly with respect to the agricultural sector. Instead, on both national and sectorial levels, growth rates seem to be no higher (and, in the first period after liberalisation, even lower) than under the ISI policy regime (see table 1.A). The neo-liberal policies introduced within the structural adjustment framework did not perform better than previous policies.
- China continued to employ a mixed price discrimination policy, even in recent years and despite the country's entry in the WTO, and it continues to show very high growth rates (IDB, 2005). This suggests that State interventionism in the market and the price system can be a useful instrument not only for the distribution of resources between sectors, but also within the agricultural sector, by preserving production considered critical for the national food security, protecting the livelihoods of specifically-needed groups of farmers and promoting a more equal growth within the agricultural sector.

Public Spending in the Brazilian and Chinese Rural Sectors: the Role of the State

No-one would dispute the fact that public spending and investment play a key role in stimulating growth. However, from an economic development perspective, growth is not the final purpose; growth matters as an instrument to reduce poverty, yet, as many studies point out, growth does not necessarily generate a reduction in poverty trends. Furthermore, when it happens, a comparative analysis of many developing countries cases showed clearly that poverty elasticity of growth is not a constant factor, neither between countries nor within a country, if many periods are taken into account⁵.

This suggests, firstly, that a growth strategy is not the only viable possibility for reducing poverty. For instance, when poverty goes hand in hand with inequality, it is likely that redistributive policies will work as an anti-poverty instrument in the absence of growth. And secondly, many factors affect growth's capacity to be "pro-poor" - factor such as the initial unequal conditions and the *direction* or *quality* of public spending.

A pro-poor growth strategy could be defined, in generic terms, as one that stimulates growth and development in a sector in which the poor are concentrated, enabling them to take part in growth generation and, consequently, to benefit more from it. So, if poverty is mainly a rural problem, a pro-poor economic development policy is at least partly based on investment into agriculturally-based growth.

During the past few decades (albeit with important exceptions), both Brazil and China have adopted an economic development approach which, in general terms, corresponds to our generic definition of propoor growth strategy.

While analysing public rural spending trends in China in different areas (R&D, irrigation, education and infrastructures) from the 1960s (and even the 1950s) until the late 1990s, the logic behind the trend is quite clear, and consequently, the strategy chosen; it is harder to find the logic behind the unstable trend of Brazilian public spending in rural areas. That is, it seems that behind the Chinese trend there was a long-term agricultural strategy, implemented in a pragmatic way, while the Brazilian one has been more fragmented.

^{5.} See *World Development Report 2001-2002*; Chapter 3 "Growth, Inequality and Poverty".

Between 1953 and 1978, the priority for Chinese public spending in rural areas was on R&D and irrigation (productivity promotion). Between 1979 and 1989, while the R&D spending annual growth rate is lower (though fairly constant in absolute terms) and that of irrigation spending is even negative, public spending on rural infrastructure increased substantially and continued growing during the 1990s. Furthermore, public spending on rural education has been characterised by a fairly constant growth trend, except in the period of the Cultural revolution (1976-1986); this was a destructive time for Chinese society in general and its education in particular. The education infrastructure was decimated as a result of the revolutionary struggle (see table 2).

Table 2. Public spending in rural China, 1953-97 (millions of 1990 Yuan)

		_			
Year	R&D	Irrigation	Education	Roads	Communication
1955	55	530	2,490	224	26
1960	770	5,291	6,314	510	193
1965	584	2,520	4,405	424	110
1970	657	3,416	3,060	537	156
1975	883	5,859	6,944	572	278
1980	1,295	7,457	10,660	693	237
1985	1,764	5,183	19,025	1,253	457
1990	1,625	7,164	25,006	2,559	4,968
1995	2,267	15,417	34,139	5,673	7,795
1997	2,170	23,415	41,024	10,700	9,350

Source: adapted from Fan, Zhang, Zhang (2002: table 3.1)

The Chinese rural spending trend shows in the first period (1953-1978) a clear demand for a better agricultural productivity: as China is a country with a scarcity of arable land, it is quite logical that this should be its first step. Meanwhile, irrigation was another sensitive problem for the agricultural sector that could not wait. These initial interventions were fundamental in order to facilitate the successful application of a more technological productivity policy which would be implemented later.

Regarding rural social policy, spending grew in a fairly constant way (except during the Cultural Revolution), though during the first phase of reform it was better channelled through the "nine-year compulsory schooling education policy", which meant that all children were required to attend school for at least nine years to finish both primary and junior middle school. The policy significantly increased the efficiency of public spending on rural illiteracy rate trend, resulting in a reduction of illiteracy among agricultural labourers over the long term from 27.9 % (1985) to 10.1 % (1997) (IFPRI, 2002: table 3.2) .

In order to analyse Brazilian rural public spending trends and to understand their strategic line, we will base our observations on a detailed study of the issue by Gasques (FAO, 2001) and another by Oliveira (IPEA/CEPAL, 1998). Both provide us with Official Data of Brazilian Agencies.

