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Brazil, the Southern Cone, and China: The Agribusiness Connection

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Abstract

Largely in response to Chinese demand, Brazil more than doubled its production of soy in the first decade of the 2000s – increasing from 30 million to well over 70 million tons. Soy has become consolidated as Brazil´s leading agro-industrial sector and has been responsible for opening up a vast new frontier in Brazil´s central savannah region. With, a new model of large-scale mechanized grains farming has also emerged. More than half of China´s soy comes from Brazil, which in turn exports more than 60% of its soy to China. As Brazil has shifted the direction of its exports from Europe to China, it has progressively exported less meal and oil until by the end 2010, over 90% of soy exports to China were in the form of grain. More recently China has increased its imports of other basic commodities, such as corn, a crop produced in tandem with soy in Brazil, and whose exports to China have increased sharply. China´s soy processing complex has been constructed in alliances with the global traders. At the same time, however, China has shown itself to be unwilling to rely exclusively on the spot market controlled by these traders, and has combined land investments in third countries and long-term, large-scale supply contracts. In the case of Brazil, this has been done through direct Government-to-Government negotiations for investments in logistics and in the installation of soy processing capacity. This paper will explore the ways in which the Brazil-China axis is reshaping patterns of trade and investment in soy and related commodities. On the Brazilian side, we are particularly interested in the characteristics and dynamics of the models of investment and farming on the soy frontier. China´s extensive interests in Brazilian soy provides a privileged perspective from which to analyze the different ways in which it is trying to reshape the dynamics of global agricultural commodity trading. Where possible, we also incorporate insights from China´s involvement in other Southern Cone countries, particularly Argentina.

Keywords: Brazil; China; soy production; commodities trade; Southern Cone

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Introduction

In this paper, we analyze the evolution of trade/investment and diplomatic relations between Brazil and China, focusing on agricultural resources and food, and extending the analysis to the Southern Cone countries as a whole in our discussion of the soy and meat sectors. We draw attention to the contrast between the suppositions of parity in diplomatic interests and the deepening of "neo-colonial" trade and investment patterns. China´s current development strategies, as previously in the cases of Britain, Continental Europe and Japan, are geared toward ensuring supplies of a broad range of raw materials, both extractive and agricultural. Food security concerns, however, are central and become increasingly so as China´s per capita income advances and urbanization accelerates. The scale of even small levels of food and raw material dependence, especially in today´s volatile conjuncture, makes China´s exclusive reliance on world markets and trade increasingly problematic. While China´s strategies to ensure resources are global, Brazil and the Southern Cone have become central to the supply of grains and meats for dietary transitions, along with cotton, pulp and tobacco. We explore China´s initiatives in this region to move towards hands-on control over the supplies of these resources, involving investments in land, long term contracts, joint-ventures, direct investments, the promotion of infrastructure and logistics, and more recently the transformation of COFCO into a global trader. In the shift away from policies of food and raw material self-sufficiency, China initially limited its perspective of dependence on out-sourcing to specific non-food and feed products. As China´s dietary transition deepens, its dependence on global supplies becomes more far-reaching. Brazil and the Southern Cone, given their centrality in feed grains and meats, are privileged arenas for investigating the "more-than-market" strategies currently being developed by China to ensure its food security.

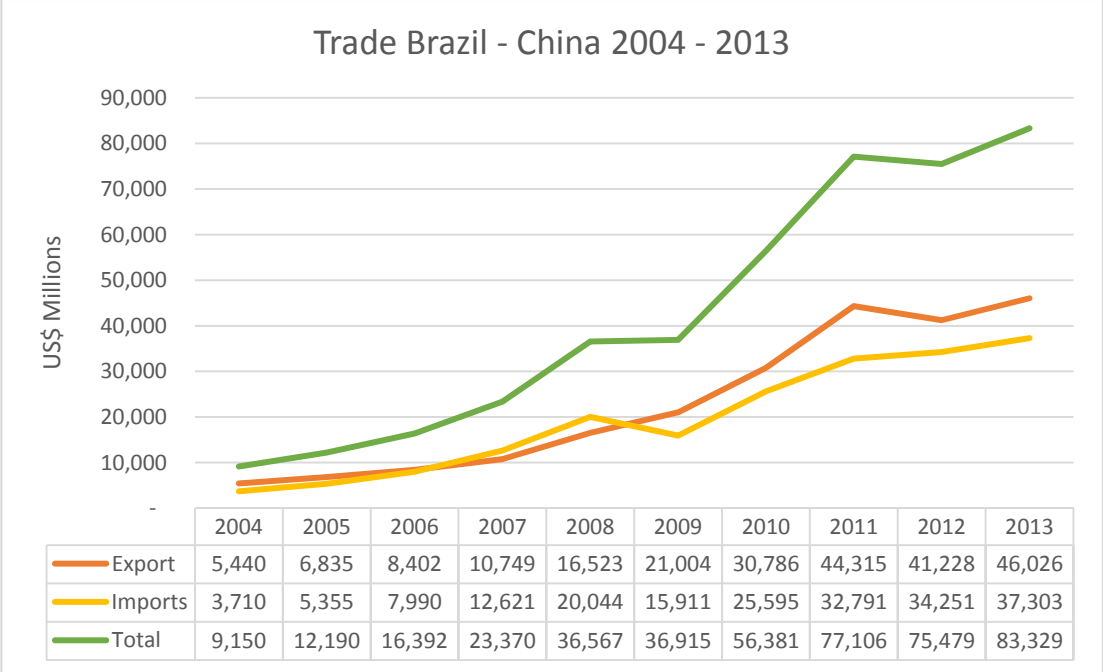
Evolving Economic, Diplomatic and Geopolitical Relations: China and Brazil

In April 2015, the Brazil-China Business Council published a special issue to celebrate 40 years of diplomatic relations between the two countries, which was initiated in 1974 (CEBC, 2015). Economic cooperation began even earlier in 1971, when Brazil responded to a request by China for sugar to compensate a failed harvest in Cuba, its then traditional supplier. Cotton also appears as an export along with iron ore. In the 1970s and 80s however, the terms of trade were determined by Brazil´s more advanced industrial structure, exporting intermediary manufactured products from its steel and petrochemical industries in exchange for petroleum. Nevertheless, by the 1990s, current patterns of trade already made up more than half (56% in 1991) of Brazil´s exports earnings coming from iron ore and soy oil, with imports from China increasingly concentrated on cheap final consumer goods reflecting China´s rapid industrialization.

Economic cooperation was woven into and highly influenced by the consolidation of diplomatic ties formalized, on China´s initiative, as a "Strategic Partnership" in 1993. On both sides, the convergence of diplomacy, trade and investment was stimulated by the centrality of state-owned enterprises and/or firms centrally involved in public investment programs. Hydroelectric schemes, infrastructure and transport were permanent features of cooperation agreements and the two countries launched a joint satellite program, in addition to establishing a more general program of Science & Technology cooperation (CEBC, 2015).

Trade flows exploded, rising from USD 9 billion to over USD 80 billion between 2004 and 2013 (see Figure 1 below), an average annual growth of 30%. China´s exports shifted from cheap final consumer goods to machines, equipment and electronic goods, whereas some 75% of Brazil´s exports consisted of iron ore and soybeans, with other basic commodities (cellulose, petroleum) making up the remainder.

Figure 1: Trade Brazil-China 2004 -2013



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Export	5,440	6,835	8,402	10,749	16,523	21,004	30,786	44,315	41,228	46,026
Imports	3,710	5,355	7,990	12,621	20,044	15,911	25,595	32,791	34,251	37,303
Total	9,150	12,190	16,392	23,370	36,567	36,915	56,381	77,106	75,479	83,329

Source: CEBC, MDIC , 2015

Trade was increasingly accompanied by direct foreign investment on the part of China, amounting to USD 56.5 billion in announced investments between 2007 and 2013, as it entered telecommunications, petroleum, transport and the automotive industry (CEBC, 2015. See Annex 1 for a breakdown of investments). Brazilian investments in China have been largely firm specific and sporadic.

Figure 2: Announced Chinese Investment in Brazil 2007- 2013

Source: CEBC, MDIC Adapted by the authors for 2015.

From the 1970s to 2010, trade and investment relations between the two countries became completely inverted, with Brazil assuming the role of raw material supplier fuelling China´s explosive industrialization (Wilkinson & Wesz, 2013). Since 2009, China has become Brazil´s leading trade partner both for imports (16%) and exports (18.7%). The contrary, however, is not the case – with Brazil accounting for only 3% of China´s imports and 1.5% of its exports. In the 1970s, the two countries had similar sized economies, with

Brazil having a more advanced industrial base. Forty years later, China´s GDP grew to 6 times that of Brazil and accounted for 11.7 % of total global trade, compared to 1.3% in the case of Brazil (CEBC, 2012).

Brazil and much of Latin America have become strategic resource suppliers for China´s economic growth. It is important, however, to distinguish between the different components in China´s demand – minerals, petroleum, and biomass. Our paper is primarily concerned with agricultural based resources. While China has been heavily dependent on mineral extraction imports, agricultural resource dependence is quite selective and China has exhibited a surprising level of agricultural and food self-sufficiency during these decades of accelerated economic expansion. Over the last twenty years, China´s imports of agricultural products have represented just 7% of its total imports. With total agricultural imports of over USD 80 billion, China exports around USD 40 billion in agricultural products and is a leading exporter of fresh and processed fruit and vegetables, particularly to the US, Japan and Europe (CEBC, 2012). The imports are heavily concentrated on feed and raw materials (soy and cellulose, timber, cotton, tobacco). While exhibiting global concerns for raw material and food provisions which are reminiscent of those of England and Japan, when these countries experienced their industrial take-off, what is exceptional about China is its high degree of agricultural and food self-sufficiency. Nevertheless, the scale of its demand means that proportionately moderate imports can have a decisive impact on world trade. For this reason, concerns about food security are leading China to trade agreements and investment strategies that aim to minimize the risks of world trade.

