Latin America and China – A New Dependency?

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Abstract

Economic relations between China and Latin America have grown rapidly over the past decade. The paper documents the growth of trade, foreign direct investment (FDI) and other financial flows between China and Latin America and identifies the interests of China in the region as a source of raw materials, a market for exports of manufactured goods and an area of diplomatic competition with Taiwan. It points to the asymmetric nature of the relationship in terms of the relative importance of bilateral trade to each partner, the composition of trade flows, and the balance of FDI flows. It shows that these show many of the characteristics of centre-periphery relations. However China is far from becoming a new hegemonic power in Latin America and the latter's relations with the United States and Europe continue to be more significant than those with China.

Latin America and China – A New Dependency?[1]

1. Introduction

Economic relations between China and Latin America have grown rapidly over the past decade. The most striking manifestation of this has been the growth of bilateral trade but this has been accompanied by closer diplomatic relations with Argentina, Mexico and Venezuela being recognised as "strategic partners" by China since 2000[2] and the Chinese government issuing its first Policy Paper on Latin America and the Caribbean in 2008.[3] During the same period, Chile, Costa Rica and Peru signed free trade agreements with China.

The growing involvement of China in Latin America has not attracted as much attention or controversy as its role in Africa and the academic literature, although growing, is more limited. Nevertheless it has given rise to debates concerning both the economic impact of China on the region and the political implications in particular whether China represents a challenge to US hegemony in Latin America.[4]

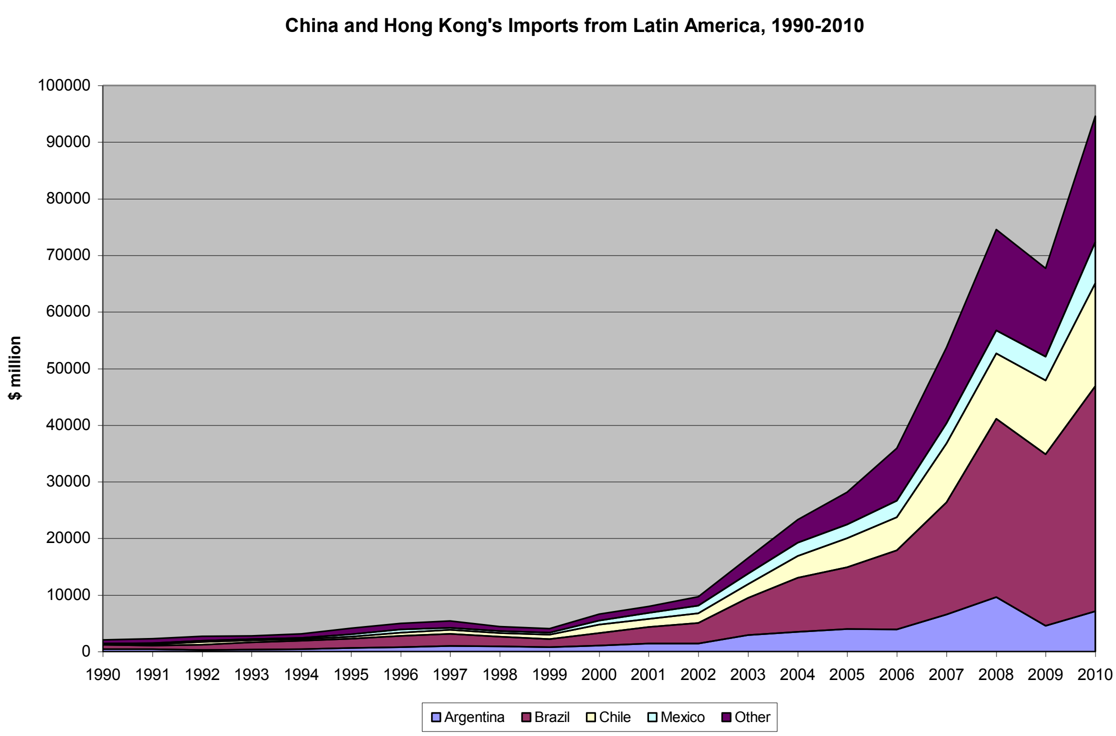
This paper will focus on three aspects of the *economic* relations between China and Latin America, namely bilateral trade, foreign direct investment, and financial flows, particularly aid. The paper documents the extent and growth of economic relations with China and asks how significant they are relative to those with the region's other major partners. Is China replacing the West as an engine of growth for the region, or is it a new source of dependency? In considering these questions, the asymmetric nature of the economic relations between China and Latin America will be analysed.

2. The Growing Economic Relations between China and Latin America

a) Trade

Latin American exports to China have grown spectacularly in recent years. While trade with China was expanding during most of the 1990s, a sharp increase in Chinese imports from the region occurred after 1999 (see Fig.1).[5] A further inflection point occurs in 2002 when the growth of Chinese imports from the region accelerated further. Since this pattern holds for all the major Latin American countries exporting to China, it would seem that the explanation must be sought in events in China rather than developments in the various Latin American countries. One explanation is that resource constraints really began to bite in China at the end of the 1990s. This view is supported by the sharp increase in China's net trade deficit in a number of primary commodities which feature prominently in Latin America's exports such as copper, iron ore, nickel and soybeans from the late 1990s.[6]. Furthermore the accession of China to the WTO in 2001 and the sharp rise in commodity prices from 2002 gave an additional boost to the region's exports. Despite a temporary drop in imports from Latin America in 2009 associated with the global financial crisis, these recovered rapidly in 2010.

Figure 1



Source: IMF, *Direction of Trade Statistics*

The share of China in total Latin American exports, having been stable during the 1990s, increased almost seven-fold between 2000 and 2010 (see Table 1). In 1990 only Cuba, of the nineteen Latin American countries listed in Table 1, had a significant share of total exports going to China. By 2000, prior to China's accession to the WTO, Chile, Peru and Uruguay had increased their share of exports to China to over 5% of total exports, but China remained a relatively minor market even for these countries. By 2009 however China was the top export market for Brazil, Chile and Cuba and the second most important for Colombia, Costa Rica and Peru.

