China Matters: China's Economic Impact in Latin America

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RESEARCH REPORTS AND NOTES

CHINA MATTERS
China's Economic Impact in Latin America

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Abstract: This paper analyzes two aspects of China's economic relationship with Latin America and the Caribbean (LAC). First, we examine the extent to which China's economic growth is affecting trade and investment flows between China and LAC. Second, we analyze the extent to which the emergence of China as a world exporter affects the ability of LAC countries to compete in world markets both in terms of exports as well as in the capacity to attract foreign investment. For each of these questions, we provide a critical assessment of a new body of work in this area, as well as offer a series of analyses that build on and confirm some of this previous work. Furthermore, we offer implications for policy and future research. We show that there is an emerging consensus regarding China and LAC. With respect to trade and investment flows, China accounts for a significant amount of the boost in LAC exports and foreign investment in recent years, but is exporting more than it imports. In terms of global competitiveness, LAC is not significantly threatened by Chinese exports in global markets, with the exception of Mexico.

INTRODUCTION

"China is an awakening monster that can eat us."
Carlos Zúñiga, Nicaraguan CAFTA negotiator[1]

1. Quoted in *La Prensa* (Nicaragua), March 10, 2004.

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Across the world there is increasing concern about the effects of China's emergence on the global economic stage. As the above quote by the CAFTA negotiator attests, Latin America is no exception. Among international organizations, academia, and governments, a small but burgeoning literature has emerged that attempts to examine the extent to which such concerns are justified. In this report we identify and offer analytical guidance about this new research.

Specifically, we report on and analyze two aspects of China's economic relationship with Latin America and the Caribbean (LAC). First, we examine the extent to which China's economic growth is affecting trade between China and the region as well as Chinese investment in LAC. Second, we analyze the extent to which the emergence of China as a world exporter affects the ability of LAC countries to compete in world markets, both in terms of exports as well as in the capacity to attract foreign investment. Furthermore, we summarize our findings and the findings of previous studies and offer implications for policy and future research.[2]

The evidence reveals that there is an emerging consensus regarding China and LAC. With respect to trade and investment flows, China accounts for a significant amount of the boost in LAC exports and foreign investment in recent years. However, as is the case with most other regions of the world, LAC is running a significant trade deficit with China. Also of concern to some is the fact that the composition of LAC exports to China is largely raw materials and primary products.

Regarding the relative competitiveness of China and LAC, the two places have dissimilar export structures and therefore do not compete very much in world markets. LAC chiefly exports raw materials and primary products to the rest of the world; China increasingly exports manufactured goods. The one exception to this is Mexico, which has a similar export profile to China. There is near unanimous consensus that Mexico is losing competitiveness and foreign investment to China.

From a research perspective, it is of utmost importance that the work not stop here. China has only been a full-fledged member of the world economy since it was admitted into the World Trade Organization in 2001. However, if the early trends identified here hold for the near future, one could expect that China's growth may accentuate the LAC region's reliance on raw materials and primary products, contribute to the persistent issues of current account deficits in LAC, and put LAC further behind in the race to "catch up" to other developing countries in establishing competitive high-value-added manufacturing capabilities.

In this space it is important to qualify that this is far from an exhaustive review of this burgeoning literature. In general, all major reports

2. We limit our review to analysis of economic consequences. For a more all-encompassing analysis, see, for example, Domínguez (2006).

we review draw from more detailed and specific background works. Because our purpose is to report on the overall findings of the literature on the two aforementioned aspects, we only resort to background papers when we believe the information in summary works is not detailed enough.

THE IMPACTS OF LAC–CHINA TRADE AND INVESTMENT

Given that China has a seemingly bottomless appetite for goods and services needed to fuel its growth, analysts examine the extent to which LAC can supply this rising demand. In this section we analyze the extent to which imports from China are contributing to export growth in LAC, examine bilateral trade between the two places, and note the effect of these trends on macroeconomic balances. Consistent with the bulk of the studies on these subjects, we find that China's demand for goods is making a significant and positive impact on the growth of LAC exports. The vast majority of these exports are primary commodities. We also show that, overall, over the past twelve years, LAC has gone from having a net trade surplus with China to a net trade deficit.