According to the databases consulted, Brazilian public spending in rural areas dropped significantly in the 1990s compared to the 1980s and the 1970s. To put this in striking perspective, between 1996 and 2000, public spending on rural areas represented 53.7% of spending in 1988.

Focusing particularly on rural social expenditure trends for the 1980s and 1990s, we can adopt (according to Oliveira [1998]) the following timescale:

- -1982/84. Strong reduction of social public spending and decentralisation from the federal government to the municipality, due to the financial crisis and disequilibrium of the public budget. The cuts were substantial in many sensitive areas, such as education (-19%), health (-12.4%) and the social provisioning system (-20.2%).
- 1985-89. This was the period called the "Nova Republica". The military dictatorship was at an end (1985/86) and a gradual redemocratisation took place, which culminated in the Constitution (1988). Social spending experienced a dramatic recovery, thanks to a better national economic situation and also to the success of the fiscal

programme *Plano Cruzado* which improved the public budget: education (+30%), health (+75%), social welfare (+72%), social system (+33%) and labour policies (+520%). However, while social spending increased, rural credits were squeezed significantly in 1987.

- 1990-93. Social spending declined again under restrictive fiscal policy implemented by the IMF within the framework of the Washington Consensus in order to contain the new financial crisis. Education and health spending dropped by more than 30% and nutrition programme spending by almost 50%. Surprisingly, spending in other social areas increased, such as that of social welfare (which more than doubled); this highlighted a dangerous tendency to favour welfare logic over that of social productivity programmes.
- 1994-95. Social public spending again shows recovery, approaching in terms of both structure and intensity the levels experienced in the late 1970s.

Table 3. Gross domestic Investment and Saving for Brazil and China: 1965 and 2002

Country	Gross Domestic	Gross Domestic	Gross Domestic	Gross Domestic
	Investment as %	Investment as %	Saving as %	Saving as %
	of GDP in 1965	of GDP in 2002	of GDP in 1965	of GDP in 2002
Brazil	25	21	27	20
China	25	40	25	43

Source: IDB, 2005

Another interesting aspect worth taking into account is the cyclical trend of rural public spending in each case: the Brazilian case shows a pro-cyclical tendency while an analysis of the Chinese case shows an anti-cyclical propensity.

The issue exists within the more comprehensive academic debate focused on the anti-cyclical Asian macro-policy tendency vs. the pro-

cyclical inclination of Latin American countries under the Washington Consensus. Post-Washington Consensus academic literature harshly criticised the effectiveness of the recessive logic of the structural adjustments, which were implemented in Latin American countries during the 1980s and the 1990s by the IMF. Furthermore, many feared that fiscal recessive policy - based substantially on a reduction in public spending that affected the social areas directly and strongly (as we point out in the Brazilian case) - was not only an ineffective instrument for alleviating the crisis, it also accelerated it.

According to this argument, we believe that the unstable as well as anti-cyclical trend of public spending significantly weakened the effectiveness of rural public spending, despite the fact that it was at some point, in absolute terms, one of the highest in the Latin American context, and was comparable with the Chinese.

The 1990s in Brazil and China: Towards (agricultural) Trade Liberalisation

Together with many other developing countries, both Latin American and Asian, Brazil and China moved towards a liberalised economy at almost the same time (Brazil from the late 1980s to the early 1990s; China in the mid-1990s and more strongly since 2001 since the country's entry into WTO). Since they have become part of the broad academic and policy debate on the opportunities (on one hand) and the risks (on the other) represented by "openness" (trade liberalisation). The debate has developed during the past few decades, enriched by new arguments as well as by new empirical cases, since globalisation and international trade (the main engine of the economic globalisation phenomenon) has moved forward, to include rich countries as well as poorer ones. However, the literature continued to be divided between those who consider international trade to be a great opportunity for

growth for all actors, and particularly for developing countries which need to catch up with the developed world, and those who, while acknowledging its potential benefits, criticise the way in which international trade liberalisation is taking place, because it is disadvantageous for developing countries and particularly for the poor within those countries.

Kraay and Dollar (2001: 23-32), for instance, argue that "...the relationship between growth of the income of the poor and overall economic growth is one-to-one." Consequently, "...a range of policies and institutions that are associated with higher growth will also benefit the poor proportionally." With respect to the international trade argument, these authors, following the same argument, state that "...openness to foreign trade benefits the poor to the same extent that it benefits the whole economy..." and that, according to its empirical analysis, "...there is no evidence of a significant negative impact of openness to international trade on the income of the poor." The authors conclude by remarking that "...growth spurred by open trade or other macro-policies benefits the poor as much as it does the typical household."

On the other hand, other authors, such as Murshed (2004) or Mackintosh (2004), focus on the risks of trade liberalisation just as it is taking place. Particularly, Mackintosh, while recognising that the world would be much poorer without trade, points out that the distribution of its benefits among countries, and among groups of people within countries, depends upon the terms on which different countries are inserted into the international trade regime. According to the author, the current world trade regime favours the rich countries more than the poorer ones.