The "neo-colonial" features of Brazil and China´s economic complementarity contrast sharply with the strengthening of diplomatic cooperation, which is protocoled as a "Global Strategic Partnership" in 2012.[1] Along with India, Russia and South Africa, China and Brazil have assumed the mantle of "large emerging countries", in the formalization of the BRICS, highlighting their common interests as developing countries. This collective identity was confirmed in the creation of the G20, with Brazil playing a leading role in negotiating "developing country" interests within the WTO negotiations. While, therefore, the profile of Brazil and China´s trade and investment pointed more to a new version of "South-North" relations, diplomatically Brazil assumed a leading role as spokesperson for the developing world (Cabral & Shankland, 2013). Such a role was further facilitated by the presentation of Brazil as a new model for sustainable development based on the promotion of biofuels and particularly ethanol from sugarcane, an emblematic developing country crop. The threats of a "reprimarization" of the Brazilian and other developing country economies (Jenkins, 2012, Kaplinsky, 2012), posed by China´s resource demands, became camouflaged in this new version of a rural, biomass-based growth model. Brazil and China emerged in the early 2000s, as an alternative pole for "cooperation for development". Brazil transitioned from being a recipient to a donor country, and positioned itself as an alternative to traditional North-South cooperation, promoting partnerships based on its dual agricultural development model, combining food security and family farming with large-scale biomass and grains/oils production (Wilkinson, 2013).

China´s Food Security and Resource Seeking Strategies

Food regime analysis, which has served to map macroeconomic and political trends in the world agrifood system, has also led to an over-exclusive focus on agriculture as a source of food. A rereading of the earlier industrializations of Britain and Japan reveals a much broader, simultaneous concern with food, raw materials (biomass and mineral) and market access (Wilkinson & Goodman, 2015). Agrifood trade and investment between Brazil and China need to be situated within this broader perspective. As noted above,

[1] The significance of strategic partnerships for China is analyzed by Zhongping, F. & H. Jing (2014) as a response to China´s increasing involvement in a multilateral world. In the words of Wen Jiabão, China´s Prime Minister from 2003-13, strategic "means that the cooperation should be long term and stable… transcending differences in ideologies and social systems", and "partnership" means that the cooperation should be equal-footed, mutually beneficial and win-win" (7).

China has been remarkable in its ability to maintain a high level of food self-sufficiency during three decades of unprecedented rates of economic growth and urbanization. China is closer to post Second World War continental Europe in its selective dependence on raw material imports. The State in China has traditionally assumed responsibility for food security, a concern accentuated in recent periods through isolationism and famine.

Nevertheless, self-sufficiency in food has been surprisingly well maintained – first through an indigenous green revolution, followed by market incentives from the late 1970s, and more recently through the promotion of large-scale agroindustry (Naughton, B., 2007; Aglietta & Bai, 2013). Of non-food biomass, timber has perhaps been the principal import priority, as China´s natural forests have disappeared. In the 1990s, there was considerable concern in Brazilian civil society organizations that large-scale Asian and Chinese investments were targeting the Brazilian Amazon. Later analyses suggested that Chinese Amazon logging investments were more concentrated in Peru (Rama & Wilkinson, 2013). Although China has promoted planted forests for pulp and paper, it remains highly dependent on imports, with Brazil as the leading exporter. A range of non-food raw materials has also been opened to imports – such as cotton (although China remains the largest producer and also has the largest stocks) and tobacco. Brazil is a leading supplier to China of both of these products, although traditional exporters of tobacco in Africa (such as Zimbabwe) are re-establishing their production (Valor Econômico, 2015).

With urbanization and rising incomes the principal pressure on the agrifood system comes from the effects of the transition to an animal protein-based diet. Given the conversion ratios between feed and meat, the demand for the former becomes a central challenge. In the 1960s, continental Europe opted for selective dependence on soy while maintaining their priority for self-sufficiency in grains. After the 1990s, China adopted the same strategy, even at the expense of its traditional soy production. While the US continues to be a leading supplier of soy, the Southern Cone has now assumed dominance and is the region with the most possibilities for expanding its production in the short term. At the beginning of the 2000s, China joined the WTO, which demands minimum levels of market access of its members. At the same time, urbanization leads not only to the adoption of an animal protein diet, but also to a diversification of food consumption habits with a range of other products being included in trade – such as fruit juice, coffee, and fish. Trade in meat products (poultry, beef) also began to assume importance, even with the shift to large-scale industrial operations in China itself (APEX, 2009).

In spite of the diversification of the urban food diet, basic commodities remain central – oils, grains (maize, wheat), milk, rice, and sugar – and even with high levels of self-sufficiency, shortfalls provoke tremors in global commodity markets. A renewed concern about extreme weather events associated with climate change has emerged, as urban food systems bring added food risks, and panic regarding food quality leads to sudden pressures on imports. The recent surge in dairy product imports in China was a notable example (Sharma, 2014). Maize imports increased sharply after 2008, but have declined over the last two years. Wheat imports have also oscillated, although at lower levels (See Table 10 in the concluding section). High levels of volatility have been a key feature of agricultural commodity prices in the 2000s. Many analyses associate these sharp price fluctuations with the financialization of agricultural commodity markets (HLPE, 2011). Others have identified the sudden new pressures on demand, created by biofuels targets, as the main culprit (HLPE, 2013). In all these analyses, surging Chinese demand has also been cited as a contributory, if not a major factor. The response to such price fluctuations has also increased the risks associated with dependence on global trade. Key agricultural commodity exporting countries (Thailand, Indonesia, Argentina) have imposed bans on exports, which in addition to aggravating prices have threatened availability (von Braun, 2008).

In summary, China has maintained a remarkable level of basic food self -sufficiency in a period of continuous and rapid economic growth and urbanization. It has selectively outsourced raw materials (timber, cotton, tobacco) and feedstuffs. Its concern with food security has led China to revise its biofuels program excluding the further use of food crops (wheat and corn). This occurred at a time when membership of the

WTO and projections of future demand called into question food self-sufficiency. At different times since 2008, basic foodstuffs have been imported in significant quantities (wheat, corn, rice, dairy products and meats). China, therefore, has to confront the issue of dependence on world markets and world supplies at a time of volatility in prices and supply. It is not so much a question of the degree of dependence, which as a percentage of domestic supplies, is modest. Rather, the issue is the scale of even modest Chinese demand in relation to the size of the world market, whose predictability is equally problematic and whose control is in the hands of the global traders. We will come back to these questions when analyzing China´s trade and investment strategies in Brazil and the Southern Cone, situating this within a broader global context.

Brazil´s Agribusiness, Global Trade and China

In 2008, Europe was still by far the principal regional destiny for Brazil´s agro-industrial exports although China had moved into second place above Latin America, the Middle East and the EUA. Between 2008 and 2012, exports to all other regions, with the exception of the Middle East, were in decline and China was edging towards first place, (see Table 1 below), a position which was confirmed in 2014.

Table 1: Principal Markets for Brazilian Agribusiness by Economic Bloc

	2012 (June)	2011	2010	2009	2008
Agribusiness Exports (US $ millions)	43.941.0	93.166.2	74.322.8	62.695.8	68.941.2
Participation in Brazil´s Agribusiness Exports					
Europe	24.6%	24.9%	26.4%	29.0%	32.9%
China	24.3%	17.7%	14.8%	14.2%	11.5%
Latin America	8.2%	8.4%	8.6%	7.7%	9.4%
Middle East	7.3%	9.2%	10.3%	9.3%	7.3
US	5.9%	7.0%	6.7%	6.5%	8.1%

Source: MDIC, CEBC, 2015, elaborated by the authors

Even though China has now become the leading destination, Brazil´s agroindustrial exports continue to be widely marketed among the world´s principal regions (see Table 2 below). Only one product – soybeans – has China as its almost exclusive customer, accounting for over two thirds of Brazil´s total exports. For other products, China accounts for between a third and a fifth of total exports (soy oil, peanut oil, cotton, pulp and paper). On the other hand, China´s participation in Brazil´s other leading export markets - sugar, coffee, poultry and beef, is currently modest. By value, as we have seen above, China accounts for only a quarter of Brazil´s total agro-industrial exports.

Table 2: China´s Participation in Brazil´s Global Agribusiness Exports

	Exports to the world US$ millions	Participation of China in exports (%)	Exports to the world US$ millions	Participation of China in exports (%)
PRODUCTS	2011		2008	
Soybeans	16.327,3	67,1%	10.952,2	48,6%
Soy oil	2.129,3	36,3%	2.670,7	31,1%
Peanut oil	42,1	34,7%	39,8	0,0%
Cotton and derivatives	1.831,9	31,1%	988,6	4,1%
Wood pulp and cellulose	4.984,8	26,1%	3.901,1	17,7%
Furs and leathers	2.062,3	19,4%	1.897,5	19,8%
Plant materials for animal feed	257,4	14,9%	237,7	1,7%
Tobacco	2.878,6	13,2%	2.683,2	13,7%
Sugar	14.958,0	8,1%	5.502,8	0,4%
Fish	115,0	6,5%	88,5	6,0%
Wines	5,6	6,2%	8,5	0,3%
Poultry meat	7.242,6	5,8%	6.013,3	0,0%
Rubber	563,0	4,5%	371,3	7,9%
Paper and derivatives	2.162,7	4,4%	1.906,6	2,7%
Wood and derivatives	1.638,9	3,7%	2.306,5	4,0%
Vegetable Textile fibers	577,6	2,5%	589,8	1,1%
Wheat	699,3	0,7%	204,1	0,0%
Corn	2.716,4	0,2%	1.405,2	
Meat	4.169,3	0,2%	4.006,2	0,0%
Fruits	897,8	0,1%	964,1	0,2%
Coffee	8.035,0	0,1%	4.174,6	0,2%
Alcohol	1.532,9	0,0%	2.424,4	0,1%
Swine meat	1.286,3	0,0%	1.364,5	0,0%
Milk and derivatives	74,2	0,0%	466,6	0,0%

Source: MDIC, CEBC, 2015

Soy is central, not so much in terms of the value of its exports, which is not dissimilar to the value of exports from the sugar-cane sector or the combined meats sector, but for the role this crop plays at a number of different levels. In the first place, we need to consider the spatial dimensions of the crop, which in Brazil occupies some 28 million hectares, three times that of sugarcane, four times that of planted forests, and nine times that of coffee. Furthermore, it is combined with the planting of corn. 60% of this production is now located on “frontier” lands and, in combination with cattle, has been the primary basis of regional development in the Center-West of the country – now pushing ever further to the North (Wesz, 2014). 50% of this soy is exported as grains and a further 25% as meal. This huge regional expansion has been fuelled by China´s demand, which has ensured a long period of high commodity prices. High levels of agricultural accumulation from soy production have attracted outside investments and consolidated a new model of large-scale farming in this region (Wilkinson & Pereira, 2015).