The majority of studies on the issue of China's impacts on LAC economies have been conducted by international financial institutions. Indeed, the most comprehensive assessments have been done by the World Bank, the Organisation for Economic Co-operation and Development (OECD), and the Inter-American Development Bank (IDB). With one exception, all of the studies use the same data set for their analyses, the United Nations Commodity Trade Statistics Database (Comtrade). Throughout this paper our own calculations, often mimicking the methods used by these institutions, use Comtrade as well (United Nations Statistics Division 2006).

China's growing demand for goods and services has had a positive and significant impact on LAC exports. A recent World Bank study found that China's GDP growth from 2000 to 2004 explains approximately 7 percent of LAC's exports growth in 2004. This growth, however, has been quite uneven across different countries in Latin America. The World Bank study identifies the Southern Cone and Andean nations as those that have been most positively affected—with increases equivalent to 14 and 9 percent of their total exports, respectively. In the case of Central American and Caribbean products, Chinese demand accounted for 2 and 1 percent, respectively, of their total exports in 2004 (Lederman, Olarreaga, and Perry 2006).

The first two columns of table 1 exhibit the mammoth increases in LAC exports to China. The next two columns replicate the analysis of the World Bank study over a longer term—we calculate the amount of increase in LAC exports that is attributable to China's increased imports from the region. Adding one more year of analysis to the World Bank study (which

Table 1 Scale and Impact of LAC–China Trade, 1993 to 2005

	Increase in exports to China %		*As share of total increase in exports %*	
Country	1993–1997	2001–2005	1993–1997	2001–2005
Argentina	380.3	154.9	5.8	17.8
Belize	−100.0	−100.0	−0.2	0.0
Bolivia	9846.4	253.0	0.0	1.1
Brazil	25.7	225.7	2.2	9.1
Chile	113.7	273.8	3.7	17.9
Colombia	199.9	978.4	0.2	2.8
Costa Rica	7850.6	1479.1	0.8	11.6
Dominican Rep.	—	−100.0	0.0	0.0
Ecuador	3382.9	−28.6	8.2	−0.1
El Salvador	—	−100.0	0.0	0.0
French Guiana	—	—	0.0	0.0
Guatemala	—	7326.0	0.0	1.3
Guyana	—	233.9	0.0	40.9
Honduras	1709.9	3012.1	0.0	4.2
Mexico	439.6	265.5	0.2	2.1
Nicaragua	—	1738.5	0.0	2.8
Panama	494.6	189.5	0.6	36.2
Paraguay	−100.0	−100.0	−0.2	1.1
Peru	214.3	296.0	11.0	14.5
Suriname	—	−100.0	0.7	1.0
Uruguay	26.0	5.5	2.7	0.5
Venezuela	−98.6	81.4	−0.1	0.3
Average	1625.7	761.2	1.6	7.5

Source: Author calculations based on COMTRADE (United Nations Statistics Division 2006).

looked at 2001 to 2004), we find that Chinese exports are still approximately 7 percent of export growth in LAC. We also exhibit these trends during the period from 1993 to 1997 to show how China was of relatively small importance to the export profiles of LAC countries just a decade ago. This table also confirms arguments that the majority of export growth to China is found in Southern Cone and Andean nations, which are largely exporting agro-industrial products and raw materials to China, whereas in Central America and Mexico, China accounts for less than the average amount of total export growth (Dussel Peters 2005).

The World Bank study also shows that China has emerged as a significant source of foreign direct investment (FDI) into LAC. Moreover, in a background study, Cravino, Lederman, and Olarreaga (2006) argue that China's entrance to the world stage as a net creditor has had important

positive effects for Latin America, beyond direct flows: "Regardless of whether China and India's capital flows are aimed at LAC markets, their growth accompanied by an increase in net foreign lending has contributed to lowering the cost of capital for LAC net debtors." A Bank of Spain study sees a potential for ever increasing FDI into LAC, arguing that as China grows it will want to secure access to raw materials, prompting investment in the region (Santabárbara and García-Herrero 2005).

It is also important to examine the composition of LAC exports to China. Building on the discussion about the impact that Chinese demand has had on the volume of exports, different authors look at the composition of LAC's export basket to China. Mauricio Mesquita Moreira (2007) shows that exports to China are largely primary commodities. Table 2 lists the top twenty exports for LAC for 2005 in 2005 U.S. dollars. As the table shows, the vast majority of LAC exports to China are primary commodities that are either raw materials or agricultural products. In 2005 there were approximately $26 billion in LAC exports to China. These top twenty account for more than 90 percent of those exports, or $24 billion.

