Adapting to the Rise of China: How can Latin American Companies Succeed?

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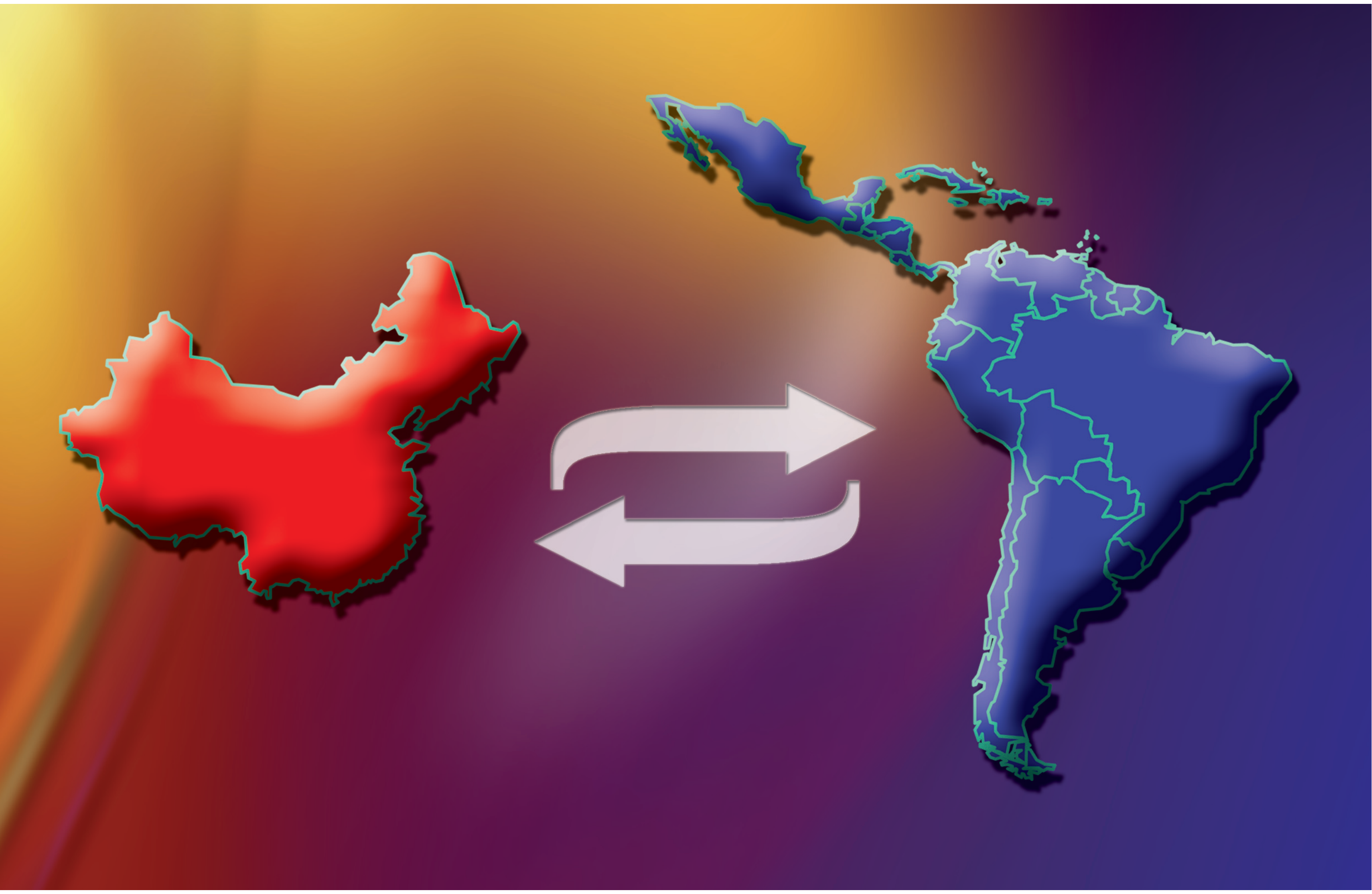

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Contents

Foreword

Trade and investment flows, as well as political ties between Latin American countries and China, have intensified rapidly in the past decade. Since the early 1990s, Latin American politicians, business executives and the media have started to pay exponential attention to China and its fast-growing impact on the world's economy and on Latin America itself. Chinese presence and influence in Latin America has expanded quickly during the past decade, and the region's leaders are seeking to better understand the challenges and opportunities presented by China as it increasingly consolidates its position as a global power.

For most of Latin America, with the main exceptions of Mexico and Central America, China has been an engine for export growth, allowing exporters to diversify away from traditional markets in the north. Beyond the fact that the region's exports to China are concentrated on commodity products, the issue remains that China's economic and political rise should be a wake-up call for more reforms in the region. As various studies and seminars carried out individually by the OECD Development Centre and the World Economic Forum show, China no longer relies only on low-cost labour to generate economic growth, but has become increasingly more competitive in higher value-added industries. Therefore, Latin American governments and companies need to adopt winning strategies to succeed in an increasingly competitive landscape, embracing the necessary reforms.

This collaborative paper examines the myths and realities concerning China's impact on the region and also reviews various business strategies that Latin American companies are adopting to respond to China's growth. The work distils an agenda for action on how companies and governments can maximize the opportunities offered by this new international context. We hope that this analysis will help to better explain the main implications that this shifting power equation will have on Latin American economies and their companies.

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Adapting to the Rise of China: How Can Latin American Companies Succeed?

As China becomes a global economic power, Latin American companies will need to adopt winning strategies to succeed in an increasingly competitive landscape. This paper explains the main implications that the shifting power equation will have on Latin America's economies, analysing the myths and realities concerning China's impact on the region. It also assesses some innovative business strategies Latin American companies are adopting to respond to China's rise, distilling an agenda for action on how companies and governments together can maximize the opportunities offered by the new international context.

The Shifting Power Equation

- *China will become a power of the size and influence of the US in the next few decades*

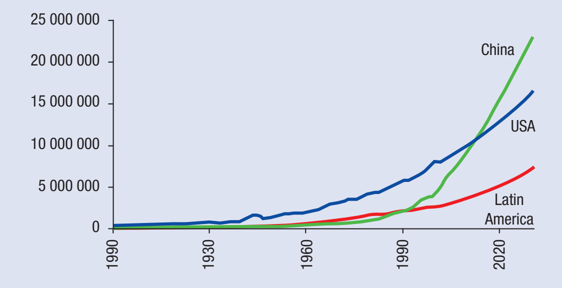
- *The sophistication of China's economy is advancing at an even faster pace than its economic growth*

China's increasing role as a pillar of the global economy is no longer disputed. Averaging an annual growth rate of 9.5% during the last three decades and having become the world's leading exporter in 2007, China's ascent is crucial to understanding market trends and shifts in the global financial and commercial spheres. The only large question that remains surrounding China's rise is when its GDP will surpass that of the United States; OECD Development Centre studies assert that 2015 is the most likely date, while Goldman Sachs estimates 2040 as the most accurate time frame.