The interactions between soy, cattle and logging, and the pressure to create new export routes, exert a relentless pressure on the Amazonian ecosystem. With the traditional ports over two thousand kilometers to the South and accessible only by clogged and badly maintained roadways, further investments are being attracted to develop the logistics and infrastructure for exports. Highways have to be paved, railways laid down, waterways made navigable, and river and deep water port terminals constructed. Exports via the Pacific are also being cogitated. A recent study has drawn attention to the indirect effects of China´s soy demand for the strengthening of the political power of rural interests (Fearnside & Figueiredo, 2015). In what may appear an unexpected development, agribusiness interests have been strengthened in recent years,

by specific Federal Government support, in the case of the Lula Government´s promotion of biofuels, and by the decisive role of agribusiness exports for Brazil´s overall trade surplus (Peine, 2009). Their political strength became evident in the renegotiation of the Forestry Code, which has ratified the status quo on deforestation and has decreased the percentage of the natural reserve, which needs to be maintained in the Amazon region.

Table 3: Brazil´s Agribusiness Exports to China

	2011		2008		Variation (%) 2011/2008		Variation (%) in average price negotiated (2011/2008)
PRODUCTS	US$ (millions)	Ton (thousand)	US$ (millions)	Ton (thousand)	US$	Ton (thousand)	
Soybeans	10957,10	22104,72	5324,05	11823,57	106%	87%	10%
Wood pulp and cellulose	1299,68	2213,37	690,72	1228,57	88%	80%	4%
Sugar	1217,13	2137,51	22,15	75,13	5395%	2745%	93%
Soybean Oil	772,74	663,72	830,13	703,68	-7%	-6%	-1%
Cotton and derivatives	569,63	274,06	40,09	34,63	1321%	691%	80%
Poultry meat	422,93	195,84	1,39	0,98	30327%	19884%	52%
Furs and leathers	401,04	134,22	375,93	110,01	7%	22%	-13%
Tobacco	379,96	52,93	367,32	54,33	3%	-3%	6%
Fruit juice	114,24	54,00	57,59	34,18	98%	58%	26%
Paper and derivatives	96,20	106,96	50,98	55,72	89%	92%	-2%
Wood and derivatives	61,03	133,57	93,11	127,00	-34%	5%	-38%
Vegetal material for animal feed	38,24	48,24	4,13	3,80	826%	1169%	-27%
Rubber	25,53	5,62	29,46	12,34	-13%	-54%	90%
Peanut oil	14,60	8,64	0,00	0,00	-	-	-
Meat	9,75	2,68	0,32	0,08	2947%	3250%	-7%
Coffee	8,08	1,65	8,95	1,68	-10%	-2%	-8%
Fish	7,42	1,60	5,30	0,86	40%	86%	-24%
Corn	6,41	21,15	0,00	0,00	-	-	-
Wheat	5,13	18,00	0,00	0,00	-	-	-
Fruits	1,04	0,11	1,86	0,31	-44%	-65%	56%
Wine	0,35	0,06	0,03	0,01	1067%	500%	96%
Alcohol	0,33	0,20	1,78	3,28	-81%	-94%	202%
Swine meat	0,08	0,02	0,00	0,00	-	-	-
Milk and derivatives	0,00	0,00	0,00	0,00	-	-	-

Source: MDIC, CEBC, 2015

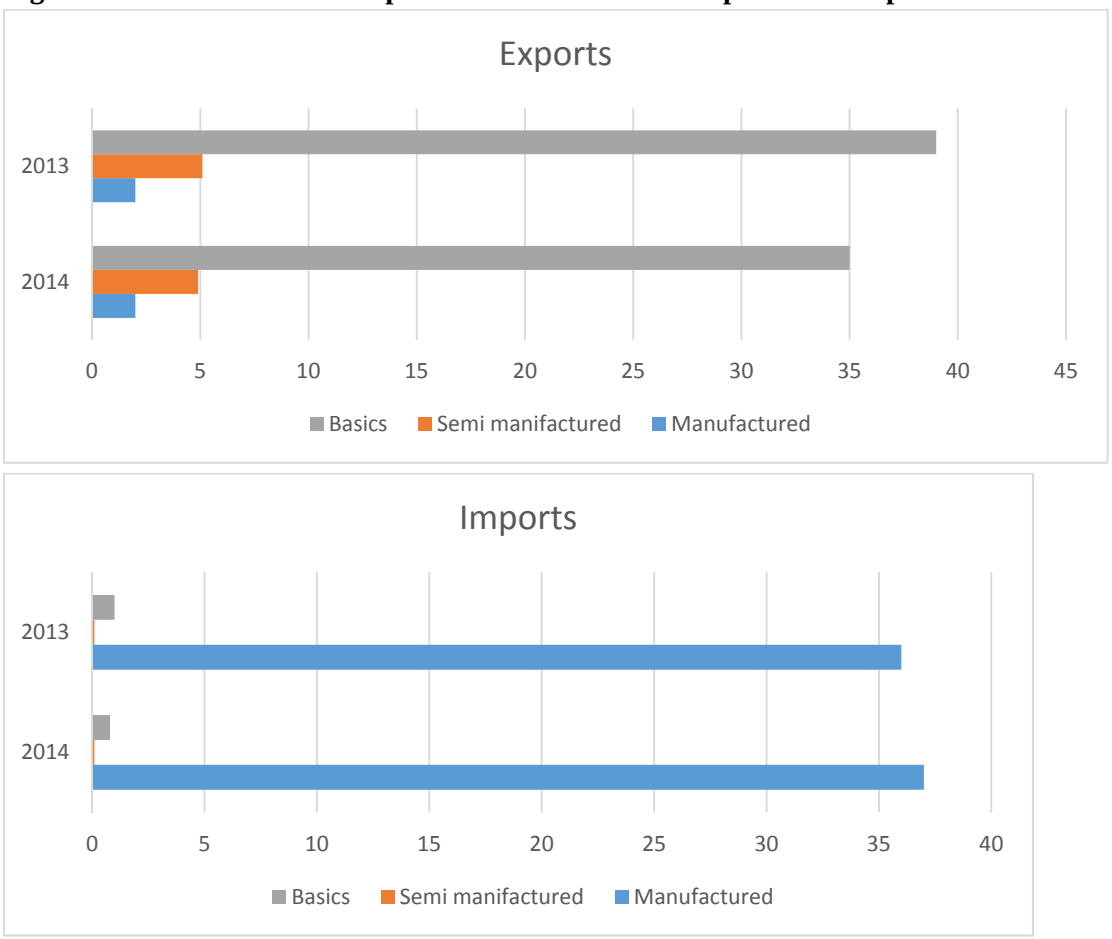
In conclusion, soy in no way exhausts the dynamic of agribusiness trade and investment between Brazil and China and this will be evident from our analysis below. Nevertheless, the extra demand for this product is having a societal impact precisely because of the spillover effects regionally, environmentally and politically. Before discussing the transformations provoked by China´s demand for soy and the strategies this country is putting in place to ensure supplies over the long term, we will look more generally at Brazil-China trade and investments and, in particular, to China´s involvement in other agro-industrial sectors where its dependence on out-sourcing is pronounced.

China and Brazil: Towards a New Style of Market Relations

Brazil maintains a small trade surplus with China, but the terms of trade are almost entirely an exchange of basic commodities for manufactured goods, as indicated in Figure 3 below. Nevertheless the reach of China´s agricultural exports can be surprising. In 2013, the Association of Garlic Producers in the state of Goiás, (the same state which received a USD 7billion proposal from the Chinese firm CNADC for investments in grains production), brought an anti-dumping suit against China, which was supported by the Brazilian Chamber of Exports (CAMEX). On the other hand, in the same year tariffs were waived on imports of black beans (Brazil's most traditional foodstuff) from China to cover a shortfall in the harvest that year (Valor Econômico,

2015).

Figure 3: Brazil – China: Comparison of the Profile of Exports and Imports



Source: CEBC 2015

The China-Brazil Business Council has accompanied Chinese investments in Brazil since the early 2000s, and although the values of these investments are often not revealed, it is possible to identify their principal objectives. Initially the primary focus was on the three types of resources – mining, petroleum and land. Market access opportunities quickly came to account for a range of investment proposals in telephones, telecommunications and the car industry. More recently infrastructure (energy transmission, railways and ports) has become a more prominent target (D´Atri, 2015, Frischtak & Soares, 2013).

Table 4: Chinese Agribusiness Investment in Brazil

Year	Company	Partner	Stage	State	Value (US$)	Objetive	Modality	Type of Company	Nature of Investment
2011	China National Agricultural Development Group Corporation (CNADC)	Governo de Goiás	Announced	Goiás	$7.000.000.000	Participation in projects for the expansion of grain crops and investment in the construction of extensions to the North-South railway line in Goias. Soy produced in this area of some 2.4 million hectares would be exported to China.	Greenfield	Central SOE	Resource seeking
2011	Chongqing Grain Group	-	Announced	Bahia	$300.000.000	Purchase of 100.000 hectares for soy production; installation of soy crushing plant. Investment stopped through Government restrictions of foreign land purchases.	Greenfield	SOE	Resource seeking
2011	Cofco. Ltd	Companhia Nacional de Açúcar e Álcool (CNAA)	Announced	Goiás e Minas Gerais	Not declared	Purchase of two units of the National Company of Sugar and Alcohol (CNAA).	Fusion & Acquisition (complete)	Central SOE	Resource seeking
2011	Grupo Pallas International	Governo da Bahia	Announced	Bahia	Not declared	Purchase of land for grain production for export (and bioenergy)	Greenfield	Private	Resource seeking
2012	Universal Timber	-	Announced	Acre	20.000	Companhy linked to a group of Chinese investors in forestry management announced interest in investing US$20 milion in the State of Acre (cities of Sena Madureira and Feijó).	Greenfield	Private	Resource seeking
2013	BBCA	-	Confirmed	Mato Grosso do Sul	320.000	Construction of a corn processing unit, capacity for 1.200.000 tons of grain costing US$320 million.	Greenfield	Central SOE	Resource seeking
2014	Tide Group	Prentiss Química	Confirmed	Paraná	Not declared	Restore the productive capacity of Prentiss, and invest in new technologies and research in Brazil (agrichemicals).	Fusion & Acquisition (partial)	Private	Resource seeking
2014	China Tabaco Internacional do Brasil (CTIB)	China Brasil Tabacos Exportadora (CBT)	Confirmed	Rio Grande do Sul	20.000	Tobacco production: construction of factories, warehouses and offices in either in Santa Cruz do Sul or Venâncio Aires.	Joint-venture	SOE	Resource seeking

Source: CEBC, elaborated by the authors

In the case of agribusiness (see Table 4 above), in addition to the soy complex, cellulose, sugarcane, cotton, leather, tobacco, poultry, and more recently, beef, are important items of trade with Brazil. Continuing with our hypothesis, that for China simple dependence on global markets is intrinsically fraught with risk given the scale of its demand and the increasing volatility of markets – which are in the hands of global traders or subject to intervention by key producer states – we would expect these product sectors to become the object of investments or contract arrangements to influence the conditions of supplies. Timber was just such an example in the 1990s, and the perceived threat of "Asian" investors in the Brazilian Amazon led to a mobilization of civil society groups (Rama & Wilkinson, 2012). It was thought that Asian and Chinese firms were moving into the Brazilian Amazon as forests in Asia were depleted and access to African forests was blocked by the dominance of European logging companies. While these Asian investments did not materialize, China has accessed Amazon timber via Peru and has developed its own global value chain importing timber for the re-export of finished wood products, all under the control of Chinese firms (Putzel et al, 2008).