Table 1: Exports to China and Hong Kong as a share of total exports, 1990, 2000, 2010

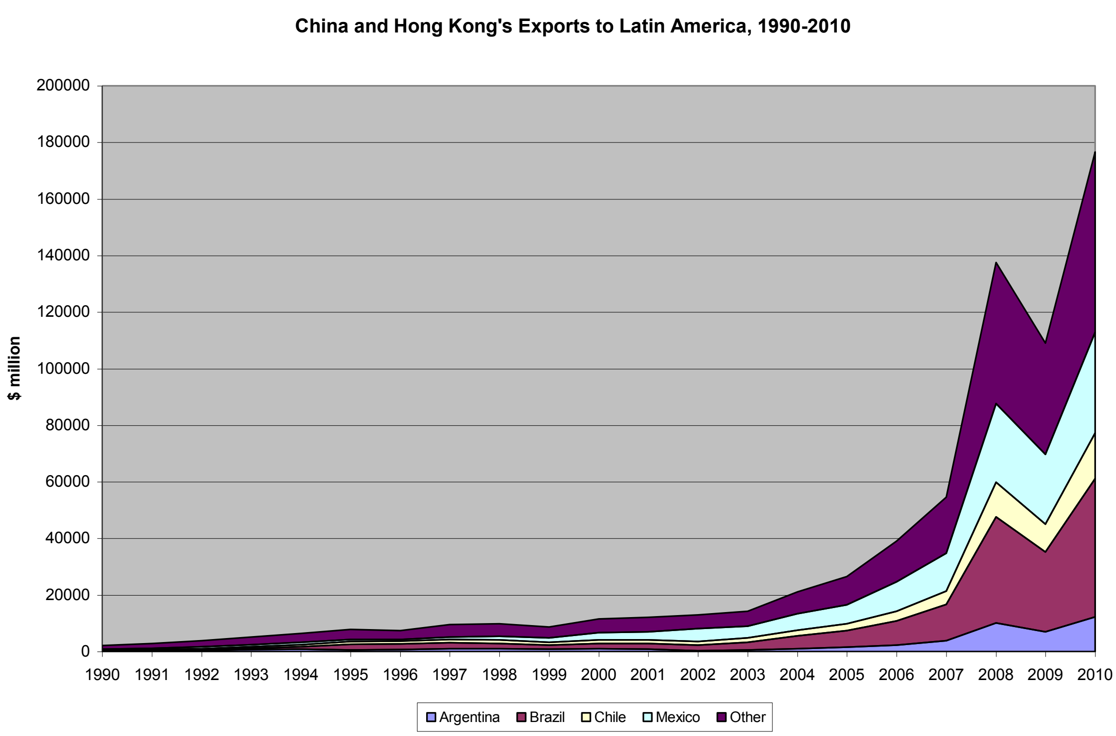
	1990	2000	2010
Argentina	2.4%	3.4%	9.0%
Bolivia	0.1%	0.4%	3.3%
Brazil	2.1%	2.6%	16.1%
Chile	0.8%	5.0%	25.0%
Colombia	0.3%	0.3%	5.1%
Costa Rica	0.5%	0.5%	8.0%
Cuba	20.8%	5.3%	27.5%
Dominican Republic	0.0%	0.2%	1.8%
Ecuador	0.0%	0.0%	1.9%
El Salvador	0.1%	0.0%	0.2%
Guatemala	0.0%	0.1%	0.5%
Honduras	0.0%	0.0%	2.5%
Mexico	0.4%	0.2%	1.6%
Nicaragua	0.9%	0.0%	0.3%
Panama	0.2%	1.2%	5.6%
Paraguay	0.3%	1.3%	0.9%
Peru	1.7%	6.8%	18.5%
Uruguay	4.8%	5.0%	14.0%
Venezuela	0.2%	0.1%	7.7%
Total	1.3%	1.3%	9.1%

Source: Own elaboration from IMF, *Direction of Trade Statistics*.

However not all Latin American countries have participated equally in the boom of exports to China. While China accounted for over 9% of the region's total exports in 2010, the shares for individual countries ranged from less than 2% of total exports in Mexico, the Dominican Republic, Ecuador, Paraguay and several Central American countries, to over 15% in Brazil, Chile, Cuba and Peru (see Table 1). One obvious reason for this is that all those countries which had a low share of exports to China, apart from Mexico and Ecuador, still recognise Taiwan and therefore do not have diplomatic relations with the People's Republic of China. In contrast, the close political ties between Cuba and China and the fact that Cuba is excluded from its closest market, the USA, helps explain the high level of trade between the two countries.

Latin American imports from China have also grown significantly in recent years. Figure 2 shows that Chinese exports to the region grew gradually from the early 1990s (with slight dips in 1996 and 1999) until 2003, after which they accelerated markedly. This reflected the growing international competitiveness of China in an expanding range of manufactured goods and improved access to Latin American markets following China's accession to the WTO in late 2001. Exports to the region fell in 2009 as a result of the crisis but growth resumed in 2010.

Figure 2



Source: IMF, *Direction of Trade Statistics*

China's share in total imports to Latin America grew gradually during the 1990s but then increased more than five-fold between 2000 and 2010 (see Table 2). In 1990 only Cuba registered significant imports from China. Table 2 also shows the increasing share of imports from China in individual Latin American countries. Although the share of China varies between countries, the differences are not as marked as in the case of exports.

Table 2: Imports from China and Hong Kong as a share of total imports, 1990, 2000, 2010

	1990	2000	2010
Argentina	0.6%	4.8%	13.6%
Bolivia	0.7%	3.5%	3.9%
Brazil	1.3%	2.8%	14.5%
Chile	1.4%	5.4%	17.7%
Colombia	0.2%	2.3%	13.6%
Costa Rica	0.6%	1.5%	7.7%
Cuba	9.4%	7.2%	12.0%
Dominican Republic	1.1%	1.5%	4.7%
Ecuador	0.0%	0.0%	8.2%
El Salvador	0.2%	1.1%	5.9%
Guatemala	0.5%	1.3%	8.2%
Honduras	0.0%	0.9%	7.9%
Mexico	1.5%	1.9%	15.2%
Nicaragua	2.0%	0.0%	8.1%
Panama	1.0%	1.4%	5.8%
Paraguay	3.8%	11.4%	34.9%
Peru	0.4%	4.3%	13.3%
Uruguay	1.1%	4.1%	14.3%
Venezuela	0.4%	2.0%	10.5%
Total 19	1.4%	2.5%	14.1%

Source: Own elaboration from IMF, *Direction of Trade Statistics.*

Perhaps surprisingly, given that it does not have diplomatic relations with China, the country where imports from China and Hong Kong accounted for the largest share of total imports in 2010 was Paraguay. Most of the other major Latin American countries have between 10% and 20% of their imports supplied from China and China ranks either second or third in terms of sources of imports. Although the Central American countries have below average shares of imports coming from China, they are not negligible, accounting for between 5% and 10% of total imports.

b) Foreign Direct Investment

China launched its "Going Out" strategy to encourage Chinese companies to invest overseas in 2000 but until the mid-2000s the level of Chinese FDI remained relatively low.[7] However since then Chinese FDI has grown rapidly and in 2010 it was the fifth country in the world in terms of outward investment flows.[8] As global FDI outflows fell dramatically with the financial crisis, China increased its share of the total from less than 1% in 2007 to over 4% in 2009.[9]

Chinese FDI in Latin America has also grown rapidly in recent years (see Table 3), but in contrast to the ample evidence of the growing trade links between China and Latin America, the information available on FDI flows is much more limited and problematic in terms of quality. The main source of data for Chinese FDI outflows is MOFCOM, the Chinese Trade Ministry. It has been suggested that their figures underestimate the true level of Chinese FDI since not all companies register their investment with MOFCOM. Firms also often fail to report foreign earnings re-invested abroad which are regarded as FDI by international standards. Another problem in terms of identifying the countries which receive Chinese FDI is that many Chinese firms make their foreign investments through subsidiaries in other countries, particularly the British Virgin Islands, the Cayman Islands and Hong Kong. Since firms often report the first and not the final destination of their investments to MOFCOM, 80% of Chinese FDI is recorded as going either to Hong Kong or to tax havens.[10] Investments in Latin America carried out in this way will not therefore be registered as Chinese FDI either by MOFCOM or the host countries.