A finding that has been largely overlooked in the literature thus far is the fact that LAC has been importing more from China than it has been exporting. Indeed, as shown in table 3, the region had a trade surplus with China in 1993 of $158 million (2005 U.S. dollars) but posted a trade deficit with China in 2005 to the tune of over $16 billion. Only Brazil, Argentina, Chile, and Peru have surpluses with China (chiefly a result of exporting grains, beef, and copper). For each nation that has a deficit with China, the deficit makes up a significant portion of the nation's total deficit. In Colombia, the trade deficit with China is ten times the nation's entire trade deficit, and in Mexico, the China deficit is twice the entire deficit (since the total trade deficit is offset by surpluses with other countries). In Uruguay the deficit with China is 25 percent of its total deficit, and Guatemala's deficit with China is 14 percent of its total.

We are aware that from a macroeconomic standpoint, bilateral trade balances are not a relevant measure. It is well known that what really matters is the overall trade balance. However, we have chosen to point out trends in bilateral trade balances between LAC and China for two important reasons. First, many of the studies reviewed point to positive bilateral trade balances with China as a source of good news. Pointing out that positive balances exist only for some countries, while negative balances prevail for others, only helps to put the findings of the studies in the adequate perspective. Secondly, as inaccurate as looking at bilateral trade balances may be, it is nonetheless true that policy makers pay significant attention to this measure. For example, it is commonplace in debates about the Chinese competitive threat to U.S. production to see both press outlets and policy makers highlight the growing bilateral trade deficit with China.

Table 2 Top 20 Chinese Imports from LAC (US $1,000), 2005

Rank	Commodity	Value	Share (%)
1	Iron ore and concentrates	4,643,908	17.6
2	Seeds and oleaginous fruit, whole or broken, for "soft" fixed oil	4,615,911	17.5
3	Ores and concentrates of base metals (n.e.s.)	3,440,309	13.0
4	Copper	2,334,939	8.8
5	Thermionic, microcircuits, transistors, valves, etc.	1,305,653	4.9
6	Crude petroleum and oils obtained from bituminous minerals	1,194,125	4.5
7	Feeding stuff for animals (not including unmilled cereals)	952,122	3.6
8	Fixed vegetable oils, soft, crude refined or purified	905,377	3.4
9	Pulp and waste paper	777,144	2.9
10	Leather	577,381	2.2
11	Pig and sponge iron, spiegeleisen, etc., and ferro-alloys	489,682	1.9
12	Parts (n.e.s.) of and accessories for machines of headings 751 or 752	342,340	1.3
13	Universals, plates, and sheets of iron or steel	331,106	1.3
14	Ingots and other primary forms of iron or steel	229,875	0.9
15	Wood, simply worked, and railway sleepers of wood	225,342	0.9
16	Petroleum products, refined	219,454	0.8
17	Polymerization and copolymerization products	210,150	0.8
18	Nonferrous base metal waste and scrap (n.e.s.)	189,254	0.7
19	Other crude minerals	178,763	0.7
20	Tobacco unmanufactured; tobacco refuse	177,345	0.7

Source: Author calculations based on COMTRADE (United Nations Statistics Division 2006).

Note: The abbreviation n.e.s. stands for "not elsewhere specified."

A recent Mexico-specific study shows that since 2003, China has become second only to the United States in Mexican imports. The study further shows that China was the principal nation with which Mexico had a trade deficit that year (Dussel Peters 2005). This trend may be accentuating. Mesquita Moreira (2007) looked at the evolution of LAC's imports from China and, with the caveat that reliable data on market penetration for the entire region is difficult to obtain, he finds that trade flows suggest that China's moderate presence in LAC's domestic manufacturing market is changing rapidly. He also finds an increasing Chinese share of manufacturing imports in all LAC's subregions. More specifically, he finds that, in the