In 2012, China imported 65% of its demand for cellulose and is the world´s largest importer. In contrast, China is the world´s largest producer of paper (99 million tons in 2011), with imports of less than 5 million tons in the same year. Brazil´s pulp exports to China have increased sharply, doubling in value between 2008 and 2012, although they still fall behind the US and Canada, and China imports from a broad range of countries (CEBC, 2015). It is projected that Brazil will triple its exports of pulp by 2025. In 2010, the Chinese company, Rizhao, was reported to have plans to invest in Brazil for the production of 1.5 million tons of cellulose. This investment, however, seems not to have materialized, and in 2012 restrictions on foreign land investments severely affected foreign investments in this sector. According to Pöyry Tecnologia, a leading Finnish Engineering Firm in the cellulose sector, China was also trying to reinforce its domestic cellulose production (Valor Econômico, 2015). This may explain the unprecedented anti-dumping measures adopted against imports of Brazilian cellulose in 2013. An alternative or complementary explanation would be the higher tariffs imposed by Brazil on imports of paper products from China (Silva & Yueming, 2014). Suzano Paper and Cellulose, one of Brazil´s leading firms in this sector, trades directly on a contract basis with Chinese firms, rather than through the market, and due to its purchase of the British Futurogene, it also has research facilities in China. The cellulose sector is a fascinating example of how these two leading "emerging economies" advance their trading and investment relations through a mixture of cooperation and conflict strongly influenced by shifting regulatory arrangements.

Three firms dominate the Brazilian tobacco market: Souza Cruz, Phillip Morris and Alliance One. China is the world´s largest market for cigarettes with a growth rate of 3-4%. Half of its imports come from Brazil, and China is also Brazil´s leading export market. In 2012, China Tobaco Internacional do Brasil (CTIB), subsidiary of China Tobacco International, established a joint venture with Alliance One Brasil in which CTIB would have a 51% partnership. Through this agreement, some six thousand contracts with small tobacco farmers in the Southern State of Rio Grande do Sul, (the only State then authorized to export to China), a fifth of Alliance One Brasil´s contracts, were transferred to the new company. The goal appears to be that of ensuring higher quality tobacco for the emerging middle class market and is seen "as only an initial step" (Valor Econômico, 2015). Subsequent to this agreement, Chinese officials have authorized exports from a number of other Brazilian States – Santa Catarina, Paraná, Alagoas and Bahia. Here again direct contract relations are substituting reliance on the global market.

In recent years, China has become a major importer of sugar from Brazil, a trend which is likely to continue given its current below average per capita consumption (10 kilos versus a world average of 15 kilos) in the context of continued urbanization and economic growth (OECD-FAO, 2014). China was largely absent from the huge wave of investments that poured into Brazil´s sugar-alcohol sector in the mid-2000s. Noble, the then Hong Kong-based trading company, backed by China´s sovereign fund, already had two sugar mills and acquired two more in 2010, increasing its sugar producing capacity to 1.34 million metric tons. With the

purchase of Noble, COFCO now assumes control of four sugar plants in the state of São Paulo. This follows its purchase of Tully Sugar, responsible for 10% of Australia´s sugar production. China has a modest ethanol sector, developed at the beginning of the 2000s using grains (corn, wheat), and a 10% blend is in operation in a number of provinces. Further use of grains for ethanol was banned after 2008 for food security reasons and a number of alternative raw material sources have been developed (manioc also imported from Thailand) but have remained on a modest scale (HLPE, 2013). On the other hand, China has announced the production of the world´s largest second generation cellulosic ethanol plant, and a Chinese delegation has been in negotiations with the State of Alagoas in Northeastern Brazil, an important sugar producing region, where a second generation ethanol plant is now in operation.

As in the case of pulp exports, a Brazilian firm took the lead in developing direct trade relations for sugar with China and the Asian market. In 2012, Copersucar, Brazil´s leading sugar producer and exporter, established a subsidiary (Copersucar Asia) in Hong Kong in the same year that China became Brazil´s leading export market. Copersucar controls some 10% of Brazil´s sugar production, operates a port terminal in Santos, São Paulo, and in 2011 created a shipping freight company in a joint venture with the Jamial Al-Ghurair (JAG), which controls Al Khaleej Sugar (AKS) – the world´s largest sugar refinery, located in Dubai. In 2014, Copersucar united in a 50-50 joint venture with Cargill to form Alvean, creating the world´s largest sugar trading company with offices in Bangkok, Bilbao, Delhi, Dubai, Hong Kong, Jakarta, Moscow, São Paulo and Shanghai. This joint venture parallels the creation of Raizen between Brazil´s then leading sugar producer Cosan and Royal Dutch Shell. A similar pattern has emerged in the new soy frontier where the Brazilian Amaggi Group has created joint ventures with both Bunge and Dreyfus. The global traders, who prided themselves on the self-sufficiency and secrecy of their operations, are now finding it advantageous to ally themselves with increasingly powerful national players. Copersucar maintains its independence in the ethanol market and with its purchase of the US-based company, Eco-Energy, is now the leading global exporter of ethanol.

The China, Brazil and Southern Cone Soy Nexus

In each of the above sectors where China and Brazil have substantial commodity trading relations, we have seen moves on both sides to go beyond the classical trading model, establishing different forms of more direct negotiation – such as long term contracts with clients, contract integration for the supply of raw material, direct investments in production, and joint-ventures. In none of the above sectors, however, is China´s strategic dependence on imports so pronounced as in the case of soybeans. Within a vision of food security dominated by the concept of self-sufficiency, China decided to outsource feed in an effort to secure basic food grain autonomy. As we have noted, the European Community adopted a similar position in the 1960s. This decision was taken even at the cost of seriously weakening China´s domestic soy complex, which underwent a rapid internationalization after 2004 (Oliveira & Schneider, 2014).

Soy and grains more generally are seen to be the products most subjected to the global institutions of the agricultural commodity market, with prices decided by the Chicago Board of Trade (CBOT) and supply managed and controlled by the Big Four, ABCD, traders – Archer Daniel Midlands, Bunge, Cargill and Dreyfus (Murphy, Burch & Clapp, 2012). An influential interpretation of Brazil´s and the Southern Cone´s emergence as the new global pole of soy and grains production, highlights the region´s comparative advantage and its integration into an expanding global value chain orchestrated by the ABCD players, creating the regional Southern Cone “Republic of Soy” (Turzi, 2011, Giraudo, 2014). Such a view underestimates the role of public policies in the two major countries of the Southern Cone, Brazil and Argentina, and their different consequences for the trajectories of soy expansion in each country. It similarly underplays the importance of domestic consumption and demand patterns in these countries. It fails also to

appreciate the decisive role played by Japan since the 1970s in the opening up of Brazil´s huge new frontier region in the Center-West of the country (Rama & Wilkinson, 2012).

In the 1990s, it seemed as though Brazil and Argentina´s soy complexes would be integrated on a regional basis. The advance of Brazilian soy was still concentrated in Minas Gerais and Mato Grosso and Argentinian firms, along with the ABCD traders, concentrated their new crushing investments along the Rio de la Plata. With the implementation of the Lei Kandir in Brazil providing a special stimulus to the export of soy as grain and the policy of taxing (called "retenciones"), grain exports in Argentina favoring the export of oil and meal, the new crushing capacity along the Rio de la Plata seemed to provide the basis for increasing regional integration of the soy complex (Gutman, 2000). However, with the explosion of Chinese demand for soy grain and the unexpectedly rapid advance of Brazil´s soy frontier up the Center West to the North of the country, this regional Integration becomes less realistic and the central challenge becomes that of new investments in crushing, storage and logistics to ship soy out via the North of the country. While the ABCD group has taken the lead this entirely new scenario is creating opportunities for the entry of a wide range of actors reflecting the increasing importance of local and regional capital along with new global players (Wilkinson & Pereira, 2015).[2]

China has frequently declared its interest in establishing greater independence in relation to the ABCD traders, and COFCO´s recent purchases of Noble and Nidera suggest that it might soon be in a position to add its initials, creating the "Big Five". China´s activities in the Brazilian and the Argentine soy sector can be divided into four phases, which overlap and have been influenced by changes in the regulatory climate. Initially the primary focus was on the purchase of land, a strategy frustrated by the reactivation of restrictive regulations on foreign land purchases in Brazil in 2010 and in Argentina in 2011. A second approach was via negotiation with State Governments in the soy regions of both Brazil and Argentina. Proposals here had to take into account public policies and particularly the broad concern regarding China´s demand for soybean, rather than processed soy products – an issue discussed during Brazil´s Presidential visit to China in 2012. Goiás and Bahia were the two states that became the object of ambitious investment plans, but the results to date have been insignificant (Lucena and Bennet, 2013).