Despite these caveats, the most striking feature of bilateral investment flows is their relatively modest level up to now. If one ignores FDI flows between China and Caribbean tax havens such as the British Virgin Islands and the Cayman Islands, the role of FDI is not nearly as significant as that of trade in bilateral relations. In 2010, Chinese FDI flows to the region were less than $1 billion (see Table 3) which compares to

Chinese exports of goods of more than US$175 billion in the same year (see Figure 2). Although this was a fifty-fold increase over the 2003 level, Latin America's share of worldwide Chinese FDI was only a little over 1% of the total. Similarly, although the stock of Chinese investment in Latin America increased almost ten-fold over the period to US$3 billion in 2010, the share of global Chinese investment was less than 1%, almost exactly the same as in 2003.

Table 3: Chinese FDI in Latin America, 2003-2010

	FDI Outflow		**FDI Stock**	
	US$mn.	**Share of Total Chinese FDI**	**US$mn.**	**Share of Total Chinese FDI**
2003	16.6	0.58%	321.7	0.97%
2004	46.4	0.84%	408.2	0.91%
2005	48.8	0.40%	502.8	0.88%
2006	90.4	0.51%	653.4	0.87%
2007	301.8	1.14%	1040.5	0.88%
2008	89.8	0.16%	1249.2	0.68%
2009	356.0	0.63%	1696.0	0.69%
2010	878.6	1.28%	3047.8	0.96%

Source: MOFCOM *2010 Statistical Bulletin of China's Outward Foreign Direct Investment,* Beijing: Ministry of Foreign Commerce, 2011.

Much higher levels of Chinese FDI in Latin America have been reported by the Economic Commission for Latin America and the Caribbean in various reports. The figures which they report vary considerably with one estimate that China invested US$7.3 billion in Latin America between 1990 and 2009 and another giving a much larger figure of $23.8 billion for the period 2003-2009 and over $15 billion in 2010.[11] It is unclear how far this is based on announcements of investment which tend to overestimate the FDI that actually takes place, but even if they represent actual inflows of capital, they are still far less significant than the bilateral trade flows..

FDI flows between Latin America and China have not been entirely one way and several Latin American firms have established operations in China. These include the Brazilian aircraft manufacturer Embraer and the Mexican firms CEMEX and Bimbo. Between 2002 and 2009 inflows of FDI from Latin America totalled almost US$1 billion, with a peak of US$150 million in 2006 (Table 4). Since then annual inflows have been more or less stable at around $100 million a year. Although China has been a major destination for global FDI, Latin America's share of this inflow has been negligible. Nor is China a significant destination for Latin American FDI, accounting for less than 1% of the region's total outflows over the same period.

Table 4: Latin American FDI in China, 2002-2009

	Value (US$ million)	Share of China's FDI inflows	Share of Latin America's FDI outflows
2002	117.87	0.22%	1.66%
2003	106.6	0.20%	1.13%
2004	144.01	0.24%	0.75%
2005	108.71	0.18%	0.56%
2006	152.94	0.24%	0.35%
2007	97.09	0.13%	0.42%
2008	106.31	0.12%	0.28%
2009	99	0.11%	0.71%
2002-2009	932.53	0.26%	0.76%

Source: own elaboration from *China Statistical Yearbook,* various issues and UNCTADStat database.

c) Financial Flows

Systematic information on other financial flows from China to Latin America is even more difficult to come by than data on FDI. This in part reflects the difficulty in classifying different types of capital flows and the problem in the case of China in distinguishing between FDI, commercial loans and aid, when these are often packaged together.

Table 5: Reported Chinese Aid to Latin America, 2002-2007 (US$ million)

2002	2002	2004	2005	2006	2007
4	1	7,000	2,931	16,425	401

Source: T. Lum, H. Fischer, J. Gomez-Granger and A. Leland, *China's Foreign Aid Activities in Africa, Latin America, and Southeast Asia* Washington DC: Congressional Research Service, R40361, 2009, Table 4.

Table 5 provides one estimate of financial flows from China to Latin America. Although described as "aid", the data includes government-sponsored investment, concessional loans and grants. In fact over 90% of the total flows to Latin America between 2002 and 2007 were made up of government-sponsored investments.[12]

As with trade relations and FDI, other financial flows from China have only become significant fairly recently. Indeed they start at around the time of President Hu Jintao's first visit to the region in 2004. Subsequently, between 2007 and 2010, there was a sharp increase in loans to Latin America by the China Development Bank and the Export-Import Bank of China and it was reported that by the end of the period these Chinese banks were lending more to the region than either the World Bank or the Inter-American Development Bank.[13]

3. Latin America's Role for China

From the point of view of China, there are three key interests in terms of its relations with Latin America.[14] First and foremost, it is an important source of the primary commodities that China needs to supply its rapidly growing industrial sector with energy and raw materials and to meet increasing demand for foodstuffs associated with rising income levels. Second, it is an expanding market for manufactured goods and the Chinese government has been keen to improve market access for the country's exporters. Finally Latin America plays an important part in the diplomatic competition between the People's Republic of China and Taiwan. Half the countries in the world that still recognize Taiwan are in Latin America and the Caribbean and, in terms of size, Paraguay and the Central American countries are the most significant countries with which the latter still has diplomatic relations.

a) Latin America as a source of raw materials

The clearest evidence of the importance of Latin America as a source of raw materials for China is the structure of the region's exports and the way that these have evolved over time. Primary products accounted for over 70% of Latin American exports to China in 2008 and resource-based manufactures (i.e. primary products with a limited degree of processing) for a further 16% (see Table 6). The main products exported from the region to China were copper ore and concentrates, soybean and soya oil, iron ore, crude oil, refined copper and fishmeal.

Table 6: Composition of Latin American Exports to China and the Rest of the World, 1990, 2000, 2008 (% share)

	China			Rest of the World		
	1990	**2000**	**2008**	**1990**	**2000**	**2008**
Primary Products	**40.2**	**58.1**	**71.9**	**49.1**	**27.0**	**38.5**
Manufactured Goods	**59.8**	**41.8**	**28.1**	**49.7**	**71.3**	**58.5**
Resource based	25.1	23.3	15.8	22.0	17.2	15.1
Low technology	10.1	5.8	2.4	9.6	11.9	7.7
Medium technology	24.3	6.2	5.6	15.5	25.6	23.4
High technology	0.2	6.5	4.3	2.6	16.7	12.3
Other	0.0	0.1	0.1	1.2	1.7	3.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Economic Commission for Latin America
Note: Exports from Latin America and the Caribbean to the People's Republic of China

Latin American exports to China are much more heavily concentrated on primary products and resource based manufactures than the region's exports to the rest of the world, where primary products make up less than 40% of the total (Table 4). Also the trend over time has been for the share of primary products in Latin American exports to China to increase significantly, while their share in exports to the rest of the world is lower than in 1990. The increased share of primary products in exports to China has come partly at the expense of exports of resource based manufactures.