Murshed, following the same academic school, shows the marginali zation that many nations in the South have experienced since economic globalisation expanded.

Nevertheless, in a different way and, evidently, under different argumentations, both Kraay and Dollar, and also Murshed agree that, in

order to explain the effect of trade liberalisation, the whole spectrum of macro-policies implemented in a country to move towards opening up external trade matters, as well as other factors.

With respect to this issue, (agricultural) trade liberalisation took place in Brazil and China in a tangible different way. In Brazil, it was as part of the structural adjustment deal which was signed in 1988 with the International Monetary Fund. In China this was done as part of a domestic process of reform that started in the mid-1990s, in anticipation of China's membership of the WTO. In Brazil the process has been particularly fast, while China's liberalisation process has been gradual and has not been completed as yet.

The main purpose of this chapter is to describe how this happened in each case.

What was Reformed, and How

The set of reforms that led China and Brazil towards a liberalised economy started in the late 1980 for the former, and the early and mid-1990s for the latter.

The process took place in a quite different national economic climate. In 1987, Brazil was again in the middle of a new macroeconomic crisis, due to strong inflation and public deficit. Meanwhile, the military dictatorship had recently been replaced by a democratic regime.

In addition, China's economy experienced - in the early 1990s - a slowdown of growth, due to high inflation, corruption and the Tiananmen Square incident (1989). However, it was not a proper macroeconomic crisis, as in the case of Brazil. In fact, China never suffered from a strong public deficit or hyperinflation, as Brazil had, and never depended on IFI loans.

Brazil signed its first structural adjustment deal with the International Monetary Fund in 1982, followed by another in 1988. According to the reform indexes by Morley et al. (1999), there are no clear reform signals

in Brazil until 1985. Between 1986 and 1990, tax and financial reforms were implemented and trade regime was only reformed between 1991 and 1995, rapidly transforming the country into a liberalised economy.

Reforms took place within the framework of the political conditionality imposed, by the IMF, following the Washington Consensus. The earlier adjustment measures were directed: first, towards a macroeconomic stabilisation; second, towards opening the national economy to foreign market.

In the case of China, the reform package responded to the need to relaunch the economy following a slowdown in growth, and represented a new step towards what the Chinese Communist party called, in the Third Plenum of the Fourteenths Party Congress (November, 1993), "...a Socialist Market Economic Structure." (Qian, 1999: 16). Furthermore, when the new package of reforms was developed, China had already started a "dialogue" with the WTO and policies adopted at this time were focused on the final aim of entering the WTO.

In both cases the new reform package only paid residual attention to the agricultural and rural sectors, compared with previous periods, and particularly in relative terms to the industrial sector.

Trade Reform

In order to open the national economy up to the foreign market, Brazilian trade policy was adjusted by lowering import tariffs, eliminating the quota system and aligning the overvalued exchange rates through a real depreciation. The latter adjustment was expected to stimulate exports, particularly agricultural.

Import tariffs and barriers for agricultural products dropped quickly: between 1984 and 1987, tariffs for agricultural product imports were still more than 40%, though they dropped to 10% between 1998 and 1999 (Lora, 2001); the average tariff for food import was above 50% between 1984 and 1987, almost 30% between 1988 and 1990 and

stood at 11% between 1991 and 1993 (CEPAL/IICA, 1997). Support for the main agricultural products (wheat, coffee, rice, maize, sugar and beans) maintained high levels until 1992-93, and then dropped.

From 1991 onwards, agricultural export has more than doubled in terms of volume. Unfortunately, revenues from exports did not increase as fast as export-oriented production did, principally because the price of many of Brazil's primary exports –such as sugar and coffee - fell during the 1990s (FAOStat web database; Cassel et al, 2003).

In the case of China, a mixed liberalisation strategy was implemented in the mid-1990s. In anticipation of WTO accession, in 1995 China's government lowered the tariff of many agricultural products, while at the same time continuing to subsidise other key agricultural commodities (Anderson et al, 2002).

The main challenge for Chinese agricultural policy in the 1990s was to provide a solution to the food shortage problems, which were related to population growth. The aim of the gradual and mixed liberalisation policy was, on one hand, to acquire cheap food imports, and, on the other, to protect certain key products in order to stimulate production and limit border food dependency. The main concern was on grain production. China showed, starting from the first agrarian reform (1978), a good grain productivity capacity. However, population growth on one hand, and increased demand for meat and the consistent high demand for cereals for livestock feed on the other, created a huge demand for grain imports. In the 1990s, China became a major net importer of wheat, rice and soy (Soler, 2004). In order to stimulate the production of these (and other) key products, in 1995 China introduced the "Governor's Grain Bag Responsibility System". This held provincial governors responsible for balancing grain supply and demand and stabilising grain prices in their provinces. At a national level, the policy seems to have been a success, since domestic supply has increased and prices have stabilised (Fan and Cohen, 1999).