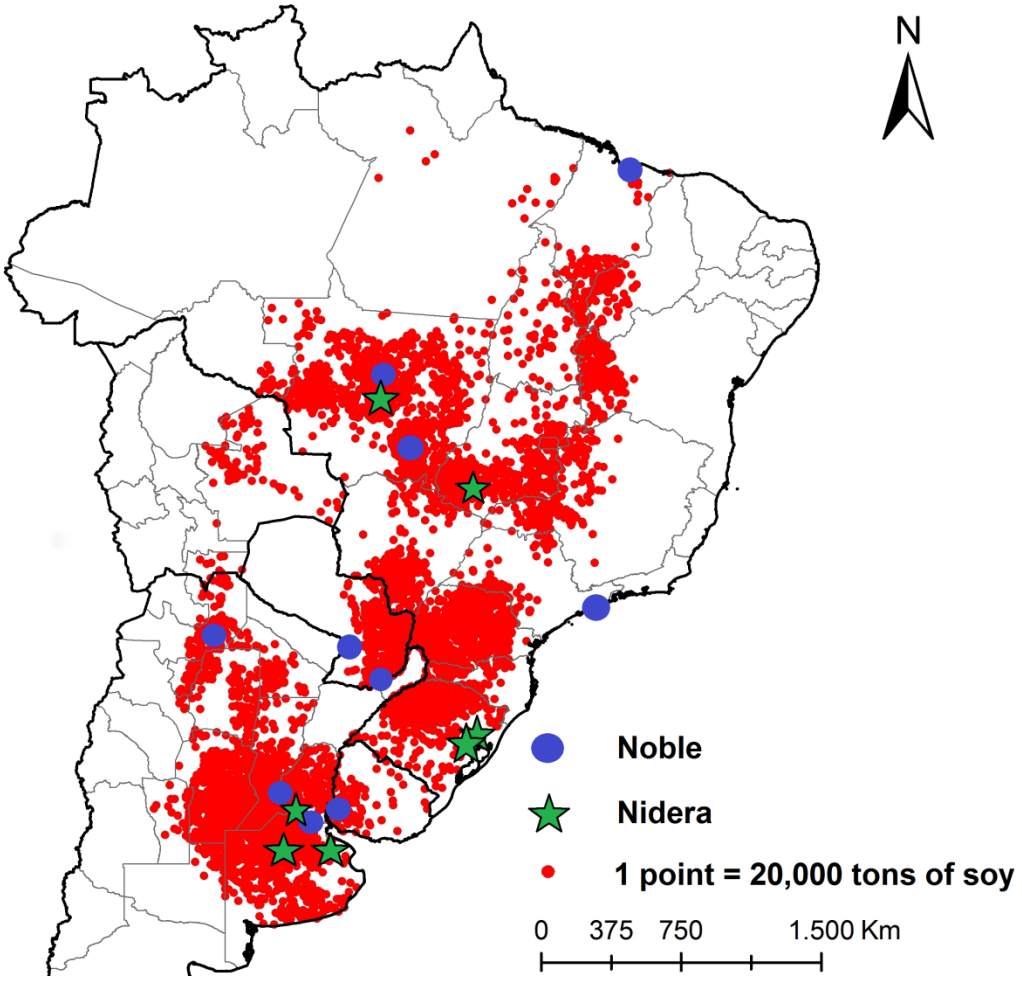
In Argentina, the Chongqing Grain Group (CGG) acquired 130,000 hectares of land in Santiago del Estero and established a partnership with Molino Cañueças, producer of vegetable oils and flour, for the purchase of 10,000 hectares in the province of Cordoba. The most notorious investment was that by Beidahuang in partnership with Cresud, Argentina´s largest agricultural firm, for the acquisition of 320,000 hectares in the province of Rio Negro. The State Governor ceded the land together with use of the Port and offered fiscal advantages for the proposed investments. The Argentine Federal Government found these terms unacceptable, accusing the state government of exceeding its constitutional authority and stopping the project (Ellis, 2015). China´s focus then shifted to the financing of logistics and infrastructure in an investment agreement covering railways and port facilities with Belgrano Cargas, Argentina´s largest railway company.

China has also committed itself to large-scale infrastructure investments to improve the export logistics

[2] The advance of soy in Argentina was accompanied by the development of a new model of agricultural production whereby specialized logistical firms provided all the services for a fundamentally rentier farmer class. Los Grobos and El Tejar were the most notable firms promoting this model and their entry into Brazil seemed to mark an "Argentinization" of Brazilian agriculture on the new soy frontier. The Brazilian farming model, however, is more "hands-on", owner-producer oriented. In addition, sub-contracting what are seen to be activities essential to the farming operation are illegal in Brazil (an issue currently being heatedly debated in Congress). El Tejar (O Telhar in Brazil) has had to cut its operations back and its ownership has now changed hands. Los Grobos has also left Brazil, with its investments in Brazilian soy being acquired by the Japanese trader, Mitsubishi. In complementary fashion, Brazil´s largest soy farming group Maggi began operations in Argentina but then withdrew with complaints about the very different conditions under which Argentine soy producers must operate.

of Brazil´s new soy frontier, on average some two thousand kilometers from the Southern ports. China´s main focus here is on the creation of railway systems linking production to Northern port outlets and the Pacific. Here again technical and political delays have so far prejudiced the implementation of these projects. China´s most recent move, as we have mentioned, has been the purchase of Nidera by COFCO (USD 1.2 billion) and Noble (USD 1.5 billion) in 2014, which provides this state firm with an important direct entry into the origination and marketing of soy in the whole of the Southern Cone. With these acquisitions, COFCO´s turnover reaches USD 63.3 billion, in the same league as the Big Four.

Figure 4: Soy production in the Cone Sul (2010/11) and location of Noble and Nidera´s investments in the region

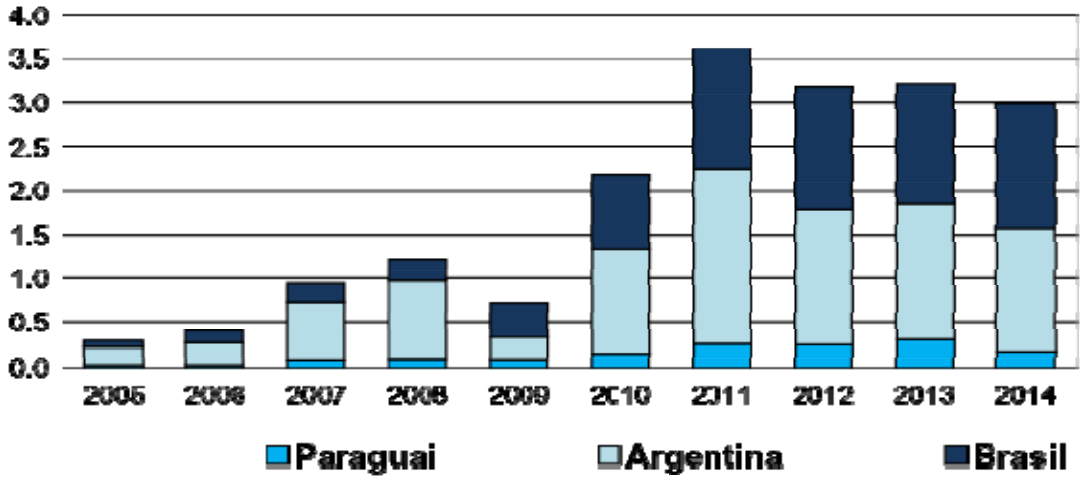


Source: Adapted from Wesz Jr (2014) (for a detailed account of these assets see the Annex)

Noble operates with a wide range of commodities – grains, oils, sugar, cocoa, cotton and coffee - and is present in 40 countries on the five continents. It is the largest commodity trader in Asia, and with five plants in China, it has one of the largest crushing capacities the country. Noble is present in the four countries of the Southern Cone, beginning its investments in Argentina in 2000, with a focus on the construction of storage and port capacity allowing it direct negotiations with farmers. In 2009, Noble inaugurated its first crushing plant in Rosário, in the Province of Santa Fé, with a capacity for 9,500 tons/day, some 5.5% of total Argentina crushing capacity. Noble is responsible for around 10% of Argentina´s soy grain exports, 6% of

feed and 9% of soy oil (Ciara, 2015). In 2004, Noble began investments in Brazil employing the same strategy, constructing storage capacity in Mato Grosso and Paraná. In 2010, the group inaugurated a port terminal in Santos, São Paulo at a cost of USD100 million. In 2011, Noble announced investments of USD 200 million for a soy crushing plant in Rondonópolis in Mato Grosso, with a capacity for 4,000 tons/day and 300 million tons/year of biodiesel. In Paraguay, Noble formed a joint venture with a local logistics firm, Baela, for the river transport of grains and has built a crushing plant in the port of Villeta. In Uruguay, Noble maintains a terminal in partnership with Barraca Jorge Erro e Evera in the Nueva Palmira Port, with a capacity for 14,500 tons. In all of these countries, Noble is also active upstream in the supply of fertilizers, technical assistance and finance, in similar fashion to other global traders. From 2005 to 2011, Noble´s exports from the Southern Cone experienced explosive growth, from USD 300 million to USD 3.7 billion, settling to around USD 3 billion in the last three years:

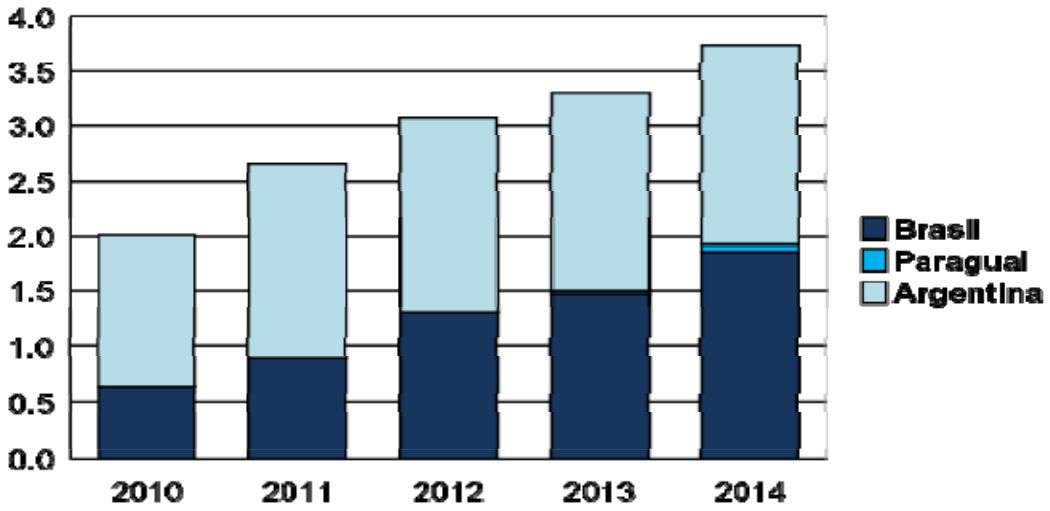
Figure 5: Noble Total Exports from Brazil, Argentina and Paraguay (in USD FOB billions) – 2005 to 2014



Source: SECEX (2015), INDEC (2015), Capeco (2015), CIARA (2015), elaborated by the authors

Nidera was founded in 1920 in Holland and moved to Buenos Aires in 1930. In the same decade, it set up office in Uruguay, and in the 1950s, began operations in Brazil. Today Nidera is present in 20 countries and operates in all sectors of agrofood, including seeds. Nidera has two crushing plants in Argentina, in Buenos Aires and Santa Fé provinces, with a capacity for 11,000 tons/day, some 8% of Argentine capacity. In Brazil, Nidera acquired the Brasil Óleo de Mamona (BOM) firm in the State of Bahia and, in 2005, bought up Bayer´s soy and corn seed operations in Patos de Minas (MG) and Rio Verde (GO), forming Nidera Seeds, which now controls some 10% of the transgenic soy seed market in Brazil. Nidera Brazil Grain and Oil (BG&O) operates in the marketing of grains and oils and Nidera Nutrientes e Proteção de Cultivos (Nidera NPC) in plant protection. In Uruguay and Paraguay, Nidera focuses on the supply of seeds. In contrast to Noble, Nidera´s share in exports has increased significantly in the last five years and it now exports more than Noble does.