Table 3 China Trade and Deficits in Latin America (US $1,000), 2005

	Net exports 1993		*Net exports 2005*	
Country	China	Share (%)	China	Share (%)
Antigua and Barbuda	0	0.0	−4,809	1.2
Argentina	−69,691	1.4	1,625,669	14.2
Bahamas	0	0.0		00.0
Barbados	−6,756	1.3	−48,244	3.7
Belize	−6,215	3.0	−9,833	2.2
Bolivia	−5,411	1.1	−116,299	−25.6
Brazil	841,090	5.5	1,006,430	2.5
Chile	−39,394	2.4	1,849,349	21.2
Colombia	−68,495	1.9	−1,380,132	10,056.8
Costa Rica	−299	0.0	−109,520	5.4
Dominica	−814	1.3	−3,576	2.9
Dominican Republic	0	0.0	0	0.0
Ecuador	−6,576	−1.0	−614,528	−235.8
El Salvador	−293	0.0		00.0
Grenada	−1,060	0.8		00.0
Guatemala	−2,751	0.2	−715,414	0.0
Guyana	0	0.0	−26,802	11.2
Haiti	0	0.0	0	0.0
Honduras	−9,096	1.1	−84,828	3.2
Jamaica	−23,859	1.6	0	0.0
Mexico	−582,193	3.2	−16,560,795	217.6
Nicaragua	−127	0.0	−141,656	8.6
Panama	−2,004	0.1	−88,842	2.8
Paraguay	714	−0.1	0	0.0
Peru	67,508	−5.6	802,932	17.4
Saint Kitts and Nevis	−197	0.2	−1,676	1.0
Saint Lucia	−5,015	2.1	−9,885	2.4
Saint Vincent and the Grenadines	−1,460	1.4	−6,520	3.3
Suriname	0	0.0	0	0.0
Trinidad and Tobago	−17,345	−6.4	−164,173	−4.2
Uruguay	97,877	−10.0	−122,699	25.9
Venezuela	4,742	0.1	−838,206	−2.5
Total general	158,481	−0.8	−15,764,055	−20.6

Source: Author calculations based on COMTRADE (United Nations Statistics Division 2006).

case of Brazil, whereas the country's import penetration as [a] whole has been declining since the 1999 maxi-devaluation, Chinese penetration has moved in the other direction, increasing substantially, although from a small base. In Mexico, the growth of China's imports has been outpacing that of the rest of the world by a large margin since 1999.

When one examines the export structures of LAC and China it is fairly straightforward to see that LAC would supply China with raw materials and commodities, and China would export manufactures to LAC. When comparing the exporting structure of fifteen LAC countries with the importing structure of China, a recent OECD study finds that the goods that LAC countries export and China imports are mainly commodities—except in the case of Mexico. Conducting this analysis at a greater level of detail for a subset of countries (Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela), the OECD study finds that the sector in which these countries are specialized and China is not is clearly raw materials (wood products, processed food, minerals, and perishable goods). These two findings, the study argues, are problematic in that trade with China could entail a deeper specialization in primary products (we discuss this issue in further detail in Summary and Conclusions). In the short term, however, China's demand for raw materials is positive not only because it may increase direct exports from LAC but also because it may help to drive the prices of these exports higher (Blázquez-Lidoy, Rodríguez, and Santiso 2006).

COMPETITIVENESS IN WORLD MARKETS

"What are the factors driving the crisis of the textile sector? First is the global competition of China, which is more and more present in every market."

Isaac Soloducho, President of Paylana[3]

Perhaps of even more concern to Latin Americans is the extent to which China will outcompete LAC in world markets. In other words, is China penetrating (or does it have the potential to penetrate) world export markets at a faster rate than firms in LAC? Interestingly, such fears are not justified, at least in the short and intermediate term. The majority of analyses show that since LAC has a different export structure than China, it is simply not exporting the same types of products to world markets that China does. Therefore, LAC is not as threatened by China's rapid penetration of world markets as one might think. The one exception to this rule is Mexico, which has a very similar export structure to China and has been

3. Paylana is a leading exporter of high-quality wool-based apparel in Uruguay; Soloducho quoted in *El Observador* (Uruguay), November 20, 2006, p. 13.

shown to be losing competitiveness to China in both exports and foreign investment.

Comparisons of export structure are based on the assumption that similar export structures will suggest the highest potential for competition. An OECD study found:

> In general terms, the results suggest that there is no trade competition between China and Latin America . . . [Moreover] this trade competition is even decreasing rather than increasing over the recent period of time. Not surprisingly, countries that export mainly commodities face lower competition . . . Paraguay, Venezuela, Bolivia and Panama are those that exhibit the lowest figures among 34 selected economies, i.e. those are the countries that suffer less from Chinese trade competition. Brazil could be considered as an intermediate case between Mexico and Venezuela. (Blázquez-Lidoy, Rodríguez, and Santiso 2006)