Fiscal Reform

Within the adjustment package, fiscal reform was one of the first to be implemented in Brazil. It was focused on the rapid stabilisation of the economy which, in the case of Brazil, meant giving priority to inflation control, which represented one of the main efforts and, at the same time, was symptom of the imbalance in the public sector. Therefore, fiscal reform was strongly linked to monetary reform.

The first anti-inflationary adjustment was the 1986 "Cruzado Plan". Its main measures were a general price freeze, a wage readjustment and freeze, readjustment and freeze of rents and mortgage payments, and a fixed exchange rate. The plan's immediate results were spectacular, but it exploded after only a year. Four more unsuccessful plans were implemented, but it was only the last one the "Plan Real" (1994) - that succeeded in finally bringing inflation under control. The main reason for the lack of success of previous plans was the "indexation phenomenon", which was not taken into account. Every buyer or seller knew what the recent inflation rates had been, and would factor that index into their prices, contributing to an increase in future inflation. Among other features, the "Plan Real" de-indexed the economy and imposed a crawling peg exchange rate regime (Morley, 2003; Krugman, 2003).

In the Chinese case, fiscal reform (which took place since the mid-1990s), was focused on limiting the capacity of central government to borrow from the central bank and from deficit-financing its current account (the "Budget Law"). According to the reformed system, the central government could only have deficit financing in its capital account. The main objective was to make public spending more "transparent", in order to contain the corruption scandal that surfaced between 1989 and 1993.

With regard to public spending in the agricultural and rural sector, both Brazil and China experienced a cut and a qualitative change. In both cases, agricultural subsidies dropped: in Brazil, in a generalised way; in China in a mixed way (some subsidies dropped dramatically, others maintained a stable trend). Furthermore, in both cases, substantially less attention was paid to agriculture than to the industrial sector.

Rural Credit Policy

Changes in rural credit policy has been another crucial factor in both study cases, since it affects the agricultural sector and the rural society's livelihood.

The new Brazilian fiscal policy adopted within the 1987 structural adjustment programmes harshly affected rural credit loan volumes: they shrank from a figure of around US\$ 25 billion in 1980 to around US\$ 6 million in 1990, with the greatest drop occurring after 1987. The negative interest rates applied before the reform made rural credit a subsidy instrument rather than a financial intermediation mechanism. The introduction of a policy that squeezed credit in 1987 caused the real interest rate rise from -33.3% in 1986 to 7.0% in 1987 (Buainain and De Castro Rezende in Spoor, 2002). Before this change, the National System of Rural Credit (SNCR), created in the middle 1990s, mainly managed rural credit. Furthermore, some specific and temporary rural credit programmes were promoted by other public initiatives, such as the Federal Government Loan (EGF) programmes. Private banks were relatively uninterested in rural business, owing to the high risks. The introduction of a policy that squeezed credit and the financial liberalisation process, which also took place in the late 1980s, negatively affected those small producers who had benefited from the previously generous credit policy. New rural financial markets are mainly private, and the higher real interest rates are largely prohibitive for peasant producers (Brandao and Carvalho, 1991; Spoor, 2002).

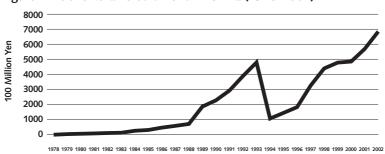


Figure 1. Public Rural Credit Trend in China (1978-2002)

Source: Author's elaborations of data from the China Statistical data Compilation. 1949-2002. All China Marketing Research Co.

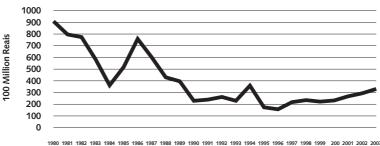


Figure 2. Public Rural Credit Trend in Brazil (1980-2003)

Source: Author's elaboration of data from the Banco Central do Brasil. www.bcb.gov.br

China's public rural credit policy has been characterised by intense and off-hand changes. Higher inflation (due particularly to rising grain prices), corruption and the Tiananmen Square incident (1989) put economic reforms on hold. In 1990, there was also discussion of the possibility of a "re-collectivisation" of agriculture, though finally, it did not took place. As figure 1 shows, public agricultural loans grew

between 1989 and 1993, decreased between 1993 and 1996, and recovered again after 1996. Furthermore, Chinese state interventionism in agricultural sector became more specialised in the second half of the 1990s. That is, according to a policy of food self-sufficiency, the government gave a boost to some producers with subsidies (such as better credit access), while paying residual attention to other producers. The Chinese increase in inequality noted by many authors – both between and within sectors – could be, in the specific case of rural and agricultural sector, also linked to some extent with the policy discrimination described above.