The importance of securing raw materials is also reflected in the pattern of Chinese FDI in Latin America. The bulk of Chinese investment in the region is of the "resource seeking" variety focussing on oil and minerals. Unfortunately there is no detailed breakdown of Chinese FDI by sector in Latin America, but it is clear that oil and gas and mining have been a major focus for such investment. The UN Economic Commission for Latin America and the Caribbean estimates that 92% of confirmed Chinese investment in the region were in natural resource extraction, primarily oil and gas.[15] Ten of the twelve major mergers and acquisitions by Chinese firms in South America between 2002 and 2008 were in raw materials, energy and power.[16] Major Chinese companies with investments in Latin America include Sinopec, CNPC and CNOOC in oil and gas and Minmetals, Chinalco and Wuhan Steel in minerals.

Securing access to natural resources has also been an important factor in other forms of financial flows from China to Latin America too. A report by the U.S. Congressional Research Service reported that over two-thirds of the projects financed by China in the region were in the natural resource sector, while 28% were in infrastructure and public works, part of which may also have been related to gaining access to raw materials.[17] While these figures may have included some FDI projects, other forms of funding have clearly played an important role in securing supplies of oil and minerals. Some of the most high profile examples include loans of US$10 billion from the China Development Bank to Petrobras in Brazil in 2009 in return for 200,000 barrels of oil a day and to the Venezuelan government in 2010 for between 200,000 and 300,000 barrels a day. An earlier example was an agreement signed between the Chinese company Minmetals and the Chilean state owned mining company CODELCO which agreed to supply copper at a fixed price for fifteen years in return for an investment of US$500 million in 2005.[18]

b) Latin America as an export market

Although China's exports to the US, Europe and the rest of Asia are far more significant than its exports to Latin America, gaining access to the Latin American market is an important aspect of the relationship. While exports to Latin America account for only

5% of China's total exports they have been growing rapidly in recent years. China is keen to diversify its export markets in order to reduce its dependence on the US and other developed country markets.[19] Also the slowdown in growth in North America and Europe as a result of the financial crisis and the rapid recovery in Latin America since 2009 has increased the attraction of the region as an expanding market.

The rapid growth of imports from China has been a cause of concern in many Latin American countries giving rise to complaints from local manufacturers about "unfair" competition from Chinese goods. China has become a major target for anti-dumping and safeguard measures in several Latin American countries. In Argentina the government introduced a set of measures in 2007 aimed at restricting imports of plastic products, leather products, textile and footwear, metal tools, electrical machinery, tires, optical and clockwork instruments and toys from Asian countries, particularly China.[20] Brazil has also used anti-dumping measures more extensively against China than against any other country.[21] Mexico has experienced more trade conflict with China than any other Latin American country and until recently maintained high import duties on more than 1,300 tariff items.[22]

An important objective of Chinese diplomacy in the region has been to improve market access for Chinese goods. One way in which it has tried to do this is by obtaining "market economy" status from Latin American governments.[23] This was one of the key objectives of the visit of President Hu Jintao to Latin America in 2004 and Brazil, Argentina, Chile, Venezuela, Peru and several Caribbean countries agreed to grant China market economy status at the time, although the necessary legislation has never been approved in Brazil.

Although, as discussed earlier, Chinese FDI in Latin America has been largely focussed on extractive industries, there has also been some Chinese investment in manufacturing for example in textiles and electronics in Mexico and in consumer electronics and telecommunications in Brazil. Most of the Chinese FDI in manufacturing has been market seeking i.e. to supply the domestic market while investments to create export platforms to sell in third markets has been minimal.[24] Whereas investment in oil and mining is dominated by large state companies, FDI by manufacturing companies involves a wider range of firms in terms of ownership and size. Surveys of small and medium Chinese firms have found that FDI is often seen as a means of promoting exports, either of the firms themselves or of other Chinese firms.[25]

Some of the other financial flows from China to Latin America can also be seen as partly reflecting an interest in the region's market. This is particularly true in the case of government support for infrastructure projects which often requires 50% of project materials and services to be sourced from China.[26] Some major Chinese firms which have been involved in large infrastructure projects in Latin America such as Sinohydro in power and Huawei in telecommunications are in fact engaged in exporting equipment to the region.[27] If, as has been suggested, investment in infrastructure in China will tail off in the foreseeable future, then there will be more pressure on Chinese construction and other companies to look for new markets overseas.

c) China and Taiwan

The PRC's "One China Policy" means that it will not maintain diplomatic relations with countries that recognize Taiwan and it has sought to isolate the latter internationally. This has been an important factor in relations between China and the countries of Central America and the Caribbean (and Paraguay in South America) where China and Taiwan compete diplomatically.[28] In the 1980s the Sandinista government in Nicaragua switched recognition from Taiwan to the PRC but then when they lost power in 1990, Taiwan was recognized once more and continues to be, despite the FSLN returning to power. More recently in 2007, Costa Rica broke off its long-standing diplomatic relations with Taiwan and recognized the PRC.

The issue of diplomatic recognition has a significant influence on trade, foreign direct investment and aid and other financial flows to the region. Since 2004 Taiwan has signed free trade agreements with five Central American countries, Panama, Guatemala, Nicaragua, El Salvador and Honduras.[29] Costa Rica on the other hand signed a free trade agreement with the PRC in 2010. As was noted earlier, countries which recognize Taiwan are amongst those which have not participated in the boom in the region's exports to the PRC. This was confirmed by an econometric analysis of exports from 18 Latin American countries to the PRC for the period 1986 to 2004 which found that countries with diplomatic relations with Taiwan tended to export less to the PRC than would be predicted by other variables such as Gross Domestic Product and distance.[30] Interestingly however, the lack of diplomatic relations was no barrier to PRC exports to Latin American countries that recognise Taiwan and two of the countries with the highest share of imports from mainland China and Hong Kong in 2010 are Paraguay and Panama (Table 2).

In the case of Chinese FDI, the only country with diplomatic ties to Taiwan which receives significant flows from the PRC is Panama. Given the role of Panama as an offshore financial centre and the fact that China invests heavily in other such centres in the Caribbean including the British Virgin Islands and the Cayman Islands, it is probable that investments in Panama are also largely financially motivated. The other Central American economies and the Dominican Republic which receive very little FDI from the PRC have been targets for Taiwanese FDI.

Chinese aid to the region is clearly influenced by the diplomatic competition between the PRC and Taiwan. Those countries recognizing Taiwan receive substantial amounts of aid from Taipei.[31] On the other hand, Costa Rica's shift in allegiance in 2007 was followed by aid to build a new national stadium and for reconstruction following major floods, as well as a major Chinese purchase of a $300 million Costa Rican bond issue.[32]

In summary then, China's interest in Latin America as a source of raw materials, as a market for its manufactured exports and as an arena of competition with Taiwan largely explains the growth and pattern of trade, FDI and other financial flows with the countries of the region over the past decade. The main drivers of these developments have come from the Chinese side and Latin America has been responding to agendas where China has been in the driving seat.