The world is witnessing one of the most important and fastest ascents in recent history. But as shown in Figure 1, China's rise is far from being a transient episode. Research carried out by the OECD Development Centre[1] on China's economic history over the last millennium shows that China's weight in the world economy is not a new phenomenon. The world's largest economy until 1890, China even accounted for roughly one-third of global GDP in the mid-19th Century. Therefore, the last hundred years have been an exception rather than the rule regarding China's traditional position as the champion of the world economy. The country's gradual liberalization and the opening of its economy since the late 1970s have brought it back to the centre of the global stage, a phenomenon shared with other dynamic Asian economies. For instance, although China and India still represent only 16% of total global output, they currently account for one-third of total output growth.

It is not only size but sophistication that matters. China recently became the third country in the world to put a man in orbit, and its integration into global markets has been no less impressive. It has been characterized by fast technological upgrading, as the country's export structure has been driven by a large share of industries focused on medium and high technology manufactures. Figure 2 shows the importance of manufactures, machinery and equipments as a percentage of exports: the share of high technology exports grew by almost 20% in just ten years (between 1995 and 2005), while the percentage of low technology exports halved. This

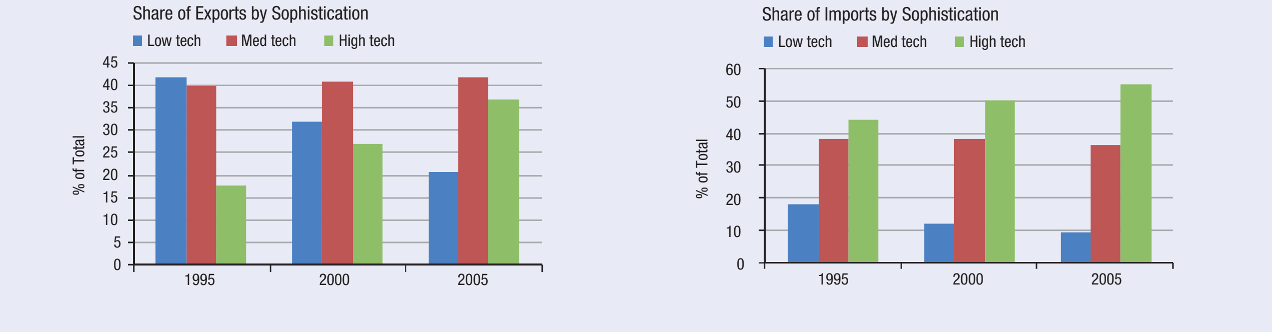
Figure 1. Comparative Levels of GDP, China, United States and Latin America



Source: OECD Development Centre, 2008. Based on A. Maddison, Chinese Economic Performance in the Long Run. Second Edition. Forecast for Latin America based on Maddison series and Goldman Sachs study on BRICS (WP 134), 2006.

[1] Maddison, A. (2008), *Chinese Economic Performance in the Long Run - Second Edition, Revised and Updated: 960-2030 AD*, OECD Development Centre, Paris.

Figure 2. The Chinese Economy and Technological Upgrading

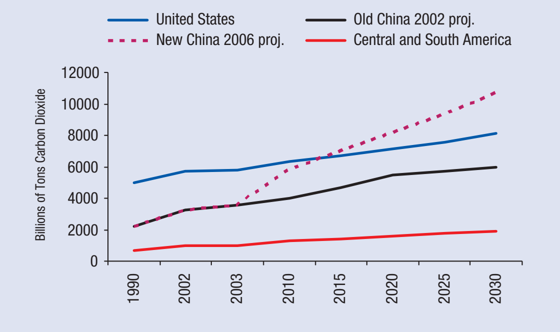


Source: International Monetary Fund, CEIC.

is in combination with a considerable increase in imports of medium and high technology goods, which denotes a much higher level of intra-industry trade.

There is no doubt that China will play a major role in most facets of the world economy. As shown in Figure 3, the exact nature of this impact is difficult to forecast in areas such as the environment, with China's carbon dioxide emissions rising rapidly as a result of economic growth. The chart shows how

Figure 3. Carbon Dioxide Emissions by Region (1990-2030)



Source: International Energy Outlook 2006. Data for China projection on 2002 obtained from the IEA publication on 2002.

China will become the world's biggest CO_2 emitter in the next couple of years, although by other accounts[2] it already surpassed US emissions in 2006. World commodity markets have also been affected by the Chinese boom during the past decade: the country has quickly become the world's largest consumer of copper, cement and soybeans, among others, with a considerable impact on the volatility of price and demand.

China has, therefore, resumed its journey towards the prominence it had lost over the past century. The speed and scale of its ascent make it difficult to assess the exact impact on other countries and economic players. The purpose of this document is to provide an up-to-date view of how China's emergence is affecting Latin America. It looks at some recent macroeconomic indicators while reviewing the particular way in which specific Latin American companies have reacted to remain competitive in the face of increasing Chinese competition.

Myths and Realities concerning China's Impact on Latin America

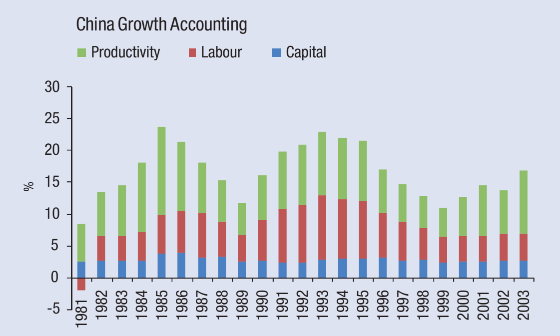
- *Misconceptions about the sources of China's growth lead to incorrect conclusions about its impact on other emerging economies, like Latin America*

China's economic growth and its increased share of world export markets have mostly been met with apprehension in Latin America. There is indeed a competitive threat arising from increasingly global and sophisticated Chinese competitors, but there are also a number of misconceptions around the real

[2] Netherlands Environmental Assessment Agency, June 19, 2007 released Assessment.

effects of China's ascent on Latin America's economies. Insufficient attention is being paid to the opportunities brought about by this new context. A closer look at three common perceptions of China's impact on emerging markets can help clarify whether or not Latin American countries can benefit from the ongoing shifting power equation in the world economy. The first myth relates to China's low labour costs and the implications for other emerging regions. The second one is China's supposed negative impact on the allocation of foreign direct investment, particularly to Latin America. Finally, a third myth is the idea that China's growth has mostly benefited South America's commodity exporting countries and has been detrimental only to those economies that rely to a greater extent on manufacturing exports for growth. Whereas these perceptions are partially based on observed phenomena, a closer look at the data seems to contest them, initiating a much more complex debate on the future challenges Latin America faces from China.

Figure 4. Growth Accounting in China: Contribution to GDP Growth (1981-2003)



Source: International Monetary Fund.