In China, just like in Brazil, the public sphere mainly managed rural credit, through governmental banks. In the early 1980s, as part of an important bank system reform framework, the China Agrarian Bank (ABC) was created, which was responsible for rural finances and the management of public funds aimed at agrarian development. In 1994, within a new sectorial reform, the Agrarian Development Bank (ADB) was created, a body that focused on agrarian development subsidisation. Furthermore, China has approximately 53,000 rural credit cooperatives (also with a public nature) which receive deposits and loans from and to agricultural and rural enterprises and households (Soler, 2004; Quin, 1999). Financial liberalisation is still minimal in China, so there is no substantial participation by private banks in business, as was the case in Brazil before the financial liberalisation process. However, many changes could still happen in this scenario, with increasing financial liberalisation taking place in recent years.

In both our cases for study, the rural credit issue is strongly linked with private property regulation. In Brazil, land distribution and the phenomenon of landlessness are historically structural problems that still remain unsolved. In China, private ownership has been only recently taken into account, constitutionally speaking.

Brazil and China: Rural Social Structure, Rural Labour Market and Poverty Trends

Inequality in a Multidimensional Perspective in Brazil and China: an Obstacle to Reduction of Poverty

The first major structural difference between China's rural society and Brazil's is the distribution of (partly arable) land amongst farmers.

When the second rural reform took place in 1979, China was one of the most egalitarian societies in terms of asset distribution. Under the 1949 – 1952 (first) agrarian reform, land was confiscated by the government from landowners without compensation and redistributed to peasants in a highly egalitarian way (Fan et al, 2002).

Brazil is very much in need of a land reform on such a scale. Some land reform was implemented in the post-World War 2 period. However, during the Structural Adjustment period, distribution land reforms implemented in the Import Substitution period were abandoned, and replaced by (re)allocation through the land market (Spoor, 2002). Lula's government has now returned to the land reform plan, as part of a larger programme called "Projeto Fome Zero" (Zero hunger Programme), though in practice, not much has been achieved.

Brazilian rural society is today what China's was before 1949 - more than 80 % of agricultural land in the hands of 20% of the rural population.

The difference between the rural society structure of the two countries and the distribution of the main production asset (land) is strongly linked with inequality in terms of income distribution. The way in which production assets are distributed has influenced income distribution. Inequality in income distribution depends strongly on the inequality of the initial distribution of production resources. Many empirical works show the strong relation between growth, inequality and poverty, particularly in the case of developing and transition countries (Cornia, 2003; Mckinley, 2001; Spoor, 2005).

Furthermore, the World Bank (2001) recently assumed the important role played by a more equal distribution of wealth in order to achieve the goal of poverty reduction.

Hence, it is no surprise that, given that Brazil is more unequal than China in terms of the distribution of assets (land), it is also more unequal in terms of income distribution, though many authors have highlighted a worrying increase in spatial inequality in China during the last decade⁶.

According to the academic claims presented, inequality seems to be one of the factors that explain why agricultural liberalisation could create benefits that will not be equally shared; furthermore, the process, which favours some agricultural export crops rather than others, could represent a dangerous instrument that might consolidate and increase inequality.

According to the UNDP database, the Brazilian Gini index stands at around 0.60 and the Chinese one at 0.44.

How has Greater Openness Affected Inequality and Rural Poverty in Brazil and China?

General consent (as well as concern) exists in economic literature with respect to the increase of inequality in China during the 1990s.

According to Spoor (2005), spatial income inequality has grown rapidly since the mid-1990s, as Chinese policies have proved detrimental for agricultural producers. According to Anderson, Juang and Ianchovichina (2004), small peasant farmers, who depend solely on agricultural production, and poor rural workers are the losers in the agricultural trade liberalisation process, while rural workers in the non-farming sector win. According to Fan, Zhang and Zhang (2002) reduction on public investment on rural sector explain in part this unequal growth.

6. See Milanovic (2004) and Spoor (2005).

With regard the trend in Chinese rural poverty, it also assumed that increasing inequality represents an obstacle to (rural) poverty reduction.

In contrast, in the case of Brazil, the economic literature presents an opposite argument regarding the way in which greater openness has affected inequality and rural poverty trends. Milanovic (2004) links (positively) Brazilian inequality with inflation and interest rate trends rather than with greater openness. That is, in the Brazilian case, inequality is negatively affected by higher inflation and interest rates. However, according to the analysis made in the previous chapter on the liberalisation measures package, the 1987 fiscal reform brought about a dramatic rise in the real interest rate for rural credit (Spoor, 2002). Adopting a more extensive interpretation of the openness phenomenon that is, considering not just a restrictive commercial interpretation (trade, tariffs, subsidies) but the whole policy (fiscal, monetary, etc...) package that went with the market liberalisation process - the positive linkage pointed out by Milanovic (2004) between interest rate trends and inequality indirectly links (in accordance with our argument) greater openness policies with inequality.