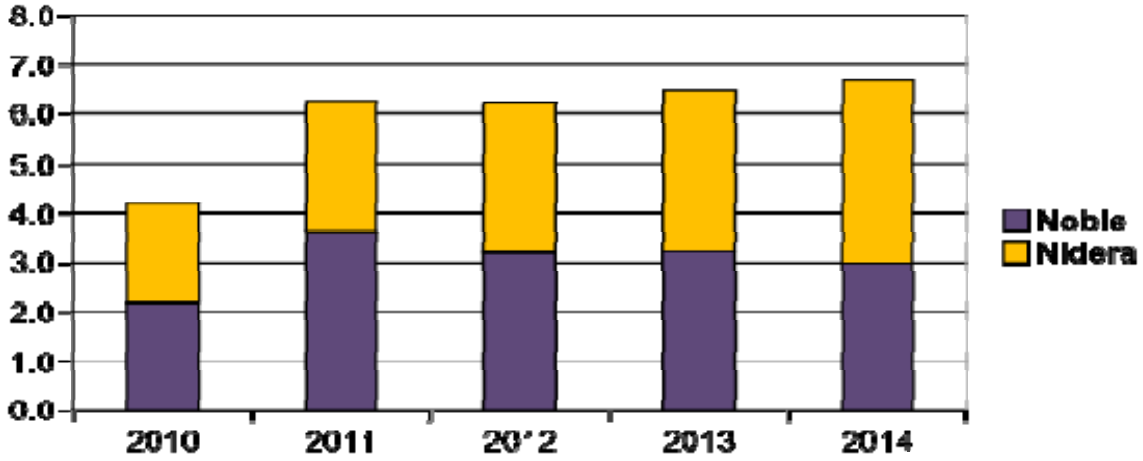
Figure 6: Nidera´s Total Exports from Brazil, Argentina and Paraguay (USD FOB billions) – 2010 to 2014



Source: SECEX (2015), INDEC (2015), Capeco (2015), CIARA (2015), elaborated by the authors

With these two purchases, COFCO has established a solid presence in a broad range of agricultural commodity markets, particularly in the soy complex in the Southern Cone, where its presence in seeds may offer advantages in relation to the ABCD group. COFCO is now particularly strong in Argentina, with 12.8% of this country´s crushing capacity (Hinrichsens, 2015), and 12%, 15% and 15% respectively of soy feed, oil and grains exports – leaving COFCO second only to Cargill, pushing Bunge and Dreyfus into third and fourth places (Clarin, 2015). Since 2011, the share of Brazil and Paraguay in the exports of these two firms has increased by 40%, whereas those from Argentina declined by 15%. It is also interesting to note that in this same period, Nidera has assumed a leading role (see Figure 7).

Figure 7: Total Exports of Nidera and Noble in Brazil, Argentina and Paraguay (in USD FOB billions) – 2010 to 2014



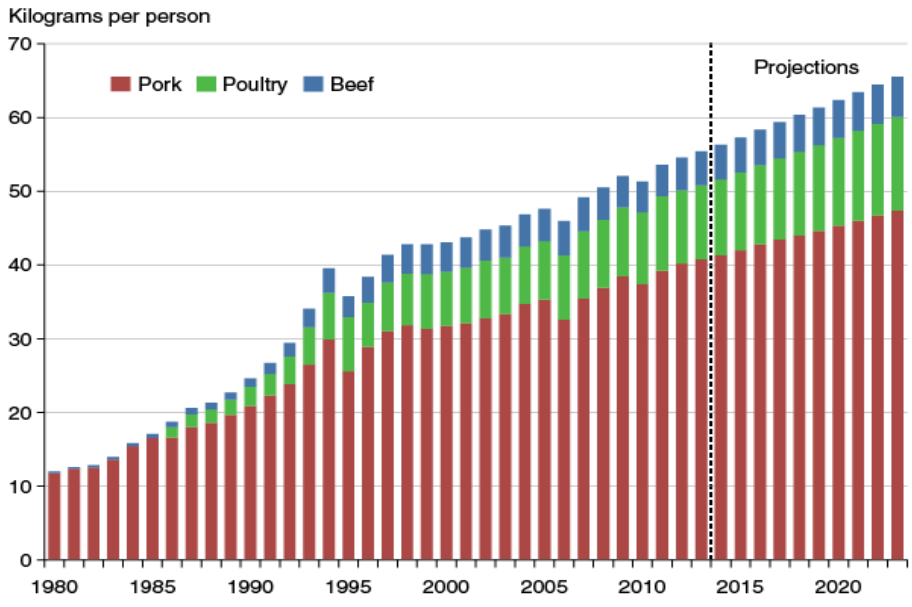
Source: SECEX (2015), INDEC (2015), Capeco (2015), CIARA (2015), elaborated by authors

Trade and Investments: From Feed to Meats

The challenges of transitioning to an animal protein diet in China, due to growing per capita income and urbanization, translated itself into a policy of feed imports and the promotion of the intensive industrial meat production model. Two factors introduced the need for more specific policies to address rising meat consumption. In the first place, China´s meat diet has been based on pork – producing and consuming 50% of the global supply. Even with the remarkable expansion of intensive production (Sharma & Schneider, 2014), demand is outstripping supply. Although currently marginal, at 2% of domestic consumption, China is now the second largest importer of pork. World trade in pork was not designed for the scale of China´s market. While it provoked great surprise (and alarm), the purchase of the U.S._Smithfields, the world´s largest hog firm, by Shuanghui (with the help of CDH Investments, a Chinese private equity firm, and the Bank of China), is a further indication of the degree to which China is looking beyond trade to ensure food security.

Although pork consumption is increasing in China, urbanization and rising incomes are also bringing changes in the profile of food consumption (see Figure 8 below). Per capita consumption of chicken has risen from 1 kg in 1990, to 9 kg in 2014. Here again the industrial contract integration model has been diffused with the arrival of Tyson in the nineties, followed by C.P. Thailand Group. The largest domestic group, Wens, which has also adopted this model, now produces more than a billion chickens per year. Nevertheless imports of half a million metric tons were reached in the early 2000s and are projected to reach this figure again in 10 years, in spite of the intense modernization this segment has undergone in this period. Outbreaks of Asian flu have led to a shift from contract farming to full integration and a further effort to reduce the influence of the traditional wet markets and the practice of live bird purchases.

Figure 8: Continued growth projected in China's per capita meat consumption



Source: USDA Production, Supply and Distribution database and projections.

After two years of negotiations, China and Brazil resumed trade in poultry in 2008 with the authorization of exports from 22 Brazilian plants. In 2010, a trade dispute with the US, which until then was responsible for 75% of China´s broiler meat imports, shifted trade in Brazil´s favor, and exports to China exploded from 24,000 tons in 2009 to 196,000 tons in 2011 (see Table 5 below). Prior to this, Brazil, which since 2004 has been the world´s leading poultry exporter, was delivering some 415,000 tons to Hong Kong, of which a substantial part was consumed on the Chinese mainland. The greater part of China´s imports is for

chicken parts, while its exports are whole chickens. Changing consumption patterns and the effort to promote frozen chicken sales will likely increase the market for whole chickens. Brazilian firms Marfrig, through its acquisition of Keystone Foods, which supplies food service chains, and Brazil Foods (BRF), in a joint venture with Dah Chong Hong (DCH), have initiated investments in China.

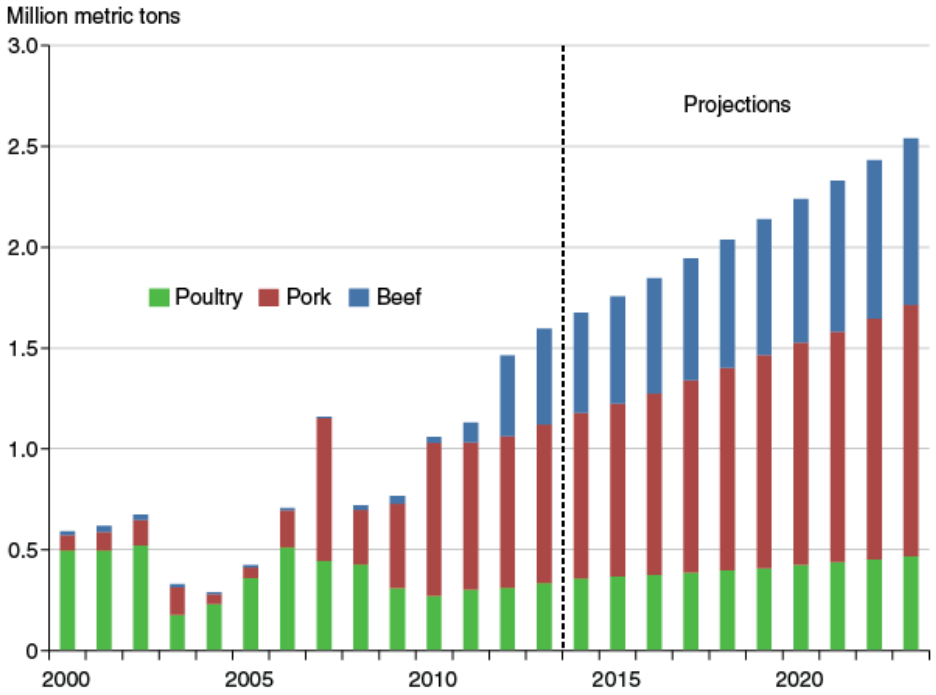
Table 5: Brazil´s Chicken Export to Hong Kong and China, by Category, 2000-2015