Myth I: The main source of China's competitive advantage is cheap labour

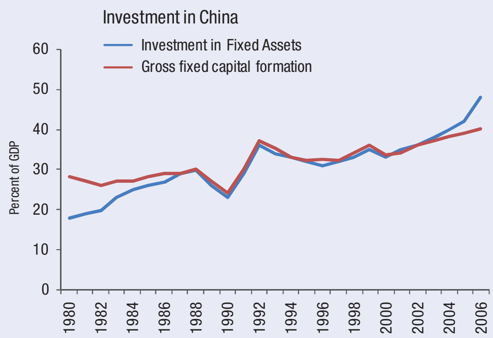
Reality: Low labour costs in China are significant but the wide availability of capital, coupled with very high productivity growth levels, are equally important in explaining China's hard-to-beat competitiveness

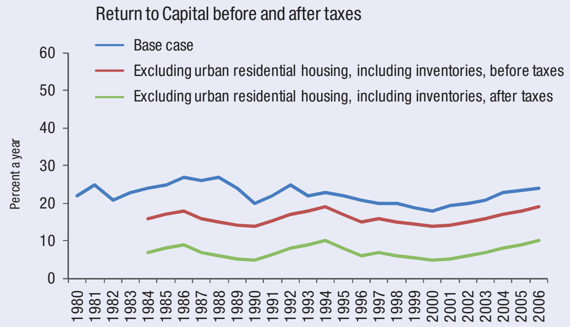
China is widely perceived as a huge manufacturing hub whose main competitive advantage lies in low labour costs. Although there is some truth to this statement, labour markets are changing at a very rapid pace. Chinese wages continue to be lower than in most Latin American countries but they are rising fast at an annual rate of close to 8%. The labour-cost gap with other emerging economies is therefore diminishing.

On the other hand, Chinese investment rates continue to be very high, at around 40%, which favours an abundance of capital for investment. A high level of investment would normally indicate a future slowdown in the return to capital. Surprisingly, return to capital continues to be strong, and stable at around 20% since 1992, thanks to important productivity gains.

Figure 5a shows that investment rates in China (as a share of GDP) between 1980 and 2006 almost doubled during this period. Whereas investment in

Figures 5a & 5b. Fixed Capital Investments in China as % of GDP and Return to Capital (1980-2006)





Source: Bai, Chong-En. C. Hsieh and Y. Qian. "The Return to Capital in China". NBER Working Paper 12775. National Bureau of Economic Research. December 2006. Based on China Statistical Yearbook.

fixed assets has increased dramatically, the return to capital (Figure 5b) has remained relatively stable, as explained above. This phenomenon, combined with high levels of consumer and corporate savings in China,[3] indicates that at least in the short to medium term the abundance and availability of capital is sustainable. Thus the argument that China became a manufacturing hub only as a result of cheap labour needs reconsideration: high productivity growth explains its expansion to a large extent and the wide availability of capital is at least as important.

Therefore, the myth that China's main competitive advantage lies in low labour costs is misleading. A long amount of time must still pass before the gap in wages with other emerging regions is bridged, but as a closer look at the macroeconomic data suggests, the wide availability of capital and high productivity levels might be better elements to explain China's hard-to-beat competitiveness.

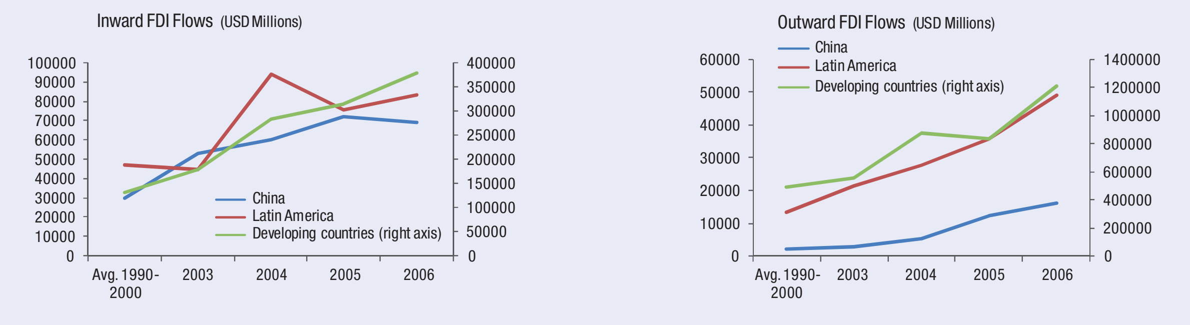
Myth II: China has a negative impact on FDI flows to other emerging markets

Reality: Most Latin American economies do not compete for the same type of FDI that China receives and China's investments in Latin America are only the beginning of a trend that offers many opportunities for the region

Another commonly held belief is that China's receipt of FDI flows negatively affects other emerging and developing economies. According to this argument, this negative effect is the result of a zero-sum game: the FDI that flows to China does not go to other emerging markets. Certainly there is some evidence of this substitution effect on some East Asian economies, but the evidence is less conclusive regarding Latin America. Analysis of the period from 1995 to 2001 shows that China's inward FDI partly hampered flows to Mexico and Colombia, but not to the leading economies of the region, such as Argentina, Brazil, Chile and Venezuela.[4] Investments attracted by China would not necessarily have gone to Latin America in the absence of a booming Chinese economy. Other Asian countries are more affected by China's competition as a recipient of foreign investment.

One of the main reasons behind the different nature of FDI inflows into China and Latin America is the Chinese financial markets' spectacular growth in size and scope during recent years, which has provided an important source of endogenous funding for Chinese companies. The rapid pace of financial asset creation indicates that FDI flowing into China is mostly the result of technology transfers rather than a need for financing, which could well be met by national investors. Latin America offers a sharp contrast, since it attracts financial investors to a greater extent by higher returns in a still relatively scarce environment of long-term capital. Thus FDI has a different nature in

Figure 6. Inward and Outward FDI Flows in Latin America (1990-2006) USD Millions



Source: J. Santiso (ed.). The Visible Hand of China in Latin America. OECD Development Centre Studies, 2007. Based on UNCTAD data.

3 Jahangir, A. and L. Cui (2007), "Explaining China's Low Consumption: The Neglected Role of Household Income". International Monetary Fund Working Paper 07/181. Washington, DC.

4 García-Herrero, A. and Santabárbera, D., "Does China Have an Impact on Foreign Direct Investment to Latin America? in Santiso, J. (ed.) (2007), *The Visible Hand of China in Latin America, OECD Development Centre*, Paris.

both regions: in China it is more oriented towards technology transfers whereas in Latin America it is motivated by higher returns. This explains to a great degree the absence of a clear substitution effect.

In any case, another reality behind China's international role in terms of FDI flows is often ignored. Its capital accumulation is gradually turning the country into a net exporter of investment. Notwithstanding its role as a magnet for direct investments, China's demographic structure, pension reforms and high saving rates are likely to turn investment in the opposite direction. China will be one of the major exporters of capital in the next decades, and many Latin American countries are already benefiting from growing FDI flows from the Asian giant.