4. An Asymmetric Relation

Despite the rhetoric of South-South cooperation and mutual benefit that surrounds relations between China and Latin America,[33] in a number of respects the relationship is profoundly asymmetric. In this section the main emphasis will be on trade flows since, as was noted earlier, this has up to now been the crucial dimension of economic relations with China.

a) The significance of bilateral trade for China and Latin America

A first asymmetry is that China is much more important as a trade partner to Latin America than the region is to China. This was not always the case but has become increasingly so in recent years. In 2000, although bilateral trade was still relatively limited, Latin America was marginally more significant to China than China was to Latin America with China accounting for 1.9% of Latin America's total trade while Latin America accounted for 2.1% of China's trade. By 2010 the relative significance had been reversed with 11.6% of Latin American trade being with China while the region accounted for only 7.1% of China's trade.[34]

In fact given that relations are at the level of individual countries, it is more relevant to compare the relative significance in these terms as well. As was noted earlier, China is the most important export market for three Latin American economies and second most important market for a further three. In terms of sources of imports, China was amongst the top three suppliers for all Latin American countries apart from El Salvador, Honduras and Nicaragua. In contrast, amongst Latin American countries, only Brazil (9th) and Chile (18th) were ranked in the top twenty suppliers of imports for China and only Brazil (15th) was in the top twenty Chinese export markets (data from ECLAC, SICGI database).

Table 7: Relative Importance of Latin America to China and China to Latin America in Selected Commodities, 2009

	Country's share of Chinese imports (%)	China's share of country's exports (%)
Iron ore		
Brazil	25.7	52.9
Chile	1.1	65.4
Peru	1.0	83.9
Copper		
Brazil	1.4	23.6
Chile	31.5	35.1
Mexico	1.5	34.5
Peru	5.6	27.9
Oil		
Brazil	1.8	14.3
Venezuela	2.2	4.4*
Soybean and soy oil		
Argentina	14.8	53.5
Brazil	37.5	53.3

Source: own elaboration from UNCOMTRADE data

Even at the level of the major commodities that Latin America exports, it is much more dependent on the Chinese market than China is on the Latin American countries as a source of supply. Table 7 compares exports to China as a share of total exports for several Latin American countries for four major commodities, with the share of those countries in China's imports of the commodities. In the case of iron ore, only Brazil has a significant share of the Chinese import market with over a quarter of the total, but more than half of Brazilian exports go to China. Chile and Peru which have relatively small shares of the Chinese market are even more dependent on China. For copper around a quarter to a third of exports from the Latin American countries go to the Chinese market. Only in Chile is there a reciprocal dependence with China obtaining slightly less than a third of its imports of copper from that country. Latin America is not a significant source of petroleum for China and up to now, China is not a major market for Latin American exports either. Finally in soybeans and soy oil, although Argentina and Brazil are both significant suppliers of Chinese imports, they depend on the Chinese market for more than half their exports of soy which again indicates an asymmetric relation.[35]

b) The Composition of Trade

A second type of asymmetry is the structure of bilateral trade between China and Latin America. As was seen above, a large and increasing proportion of the region's exports to China are made up of primary products, while the bulk of non-primary product exports are of resource-based manufactures (Table 6). In contrast, Chinese exports to Latin America are almost exclusively of manufactured goods.

This trade structure cannot be explained solely in terms of the pattern of comparative advantage between China and Latin America. Studies of particular value chains show that the Chinese government has actively promoted the development of its own processing industry and relied on imports to supply the basic raw materials. A clear example of this is in soybeans where China developed its own crushing industry in the late 1990s virtually ending imports of soybean flour which were replaced by imports of unprocessed soybeans.[36] A similar situation exists in relation to the copper value chain where Chilean exports to China are concentrated in the early stages of the value chain and China has invested heavily in smelting and refining capacity.[37] Brazil's trade with China in the iron and steel value chain also show a tendency towards "primarization" with exports increasingly being of iron ore and pig iron as opposed to steel and steel products.[38]

Table 8: Composition of Latin American Imports from China and the Rest of the World, 1990, 2000, 2008 (% share)

	China			Rest of the World		
	1990	**2000**	**2008**	**1990**	**2000**	**2008**
Primary Products	**22.2**	**3.1**	**0.9**	**18.6**	**9.6**	**13.1**
Manufactured Goods	**77.0**	**95.1**	**97.8**	**76.8**	**86.5**	**85.4**
Resource based	13.0	10.5	9.4	19.8	15.8	20.9
Low technology	28.3	35.4	20.5	9.8	14.2	10.9
Medium technology	23.1	25.1	26.3	34.2	35.3	36.5
High technology	12.6	24.2	41.6	12.9	21.3	17.1
Other	0.7	1.7	1.3	4.6	3.9	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Economic Commission for Latin America

In terms of the type of goods imported from China, the pattern is the reverse of that noted for Latin American exports to China. Virtually all Latin American imports from China in 2008 were manufactured goods and almost 90% were non-resource based manufactures (see Table 8). Contrary to some popular perceptions, imports from China are not predominantly of low tech goods which accounted for just over a fifth of the total by 2008. While over a quarter are made up of medium-technology goods, more than two-fifths of imports from China were high technology goods.[39] Since 2000, the share of high-tech imports from China has been increasing while that of low-tech products has tended to fall (see Table 8).

The structure of trade between China and Latin America has been increasingly characterized by the centre-periphery type of relation with Latin America exporting primary products and resource based manufactures in exchange for Chinese manufactured goods. Thus whereas in 1990 roughly two-thirds of Latin American exports to China were primary products and resource-base manufactures and two-thirds of imports from China were non-resource-based manufactures, by 2008, the respective shares had both increased to almost 90% (see Tables 6 and 8). Moreover the types of manufactured goods imported from China have become increasingly technology-intensive over time. Thus, in contrast to the rhetoric of South-South cooperation, the reality demonstrated by the trade pattern is the type of centre-periphery exchange that has been a concern in Latin America for more than half a century.

c) Export Concentration

Another common concern where exports are predominantly made up of primary commodities is the lack of diversification in terms of products exported. This is certainly true in terms of the region's exports to China where each country depends heavily on one or two products. In Argentina soybeans and their derivatives account for the bulk of exports.[40] In Chile around 80% of exports are of copper,[41] while in Brazil it is soybeans and iron ore that dominate.[42] The other major South American exporter to China, Peru relies heavily on exports of copper and fishmeal. What is more, the trend has been for exports to become increasingly concentrated in a small number of products over recent years.

Table 9: Herfindhal-Hirschman Index of Export Concentration, 2000-2009

	China's Exports to LA	LA's Exports to China
2000	0.22	0.37
2001	0.21	0.41
2002	0.21	0.39
2003	0.21	0.37
2004	0.21	0.38
2005	0.21	0.37
2006	0.21	0.37
2007	0.21	0.39
2008	0.21	0.41
2009	0.21	0.41
2010	0.21	0.42

Source: own elaboration from UNCTADStat database

One commonly used index of export concentration is the Herfindhal-Hirschman Index. The index is normalized so that it takes values from 0 to 1 which represents the maximum level of concentration. Table 9 compares the concentration of Latin American exports to China with that of China's exports to Latin America. It is based on the 3-digit level of the SITC Rev.3. The index shows that Latin America's exports to China are much more highly concentrated than China's exports to Latin America as might be expected. Comparing the bilateral exports of individual Latin American countries and China would likely show even greater differences in terms of the level of concentration of exports from Latin America.