Estimating the different determinants of LAC exports, the World Bank study finds no evidence to support the argument that Chinese exports are replacing LAC exports in the world marketplace. Rather, it finds that the growth in Chinese exports to third markets leads to an increase in LAC exports to these markets equivalent to 32 percent of LAC exports in 2004, a result the authors interpret to mean that exports from China and from LAC complement rather than substitute each other in world markets. This World Bank study also finds a positive impact of Chinese exports to LAC on LAC exports to third markets, suggesting that imports of a larger variety of cheaper Chinese goods are positively affecting LAC's competitiveness in third markets (Lederman, Olarreaga, and Perry 2006). However, a recent IDB study notes that the two areas' export profiles are beginning to converge, and therefore fierce competition could ensue in the future: "As China and Latin America—and Mexico in particular—have converged toward increasingly similar export baskets, especially in manufacturing industries, direct competition has intensified" (Devlin, Estevadeordal, and Rodríguez-Clare 2006).

Lall and Weiss tackle this question using a different approach. They examine the evolution of China and LAC export shares in both the world and U.S. markets and look for evidence of increased Chinese competition by studying increased penetration of Chinese exports in concert with decreased penetration of LAC exports. More specifically, they define a category in which China's market share is rising (for either the world market or the U.S. market) and LAC's is decreasing as a category in which LAC is experiencing a "direct threat" from China. Similarly, they define a category in which both China's and LAC's shares are increasing but China's share is increasing faster as a category in which LAC is experiencing a "partial threat" from China. Lall and Weiss correctly note that this analysis is of the first order, given that these "threats" may be spurious and are not backed by econometric analysis.

Table 4 Percentage-Point Change in Penetration of World Markets, 2000–2004

Commodity	LAC	Mexico	China
Food and live animals chiefly for food	0.06	−0.27	0.32
Beverages and tobacco	−0.18	−0.07	0.26
Crude materials, inedible, except fuels	1.78	−0.07	−0.27
Mineral fuels, lubricants, and related materials	−0.04	0.23	0.49
Animal and vegetable oils, fats and waxes	2.01	−0.11	−0.20
Chemicals and related products, n.e.s.	−0.23	−0.23	0.62
Manufactured goods classified chiefly by materials	0.30	−0.39	3.08
Machinery and transport equipment	0.01	−0.83	4.56
Miscellaneous manufactured articles	−0.05	−0.56	3.84
Commodities and transactions not classified elsewhere in the SITC	−0.41	0.03	0.13

Source: Author calculations based on COMTRADE (United Nations Statistics Division 2006).

Using this analytical framework, the authors argue that "[f]or the world market for all the LAC 18 countries [in the study] together, the average weighted share of 'threatened exports'—under direct plus partial threat—is surprisingly stable at 45.1% in 1990 and 39.4% in 2002." The authors also find that the intensity of the Chinese threat has decreased significantly over time and that, in 2002, only 11 percent of LAC exports experienced a "direct threat" (Lall and Weiss 2005).

Table 4 exhibits an aggregate view of the data using the methodology of Lall and Weiss for the years 2000 to 2004. Although the data are quite aggregated and thus mask the nuance of sector-specific details, the table underscores the general trend that resource-based and agricultural commodities are not under "threat." However, in every case, for manufacturing, LAC either declined in share or grew slowly while China made significant changes.

Using a very similar methodology,[4] Mesquita Moreira finds that "LAC losses to China in the world markets in 1990–2004 were on the whole relatively small, reaching 1.7% of the region's total manufacturing exports in 2004 (US$ 5.5 billion). As expected, given the differences in factor endow-

4. Where "a market share loss for LAC (in any product or market) is understood as a reflection of the fact that its exports have grown less than world exports because its exports were (i) less dynamic than those of China and/or (ii) less dynamic than those of the rest of the world" (Mesquita Moreira 2007). Because he focuses on China, Mesquita Moreira's figures refer to "the losses due to (i), that is, market share losses that can be attributed directly to China, measured as a percentage of total exports in 2004."

ments, the highest losses were in low-tech, labor-intensive goods, which responded for nearly 30% of the total losses." However, argues Mesquita Moreira, "[t]he losses seen in the other categories reinforce the earlier argument that LAC should be prepared to face competition from China on the whole factor-intensity spectrum, from high-tech to natural resource-based manufactured goods" (2007). Moreover, losses mounted in the last years of the period. In a previous version of the same paper which covered the 1990–2002 period, Mesquita Moreira (2004) found that 0.7 percent of the region's exports was being lost to China. Adding two years to the analysis increased the figure to 1.7 percent.