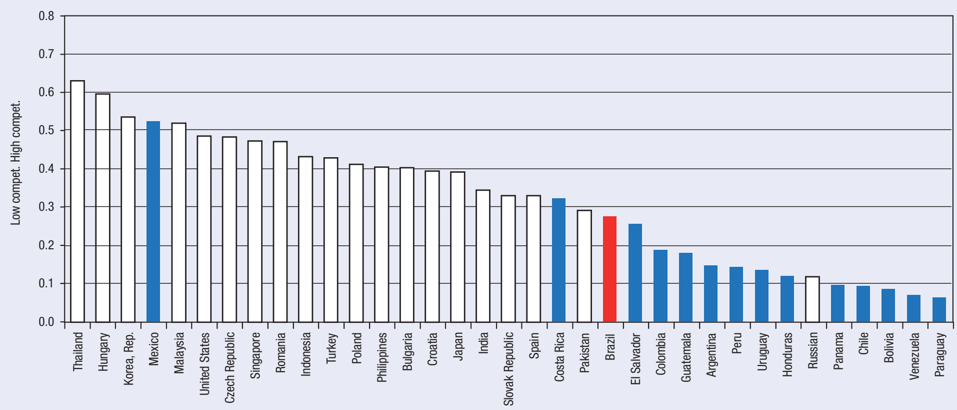
The claim that China has a negative impact on FDI flows to other emerging economies is, therefore, relative: developing countries compete for limited FDI from developed economies, but they are increasingly benefiting from South-South investments. Research does not seem to suggest that most Latin American economies are particularly affected by China's competition for FDI. On the contrary, growing Chinese investments in Latin America are likely to offer opportunities for the region, as is being witnessed.

Myth III: China's rise benefits commodity exporting countries and adversely affects light-manufacturing exporting nations

Reality: China's rise offers opportunities and challenges for both groups of countries in keeping and sustaining a manufacturing sector

China has been seen as a problem for light-manufacturing exporters while it benefits raw-commodity producers. High commodity prices, partly motivated by China's and India's growing demand for oil, minerals and raw materials, certainly benefit the trade balance of many Latin American countries, although the export bonanza in commodities is not risk free. An excessive focus on commodities could be shifting resources away from other sectors, particularly manufacturing. As pointed out in the OECD's Latin American Economic Outlook 2008, the Latin American economies should be aware of the risks of Dutch Disease: excessive specialization and export concentration on commodities might drive exchange rates up, inducing a long-term decline in non-commodity exports.[5] China's current blessing could, therefore, pose a longer-term problem for certain Latin American countries if the current boom in commodity prices is not adequately managed.

Figure 7. Average Export Competition with China for Selected Countries (2000-2006) Coefficients of Specialization



Note: CS coefficients calculated with exports of country i and exports of country j (China). A coefficient of 0 would mean countries export completely different products, a coefficient of 1 would mean that the countries export the exact same product basket.

Source: OECD Latin American Economic Outlook 2008. OECD Development Centre, based on WITS Database, 2007.

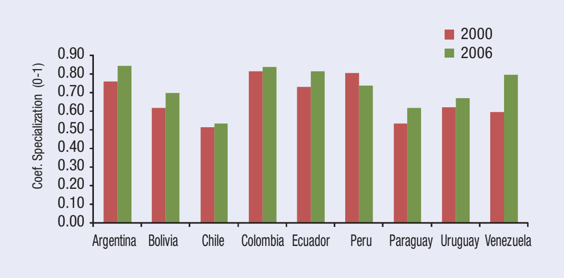
[5] OECD Development Centre (2007), *Latin American Economic Outlook 2008* (Chapter 4), OECD Development Centre, Paris.

Looking more closely at trade structures and competition between China and Latin America's economies, it appears that the Asian giant is not that big a commercial threat for most countries in the region. Except in some cases where there is a clear overlap of exported goods, such as in Mexico and certain Central American countries, the trade structures of most Latin American countries show a pattern of complementarity with China, rather than one of fierce competition (Figure 7).

However, to gain a better understanding of the real implications of China's trade-based economy on Latin America, the examination should look instead at these two regions' export structure in local or regional markets, where most basic, low and medium technology manufactured goods are traded. Figure 8 uses coefficients of specialization to compare the trade structures of China and Brazil in a third market, South America. The question is how much Brazilian exports to South America compete with Chinese exports to South America. In this case, the two countries show a higher degree of competition against each other in most markets, particularly in Argentina, Colombia, Ecuador and Venezuela. Coefficients of specialization for Brazil and China in Figure 7 are a bit below 0.3 and, in Figure 8, the same coefficient calculated only for the exports to the four countries mentioned is close to 0.8. And the competition has been rising between 2000 and 2006!

Chinese trade competition with Latin American countries, even those with strong commodity-based economies, is therefore not clear-cut. Many countries, particularly in South America, present trade structures that suggest complementarity rather than anything else, in particular due to China's growing demand for commodities. However, when trade competition between such countries as Brazil and China is measured at the regional market level, rivalry accentuates. The distinction between a beneficial effect for commodity exporting countries

Figure 8. Trade Competition in South America: Brazil vs China



Source: OECD Development Centre, 2008.
Based on Comtrade (WITS) database.

and a negative one for economies with a strong light-manufacturing sector is not as clear when elements like the risk of Dutch Disease are taken into consideration.

Latin American Companies Are Leading the Adaptation to a New Competitive Landscape

- *Although government reform must improve the conditions for economic development, individual companies can act as a catalyst for change within an industry and provide the basis for more targeted reforms*
- *Successful business strategies to adapt to Chinese competition in particularly exposed industrial sectors involve bold and ambitious moves along the value chain and geographical expansion*

The previous section concluded that China is an increasingly sophisticated economy whose competitive edge is solid and based not only on cheap labour, but on high-productivity growth and an abundance of capital. Chinese companies also enjoy immediate access to a large, booming market that will be the biggest in the world within two decades. These advantages make them formidable competitors. In order to withstand this competitive threat, in particular for products that are subject to international trade, Latin American companies must make the most of their comparative advantages, including the proximity to such key markets as the US and the maximization of close cultural ties, and the exploitation of strong existing networks that may facilitate market access and penetration.

In order to get a greater (more micro-) perspective on the impact of China's rise, this section evaluates the response of four illustrative Latin American companies and their corporate-strategy decisions. The purpose is not to make an exhaustive analysis of the best business strategies to adopt to make the best of China's ascent, but rather to gain a better understanding of the conditions and public policies that lead to success. The underlying assumption is that public policy can follow and strengthen the successful business strategies and innovations of companies and entrepreneurs.

Many Latin American companies have successfully ridden the boom and rise of China, particularly in the basic and natural resources industries. Companies like CVRD, Aracruz, Gerdau and Codelco have even gained a strong foothold in the Asian country. Indeed, those companies have actually been among the main drivers of growth in Latin America in the past decade. Their rapid ascent into the ranks of global multinationals deserves particular praise and their investments in technology and quality have led many to be global leaders in their industries. As they consolidate their local supplier base, they also create more and higher paid jobs. An interesting example of this trend is the evolution of the ecosystem of companies around the Petrobras expansion.[6] The region needs more of these leading companies.

