April 2009 – briefing paper

Latin America faces the Chinese Dragon:
Opportunities, Challenges and Responses

World Economy & Finance Research Programme

E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL

China's explosive economic growth and increased integration with the global economy over the last three decades has been one of the most striking features of the latest phase of globalisation. China's output has increased 15-fold in real terms making it the third largest economy in the world at official exchange rates. China not only grew rapidly, but also became much more open. As a result its share of world trade rose from less than 1% in 1980 to around 7%, making it the world's third largest trading economy and on current trends, the OECD predicts that it could become the world's largest exporter by the beginning of the next decade.

This Brief reports on the findings of a research project that has studied the economic impacts of China's re-emergence on Latin America. As well as looking at the effects on the trade and investment flows of 18 Latin American countries, more detailed studies were undertaken by local collaborators in Argentina, Brazil, Chile and Mexico involving both overviews of those countries and case studies of key value chains.

The School of Development Studies
DEV ODG
The Overseas Development Group

UEA University of East Anglia

China's impact on Latin America: Angel or Devil?

The rise of China has major consequences for other countries all around the globe. The impact of cheap imports of Chinese products to the USA and the European Union have rung alarm bells amongst manufacturers and politicians, while consumers have benefited from falling prices for clothes, electronics and other products. At the same time, there has been a scramble by Western multinationals to gain a foothold in China. Large Chinese trade surpluses have led to the build-up of foreign exchange reserves and provided a source of funding for the US trade and budget deficits. The growing Chinese involvement in Africa has also been a focus of attention with some welcoming the willingness of China to invest in and provide aid to Africa, while critics highlight China's support for some of the region's more unsavoury regimes.

While these aspects of China's growth have been widely discussed, rather less attention has been given to its impact on Latin America. In the United States some commentators have expressed concerns about the growing influence of China in the region seeing it as a threat to US hegemony. However China's interest in Latin America is primarily economic rather than political and it is the economic aspects that are the focus of this Brief.

Trade between China and Latin America is now worth more than $100 billion a year.

The growing economic relations between China and Latin America

Trade between China and Latin America has grown ten-fold over the past decade and is now worth over $100 billion (see Figure 1). There was a surge in imports from Latin America from the turn of the millennium and between 2002 and 2005 China ran a trade deficit with the region. However the rapid growth of Chinese exports to Latin America in recent years has seen this reversed. Chinese firms are also starting to invest in the region and some Brazilian, Mexican and other Latin American firms have even ventured into China, although bilateral investment flows lag a long way behind trade (see opposite). The growing significance of these relations was underlined by the recent (November 2008) visit of Chinese President Hu Jintao to the region and the negotiations to sign free trade agreements with Peru and Costa Rica to follow the one with Chile which came into force in 2006.

Debate is growing over the costs and benefits of closer economic relations with China.

An asymmetric relationship

Although China ranks amongst the top three trade partners for a number of Latin American countries, because of the difference in size, China is economically much more significant for Latin America than the region is for China. This is certainly true as far as individual countries are concerned. Brazil, the largest Latin American exporter to China, ranks fourteenth amongst China's suppliers accounting for 1.5% of total imports, while no other country in the region is in the top twenty import sources. Latin American countries are even less significant as destinations for China's exports with Mexico, the most important, ranked twenty second with less than 1% of China's total exports. Even taking Latin America and the Caribbean as a whole, the region accounts for only 3% of China's exports and supplies 3.8% of its imports.

Direct and indirect economic impacts

In analyzing the impacts of China on the region it is useful to distinguish between the direct and indirect effects. Direct effects are those which arise from bilateral trade and investment between Latin America and China. These are addressed below in pieces on the growth and structure of Latin American exports to China, the recent surge in Chinese imports to the region and the importance of bilateral flows of foreign direct investment (FDI).

However because of China's size and growing significance in the global economy, it also affects world trade and investment flows and world prices in ways which have impacts on Latin America. Two such indirect impacts are particularly important – competition for Latin American exports to third markets and the impact of Chinese demand on commodity prices and on the region's terms of trade.

Whether or not these impacts are positive or negative for the region's economies overall has been a matter of some debate. In the words of one influential paper, is China an "angel" or a "devil" for Latin America (Blázquez-Lidoy et. al., 2007)? These impacts are not uniform across the region and will depend on their nature (competitive or complementary) and the relative significance of the effects in different countries.