In a similar analysis, Morley (2003) focuses on the linkage between inflation control, fiscal policy and poverty reduction, to reveal an extremely interesting argument. It is often assumed that inflation affects negatively the poor. However, if inflation control strategy leads to a cut in public spending that involves the social services, the safety net and, in general, pro-poor spending, then a decrease in inflation will not go with a decrease in poverty. On the other hand, if increased public spending is financed by foreign borrowing instead of by taxation, poverty is likely to decrease, though it could well be a temporary effect. Brazil experienced both situations, with structural adjustment programmes (1987) before, and the anti-inflation "Real Plan" afterwards (1990s).

Cassel and Patel (2003), state that liberalisation consolidates existing patterns of inequality within the Brazilian rural sector. The authors claim that agricultural liberalisation affected the rural labour market, increasing the role of seasonal work with respect to its full time equivalent. Another

study, Carneiro and Arbache (2003), concludes that greater openness affected inequality and rural poverty neither positively nor negatively.

It seems that the Brazilian picture is more complex than the Chinese one. The ambiguity noted in the academic literature with respect to the effects of Brazilian greater openness clarify the analytical perspective adopted for this research paper. A strictly commercial interpretation of the process within a macro-sector perspective is not enough when it comes to explaining the impact of agricultural trade liberalisation on rural poverty. It needs to be seen in the light of the whole policy and structural changes that led to the increase in openness, as well as in an historical perspective. Of the above mentioned authors, those who reject a direct link between openness on one hand and inequality and rural poverty on the other (as did Carneiro and Arbache [2003]) adopted what we have defined as a "restrictive interpretation" of the phenomena. However, it is not always easy to find a direct link. Furthermore, poverty and inequality should not be considered as just quantitative and quantifiable problems: "...income poverty is only an indirect indicator of human poverty..." (Pronk, 2004:14), as this can sometimes produce an altered view of the reality.

The more indirect link between greater openness on one hand and rural poverty and inequality on the other expressed by other authors (such as Cassel and Patel [2003] and Morley [2003]) does not weaken it, but rather it underlines the complexity of a picture than sometimes has been underestimated.

Finally, the governments of both countries do now recognise the problem of the growing income inequality. Both countries recognise inequality as a problem that still needs to be solved. In the case of China, the government has responded to growing inequality with the introduction (in 2000) of a large-scale public investment programme focused on the western inland provinces (Spoor, 2005).

In Brazil, Lula's government implemented the so called "Projeto Fome Zero" (Zero Hunger Programme), as well as new incentive policies for family agriculture.

Structural Changes in the Rural Labour Market and Rural Employment in Brazil and China

During the past two decades, both China and Brazil experienced a reduction in employment in the primary agricultural sector.

In the case of Brazil, despite the fact that agricultural production grew, following the increased openness of the agricultural sector, this did not create more employment, as had been hoped. Trade liberalisation increased the volume of exports but this had a limited impact on the generation of employment. Import growth and the introduction of new technologies in the production process contributed to a net destruction of more than 2 million jobs in the agricultural sector alone (see table 4), which represented more than 5 million if we consider the whole Brazilian economy.

Table 4. Trend of employment in Brazil agriculture sector 1990-2003

Years	Number of employed in agricultural sector
1990	14,911,400
1991	15,268,200
1992	15,642,100
1993	15,571,600
1994	15,365,300
1995	15,163,000
1996	13,905,800
1997	13,679,000
1998	13,292,900
1999	14,363,400
2000	13,496,100
2001	12,166,100
2002	12,508,400
2003	12,711,200

Source: Instituto Brasileiro de Geografia e Estatística, Sistema de Contas Nacionais (IBGE web page)

As a consequence, the rural exodus towards the city grew strongly during the 1990s, and is still continuing. According to World Bank

development indicators, the Brazilian urban population jumped from 70% in 1987 to 82 % in 2000, and was accompanied by the rise of the "favela phenomena" on the outskirts of the cities.

Some authors link the negative trends in rural employment to the aforementioned "inequality argument", particularly in terms of land distribution. According to Schonleiner's theories (1997), larger Brazilian agricultural producers are less efficient in terms of productivity than family farmers. Considering that the former were able to benefit more from trade liberalisation because they possessed the instruments needed to adapt agrarian production to market changes (while the latter become fundamentally marginalized from new market opportunities), trade liberalisation increased rural unemployment since it impacts positively on large farmers but negatively on smaller ones.

In the case of China, the reduction in agricultural employment has mainly been a consequence of the rapid growth in agricultural labour productivity, which took place after the post-1979 rural reforms. During the 1980s, a rapid development of rural industrial activities took place, promoted by private farmers and also at the local government level, through the creation of "township and village enterprises" (TVEs). The dynamic rural non-farming sector was able to absorb a large quantity of surplus agricultural labour seeking new job and income opportunities. According to the China Statistical Bureau Yearbook (SSB-1998), in 1997 more than 36 % of rural income came from rural non-farming activities, while in 2001, more than 50% came from non-farming activities (rural and non-rural); in contrast, rural income in 1978 still came predominantly from agricultural production (IFPRI, 2002; Janvry et al., 2005).