However, the current analysis focuses on companies in sectors with no absolute comparative advantage and where there is immediate or potential competition from Chinese firms. The selected corporate strategy decisions in this analysis are evaluated along three dimensions: (1) product (or market) portfolio; (2) value chain presence; and (3) geographical presence. The findings are based on research and interviews with the leaders of several Latin American corporations that form part of the World Economic Forum's network. The strategies of four companies that provide a particularly good illustration are summarized in Figure 9, in line with the three dimensions mentioned above:

- *Bematech*, based in Curitiba, Brazil, is a manufacturer and solution provider of point-of-sale hardware and software targeting the needs of the small to mid-sized retail and hospitality markets. Bematech has over 1,200 employees in over 20 offices, manufacturing facilities and warehouses located throughout the world.
- *Organización Corona* is the leading Colombian producer and seller of home improvement and building products. It has long enjoyed a leading position in Colombia in ceramic floors and bathroom building products. The company has a presence in several Latin American countries, the US and Canada. Corona has 10,500 employees, 90% of whom are based in Colombia.
- *Nemak*, founded in Nuevo León, México, and part of the larger Grupo ALFA, is the world's leading producer of aluminium cylinder heads, engine blocks and other aluminium components for automotive applications. Nemak has close to 15,000 employees in 13 different countries, including China.
- *Koramsa*, in Guatemala, was judged by some to be the biggest maquila in Latin America in 2005, with more than 20,000 employees. Until 2006 it provided an "integrated" assembly package as contractor for 14 North American labels, mostly for jeans and other denim products.

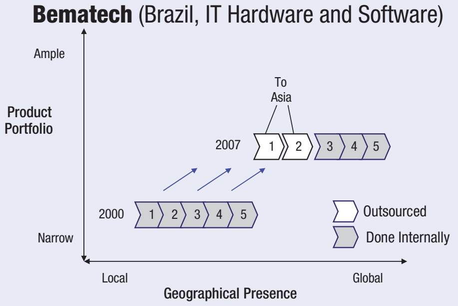
[6] "América Latina frente al Crecimiento de India y China", Presentation by Almir Barbassa, Chief Financial Officer of Petrobras, at the VIII Foro Latibex. Madrid, November 2007.

Figure 9. Illustration of Changes in the Value Chain, Geographic and Market Presence of Selected Latin American Companies

Value Chain Steps

1 R&D, Product Creation
2 Basic Fabric/Unique Component
3 Assembly
4 Distribution and Logistics
5 Marketing/ Branding/ Post-Sale Service

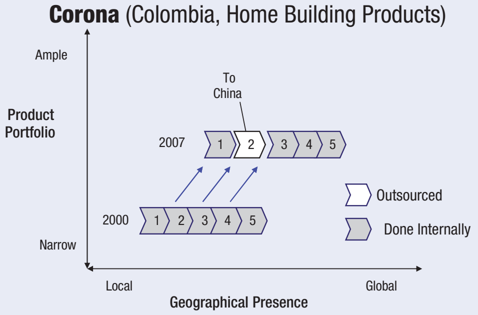
Bematech (Brazil, IT Hardware and Software)



Strategy: Use China's unique capacity to design and produce technology products and focus on capturing more downstream value

- Outsourced some R&D activities and unique component manufacturing to Asia
- Took advantage of the superior speed and innovation ecosystem and increased product portfolio offering in home and foreign markets
- The faster product development speed gave it a competitive advantage over other suppliers. The company exploited its greater customization capacity to win clients and expand first regionally and now globally

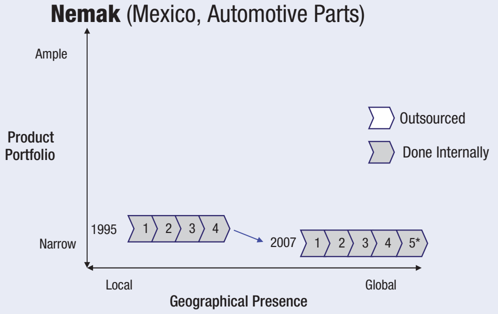
Corona (Colombia, Home Building Products)



Strategy: Integrate China's unbeatable low-cost base into its value chain and focus on innovation and scale in regional markets

- Gained scale by expanding into the US by acquiring a local manufacture with strong brand and distribution network
- Installed a team of engineers and quality officers to source from the cheapest producers in China
- Is now importing some finished products but mostly intermediate products and parts that are assembled in Colombia and the US to accelerate new product development and increase product portfolio. More and higher technical jobs are needed

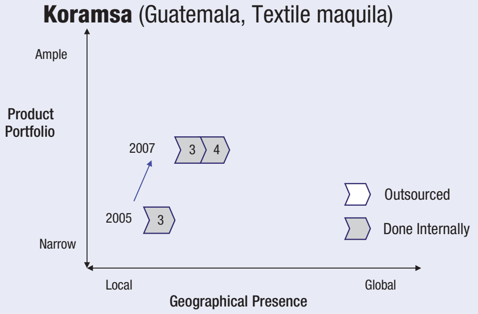
Nemak (Mexico, Automotive Parts)



Strategy: Focus on a high value-added niche and achieve global dominance

- Early on, decided to focus only on the segments of automotive supplies where it could differentiate itself
- Worked closely with its buyers and got involved in joint product development. Achieved world quality and technical leadership
- In early 2000s, started a quick global expansion via M&As and added more of the best in segment companies
- Present in China where its global scale and technology advantage make it hard for smaller, lower quality producers to compete with it

Koramsa (Guatemala, Textile maquila)



Strategy: Change the product mix to segments with high volatility of demand and high customization needs

- Reinvented itself after losing 70% of its workforce due to the entry of Chinese textiles into the US market in 2006 (WTO)
- Now produces higher value-added garments in smaller batches with shorter lead times. Has moved into providing distribution and inventory-management services for its buyers
- Has higher paid, more technical jobs than before, with greater investment in technology
- Has stabilized its workforce and business but its long-term sustainability is in question if it is unable to move downstream with its own brand and fashion design (as is the case of successful companies in the region, including Wrangler in Costa Rica)

Source: Interviews, Company Annual Reports, World Economic Forum and OECD Analysis

Three central strategies emerge from this brief analysis of Latin American companies' responses to increasing Chinese competition: the need for upstream value integration, a focus on a high value-added global niche and specialization on product segments with high volatility of demand and the need for customization.

a. *Upstream value chain integration to capture greater downstream value*

The case of Bematech illustrates the potential for closer integration with China to benefit from lower production costs in the product development process while keeping the most valuable segments of the value chain under tight control. At the same time, Bematech has used its strong understanding of regional cultural differences to outcompete larger Japanese and American rivals. In Latin America it operates from Argentina and uses the region as a hub for innovation. When its installed base has grown and has adapted to local requirements, its position for further revenue streams for service and other sources is strengthened.