How important are foreign investment flows?

There has been a great deal of talk of massive Chinese investment coming to Latin America. At the time of President Hu Jintao's visit to the region in 2004, local media reports claimed that he had promised that China would invest $100 billion in Latin America over the next ten years. It later emerged that this figure was actually a target for bilateral trade between China and Latin America and that investment was likely to be far more modest. However inflated expectations were created, which continue to influence discussions of Chinese FDI in the region.

Chinese investment in Latin America lags a long way behind trade flows.

A second factor which leads to the extent of Chinese FDI flows to Latin America being exaggerated is the use of data on Latin America and the Caribbean in Chinese sources. This is misleading because out of a total flow of US$4,902 million to Latin America in 2007, US$4,478 million went to the Cayman Islands and the British Virgin Islands, two Caribbean tax havens. This meant that Chinese investment in the rest of Latin America and the Caribbean in that year was just over US$400 million. The total stock of Chinese FDI in the region at the end of 2007 came to just over US$1 billion, which was less than 1% of all China's FDI stock.

Figure 2 shows that the main countries in which China has invested in the region are Argentina, Brazil, Mexico, Peru and Venezuela, which between them account for three-quarters of the total stock. Much of Chinese investment in Latin America is of the "resource seeking" variety focussing on oil and minerals, as is suggested by the significant investments in Peru, Venezuela and Ecuador. 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.

There has been a significant growth of Chinese investment in Latin America in recent years with a three-fold increase in the total stock between 2003 and 2007, but this was from a very low base. Investment flows from China at just over US$400 million in 2007 lag a long way behind Latin American imports from China which passed US$50 billion in the same year. China, with its large foreign exchange reserves, may well become a more significant investor in Latin America in the future as controls on capital outflows are relaxed, but for now the region continues to rely heavily on investors from traditional home countries in North America and Europe.

Given that so much hype surrounds Chinese FDI in Latin America, it is somewhat surprising to find that before 2007 the FDI flows from the region to China exceeded the inflows. Amongst the major Latin American countries, Brazil has been the most significant investor with a total investment of $175 million between 2002 and 2007, followed by Argentina ($89 million), Mexico ($60 million) and Chile ($43 million). Even in the case of Brazil only a handful of companies have decided to invest in China. The pioneer was Embraco (compressors), which set up a joint venture with a Chinese company in 1995, and was followed by firms such as Embraer (aircraft), Weg (electrical motors), Sabo (autoparts) and Marcopolo (buses). Mexican firms have recently started to invest more significantly in China led by Maseca with a planned investment of $100 million.

Figure 1 – China's Trade with Latin America, 1990–2007

Source: IMF, Direction of Trade Statistics

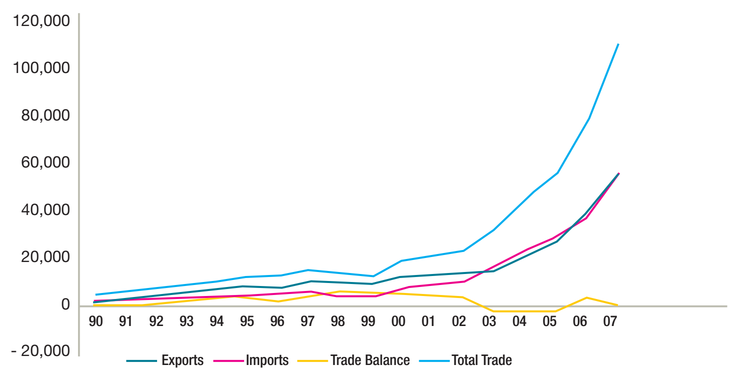
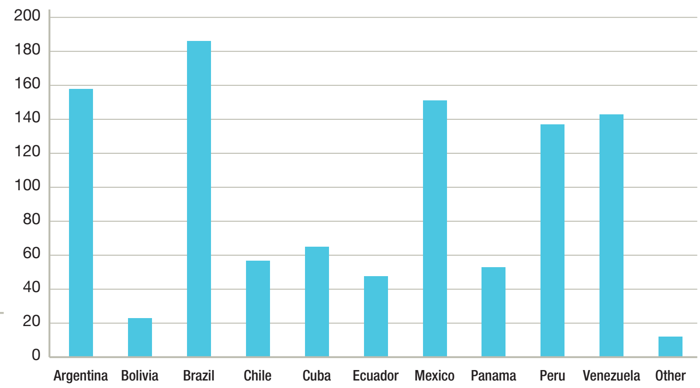