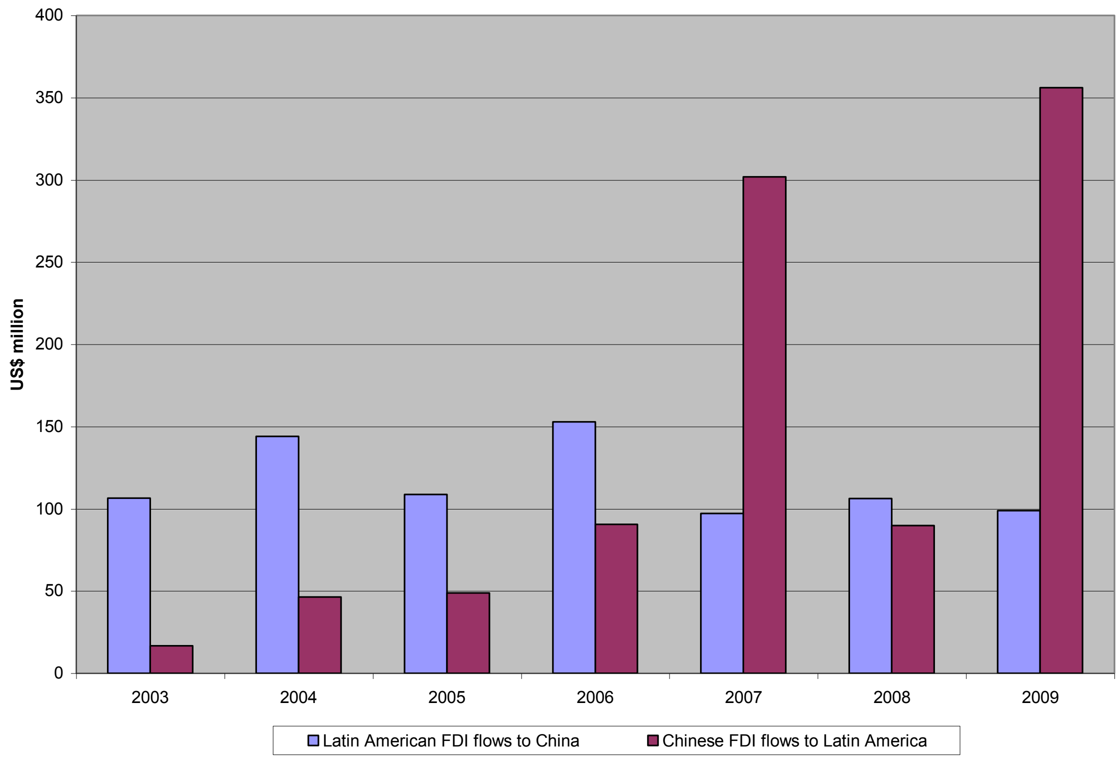
Table 9 also shows that there is no tendency for Latin American exports to China to become more diversified. Quite to the contrary, the Herfindhal-Hirschman Index has in fact increased since 2005. This is a further asymmetry in the trade relation between China and the region.

Not only are exports to China concentrated in terms of products, but also in terms of the firms involved. For example, five firms account for over 60% of Chilean exports to China,[43] while in Argentina the top ten firms make up more than 70% of exports.[44] Brazil's exports to China also appear to be similarly concentrated in a handful of large companies. The most extreme example in the region is probably Costa Rica where Intel is responsible for 85% of the country's exports to China. This suggests that the benefits from exports to China may also be highly concentrated.

d) FDI and financial flows

The asymmetry in terms of FDI flows between China and Latin America is less marked than in trade and less significant because of the relatively low level of FDI. Nevertheless the trend could also be seen towards China increasingly taking the role of an industrial centre vis-à-vis a Latin American periphery. Figure 3 shows that although flows of FDI from Latin America to China exceeded Chinese FDI in Latin America up to the mid-2000s, this has been reversed in recent years and given the increase in Chinese FDI in the region in 2010 and projections for the future, the ratio of Chinese to Latin American outflows is likely to rise very significantly.

Figure 3: Latin American FDI flows to China vs. Chinese FDI flows to Latin America, 2003-2009 (US$ million)



Source: Chinese FDI in Latin America from MOFCOM, *Statistical Bulletin of China's Outward Foreign Direct Investment*, various issues.

Latin American FDI in China from *China Statistical Yearbook*, various issues

The differences between flows from China to Latin America and those from Latin America to China that have emerged in recent years in FDI are likely to be accentuated by the differences in other financial flows. While China has recently granted major loans to a number of Latin American governments and firms through the China Development Bank and the China Exim Bank, there have been no similar large loans from Latin America to China.

5. A New Dependency on China?

While there is strong evidence that the economic relation between Latin America and China has centre-periphery characteristics, it is quite another question to ask whether this means that China is becoming a new hegemonic power in the region. Alternatively the issue could be presented in a more positive light by considering whether China is becoming a new engine of growth for the Latin American economy. From both standpoints the key question is how significant is China today and in the foreseeable future for the Latin American economies?

Despite the fact that China has become the major export market for some Latin American countries, in aggregate just over 8% of the region's total exports went to China in 2010, whereas the United States accounted for 41% and the EU for 13% of exports in the same year.[45] Similarly, although the share of China in the region's imports was rather higher at over 13% in 2010, this was still less than the 31% of imports that came from the US and the 14% from the EU. This should warn us against exaggerating the impact that trade with China will have on the region.

Nevertheless, the trend over the past decade has been for the share of the US in both Latin American imports and exports to decline while that of the EU has remained roughly constant and China's has increased significantly. The Economic Commission for Latin America has projected, based on data for sixteen Latin American countries, that by 2020 China will have overtaken the EU as both an export destination and as a source of imports for the region, and will have narrowed the gap with the US.[46] In 2020 it is projected that China will account for almost a fifth of Latin American exports and a sixth of imports.

In terms of FDI, China's role in the region continues to be marginal. Despite the significant recent growth of Chinese investment in the region, in 2010 China accounted for less than 0.3% of the total stock of foreign capital in the region and its share of FDI inflows in that year was only 0.8%.[47] Even though the official figures may underestimate the true extent of Chinese FDI and a number of major new investments were made in 2010, the role of Chinese firms in the region remains very limited. As they continue to expand globally, their presence in Latin America is likely to become more significant in the future. Nevertheless Chinese FDI is starting from such a low base that it will be some time before it achieves levels comparable to that of US or EU FDI in the region.

The global financial crisis provides a good test of the extent to which China has emerged as a key driver of economic growth in Latin America, making the region less vulnerable to fluctuations in the US economy. The crisis had a major impact on Latin American exports in 2009 with a decline in value of 23% compared to 2008.[48] Exports to the US fell by 26% and to the European Union by 28%. In stark contrast Latin American exports to China continued to increase in 2009, by 7.5%, reflecting the continued growth of the Chinese economy through the crisis (Table 10). This has led ECLAC to claim that "*China's economic dynamism has come to the rescue of Latin America and the Caribbean's exports*".[49]

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How valid is this claim? The contrast between the precipitous fall in exports to the major developed markets and to other Latin American countries and the continued growth of exports to China is indeed striking, but are these sufficient grounds to claim that China has rescued Latin American exports? One question to consider is the extent to which the growth of exports to China between 2008 and 2009 has offset the decline in exports to other markets.