> *"The ecosystem for components design and manufacture in and around Taipei is impressive. Moving a large portion of our R&D and component design to Asia has accelerated our market response rate and our capacity to deliver more new and customized products to our customers."*
>
> Marcel Martins Malczewski,
> CEO of Bematech

Organización Corona presents a similar example of using China to grow regionally and incorporating more jobs and added value. The company leads in ceramic floors and bathroom building products in Colombia. Its evolution and internationalization show how a determination to compete globally has allowed it to take advantage of the rise of China to spur growth and strengthen its regional position. Corona's first step was to expand its value chain presence in the United States, until then by far its most important export market. In 2004, the company acquired the operations and brand of Mansfield, a US firm. It then considered establishing a manufacturing plant in China in order to address need in the US and gain a foothold in China. After greater investigation it finally decided against entering the Chinese market, but nevertheless created an office in the country with a Colombian supervisor and 12 engineers overseeing local suppliers and contractors. Its operations in China have so far been a success: its sales and product portfolio have grown, technological upgrades have been made and the number and quality of jobs have increased. With this new and stronger base, Corona is rapidly expanding regionally to countries with traditionally very strong local players, such as Brazil and Mexico.

> *"We used to import finished faucets and metal taps. We now import only some key components that we assemble in our Colombian plant, and we can integrate them better with new designs and with our brand identity."*
>
> Luis Alberto Botero,
> CEO of Corona Sanitaryware

b. *A focus on a high value-added niche to achieve global scale*

It is difficult to find in the region a better example of a successful global niche strategy than that of Nemak. The company is the world leader in its sector of activity – aluminium cylinder heads, engine blocks and other aluminium components for automobiles – and has rapidly expanded across the globe to achieve economies of scale and solidify its technological edge. Its production facilities in China do not represent a large portion of the company's operations, but the presence is important to keep the development of other potential, more sophisticated players at bay. Nemak's choice of segment for specialization was made as a result of the threat of commoditization and competitiveness in several other segments of the automotive industry. It was selected based on its need for greater technical prowess and specialization. This niche strategy quickly paid off: the company opened its first factory outside Mexico in 2000 and has experienced quick expansion since.

Another Latin American company that is widely known for succeeding as a global niche player is Embraco, the Brazilian compressor producer. By being a pioneer in China and internationalizing quickly, Embraco achieved early access to a booming Chinese market and a greater volume of operations that accelerated its expansion in other parts of the globe and secured its position as the world's leading producer of compressors. As with Nemak, a key factor in Embraco's success has been the company's R&D leadership in its specific sector of activity and the ability to integrate globally in the segment via a joint venture and close collaboration with final product manufacturers. Companies like Mexico's Grupo Gruma (Maseca Tortillas) have pursued a similar strategy and successfully entered the Chinese market.

c. A focus on product segments with high volatility of demand and high customization needs

Finally, the strategy of focusing on segments with high volatility of demand and greater need for customization, to exploit geographical advantage, is illustrated by the case of Koramsa. A large maquila in the textile sector, Koramsa was hard hit by China's accession to the World Trade Organization (WTO), which allowed the entry of Chinese denim products into the US – Koramsa's main market by far – as of January 2006. Less than a year later, the company was bleeding cash and had drastically reduced its workforce from 20,000 to less than 7,000. Since Chinese producers had access to much cheaper fabrics[7] and a lower-cost labour force, Koramsa's leadership swiftly decided to move into the manufacture of more elaborate products, with shorter cycles and greater customization. As shown in Figure 9, Koramsa expanded its number of stock keeping units and began providing distribution and logistics services at the request of buyers. In order to manage the business's added complexity, the company invested heavily in IT and raised the level of much of its workforce (for instance, line supervisors who in 2005 had only achieved a high

> *"It is critical for us to consolidate our move downstream in the value chain, where we can create more value with design and with our own brands. We feel confident that we can rebuild profitability and trust our capacity to create more high-value jobs. But it is important to understand that a niche business is a niche: the volumes that provided for 20,000 jobs in the past are gone for good."*
>
> Peter Klose,
> CEO of Koramsa

school education had all been replaced by industrial engineers by 2007). Today the company has managed to stabilize its workforce at 7,000 employees, with a greater number of higher-paid workers and a more solid competitive position. In contrast to the previously cited cases, Koramsa's story only shows moderate success and the company still faces a number of challenges. Change to a "higher valued-added" segment has thus far had its shortcomings. The volatility of demand is reflected most in the volatility of demand for labour, for instance. Moreover, the added complexity, while producing higher-paid and more sophisticated jobs, must still translate into greater profitability. So far, inventory keeping services have only increased the level of working capital.

Koramsa's partial success does not mean that niche strategies cannot be very successful. Jabil Circuits, a Mexican contract manufacturer of electronics products for the likes of Cisco and Nokia,[8] is well known for having been able to move up the value chain in other sectors severely hit by Chinese competition. As orders were lost to Asian competitors, Jabil saw its workforce of 3,500 shrink by half from 2001 to 2002. Instead of attempting to win back lost orders, the company learned to make more complex and customized products (computer routers and handheld credit card machines, for example) that were traditionally made in the United States. Managers at one of the company's Mexican plants very deliberately studied the US market to ascertain the necessary performance levels and the areas in which lower-cost labour could create an advantage. As a result, the factory retooled its inventory system and trained workers to undertake more than one task at a time, so the number of items it was able to produce rose to more than 6,000, from 600. Orders flooded in, and employment by 2005 was 10% higher than it was at its peak in 2001. As of 2007, revenues continue to grow at over 30% a year, reaching almost 2 billion dollars in the period. Other companies in Mexico, in particular in the Guadalajara IT cluster, have also been working hard to make similar transitions.

All the cases mentioned above and other interviews with regional leaders underline critical elements that make a successful adaptation to Chinese competition possible. An adequate coordination of winning business strategies and fitting policy measures could allow an even greater number of companies to succeed and adapt to the new Chinese century. As shown in Figure 9, all winning business strategies involve companies moving along the value chain, carrying out geographical expansion and – in many ways – handling greater complexity and sophistication. These needs highlight the importance of policies that make possible these transformations by:

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[7] CAFTA provisions do not allow Central American manufacturers to buy their fabrics outside Central America or the United States.
[8] Taken from "Beyond Cheap Labour: Lessons from Developing Economies". The McKinsey Quarterly 2005 Number 1.

- **Developing local and regional infrastructure with a focus on effective trade facilitation**
- **Increasing innovation and workforce qualification through incentives for R&D and better synchronization with universities**
- **Introducing greater flexibility in labour laws to match the increased adaptability to the demand**
- **Raising quality standards and norms for local and regional production**

Beyond policy recommendations, a few additional insights and unique challenges can be summarized from the different discussions held with leading business actors:

- Business leaders must think regionally in order to exploit regional market networks and cultural advantages
- Companies that have been successful have acted with foresight by acknowledging that the Chinese phenomenon requires an overall change in strategy, even in circumstances when the competition appears to be indirect or only apparent in the long term
- It is important to think proactively, while the business is still solid enough to finance the acquisitions or expansion that can help it face future challenges from a stronger position
- Investment in IT and technology upgrades are present in all cases of success and adaptation
- In the case of the textile industry attempting to move up the value chain, but also applicable to other markets that first need to build a local market in order to move along the value chain, a local market must exist and be protected from unfair competition (mostly from smuggled products). A reference on this point is an example in Colombia, where companies like Arturo Calle are very successfully developing a strong design and fashion business that they are now actively taking global