Figure 2 – Chinese FDI Stock in Latin America, 2007 (US$m)

Source: Source: Ministry of Commerce of the People's Republic of China, Department of Outward Investment and Economic Cooperation



China: A growing market for Latin American exports

Latin American exports to China took off at the end of the 1990s (see Figure 3). This pattern holds for all the major Latin American countries exporting to China, suggesting that the explanation must be sought in events within China rather than developments in the various Latin American countries. A key factor was that by the end of the 1990s, rapid growth in China had outstripped domestic supply leading to a 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 2002, rising commodity prices gave a further boost to the value of exports to China.

Latin American exports to China have not diversified beyond a few primary products.

The fact that trade is driven by China's demand for raw materials is reflected in the composition of the region's exports. These are dominated by unprocessed primary products and resource based manufactures which between them account for more than four-fifths of total exports (see Figure 4).

Exports to China by the major Latin American exporters are concentrated on a very narrow range of products. More than three-quarters of China's imports from Argentina and Chile are of soya and copper respectively. Two thirds of imports from Brazil are soya and iron ore, while a similar proportion of imports from Peru are of copper and fishmeal. Thus the major Latin American exporters to China have not so far been able to diversify their exports beyond a few primary commodities. Even worse, for many of these products, exports to China are increasingly concentrated in the least processed products within the value chain (see Box 1 for an example).

Not all Latin American countries have participated in the boom in exports to China. The Central American countries (apart from Costa Rica) which continue to recognise Taiwan and do not have diplomatic relations with China, have minimal levels of exports as do Colombia and Ecuador. Thus the impact of the growth of the Chinese market has been felt unevenly across the region.

The market opportunities which China represents for Latin American exporters are a clear example of a complementary effect on the region. However, while there is little doubt that in the short-run Chinese demand for primary commodities has been a boon to the region as a whole, there are concerns that this is leading to an overemphasis on the less dynamic primary sectors with only limited opportunities for increasing value added and technological change (IDB, 2006).

Argentina's Exports of Soybean Products to China

Argentina is an increasingly important player in the world soybean industry. Its share of the global soybean acreage increased from around a tenth in the mid-nineties to about a sixth in 2006/7, and its share of global production has doubled to a fifth of the world total over the same period. It accounts for more than a tenth of world exports of soybeans, almost a half of soybean meal and almost 60% of soybean oil.

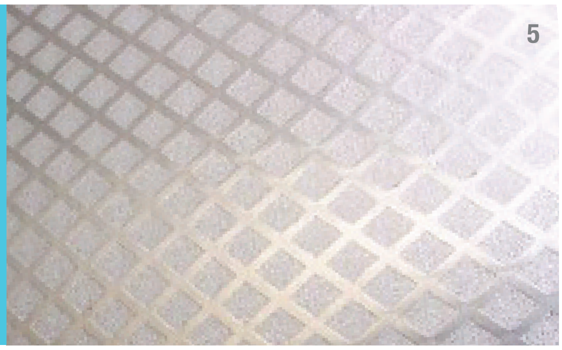
Over the same period, rising incomes in China have led to major changes in food consumption patterns, particularly rising meat consumption, increasing the demand for the products of the soybean complex (soybeans, soybean meal and soybean oil). As a result Chinese imports grew from less than 2 million tons in 1994 to 37.3 million tons in 2007 (US Department of Agriculture). Argentina has been well placed to take advantage of this growth in Chinese demand and the soybean complex accounts for more than three-quarters of total Argentine exports to China.

Although exports to China doubled their share of total exports from the soybean complex between 1996 and 2006, this growth was very unevenly distributed with China's share increasing most in the case of unprocessed soybeans, while soybean meal exports to China virtually disappeared. Compared to Argentina's exports to the rest of the world, those to China are much more heavily concentrated in the early stages of the value chain.

This is explained by the decision of the Chinese authorities in the late 1990s to develop a local oilseed crushing industry. Several promotional measures were implemented to encourage investment in the industry and to increase its competitiveness. A number of modern crushing plants were established, most of them located in the coastal provinces, near the ports, to ensure easy access to imported raw materials. Leading multinational companies such as ADM, Bunge and Cargill, with crushing plants in Argentina, invested in China and now import soybeans from Argentina to supply their Chinese plants.