There is concern about the extent to which LAC is losing FDI to China that would otherwise have flowed to LAC. The empirical evidence suggests otherwise, however. The World Bank study does not find evidence of China-driven FDI diversion from LAC but rather a synergy between investment flows to China and to LAC. Based on these findings, in their background study, Cravino, Lederman, and Olarreaga (2006) argue that "the threat from China and India in terms of FDI might be the dog that did not bark." Chantasasawat et al. (2004) agree with this assessment. They find, using 1990–2002 data, that there is no strong relationship between FDI into China and Latin America and, when present, the relationship is mildly positive. However, looking at shares of FDI directed toward developing countries, they do find that an increase in China's investment negatively affected Latin America's share.

On a similar note, the IDB study argues that because the international market for foreign direct investment is not integrated but compartmentalized, what matters in terms of assessing competition for FDI flows is the degree to which China and Latin American source their FDI flows from the same group of countries. These authors find that, for the most part, China and Latin America do not use the same sources of FDI, and, for the only two countries that do invest significantly in both Latin America and China (the United States and Japan), they find no correlation between growth in FDI flows to China and decreases of FDI to Latin America (Devlin, Estevadeordal, and Rodríguez-Clare 2006).

Therefore, the emerging consensus seems to be that in terms of absolute levels, China is not diverting FDI flows to Latin America and, if anything, is contributing to their increase.

THE CASE OF MEXICO

Perhaps most surprising is the finding that virtually every study that either compares export structures or that conducts an empirical assessment of the competitiveness of LAC exports in world markets relative to China singles out Mexico as an exception. Mexico has a similar export structure to China's and therefore has the potential to face competition

with China in world markets. Some analyses show that this is already happening both in terms of exports and FDI.

As the OECD study points out, the comparison of Mexico and China's export structures shows "Mexico facing strong commercial competition" (Blázquez-Lidoy, Rodríguez, and Santiso 2006). The World Bank study agrees with these findings, and argues that "Mexico is the only country in LAC whose comparative advantage has been moving in the same direction as the comparative advantage of the two Asian economies [India and China]. This obviously calls for larger adjustment needs than in the rest of the region" (Lederman, Olarreaga, and Perry 2006).

This result is shared by Lall and Weiss who also compare export structures and conclude that "for all exports, China overlaps significantly only with Mexico and Costa Rica . . . Other LAC countries show almost no correlation with China." Moreover, Lall and Weiss (2005) find this to be especially true when the analysis is restricted to manufacturing.

This finding is confirmed by Dussel Peters, who analyzes the competitiveness impact to Mexico and Central America in further detail. Looking at the top export product categories for Central America and Mexico to the U.S. market between 1990 and 2003, he finds that:

> the results of this analysis indicate a high degree of competition in the main product categories for exports to the United States by Central America and Mexico with China. This competition especially involves clothing, electronics and auto parts, but also items such as furniture, optical instruments and apparatus, among others. With some exceptions—clothing, knitted or crocheted for Central American and autos for Mexico—the dynamic growth of Chinese exports and their increasing share of the U.S. market seems to have initiated a deep going process that began in 2000 of Beijing displacing its main competitors. The process seemed to be particularly far reaching in the case of light industry, although with expectations that will increase in other sectors such as autos and auto parts. On the contrary, in the energy product categories and agricultural and agro-industrial items, China's presence is reduced and, considering the overall analysis of Chinese imports in these fields, growing competition with China in the U.S. market cannot be expected. (Dussel Peters 2005)

Although they show that Mexico's export structure hinted that Mexico would be threatened in world markets, in an analysis of the U.S. market from 1990 to 2002, Lall and Weiss (2005) find that a relatively small amount of Mexican exports to the United States were under "threat." However, an analysis that incorporates just two more years of data (crucial ones, given China's entry into the WTO in 2001), finds that Mexico was becoming significantly threatened from Chinese exports in the U.S. market. As shown in table 5, in resource-based and all levels of technological exports to the United States, Mexico is either losing shares of the U.S. market where China is gaining, or gaining in cases where China is gaining much faster (Gallagher and Porzecanski 2007).

Table 5 Competitiveness of Mexican Exports by Technology Level, 1997–2004

	Imports from Mexico/ Total U.S. imports	Imports from China/ Total U.S. imports
Primary products	2.07	0.96
Resource-based products	2.52	5
Low-technology products	−0.95	6.49
Medium-technology products	2.31	4.21
High-technology products	−2.07	12.59

Source: Gallagher and Porzecanski (2007).