Year	Chicken	Acc. Growth	Cuts	Acc. Growth	Preserve	Acc. Growth
2000	$ 2.734,38		$ 71.099,47		$ 15,71	
2001	$ 4.898,42	79,1%	$ 73.750,21	3,7%	$ 64,56	311,0%
2002	$ 2.161,57	-20,9%	$ 79.166,95	11,3%	$ 155,28	888,6%
2003	$ 2.226,08	-18,6%	$ 119.845,35	68,6%	$ 519,56	3207,6%
2004	$ 4.105,74	50,2%	$ 161.485,76	127,1%	$ 646,05	4012,9%
2005	$ 3.420,50	25,1%	$ 218.944,11	207,9%	$ 429,59	2634,8%
2006	$ 3.619,99	32,4%	$ 266.295,44	274,5%	$ 506,91	3127,1%
2007	$ 4.445,19	62,6%	$ 438.644,00	516,9%	$ 1.117,07	7011,5%
2008	$ 3.470,17	26,9%	$ 561.377,39	689,6%	$ 332,10	2014,2%
2009	$ 3.376,01	23,5%	$ 621.700,18	774,4%	$ 884,24	5529,2%
2010	$ 4.559,80	66,8%	$ 712.570,96	902,2%	$ -	-100,0%
2011	$ 7.615,11	178,5%	$ 967.174,99	1260,3%	$ 17,91	14,0%
2012	$ 2.758,87	0,9%	$ 961.723,45	1252,6%	$ 14,88	-5,2%
2013	$ 4.690,14	71,5%	$ 925.509,70	1201,7%	$ -	-100,0%
2014	$ 4.110,81	50,3%	$ 971.994,71	1267,1%	$ -	-100,0%
2015	$ 1.222,72	-55,3%	$ 211.560,84	197,6%	$ -	-100,0%
	$ 59.415,49		**$7.362.843,53**		**$ 4.703,86**	

Source: AliceWeb, elaborated by the authors (first three months of 2015)

Perhaps most surprising has been the rapid growth in beef consumption (4.55 kg per capita in 2014) and beef imports (see Figures 8 & 9). Given China´s restrictions in terms of land and water, together with the effects of agricultural mechanization and rural-urban migration, a modern beef industry will be very difficult to consolidate. Between 2008 and 2013, China's cattle slaughter declined by 3.7 million (8%), and during the same period, beef production declined by a similar amount. Between 2011 and 2014, prices increased by 81%, and yet consumption per capita has increased in this same period. At the same time, beef is a more attractive animal protein for the rising middle class and is more positively associated with health than pork. As a result, imports have exploded, rising to 314,000 metric tons in 2014. If imports by Hong Kong and Vietnam are included, the total for the greater Chinese region totals 1.39 million metric tons, making this the world´s largest importing region. Most imports have come from Oceania and Canada, with the US being excluded since the early 2000s because of the incidence of the BSE.

Figure 9: China's global meat imports projected to continue upward trend



Source: USDA Production, Supply and Distribution database and projections.

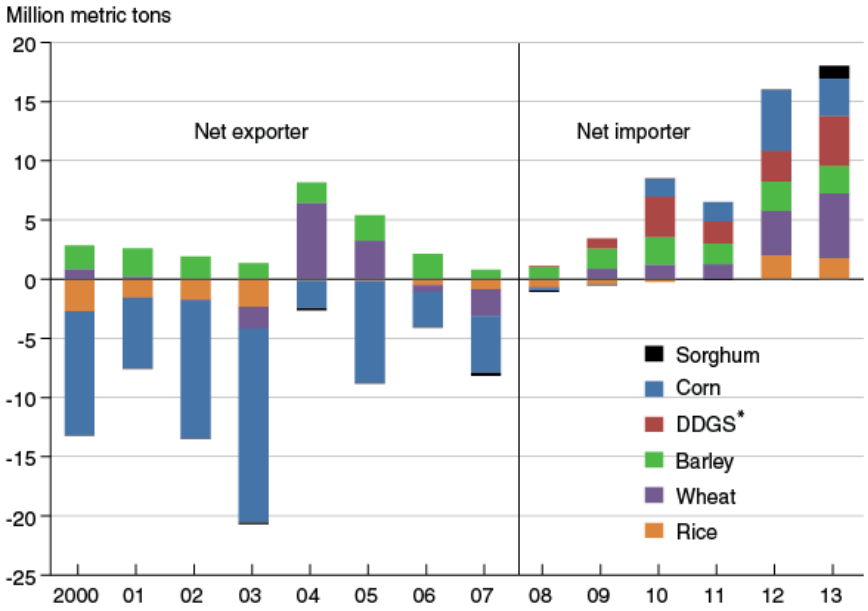
In the more recent period, however, China has been looking to the Southern Cone, not only for trade, but also for direct investments in this sector. China is now Argentina´s third largest beef export market after an agreement was signed for the export of frozen boned meat in 2012. Uruguay, for instance, is authorized to export chilled meat on the bone. Brazil´s beef exports have been suspended since 2012 after an atypical case of BSE was identified, but renewed authorization of exports is currently underway. Chinese investors are now in negotiations with mid-sized Brazilian slaughterhouses through the intermediation of CDH Investments, the private equity firm, worth USD 14 billion, which was responsible for the Shuanghui (now WH Group after launching an IPO on the Hong Kong stock exchange) purchase of Smithfield Foods (see above). Frialto, which has three plants in the State of Mato Grosso, and a slaughter capacity of 2,500 cattle/day, is one such firm currently in negotiations. Reports of similar negotiations include the Frigol in São Paulo, State, and Mataboi, a recent investment by a member of the Batista family, owners of JBS, the world's largest meat firm. Mataboi has a slaughter capacity of 2,600 cattle per day and a turnover of RR 1.6 billion, with plans to increase slaughter capacity to 10,000 head per day (Valor Economico, 2015).

Conclusions

China´s food and raw material security policies are in the process of revision, as its dependence on global food and non-food supplies deepens. The outsourcing of feed and oils (soybeans) marked a first move in this direction and was also seen as a measure to ensure basic food grain (corn) self-sufficiency. Membership of the WTO brought with it a more general commitment to opening up trading relations. As the 2000s have advanced, we can see a shift toward a broader recourse of basic food grain imports, including corn (see Figure 10 below). Urbanization and rising incomes have produced more diversified food consumption patterns and the increase in animal protein has also been accompanied by a relative decline in pork and increases in poultry and beef consumption. Both of these trends have reinforced the need to negotiate new

sources of food supply.

Figure 10: China's net imports of grains surged during 2012-13



Note: Net imports = imports – exports. Data for calendar years.
*DDGS= Distillers Dried Grains With Solubles.
Source: USDA, Economic Research Service analysis of China customs statistics.

In the case of Brazil and the Southern Cone, we have traced China´s evolving trade and investments relations. A range of strategies has been deployed – land purchases, harvest contracts negotiation, direct client-supplier agreements, joint-ventures, direct investments, promotion of infrastructure and logistics to improve and cheapen trade flows, and the acquisition of global traders. All of these initiatives reveal China´s "more-than-market" strategy to deal with dependence on outside sourcing which, even when proportionately modest, makes unprecedented demands on global trade. COFCO´s purchase of Noble and Nidera exemplifies China´s move to a "hands-on" control of all the stages of global grains/oils production and trade flows as its dependence on food and raw material imports both widens and deepens. Its most recent advances into the Brazilian meats sector suggest that this strategy may only be in its initial stages.

In the early sections of this article, we called attention to the asymmetry between the "partnership of equals" on the diplomatic "development" front and the neocolonial style of trade and investment relations between Brazil and China. It is often argued that it no longer makes sense to consider Brazil´s soy complex within the framework of traditional commodity markets. It is certainly true that soy has become a high technology sector, increasingly dependent on advances in biotechnology and informatics. Nevertheless, it maintains the demand and price elasticity problems of a commodity, which are now becoming evident as China´s demand slows down. When warning signals went out on the impending decline in demand for extractive raw materials, it was argued that demand for foodstuffs would keep the agricultural commodity markets buoyant for a considerable period of time. Since then, prices have plummeted and although in the years of boom there has been significant scope for farming capital to upgrade along the soy chain, even establishing partnerships with the Big Four, it is the latter, and now COFCO which will likely call the tune as

margins tighten.[3] Beyond the trade asymmetry of commodity exports for manufacturing and technology imports, Brazil and the rest of the Southern Cone now face the advance of influence over its soy, and eventually its meats complex, placing enormous strains on the pretense of continued diplomatic parity, as leaders of the developing world.

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[3] In another paper (Wilkinson & Pereira, 2015), we have discussed the increasingly important role of investments by Japanese traders in Brazil´s agricultural commodity sectors. Prior to the rise of China, Japan was the largest grains/oils/meats importer in Asia. As we have mentioned, it was a key player in the development of the Brazilian soy frontier from the middle seventies onwards, but has largely relied on world trade for its supplies. Now faced with the challenge of Chinese demand, it too is adopting a more hands-on strategy, investing in origination, storage and transport. Hall (2015) provides an excellent analysis of Japan´s traders in the recent period.

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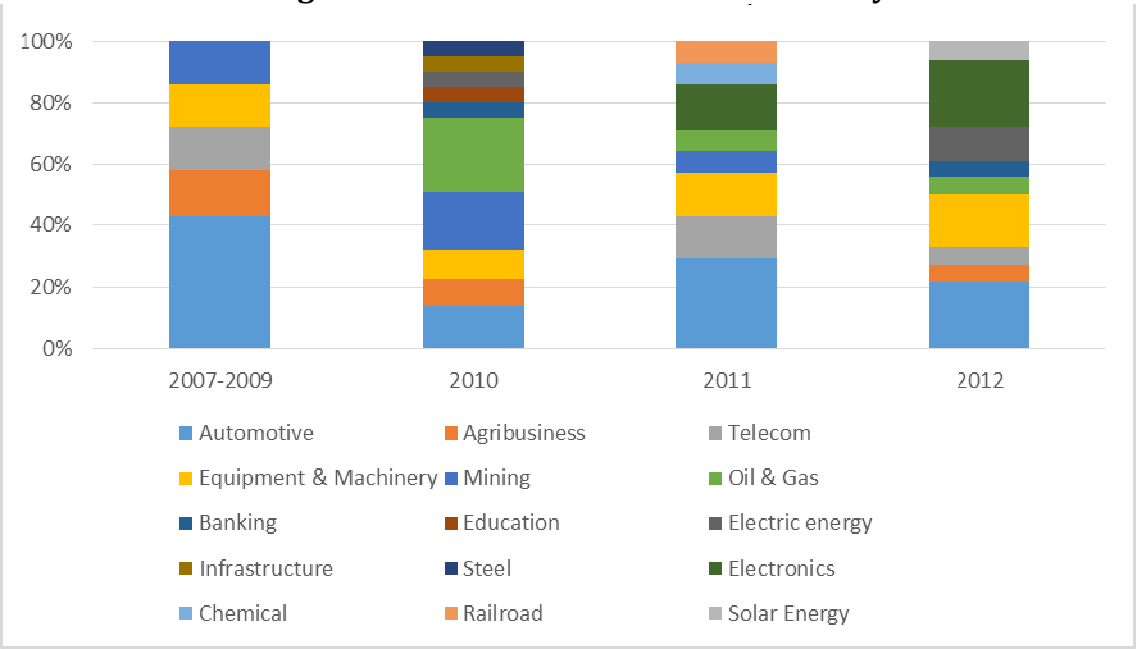
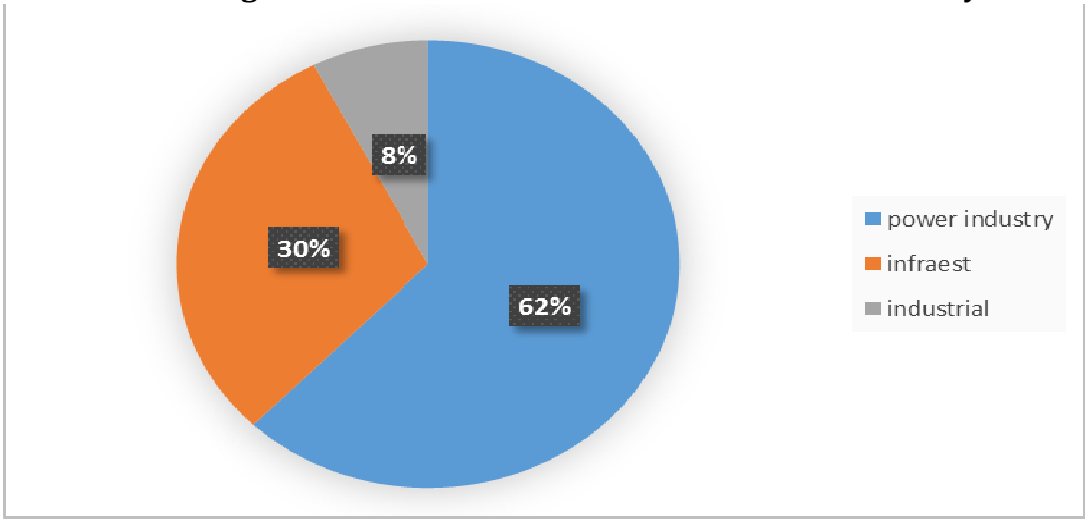
ANNEX 1