Thus not only are Argentina's exports to China almost entirely made up of primary products and resource based manufactures, but as a result of a deliberate industrial strategy in China, Argentina has been pushed into exporting the least processed products from the soybean complex.

Based on Lopez et. al. (2008)



China's impacts on commodity prices and Latin American export earnings

Because of the sheer size of China's economy, the growth of Chinese demand for raw materials for its expanding industrial economy and for food and feedstuffs to supply a more affluent population have not only provided new market opportunities for Latin American exporters of such products but also contributed to rising international prices in the commodity boom between 2002 and 2007. This has been a significant indirect impact of China's growth on the region because, despite active promotion of industrial development by Latin American governments in the second half of the twentieth century, the region as a whole remains heavily dependent on exports of primary commodities. These accounted for just over half of total export earnings in 2006 (and more than two-thirds of the total if Mexico is excluded).

While Latin American exporters benefited considerably from increases in the prices of commodities such as copper, iron ore, zinc, aluminium, petroleum, soybeans and fishmeal during the boom, it is not clear to what extent these increases can be attributed to the growth of demand from China. What is clear is that China accounts for a significant and growing share of global demand for many of these products. Figure 5 shows that in 2007 China accounted for more than half of world consumption of iron ore, a third of aluminium and zinc, and more than a quarter of copper. It is also a major market for certain agricultural products, particularly soybeans, soybean oil and fishmeal, where it makes up between a fifth and a quarter of world consumption.

The fact that China's demand for these products has increased so rapidly has undoubtedly contributed to the increase in commodity prices, although it is by no means the only factor involved. An analysis of the impact of China on global prices based on the additional demand attributable to the more rapid growth of Chinese consumption (compared to the rest of the world) and taking account of the likely responsiveness of global supply to higher prices, estimated that in aggregate Latin American earnings from its 15 leading primary commodity exports were over US$30 billion higher in 2006 than they would have been had Chinese consumption grown at the same rate as in the rest of the world (see Table 1). The bulk of this was attributable to the higher prices of petroleum and minerals.

These estimates are for Latin America as a whole and it is important to bear in mind that the gains are spread unevenly amongst the countries of the region. The main beneficiaries are oil and mineral exporters such as Chile, Peru, Venezuela and Mexico. On the other hand countries which are net importers, particularly of oil, and are not exporters of minerals are more likely to be net losers as a result of the impact of China on their terms of trade. The key to this is whether the countries concerned are complementary to China, in the sense of exporting those commodities in which China is a net importer, or compete with China for imports of the same products.

Figure 3 – China and Hong Kong imports from Latin America, 1990–2007

Source: IMF, Direction of Trade Statistics

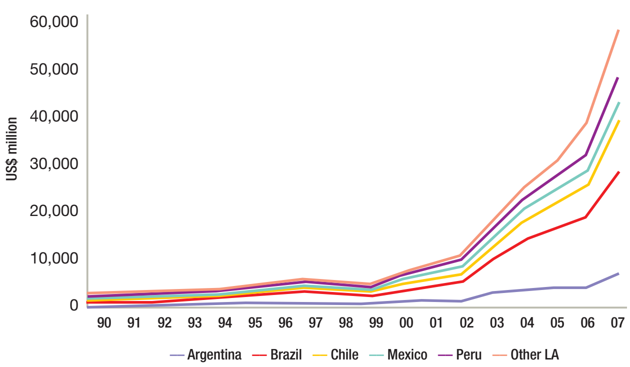


Figure 4 – Structure of Chinese imports from Latin America and the Carribean, 2006

Source: Source: Economic Commission for Latin America

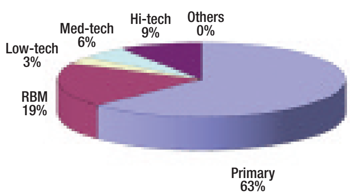


Figure 5: Share of China in global consumption of key commodities, 2002, 2007

Source: Jenkins (2008c) Note: iron ore data refers to 2006

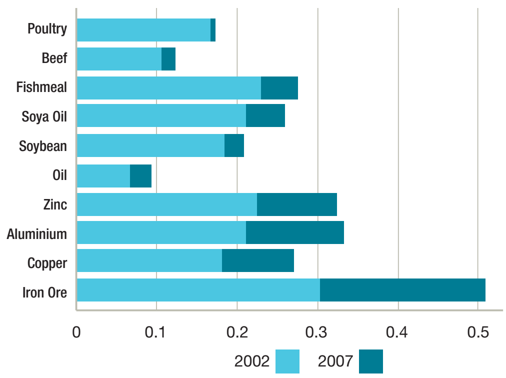


Table 1: China's impact on Latin American commodity export earnings, 2006 (US$ mn.)