To put this in context it should be noted that whereas total exports from Latin American countries to the Rest of the World (apart form China and Hong Kong) in 2009 were almost $200 billion down on the corresponding figure for 2008, the increase in exports to China in the same year was only $3.6 billion. In other words increased exports to China only compensated for less than 2% of the fall in exports to other countries.

Table 10 compares the change in exports to China and to the Rest of the World for 19 Latin American countries. This shows that although exports to China increased for the countries taken together, ten of them exported less to China in 2009 than in 2008, so that there was no offsetting effect for these countries. Of the remaining countries, growth of exports to China was relatively modest (less than 5%) for three Central American countries. This leaves six countries where China could be considered as having potentially come to the rescue of exports in the face of the global financial crisis.

Table 10: Impact of Exports to China on Latin American Export growth, 2008-9

	Change in Exports		Difference in Growth	
	To China and Hong Kong	To Rest of the World	No growth in China's exports	China's growth = growth to ROW
Argentina	-40.1%	-18.5%	0.0%	-2.0%
Bolivia	-19.1%	-32.0%	0.0%	0.3%
Brazil	13.4%	-27.7%	1.2%	3.8%
Chile	36.4%	-28.4%	5.2%	9.2%
Colombia	112.1%	-14.3%	1.4%	1.6%
Costa Rica	2.9%	-8.9%	0.3%	1.3%
Cuba	-35.4%	-24.6%	0.0%	-2.9%
Dominican Republic	-15.1%	-18.3%	0.0%	0.1%
Ecuador	-66.8%	-24.8%	0.0%	-0.9%
El Salvador	-52.9%	-16.4%	0.0%	-0.1%
Guatemala	-39.4%	-4.3%	0.0%	-0.2%
Honduras	4.4%	-20.4%	0.1%	0.3%
Mexico	6.0%	-21.4%	0.1%	0.2%
Nicaragua	-48.4%	-6.3%	0.0%	-0.3%
Panama	3.5%	418.2%	0.1%	-17.8%
Paraguay	-60.1%	-28.3%	0.0%	-0.7%
Peru	9.1%	-18.4%	1.1%	3.3%
Uruguay	20.3%	-11.9%	1.9%	3.0%
Venezuela	-4.8%	-40.8%	0.0%	1.3%
Total	7.5%	-23.9%	0.8%	1.7%

Source: own elaboration from IMF, *Direction of Trade Statistics*

One way of looking at the impact of China on the region is to ask how much greater the drop in Latin American exports would have been between 2008 and 2009 had exports to China remained unchanged or alternatively how much greater would it have been if exports to China had matched the performance of each country's exports to other markets. Table 10 shows the difference between the actual growth of exports and these two counterfactuals for the region. Column (3) shows what export growth would have been in each country in the absence of any increase in exports to China between 2008 and

2009. In those countries where exports to China fell in 2009 then the counterfactual exports and actual exports are assumed to be the same. For the region as a whole, the drop in total exports would have been 0.8% greater had it not been for the increase in exports to China. Again this can hardly be seen as China rescuing Latin American exports.

Looking at the figures for individual countries shows that the only country where exports to China made a substantial difference to overall export growth is Chile, where the decline in exports would have been over 5% higher in the absence of the increase in exports to China. Uruguay, Colombia, Brazil and Peru would all have seen exports fall by between 1% and 2% more if exports to China had remained at 2008 levels.

The second counter-factual considered is a scenario where exports to China fell at the same rate as exports to the rest of the world. Since this would imply an overall drop in the level of exports to China, as opposed to the first scenario where there was no increase in exports, the difference compared to the actual change in exports is greater. In aggregate regional exports would have fallen by 1.7 percentage points more. Again the pattern for individual countries is similar with Chile being the country that benefited most from exports to China, followed by Brazil, Peru and Uruguay. In none of the other countries was the rate of decline in exports reduced by more than 2% as a result of increased exports to China.

The picture that emerges from this analysis is that for Latin America as a whole, exports to China in 2009 did very little to offset the impact of the global financial crisis on the economy. Even when the effects on individual countries are considered, the impacts are found to be quite small and it is only really in Chile where it can be argued that Chinese demand has played a major role in cushioning the effects of the crisis.

6. Conclusion

Economic relations between China and Latin America have grown dramatically over the past decade, particularly since China joined the WTO. Up to now this has been reflected mainly in the growth of bilateral trade relations and China has become an important trading partner for the region. Other aspects of bilateral economic relations still lag a long way behind trade in terms of their importance.

The main driver of these relations has been the dramatic growth of the Chinese economy and its need for increased supplies of primary products. Other important factors from the Chinese point of view have been obtaining access to the Latin American market for its exports of manufactured goods and diplomatic competition with Taiwan, particularly in Central America and the Caribbean. Latin America has responded to the new opportunities and challenges that the Chinese boom has created. Although relations with China differ between countries in the region, the overall picture is of an asymmetric relationship, particularly as reflected in the pattern of bilateral trade. It has given rise to concerns that Latin America is returning to a dependence on primary commodities and that its manufacturing industries are being increasingly displaced by competition from Chinese imports.

There is little doubt that economic relations with China will become increasingly important for Latin America in the future. Trade, FDI and other financial flows are all likely to grow, barring a major collapse of the Chinese economic boom. However China is far from becoming the dominant economic power in the region that the United States was in the past. Thus one should not exaggerate either the fears or the hopes that have become attached to China's growing presence in the region.

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[1] This paper draws on research funded by ESRC in a project entitled "The Impact of China's Global Economic Expansion on Latin America" (RES-165-25-005)

[2] Brazil had already been designated a "strategic partner" in 1993.

[3] FMPRC, *China's Policy Paper on Latin America and the Caribbean*, Beijing: Foreign Ministry of the People's Republic of China, 2008.

[4] For a review of these debates, see R. Jenkins, 'China's Global Expansion and Latin America' *Journal of Latin American Studies,* 42(4), 2011, pp. 809-837

[5] The data used covers 19 Latin American countries. Trade with Hong Kong is included as well as with Mainland China. This is justified since although the trade statistics of the two are presented separately in international statistics, Hong Kong reverted to Chinese rule in 1997. Moreover a lot of China's trade, particularly in the early years of its export growth went through Hong Kong.

[6] UNCTAD. *Trade and Development Report, 2005,* Geneva: United Nations, 2005, Fig.2.8

[7] D Rosen and T. Hanemann, *An American Open Door? Maximizing the Benefits of Chinese Foreign Direct Investment*' Washington DC: Centre on US-China Relations, Asia Society and Kissinger Institute on China and the United States, Woordrow Wison Intersntional Center for Scholars, Special Report, 2011, p.17.

[8] UNCTAD, *World Investment Report, 2011,* Geneva: UNCTAD, Fog.1.9.