Figure 11: Chinese investment in Brazil by sector



Source: CEBC, MDIC, elaborated by the authors

Figure 12: Chinese investment announced in2015 by sector



Source: CEBC, MDIC, elaborated by the authors

Table 6: Chinese investments in Brazil 2011

Company	Partner	Sector	Stage	State	Value (US$ milhares)
Sinopec	Repsol Brasil	Oil and Gas	Confirmed	Rio de Janeiro	$7.109.000.000
Sinochem	Statoil ASA	Oil and Gas	Confirmed	Rio de Janeiro	$3.070.000.000
State Grid	Elecnor S.A., Abengoa S.A., Isolux Ingenieria S.A. e Cobra Instalaciones y Servicos S.A.	Eletrci energy	Confirmed	São Paulo	$989.000.000
Wuhan Iron and Steel Group Co. (Wisco)	MMX	Mining	Confirmed	Minas Gerais	$400.000.000
Chery	Governo de São Paulo	Automite	Confirmed	São Paulo	$400.000.000
Honbridge Holdings	Votorantim Novos Negócios	Mining	Confirmed	Bahia and Minas Gerais	$390.000.000
Jianhuai Automotive Co. (JAC)	-	Automotive	Confirmed	São Paulo	$200.000.000
Sany Heavy Industry	-	Equipment and Machinery	Confirmed	São Paulo	$100.000.000
CR Zongshen	-	Automite	Confirmed	Rio de Janeiro	$20.000.000
Xuzhou Construction Machiney Group	-	Equipment and Machinery	Confirmed	Pernambuco	$12.000.000
China National Agricultural Development Group Corporation (CNADC)	Governo de Goiás	Agribusiness	Announced	Goiás	$7.000.000.000
Sinopec / China National Offshore Oil Corp. (CNOOC)	OGX Petróleo e Gás Participações	Oil and Gas	Announced	Rio de Janeiro	$6.000.000.000
Wuhan Iron and Steel Group Co. (Wisco)	Passagem Mineração (Pamin)	Mining	Announced	Minas Gerais	$5.000.000.000
Wuhan Iron and Steel Group Co. (Wisco)	EBX	Stell mill	Announced	Rio de Janeiro	$3.500.000.000
East China Mineral Exploration and Development Bureau (ECE)	Itaminas Comércio de Minério S.A.	Mining	Announced	Minas Gerais	$1.200.000.000
Chongqing Grain Group	-	Agribusiness	Announced	Bahia	$300.000.000
Bank of China	-	Banking	Announced	São Paulo	$60.000.000
ZTE	Instituto Nacional de Telecomunicações (Inatel)	Education	Announced	Minas Gerais	$2.000.000
China Rail Construction Company	Governo do Mato Grosso	Railroad	Announced	Mato Grosso	Not declared
Cofco. Ltd	Companhia Nacional de Açúcar e Álcool (CNAA)	Agribusiness	Announced	Goiás e Minas Gerais	Not declared
Sinopec	Petrobrás	Oil and Gas	Announced	Maranhão	Not declared
Sinopec	Petrobrás	Oil and Gas	Announced	Rio de Janeiro	Not declared
Industrial & Commercial Bank of China (ICBC)	-	Banking	Announced	Não definido	Not declared
Dongfeng Motor Corporation	-	Automotive	Announced	São Paulo	Not declared
Grupo Pallas International	Governo da Bahia	Agribusiness	Anunciado	Bahia	Not declared

Source: CEBC, elaborated by the authors

Table 7: Chinese investments in Brazil 2012

Company	Partner	Sector	Stage	State	Value (US$)
Sinopec	-	Oil and Gas	Announced	Rio de Janeiro	947.000
State Grid	Actividades de Construccion y Servicios (ACS) no Brasil	Eletric energy	Confirmed	Mato Grosso	942.000
State Grid	COPEL	Eletric energy	Confirmed	Mato Grosso	750.000
Foxconn	-	Eletronics	Confirmed	São Paulo	500.000
Shaanxi Automobile Group (SAG)	-	Automotive	Confirmed	Pernambuco	500.000
Astronergy	Empresa Brasileira de Energia (EBE)	Solar energy	Confirmed	Ceará	350.000
Xuzhou Construction Machinery Group (XCMG)	-	Equipment and Machinery	Announced	Minas Gerais	250.000
Lenovo	CCE	Eletonics	Confirmed	Amazonas	150.000
Industrial & Commercial Bank of China (ICBC)	-	Banking	Confirmed	São Paulo	100.000
Shiyan Yunlihong Industrial and Trade	-	Automotive	Confirmed	Rio Grande do Sul	90.000
Changan International Corporation	-	Automotive	Announced	Goiás	75.000
Liugong	BHMáquinas	Equipment and Machinery	Announced	Não definido	50.000
Lenovo	-	Eletronics	Confirmed	São Paulo	30.000
Zoomlion	Zoomlion Máquinas de Concreto do Brasil S/A	Equipment and Machinery	Confirmed	São Paulo	20.000
Universal Timber	-	Agribusiness	Announced	Acre	20.000
CiaoHub	-	Eletronics	Confirmed	Espírito Santo	15.000
China Telecom	-	Telecom	Confirmed	São Paulo	1.000
EFFA Motors	-	Automotive	Confirmed	Amazonas	500

Source: CEBC, elaborated by the authors

ANNEX 2

Table 8: Principal soy sectors investments announced by Noble and Nidera in the Cone Sul from 2005

Company	Country	Location	Year	Value (US$)	Type of investment	Ativity
Noble	Argentina	Lima (Buenos Aires) & Timbúes (Santa Fé)	2005/06	60.000.000	Extension	Port
	Paraguay	Pacú Cua (Encarnación)	2006	Not declared	Acquisition	Port
	Uruguay	Nueva Palmira (Colonia)	2006	Not declared	Concession	Port
	Argentina	Piquete Cabado (Salta)	2008	Not declared	Construction	Soy Storage
	Brazil	Santos (São Paulo)	2008	58.800.000	Construction	Port
	Brazil	Itaqui (Maranhão)	2009	45.000.000	Construction	Port
	Brazil	Rondonópolis (Mato Grosso)	2010	200.000.000	Construction	Soy Procrssing
	Argentina	Timbúes (Santa Fe)	2011	50.000.000	Construction	Soy Processing
	Brazil	Mato Grosso	2011	40.000.000	Construction	Soy Storage
	Paraguay	Villeta (Central Departament)	2012	16.000.000	Construction	Soy Processing
Nidera	Brazil	Rio Verde (Goiás)	2005	Not declared	Acquisition	Seed Production
	Argentina	Puerto General San Martín (Santa Fé)	2010	50.000.000	Extension	Production of fertilizers
	Argentina	Junin (Buenos Aires)	2011	30.000.000	Extension	Soy Processing
	Argentina	Valentín Alsina (Buenos Aires)	2011	12.000.000	Extension	Soy Processing
	Brazil	Canoas (Rio Grande do Sul)	2012	23.000.000	Construction	Port
	Brazil	Canoas (Rio Grande do Sul)	2012	50.000.000	Construction	Soy Processing
	Brazil	Sorriso (Mato Grosso)	2014	22.000.000	Construction	Production of fertilizers

Sources: various, elaborated by the authors

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BICAS is a collective of largely BRICS-based or connected academic and policy-oriented researchers concerned with understanding the BRICS countries and some powerful middle income countries (MICs) and their implications for global agrarian transformations. Critical theoretical and empirical questions about the origins, character and significance of complex changes underway need to be investigated more systematically. BICAS is an 'engaged research' initiative founded on a commitment to generating solid evidence and detailed, field-based research that can deepen analysis and inform policy and practice – with the aim of ultimately influencing international and national policies in favour of rural poor peoples. In BICAS we will aim to connect disciplines across political economy, political ecology and political sociology in a multi-layered analytical framework, to explore agrarian transformations unfolding at national, regional and global levels and the relationships between these levels. BICAS is founded on a vision for broader, more inclusive and critical knowledge production and knowledge exchange. We are building a joint research agenda based principally on our capacities and expertise in our respective countries and regions, and informed by the needs of our graduate students and faculty, but aiming to scale up in partnership and in dialogue with others, especially social movement activists. BICAS Working Paper Series is one key venue where we hope to generate critical and relevant knowledge in collaborative manner. Our initial focus will be on Brazil, China and South Africa, the immediate regions where these countries are embedded, and the MICs in these regions. While we will build on a core coordinating network to facilitate exchange we aim to provide an inclusive and dynamic space, a platform, a community, hence we invite participation.

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