Defining an Agenda for Action

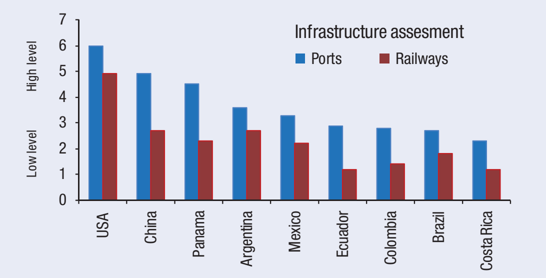
- *Investment in infrastructure would maximize Latin America's proximity to the US and boost intraregional integration*
- *Current windfall export revenues should also be channelled towards innovation and economic diversification in order to foster Latin American competitiveness and mitigate some of the risks derived from China's economic rise*

Understanding the challenges in order to expand the winning business strategies that offer the possibility of long-term success in the relationship with China allows for clearer, concise messages to policy-makers. Taking as a basis the summary outlined at the end of the previous section and combining it with macroeconomic trends and updated figures, the following agenda outlines the key areas where action by Latin American leaders from the public and private sectors can help maximize the opportunities offered by China's economic rise.

The need for infrastructure: maximizing geographical advantage

Latin America's proximity to its most important market, the United States, is a big and still unexploited advantage for the region. Good infrastructure that takes advantage of Latin America's geographic proximity to the United States can contribute to strengthening the region's trade position. Paradoxically, transport costs actually pose higher barriers to Latin America's products entering the US market than tariffs (Clark 2004, in OECD *Latin American Economic Outlook*, 2008). Competitiveness indicators underscore the extensive heterogeneity in performance across Latin American countries (see Figure 10). With China

Figure 10. Infrastructure Assessment for Selected Countries (Ranking from 1 to 7)



Source: OECD Latin American Economic Outlook, OECD Development Centre, 2008.

seemingly outperforming most countries, the geographic advantage of Latin America is not visible in the data. Infrastructure investments differ across sectors. Such commodity-intensive economies as Chile or Venezuela focus on transport infrastructure, whereas countries more reliant on manufacturing industries, like Mexico, concentrate their investments on energy-related resources.

As mentioned above, Latin America needs to capitalize to a much larger degree on its geographical advantage with big importers. The challenges for the region are well perceived from the private sector viewpoint. In a recent Investment Climate survey, over 50% of Latin American businesses considered infrastructure to be a serious issue (Fay and Morrison, 2006, in the OECD's *Latin American Economic Outlook 2008*). By contrast, in East and South Asia, less than 20% and 30% respectively agreed with this assessment.

> *"It is so much cheaper to send the product from China than from Colombia that we serve all our US West Coast customers only with the product lines that are carried by our Chinese suppliers."*
>
> Luis Alberto Botero,
> CEO of Corona Saniraryware

Together with efficiency improvements related to infrastructure, there are also institutional variables related to the region's performance on trade competitiveness. Cargo handling restrictions and mandatory port services are considerable limitations to competition at the port level. Export regulations are predominantly more costly than in other regions (World Bank, *Doing Business Report 2007*). At the opposite extreme, excessive regulation can have detrimental effects, such as those observed in Brazil (OECD's *Latin American Economic Outlook*).

Low investment rates and flawed project implementation are among the main reasons for this gap in infrastructure competitiveness. Latin American countries are spending considerably less on infrastructure than required. While the region devotes around 2% of GDP per year to that area, higher investment levels of between 4-6% would be necessary to catch up with Asia.

In sum, poor and inappropriate infrastructure is a drawback for Latin America's economies. Inadequacies in the port system and railroad networks hamper export potential. Substantial progress needs to be made by increasing investment in these sectors. For Mexico and some Central American countries that are more highly exposed to competition from China and India, it is *particularly important to build trade oriented infrastructure capitalizing on the competitive advantage provided by their proximity to the world's largest economy.*

The need for integration: maximizing exchange flows

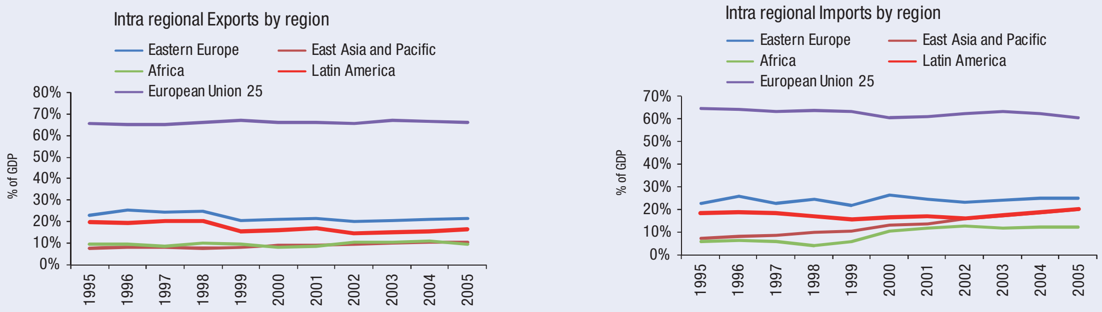
Interregional infrastructure would certainly help boost another key area in Latin America's agenda for action: a deepening of economic integration. Latin America is on a positive track to economic integration, although the multiplication of bilateral and regional agreements brings confusion rather than clarity and leaves much room for improvement.

The percentage of intraregional imports and exports as a share of total trade offers a moderate assessment of Latin America's level of regional economic integration. In 2005 Latin American countries imported roughly 20% of their goods and services from other Latin American economies, and exported around 16%. While growth in intraregional trade was spectacular in the early 1990s, it came to a halt in the following years and its share of total trade actually fell between 1998 and 2002, as various financial crises hit the region. Since 2002, and coinciding with a period of sustained annual growth above 4.5%, the weight of intraregional trade has grown, although at a moderate pace.

> *"Attention should be paid to the development of the regional ecosystem, the standards and the quality culture of the freight forwarding and logistics industry. Its absence makes planning and management of cross-regional operations much more complicated than it should be."*
>
> Gilberto Marin Quintero, President and Chief Executive Officer of Grupo P.I. Mabe, Mexico

When compared with other regions, the level of Latin America's trade integration is put into perspective. Although still far from the record levels of economic integration found in the European Union (around 65% of total EU imports and exports origin in or are destined to another member country), Eastern European economies clearly bypass Latin America's in intraregional trade. Most importantly, as illustrated in Figure 11, East Asia and the Pacific are quickly catching up with Latin America in this area. Only Africa remains clearly below Latin America in terms of intraregional imports as a percentage of total imports.

Figure 11. Intensity in Intraregional Trade by Region (1995-2005) Trade as a % of GDP



Source: OECD's *Latin American Economic Outlook*, OECD Development Centre, 2008.