Many authors agree that the rural non-farming sector has been a central source of growth and stability for China's rural areas (Fan et al., 2002; Janvry et al. 2005; Zhang, 2003). According to Janvry et al. (2005), the average income of households participating in non-farming activities is higher than that of those who only take part in farming activities. Thus, non-farming activities have not only been useful for absorbing a large

amount of surplus rural labour, they have also substantially improved rural living standards by providing a more stable income.

The Brazilian rural non-farming sector did not develop in such dramatic way. While in China, 72% of rural households obtain non-farming incomes and those incomes represent 36% of the total, in Brazil only 59% of rural households diversify their income, and the non-farming activities account for less than 20% (Ferreira et al, 2001; Janvry et al, 2005⁷).

We consider that, in the case of China, rural non-farming sector growth during the 1980s represented, at that moment, an important opportunity to absorb surplus agricultural labour and to better diversify rural income. They now represent, and for the same reasons, an instrument for mitigating the human costs of agricultural trade liberalisation, and can even use the potential benefits better. According to Anderson et al. (2003), if on one hand greater agricultural openness is increasing the volume of agricultural imports and thereby threatening certain parts of the rural population, the removal of restrictions on textile and clothing exports that also derive from greater liberalisation could boost town and village enterprises. If this becomes the scenario, demand for unskilled labour for non-farming work in rural areas may grow even while demand for farm labour falls. This suggests that, within the rural society, those who have a diversified rural income - and we have noted that this is true for 72% of rural households - were better able to withstand the risks of agricultural liberalisation than people who worked exclusively in farming activities. This also suggests that those not involved in non-farming activities could be harshly affected by liberalisation, if compensative policies are not implemented.

In the case of Brazil, the rural non-farming sector had less opportunity to work as a "mitigating instrument" than their counterparts in China.

^{7.} The Brazilian data refer only to the Northeast rural area, which is relatively poor.

As we showed above, rural industries are less developed, rural income is less diversified and, in general, rural society (and particularly small farmers and landless rural workers) is less involved in extra-farming activities, at the same time as being too weak to enter into an international market competitive logic.

So, Why did the Rural Non-farming Sector Develop Better in China then in Brazil?

The reasons why the rural non-farming sector in China developed better than that of Brazil can be found in the arguments contained in Chapters 2 and 3, which cover the progress of the various development strategies before and during the 1990s. So, we will now make a return, by way of a summary, to some of the arguments already developed, and to integrate them into the current argument.

Initially, the development of the rural non-farming sector in China was a spontaneous response by farmers to market opportunities rather than a government-planned arrangement (Janvry et al., 2005). As we showed in chapter two, during the first phase of the rural reform (1978-1984), procurement prices and subsidies for agricultural products (which had until that time been particularly low) were raised, leading to a rapid growth in rural incomes.

This meant that for the first time, farmers could save money, and thus manage to escape from the agricultural subsistence circle. This positive economic situation, the fact that the rural population were not allowed to invest or migrate to urban areas because of government control and restrictions, and farmers' willingness to reap the benefits of industrialisation, just as urban areas were doing, all created the requirements for the development of rural industry and, in a more general sense, of a dynamic rural non-farming sector.

The government also played an important role in this phenomenon, by encouraging the trend with suitable policies.

- Agrarian reform. The development experienced by the Chinese rural sector could hardly be imaginable without the land redistribution policy under the 1949–1952 revolution and the 1978 agrarian reform. The development of the whole sector started with a strategy focused on the agricultural sector. That is, the strategy started at the basis. Brazilian rural sector is still paying the price for not having had an agrarian reform -particularly a land reform- which has many times been commenced but never pushed through. Land distribution and agrarian reform gave rural Chinese society the possibility to invest in a "pro-poor development logic". In Brazil, this possibility is slowly winning through the land invasion movement (such as the one shaped by the MST movement) and through fierce political and social battles. Brazil's new Lula government seems to have restarted the land redistribution policy - within the aforementioned "Projeto Fome Zero" - that was abandoned with the last structural adjustment programmes (late 1980s-early 1990s). The future of Brazil's rural and agricultural development depends to a great extent on the success of these new public projects.
- Rural public investment. The Chinese rural sector benefited in the long term from an articulated public spending programme, while in the Brazilian case we revealed an irregular, unclear public spending strategy. The focus of Chinese public investment on rural infrastructure during the 1980s favoured not only the agricultural sector but also the rise of rural industry (see Chapter 2)

Furthermore, we pointed out that the reform package implemented during the 1990s paid - in the case of both Brazil and of China - residual attention to the agricultural and rural sector, particularly when compared with the industrial sector (see Chapter 3). While the Chinese agricultural sector was not gaining from the change, rural industry was. In some way, the rural sector as a whole appeared to be have been fairly well compensated. The increase of the percentage of non-farming activities within the Chinese rural

income also reflects these changes within the rural sector and labour market structures.