[9] UNCTAD, *China Country Fact Shee.t*

[10] D. Rosen and T. Hanemann, *China's Changing Outbound Foreign Direct Investment Profile: Drivers and Policy Implications*, Washington DC: Peterson Institute for International Economics Policy Brief No. PB09-14. Washington DC: Peterson Institute for International Economics Policy, 2009, p.4.

[11] CEPAL, *La inversión extranjera en América Latina y el Caribe, 2010,* Santiago: Economic Commission for Latin America and the Caribbean, 2011, Cuadro III.3; CEPAL, *The People's Republic of China and Latin America and the Caribbean: towards a strategic relationship,* Santiago: United Nations Economic Commission for Latin America, 2010, p.22

[12] This contrasts with the situation in Africa where concessional loans accounted for two-thirds of "aid" financing during the same period (T. Lum, H. Fischer, J. Gomez-Granger and A. Leland*, China's Foreign Aid Activities in Africa, Latin America, and Southeast Asia* Washington DC: Congressional Research Service, R40361, 2009, Table 3).

[13] K. Gallagaher, A. Irwin and K. Koleski, *The New Banks in Town: Chinese Finance in Latin America,* Washington DC: Inter-American Dialogue Report, 2012, Fig.1

[14] See Jiang Shixue (2008) and Ellis (2009) Ch.2. Ellis also refers to a fourth Chinese interest in the region namely securing strategic alliances as part of its rise as an emerging superpower. This will not be discussed here.

[15] CEPAL, *La inversión extranjera en América Latina y el Caribe, 2010,* Santiago: Economic Commission for Latin America and the Caribbean, 2011, p.154

[16] D. Rosen and T. Hanemann, *China's Changing Outbound Foreign Direct Investment Profile,* Appendix 1, Table 1.

[17] T. Lum, H. Fischer, J. Gomez-Granger and A. Leland*, China's Foreign Aid Activities in Africa, Latin America, and Southeast Asia*, p.13

[18] CEPAL, *La inversión extranjera en América Latina y el Caribe, 2010,* p.163

[19] Jiang Shixue, 'Three factors in recent development of Sino-Latin American development', in C. Aranson, M. Mohr and R. Roett (eds.), *Enter the Dragon? China's Presence in Latin America*, Washington DC: Woodrow Wilson International Centre for Scholars, 2008, pp.43-52.

[20] A. López and D. Ramos, 'The Argentine Case' in R. Jenkins and E. Dussel Peters (eds.), *China and Latin America: Economic Relations in the Twenty-first Century*, Bonn: German Development Institute, 2009, p.108.

[21] D Saslavsky. and R. Rozemberg 'The Brazilian Case' in R. Jenkins and E. Dussel Peters (eds.), *China and Latin America: Economic Relations in the Twenty-first Century*, Bonn: German Development Institute, 2009, p.202.

[22] CEPAL, *La inversión extranjera en América Latina y el Caribe,* Recuadro III.1.

[23] Market economy status is a WTO designation which affects the ease with which countries can apply anti-dumping measures. By achieving this status, China hopes that it will not be subject to so many anti-dumping actions. The US, the European Union and Japan all still regard China as a non-market economy.
[24] CEPAL, *La inversión extranjera en América Latina y el Caribe,* p.154.
[25] Ibid, p.173.
[26] T. Lum, H. Fischer, J. Gomez-Granger and A. Leland*, China's Foreign Aid Activities in Africa, Latin America, and Southeast Asia*, p.2.
[27] CEPAL, *La inversión extranjera en América Latina y el Caribe,* p.174.
[28] An improvement in relations between the PRC and Taiwan in recent years has led to less active competition in this area.
[29] G. Aguilera-Peralta, 'Central America between Two Dragons: Relations with the Two Chinas' in A.Fernandez and B. Hogenboom (eds.) *Latin America Facing China: South-South Relations beyond the Washington Consensus,* New York and Oxford: Berghahn Books, 2010, p.173.
[30] R. Jenkins, 'The Economic Impacts of China on Latin America' in S. Cesarin, R. Jenkins and Zhao Bingwen (eds), *China Outside China: China in Latin America,* Turin: Quaderni Centro di Alti Studi sulla Cina Contemporanea, 2008, Table 1.
[31] G. Aguilera-Peralta, 'Central America between Two Dragons".
[32] Ellis, E. (2009) *China in Latin America: The Whats and Wherefores*, Boulder: Lynne Rienner, 2009, pp.215-7.
[33] See the Chinese government's policy paper on Latin America (FMPRC, 2008)
[34] Own calculation from IMF, *Direction of Trade Statistics*
[35] This was brought home very clearly in the case of Argentina when China banned imports of Argentinean soy oil in 2010 on the grounds that it contained high levels of a solvent. A number of explanations were given for this action including the desire of China to promote its own crushing industry, to reduce stocks of soy oil and palm oil, to retaliate against Argentina for its protectionism against Chinese goods and to punish Argentina for the cancellation of President Christina Kirchner's visit to China earlier in the year. See G. Paz, *China and Argentina, 2000-2010: Re-emergence of China, re-emergence of Argentina?,* Paper presented at the International Workshop on China and Latin America, University of Leeds, 2011.
[36] A. López and D. Ramos, 'The Argentine Case'
[37] J. Barton, *A Study of China's Global Expansion on Chile: the copper and textile value chain,* Cuadernos de Trabajo del Cechimex No.6. Mexico City: Centro de Estudios China-México, UNAM, 2010.
[38] A. Barbosa and D.M.Guimarães, *Economic Relations between Brazil and China in the Mining/Steel Sectors*, Cuadernos de Trabajo del Cechimex No.3. Mexico City: Centro de Estudios China-México, UNAM, 2010.
[39] These are based on Lall (2000)'s classification of goods according to technology level developed by S. Lall, S., "The technological structure and performance of developing country manufactured exports, 1985-1998", *Oxford Development Studies*, Vol.28, No.3, 2010, pp.337-369.
[40] A. López and D. Ramos, 'The Argentine Case', Table 11.
[41] J. Barton, 'The Chilean Case' in R. Jenkins and E. Dussel Peters (eds.), China and Latin America: Economic Relations in the Twenty-first Century, Bonn: German Development Institute, 2009, Table 3..
[42] D Saslavsky. and R. Rozemberg 'The Brazilian Case', Table 8.
[43] J. Barton, 'The Chilean Case', Table 2.
[44] A. López and D. Ramos, 'The Argentine Case', Table 6.
[45] O. Rosales and M. Kuwayama, *China y América Latina y el Caribe: Hacia una relación económica y comercial estratégica,* Santiago: Economic Comisión for Latin America and the Caribbean, 2012. The shares reported here for trade with China are slightly lower than those reported in Tables 1 and 2 since they do not include Hong Kong.
[46] CEPAL, *The People's Republic of China and Latin America and the Caribbean,* p.13.
[47] Own estimate from data on Chinese FDI from Table 3 and UNCTAD data on total FDI flows to and stocks in Latin America.
[48] CEPAL, *The People's Republic of China and Latin America and the Caribbean,* p.10.,
[49] Ibid. p.11.