	Total Exports	"China Effect"
Crude oil	112,769	15,851
Iron ore	9,606	5,427
Copper	43,409	8,819
Aluminium	6,091	963
Zinc	4,024	1,420
Soybean	8,031	345
Soya oil	4,259	322
Fishmeal	1,824	88
Beef	5,870	201
Poultry	3,313	-56
Tropical agricultural products*	18,152	48
Forest products**	7,061	171
Total	224,409	33,599

** Sugar, coffee and bananas*
*** Sawn wood and chemical pulp*
Source: Jenkins (2008c)

The growing penetration of Chinese goods in Latin American markets

Chinese goods are appearing all over Latin America to such an extent that it was reported that in Mexico Chinese chillies were competing with local varieties. The rapid growth of imports from China is a recent phenomenon. While the trend was upwards in the 1990s and early 2000s, there was a very rapid acceleration from 2003 onwards (see Figure 6). China's share of total Latin American imports increased four-fold between 1996 and 2006 to more than 7%. This growth can be explained by the increased competitiveness of Chinese production in a wide range of goods and improved market access following China's accession to the WTO at the end of 2001.

A surge in imports from China is leading to increased demands for protection.

In terms of the type of goods imported from China, the pattern is the reverse of that found for Latin American exports to China. 99% of imports are manufactured goods and almost 90% are non-resource based manufactures (see Figure 7). Given what is known about China's comparative advantage, this is not surprising. What is perhaps less widely recognised is that China's exports to Latin America are not confined to low-tech or labour-intensive products. In fact these account for only a third of Chinese exports while more than a half is made up of medium and high-tech products including electronic equipment, machinery and chemicals.

The rapid growth of Chinese imports over the last five years has created concern within Latin America. While consumers benefit from cheaper products, manufacturers complain that they are losing markets to imports and have accused the Chinese of dumping.

In Brazil and Argentina which are major exporters to China and had large trade surpluses in the early part of the decade, these have disappeared and they now have bilateral trade deficits. This has led to protectionist moves such as the series of measures to restrict imports of tyres, clothing, toys, leather goods, footwear, textiles and bicycles from China and other Asian countries taken by the Argentine government in August 2007.

It is difficult to determine the extent to which imports from China have displaced domestic producers in Latin America. The increase in Chinese imports has, at least in part, been at the expense of other exporters. Evidence from the manufacturing sector in Argentina and Brazil suggests that a significant impact on domestic producers was confined to a few sectors such as office equipment and computers, TVs and radios, furniture, scientific instruments and sports goods. This however may underestimate the extent of the impact since it does not take into account unregistered imports of Chinese goods (contraband). In Mexico it has been estimated that up to 65% of domestically sold textiles and clothing are imported illegally, while in Brazil, the textile and clothing trade association claimed losses of US$60 million in 2006 as a result of illegal imports from China.

Figure 6 – China and Hong Kong Exports to Latin America, 1990–2007

Source: IMF, Direction of Trade Statistics

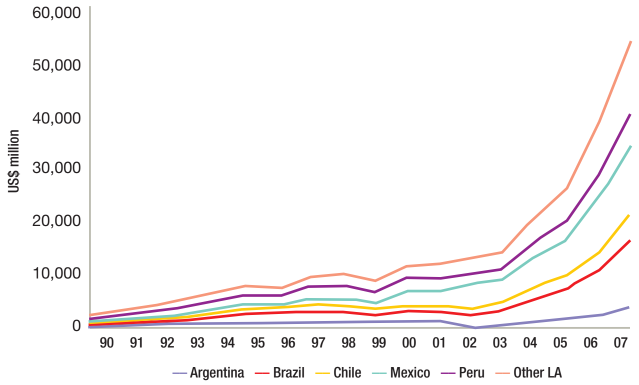
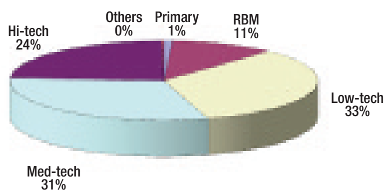
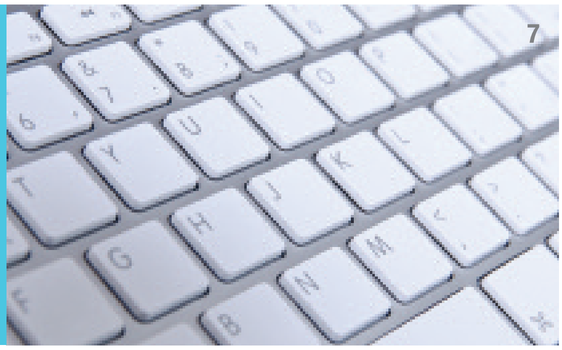