Mexico appears to be losing FDI to China as well. A Bank of Spain study performs an econometric analysis to examine the existence of a substitution effect of Chinese FDI. In general the authors find little evidence of a substitution effect. Conducting this analysis for the period from 1984 to 2001, the authors don't find evidence of a substitution effect. However, and in disagreement with the findings presented above, when they conduct their analysis for the period from 1995 to 2001 (when Chinese growth was greater and the impact of China's potential and then actual entrance to the WTO was likely to be felt) the authors find that,

> when Chinese inward FDI increases by $100 million, Colombian and Mexican inward FDI is reduced by $84 and $29 million, respectively. [What Mexico and Colombia have in common is the relatively large share of FDI in manufacturing—59 percent for Mexico and 21 percent for Colombia—particularly when compared with the other countries in the sample.] . . . This result is particularly interesting in the case of Mexico since its free trade agreement with the US (NAFTA) was in place during the whole time span and inward FDI generally increased. In fact, it only started to fall more recently, in 2002, but this does not imply that China had no effect. Our results should be read in terms of a counterfactual: Had Chinese inward FDI not been so strong, Mexico could have attracted more FDI than it actually did. (Santabárbara and García-Herrero 2005)

Dussel Peters finds this to be the case for the textiles and electronics sectors in Mexico. In the electronics sector, he finds that $514 million in FDI was diverted from the hi-tech hub of Guadalajara, Mexico, alone (Dussel Peters 2005). Of all developing countries, Mexico enjoys the closest proximity to the United States—the largest market in the world—as well as the most preferential access via the North American Free Trade Agreement (NAFTA). Given that China is thousands of miles from the U.S. border and has less than favorable access to U.S. markets, Mexico should be quite concerned about its prospects for export-led growth under business-as-usual scenarios.

SUMMARY AND CONCLUSIONS

This report has summarized and confirmed the numerous analyses of the impact of China's explosive economic growth on LAC. The report largely addresses two broad issues: first, the extent to which bilateral LAC–China trade and investment flows are changing, and second, the extent to which LAC is losing competitiveness in world markets to Chinese exports.

There is near unanimity that China's growth accounts for a positive and significant amount of the increase in LAC exports in recent years, namely because of China's growing demand for primary commodities. However, in all but a few cases, LAC is importing more from China that it exports, contributing to the persistent issue of trade deficits in the region. Indeed, Uruguay's deficit with China is 25 percent of the nation's entire deficit.

There is consensus on the competitiveness implications as well. In the short term, LAC is not threatened by Chinese exports abroad because the composition (or structure) of LAC exports is strikingly different from that of China. Indeed, there is some evidence that suggests that LAC exports complement Chinese exports and lead to more trade and investment. Mexico, however, is an exception because it has a very similar export profile to China's. Mexico is losing market shares or at least growing more slowly than China in many important world markets.

What are the implications of these findings? To put the findings in another manner: China is accentuating LAC's dependence on primary commodities and its persistent trade deficits. This could exacerbate long-held concerns in the region over commodity dependence. These concerns are rife throughout the literature. The World Bank says:

> The move towards natural-resource-intensive products implies a more concentrated export bundle in LAC. This raises concerns regarding the vulnerability of LAC to future (negative) terms of trade shocks, but more importantly there is also a feeling within LAC that the gains associated with natural-resource-intensive exports are not being widely spread. The economic, but also political, sustainability of this specialization in natural-resource-intensive sectors depends on the extent to which gains are shared with owners of other factors of production. (Lederman, Olarreaga, and Perry 2006)

This concern is shared by Lall and Weiss (2005), who argue that

> LAC faces a more serious threat over the long term: the export specialization of most of LAC is heavily biased towards resource-based and primary products, with a very small share of technology-intensive products. Chinese growth may thus constrain its ability to diversify into more dynamic and technologically advanced products, with potential harm to its dynamic comparative advantage.

Along the same line of argument about opportunities for future diversification, Mesquita Moreira (2004) argues that:

If one accepts the premise that diversification into increasing return, human capital and technology-intensive industries is good for growth, what they [LAC countries] are seeing is an increasingly congested field ahead, not least by China, which calls into question their prospects of a more diversified and dynamic economy.