Deeper regional integration is a win-win strategy for Latin America's economies and should be a priority in their response to China's growing presence in the world economy. With the increasing number of regional trade agreements since the establishment of the WTO and as capital and labour movement are liberalized across borders, it is important that Latin American countries benefit from deeper integration by increasing their levels of intraregional trade at a much faster pace than at present. They would also do well to implement measures to increase the sophistication of integrated freight services and transport providers, to set and improve quality standards, and to harmonize cross-border policies.

The need for innovation: maximizing resources[9]

Since most Latin American economies have historically been dependent on raw materials and have regarded technological innovation as a tool for appropriating commodity rents, developing a proper culture of innovation in the region seems difficult to achieve. The two main actors in the innovation process, business firms and research institutes, must work closely in order to put into practice a successful innovation strategy that satisfies their respective needs.

The Latin American business sector has traditionally been uncommitted to innovation strategies in the region, with a low propensity for funding innovation in most industries. This to a large extent is the result of a Latin American culture that lacks in innovation: innovation-oriented human capital and funding have been scarce and poorly integrated, unlike in other hubs (e.g., Boston, Bangalore). The level of inter-firm learning from international best practices is also low. Most firms have focused on adapting technologies rather than on creating or improving existent ones. The motivation to innovate differs across sectors, with some more keen on improving quality and others focused on working conditions or environmental needs. In addition, the large investments made by foreign multinationals implanted in the region have not made innovation a priority.

Nonetheless, some examples show the scope for further improvement in innovation practices. The Chilean initiative on natural-resource industries is one of them. The *salmon* cluster in Chile is a good example of the successful implementation of innovation in a non-traditional sector. Currently composed of 300 salmon clusters, this sector employs around 45,000 people. R&D is carried out in these firms with a view to generating competitive advantages. A second cluster, the *wine* industry, is another example of Chile's policy on innovation. Since the late 1970s, this industry has developed several of its different phases, such as packaging, transport, the supply of equipment and inputs, tourism and gastronomy. Although the initiatives in the wine sector might appear to be isolated, they have put Chile on par with other main producers of fine wine. Other sectors would do well to follow this example.

[9] The analysis in this section is heavily based on the main conclusions in the OECD's *Reviews of Innovation Policy: Chile. 2007*. OECD, Paris.

Fostering technological organizations and the role of public research to boost innovation is also essential. These institutions provide the skilled workforce business needs to bring about a true knowledge economy based on technology diffusion, from market-led innovation to basic research.[10] Although a number of institutions are involved in innovation networks, many Latin American countries base their research systems on universities; higher education accounts for 40% of total R&D expenditure in some cases. However, overall research infrastructure in Latin America is weak: centres are underfunded, researchers and academics receive meagre compensation and postgraduate enrolment is scarce.

> *"In the past five years we have been expanding aggressively around the world. What has impressed me a lot in the developed markets we have entered are the type of incentives for R&D and the support in staff training awarded or shared by the local government."*
>
> Dionisio Garza Medina, Chairman of Grupo Alfa and Nemak

Far from this scenario, Latin American universities and technological institutes should be more active not only in implementing new technologies, but also in allowing the current labour force to improve its skills through retraining programmes and capacity building in new sectors. Given the rapid pace of technological change in some countries, it is crucial to provide a proper learning structure where both low and high skilled workers can acquire new knowledge and put it into practice through the innovation process. This should be examined particularly in sectors where unemployment is relatively high because of regional competition, as is the case of the maquilas in Mexico.

In sum, the absence of sufficient interaction between the business and research communities is remarkable in Latin America. At the same time, technological institutes and universities have little incentive to collaborate with other research institutions, as competition prevails over collaboration. The negative effects of these phenomena prevent a much needed culture of innovation from flourishing. The region needs to expend much greater effort if it is to effectively meet the challenges posed by a more competitive global world economy where quick adaptation and anticipation are, more than ever, the keys to success.

The need for diversification: maximizing opportunities

Establishing a truly diversified economy is one of Latin America's most important challenges. Export concentration by product in the region has increased significantly since 2001, the period of China's emergence, suggesting that commodity specialization is affecting countries exporting raw materials. The so-called Dutch Disease phenomenon, as already mentioned, is a potential drawback that could hurt manufacturing, other exporters and producers in import-competing sectors. Certain Latin American governments have been successful in implementing policies to counteract this trend, including the introduction of stabilization funds, a counter-cyclical fiscal stance and prudent debt management. Thanks to these measures, the regional picture that emerges is one of overall macroeconomic stability, with inflation and real effective appreciation well contained. This is a crucial step on the road to diversification.

Diversifying the economy and taking advantage of export opportunities that may exist in other sectors require both innovation and a sound business environment, so Latin American countries remain attractive destinations for foreign investment. Part of the problem in the realm of regional specialization lies in the fact that much of the FDI has gone into natural-resource extraction. Brazil is one of the countries that have been successful in implementing a proper diversification strategy. Despite increasing trade (and competition) with Asian countries, Brazil is still highly diversified, as are its marginal exports. The manufacturing sector, which would be seriously affected under a Dutch Disease scenario, is remarkably healthy. Furthermore, none of the largest growth sectors have seen much more than 20% export growth, and none of the biggest groups in export growth are commodities. In fact, exports of agricultural raw materials, ores and metals have increased in past years, but so have other, higher value-added sectors. Brazil has been able to develop strong manufacturing and industrial bases, taking advantage of the Asian rise, as reflected by aircraft manufacturer Embraer's recent deal with China.

[10] One of the exemplary foundations devoted to this activity in Latin America is *Fundación Chile*. It is the largest private, non-profit organization for the promotion of innovation in Chile. Having for mission to transfer state-of-the-art technology, management techniques and human skills to natural-intensive sectors, the foundation has developed an original model for joint ventures, carrying out R&D and adapting foreign technology.

In summary, Latin American countries need to face persistent challenges in order to take advantage of the current circumstances while avoiding excessive specialization in commodity exports. To do so, governments play a big role in putting into practice policies that favour diversification strategies. A proper innovation strategy is a crucial step towards diversification. Finally, producers need to look ahead in the value chain and look to injecting *value* in their traditional exports, as has been done by highly diversified commodity exporters elsewhere, such as in Norway, Finland and Australia.

Summary and Conclusion

The world power equation is rapidly shifting as a result of China's economic rise to a size and influence similar to that of the United States. As noted above, this is not a myth, but already a reality. Latin America's economies need to adapt to this new competitive paradigm, and should start by reviewing some of the prevailing misconceptions about China's economic success. It is time to design proactive rather than reactive policies, since China's rise is no longer a surprise or a transitory phenomenon. Latin American governments need to boost general competitiveness by lowering country-cost factors and emphasizing policies that promote innovation that favour the companies of tomorrow. Investment in infrastructure that maximizes export comparative advantages and facilitates deeper and faster regional trade and business integration should be a priority, together with funding and support of education and research institutions assimilating the needs and demands of the markets. Diversification is also an important and unavoidable challenge for the region in the coming years, requiring macroeconomic policies directed to offset the effects of specialization by moving up the value chain and looking towards higher-value products for export.

The new world brings threats and risks, but also many opportunities. As the examples of successful companies show, business strategies and public policies must be bold, ambitious, mutually re-enforcing and forward-looking.

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