Figure 7 – Structure of Chinese exports to Latin America and the Carribean, 2006

Source: Economic Commission for Latin America





Is Latin America losing out to China in export markets?

Many developing countries are concerned that China's emergence poses a threat to their exports, particularly of manufactured goods, to third markets. The rapid growth of Chinese exports, particularly following its accession to the WTO in late 2001 and the ending of the Agreement on Textiles and Clothing (ATC), which had allowed countries to use quotas to restrict imports, at the beginning of 2005, has given added force to these fears. But how justified are they in the case of Latin America?

Previous studies which have compared Latin America with other regions have found that, apart from Mexico, the countries of the region are less threatened by Chinese exports to third markets than are the Asian economies or the transition economies of Eastern Europe (Blazquez-Lidoy et. al., 2007; IDB, 2006, Ch.5). But this conclusion is based on flawed indicators (see Jenkins, 2008a) and data which does not extend further than the early years of the decade and therefore do not capture the impact of China's WTO membership and the ending of the ATC. Using a different methodology and more recent data shows that the impact of China on Latin American exports to the US, still the main market for the region, is more serious and affects more countries than the optimistic view suggests.

Table 2 shows estimates of the loss of market share in the US to China, for the Latin American countries most seriously affected. This was estimated using an extension of Constant Market Share analysis. It covers the period prior to China joining the WTO (1996-2001) and since WTO accession (2001-2006).

The first point that stands out from Table 2 is the sharply increased impact of China on Latin American exports to the US in the period since it became a WTO member. Whereas between 1996 and 2001 the aggregate effect on the region as a whole amounted to $1.3 billion (1% of 1996 exports), over the next five years, the impact came to over $18 billion (9.3% of exports in 2001).

Looking at individual countries, Table 2 shows that between 2001 and 2006, those worst hit were the Dominican Republic, El Salvador, Mexico and Guatemala. The Dominican Republic and the Central American countries, which rely heavily on textile and clothing exports to the US, were particularly affected by the phasing out of the Agreement on Textiles and Clothing in 2005. The countries of the Southern Cone (apart from Chile), although not as badly affected as the first group, have also lost market share to China in the US. The countries which have been least affected in the post 2001 period have been the Andean group countries whose exports to the US are mainly of minerals and oil and have therefore not faced significant Chinese competition.

Another area of concern which has arisen with the recent growth of Chinese imports to Latin America is that this may be displacing intra-regional trade and possibly undermining efforts at greater regional integration. Brazilian exporters have complained that they are losing out to China in the Argentinean market and the effect of Chinese competition on intra-regional trade is an important area for further research.

Chinese Competition and the PC Industry in Mexico

During the 1990s the growth of the electronics industry in the State of Jalisco was a major success story of Mexican industrial development. At the start of the millennium the industry employed over 75,000 people and had exports of around US$10 billion. The industry was heavily based on foreign direct investment and its centrepiece was the PC industry.

However between 2001 and 2003 many of the leading producers of personal computers, laptops and peripherals, such as IBM, Hewlett Packard, Solectron and Jabil transferred their production lines to Asia, particularly China. Mexico's share of US imports of PCs fell by half from 14% in 2001 to under 7% in 2006, while China's share more than tripled from 14% to 45% over the same period. As a result it has been estimated that more than 45,000 jobs were lost in the Jalisco electronics industry between 2001 and 2003. There is only one firm still producing PCs in the state today.