The distributive and social effects of this accentuated dependence on primary commodities is, as Jenkins and Dussel Peters (2006) point out, the least researched aspect of China's challenge to Latin America, and is where more work is needed. Phillips (2007) argues that the emergence of China and the resulting shrinkage of development space for Latin America may even result not in the known pattern of specialization in primary commodities but, due to inability to reduce wage differentials, in a deepening of the "onshore provision of labour in the US economy" and a move toward a remittance-based model of development, particularly in the countries most affected by China's competition in light manufacturing.

The challenge seems to be, then, to move to higher-value manufacturing, as the *Economist* has suggested:

China and India are sucking in a lot of the foreign investment that Mexico had hoped for. Manufacturing wages in Mexico are only one-tenth those in the United States, but more than three times those in China. If it wants to keep ahead of China, and stop its own people from leaving for better jobs north of the border, Mexico must move to higher-value manufacturing. (2006)

The trends in the larger literature and those presented here build a clear rationale for government policy that could diversify the region's output toward manufacturing. Indeed, nearly all of the reports and papers discussed in this report point to an array of policies ranging from macroeconomic prescriptions to micro-based industrial policy. That being said, there has been relatively little rigorous work on the actual policy responses. If the trends that have been identified continue, there will have to be a significant policy response, and a decisive one. The policy arena is an area for new research and must confront the fact that LAC lacks the financing, political will, and policy space under current trade agreements to engage in many of the policies that its East Asian counterparts have practiced in the past.

REFERENCES

Blázquez-Lidoy, Jorge, Javier Rodríguez, and Javier Santiso
2006 "Angel or Devil? China's Trade Impact on Latin American Countries." *Cepal Review* (90).

Chantasasawat, Busakorn, K. C. Fung, Hitomi Iizaka, and Alan Siu
2004 *Foreign Direct Investment in East Asia and Latin America: Is there a People's Republic of China Effect?* Manila: Asian Development Bank.

Cravino, Javier, Daniel Lederman, and Marcelo Olarreaga
2006 *Foreign Direct Investment in Latin America during the Emergence of China and India: Stylized Facts.* Washington, DC: World Bank.

Devlin, Robert, Antoni Estevadeordal, and Andrés Rodríguez-Clare, eds.
2006 *The Emergence of China: Opportunities and Challenges for Latin America and the Caribbean.* Washington, DC: Inter-American Development Bank/David Rockefeller Center for Latin American Studies, Harvard University.
Domínguez, Jorge I.
2006 *China's Relations with Latin America: Shared Gains, Asymmetric Hopes.* Washington, DC: Inter-American Dialogue.
Dussel Peters, Enrique
2005 *Economic Opportunities and Challenges posed by China for Mexico and Central America.* DIE (German Development Institute).
Economist
2006 "Survey: Mexico: So close and yet so far." November 16: 15.
Gallagher, Kevin P., and Roberto Porzecanski
2007 "What a Difference a Few Years Makes: China and the Competitiveness of Mexican Exports." *Oxford Development Studies* 35 (2): 219–223.
Jenkins, Rhys, and Enrique Dussel Peters
2007 *The Impact of China in Latin America and the Caribbean.* Brighton, UK: Institute of Development Studies. Working Paper 281.
Lall, Sanjaya, and John Weiss
2005 "People's Republic of China's Competitive Threat to Latin America: An Analysis for 1990–2002." *Oxford Development Studies* 33 (2): 163–194.
Lederman, Daniel, Marcelo Olarreaga, and Guillermo Perry
2006 *Latin America and the Caribbean's Response to the Growth of China and India: Overview of Research Findings and Policy Implications.* Washington, DC: World Bank, Latin America and the Caribbean Region.
Mesquita Moreira, Mauricio
2004 *Fear of China: Is There a Future for Manufacturing in Latin America?* Washington, DC: Latin America/Caribbean and Asia/Pacific Economics and Business Association.
2007 "Fear of China: Is There a Future for Manufacturing in Latin America?" *World Development* 35 (3): 355–376.
Phillips, Nicola
2007 *Consequences of an Emerging China: Is Development Space Disappearing for Latin America and the Caribbean?* Waterloo, Canada: The Centre for International Governance Innovation.
Santabárbara, Daniel, and Alicia García-Herrero
2005 *Does China Have an Impact on Foreign Direct Investment to Latin America?* Madrid: Bank of Spain.
United Nations Statistics Division
2006 United Nations Commodity Trade Statistics Database (Comtrade).