- Domestic savings rate and rural credit. As shown in chapter 2, the Chinese development strategy, unlike the Brazilian, was also favoured and supported by a macroeconomic stability context, and one of the highest private savings rates in the world. This positive economic situation, together with the increase in Chinese rural credit (between 1989 and 1993 and after 1996) are other important factors when it comes to explaining the positive trend shown by the rural industry sector.
- Rural human capital development. During the first phase of agrarian reform (1978-1984) China adopted a "nine-year compulsory schooling education policy". The policy proved a success in terms of goals achieved. The illiteracy rate among agricultural labourers dropped from 27.9 % in 1985 to 10.1% in 1997 (Fan et al, 2002; table 3.2).

In the case of Brazil, in 1979, 87 % of 15 to 24-year-olds in the rural sector had less than five years of education. That percentage dropped to 63 % in 1999. By 1999, 90 % of young adults in rural areas still had less than nine years of education (Morley, 2003). Brazil's education profile for 15 to 24-year-olds is the worst in all of Latin America, despite the fact that university study is free. This happened because the government paid little attention to primary and secondary education, thereby creating an "institutional barrier" that prevents members of the less favoured social classes achieving access to university.

The fall in the illiteracy rate provided China with an improved human capital and, consequently, with a higher-quality labour force that is, able, for instance, to use modern farming technology. The increase in rural enterprise and the greater dynamism of the Chinese rural context with respect to the Brazilian one in general can also be linked to this significant "education factor".

Conclusions

This paper has analysed, through a comparative perspective, the impact of agricultural trade liberalisation on rural poverty in Brazil and in China.

We consider that rural Chinese society was better able then the Brazilian one to mitigate the human costs of the liberalisation process, and even to make better use of its potential benefits. This is because of a long-term pragmatic development strategy path which anticipated the adoption of a more open economy (and finally, entry into the WTO), as well as the way in which the liberalisation reforms were carried out. The Chinese State's ability to maintain a public role within the sector, while being less interventionist than in the past few decades, created more favourable "entry conditions" (into international agricultural markets), which can be summarized as follows.

Firstly, the growth of the Chinese rural non-farming sector has represented an important opportunity to absorb surplus agricultural labour, which the increasing volume of agricultural imports (and the competition this causes with local production), and the improvement of efficiency and hence labour expulsion, could predictably create. It has also been an opportunity for farmers to mitigate income fluctuations inherent in the risks intrinsic in focusing solely on agricultural farming activities (due, for instance, to natural disaster, adverse atmospheric conditions or unfavourable agricultural price trends because of saturated markets).

In the case of Brazil the rural non-farming sector had less opportunity to work as a "mitigating instrument" than their counterparts in China. Rural industries were and are less developed, rural income is less diversified and, in general, rural society (particularly small farmers and landless rural workers who - as we have seen - represent an important part of it, not to mention the poorest part) is less involved in non-farming (or non-agricultural) activities. At the same time, these small farms are too weak to enter into the international market and compete.

Secondly, the Chinese government has been more cautious than the Brazilian one, in that it has opened its domestic market very gradually. According to IDB (2005), protectionist policies are still implemented, despite the country's entry into the WTO. This strategy could enable the Chinese government to better control the effects of liberalisation on the agricultural and rural sector, intervening when necessary but without renouncing the benefits of liberalisation.

Instead, in the Brazilian case, the process of market liberalisation (externally and domestically) has taken place extremely rapidly. This was mainly due to the political conditions imposed by the IMF, following the Washington Consensus. The accompanying structural adjustment programme and its "fundamentals" did not allow Brazil to embark on a step-by-step market liberalisation process, in particular for controlling any negative effects on its rural economy.

Thirdly, production resources or assets (land, in particular) are much better distributed (in terms of property and access) in China than in Brazil. Brazilian rural society is today what China was like before 1949: more than 80 % of the agricultural land in the hands of 20 % of rural population. This seriously jeopardises the ability of the weaker part of Brazilian rural society – mainly small farmers and landless workers - to actively take part in the markets that have opened up with the liberalisation process and to benefit from the possibilities that this process has created.

However, despite the fact that comparative analysis has shown that Chinese rural society has proved better able to withstand the risks of a more open economy than their Brazilian counterparts, this does not mean that there are no losers in the Chinese rural context. The decline of public spending in the agricultural and the rural sector in general (on infrastructure, research & extension, education etc.) and the convergence of part of domestic agricultural prices (principally of that which is more liberalised) to international ones are negatively impacting on farming income levels, particularly for those farming households that

have no additional income from the rural non-farming economy, such as rural industries, wage labour on other farms or any other additional (migrant or other) activities.

This suggests that not only in Brazil but also in China there is a weak part of rural society that suffering under the liberalisation process (even if this part is relatively smaller in the latter country). Compensating measures to protect the most marginalized rural groups are definitely needed, particularly in Brazil, but also in China. The State still has to play a central role, to promote social development and stimulate competitive production. In conclusion, given the wider process of market liberalisation, the State cannot retreat.

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