This has led to a major restructuring of the electronics industry in Jalisco. While China has specialized in mass produced PCs, Mexico and Jalisco are increasingly specialising in the final configuration of products and in high value segments that require rapid delivery. Thus Mexico is concentrating on those products and processes where it derives a competitive advantage from proximity to consumers and suppliers in the US. Whether this strategy proves to be sustainable in the longer term remains to be seen, but it has helped Jalisco recover somewhat from the impact of the crisis of 2001-2003. *(Based on Dussel, 2008)*

Table 2: Latin American countries most affected by loss of exports to China in the US market, 1996-2001, 2001-2006, (as % of country's total exports to the US)

	1996-2001	2001-2006
Argentina	-1.8%	-5.1%
Brazil	-4.1%	-7.7%
Costa Rica	-1.3%	-7.8%
Dominican Rep	-2.4%	-13.0%
El Salvador	6.5%	-12.3%
Guatemala	6.2%	-10.5%
Honduras	3.8%	-7.7%
Mexico	-1.1%	-11.4%
Paraguay	-6.9%	-5.7%
Uruguay	-5.8%	-9.3%
18 Latin American Countries	-1.0%	-9.3%

Source: Jenkins (2008b)

China and Latin America: Prospects and lessons

Trade and investment relations follow a classic centre-periphery pattern.

The perception of China in Latin America has evolved over time. In some countries a type of euphoria existed initially over the potential of the Chinese market and the hopes for massive inflows of investment from China. This has been eroded by increased Chinese competition in the domestic market, the regional market and in the US and Europe and this has led to growing economic tensions. It seems likely that these will increase in the future. Falling commodity prices will push Latin America's trade with China further into deficit. This may be reinforced by increased efforts of Chinese firms to export to the region as their markets in the OECD countries contract with the recession. China's efforts to stimulate domestic demand may help to maintain the volume of Latin American exports of primary products but is unlikely to lead to significant diversification beyond the current narrow range of exports.

As this Brief has shown, the pattern of trade and investment relations between China and Latin America is of the classic centre-periphery kind with Latin America specializing in unprocessed primary products and China in manufactured goods including many high and medium-tech products. Thus trade with China is reinforcing the pattern of specialization which has emerged in the region since the lost decade of the 1980s. In the case of China, this is not the result of a long-standing technological lead over the region, but has been driven by state trade, industrial and technology policies over the past three decades which have sought to integrate China with the global economy, but to do so in ways which contribute to the development of production and technological capabilities and international competitiveness.

Further Reading

Blazquez-Lidoy, J., Rodriguez J. and Santiso, J. (2007). "Angel or Devil? China's Trade Impact on Latin American Emerging Markets" in J.Santiso (ed.), *The Visible Hand of China in Latin America*, Development Centre Studies, Paris: OECD.

Dussel Peters, E. (2008), *The Mexico-China Economic Relationship in Electronics. A Case Study of the PC Industry in Jalisco*, available at: http://www.uea.ac.uk/dev/faculty/Jenkins/china-latinamerica

IDB (2006). Inter-American Development Bank, *The Emergence of China. Opportunities and Challenges for Latin America and the Caribbean*. Cambridge: Harvard University Press.

Jenkins, R., E. Dussel Peters and M. Moreira (2008), "The Impact of China on Latin America and the Caribbean", *World Development*, Vol.36, No.2, pp.235-253

Jenkins, R. (2008a), "Measuring the Competitive Threat from China for other Southern Exporters" *The World Economy* Vol.31, No.10, pp.1351-1366

Jenkins, R. (2008b) "China's Global Growth and Latin American Exports" *UNU-WIDER Research Paper* No.2008/104

Jenkins, R. (2008c), *The Impact of China's Growth on Global Commodity Prices and Latin American Export Earnings*, mimeo.

López, A., D. Ramos and C. Simkievich (2008) *A Study of the Impact of China's Global Expansion on Argentina: Soybean Value Chain analysis*, available at: http://www.uea.ac.uk/dev/faculty/Jenkins/china-latinamerica

This briefing paper was written by Rhys Jenkins and is based on research carried out for the project *The Impact of China's Global Economic Expansion on Latin America*, funded by the ESRC World Economy and Finance Research Programme (Research grant no.: RES-165-25-005)

Further details and background papers for the project can be found at www.uea.ac.uk/dev/faculty/Jenkins/china-latinamerica

**School of Development Studies,
University of East Anglia, Norwich, NR4 7TJ
email: R.O.Jenkins@uea.ac.uk**