

Lora, Eduardo

Working Paper

Should Latin America Fear China?

Working Paper, Inter-American Development Bank, Research Department, No. 531

Provided in Cooperation with:

Inter-American Development Bank, Washington, DC

Suggested Citation: Lora, Eduardo (2005) : Should Latin America Fear China?, Working Paper, Inter-American Development Bank, Research Department, No. 531

This Version is available at:

<http://hdl.handle.net/10419/88045>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



*INTER-AMERICAN DEVELOPMENT BANK
BANCO INTERAMERICANO DE DESARROLLO (BID)
RESEARCH DEPARTMENT
DEPARTAMENTO DE INVESTIGACIÓN
WORKING PAPER #531*

SHOULD LATIN AMERICA FEAR CHINA?

BY

EDUARDO LORA¹

INTER-AMERICAN DEVELOPMENT BANK

FEBRUARY 2007

**Cataloging-in-Publication data provided by the
Inter-American Development Bank
Felipe Herrera Library**

Lora, Eduardo.

Should Latin America fear China? / by Eduardo Lora.

p. cm.

(Research Department working paper series ; 531)

Includes bibliographical references.

1. Competition--Latin America. 2. Competition--China. 3. Latin America--Economic conditions--1982- 4. China--Economic conditions--2000-. I. Inter-American Development Bank. Research Dept. II. Title. III. Series.

338.6048 L398-----dc22

©2007

Inter-American Development Bank
1300 New York Avenue, N.W.
Washington, DC 20577

The views and interpretations in this document are those of the authors and should not be attributed to the Inter-American Development Bank, or to any individual acting on its behalf.

The Research Department (RES) produces a quarterly newsletter, *IDEA (Ideas for Development in the Americas)*, as well as working papers and books on diverse economic issues. To obtain a complete list of RES publications and read or download them, please visit our web site at: <http://www.iadb.org/res>

Abstract²

This paper compares growth conditions in China and Latin America to assess fears that China will displace Latin America in the coming decades. China's strengths include the size of the economy, macroeconomic stability, abundant low-cost labour, the rapid expansion of physical infrastructure and the ability to innovate. Its weaknesses stem from insufficient separation between market and state. They involve poor corporate governance, a fragile financial system and misallocation of savings. Both regions also share important weaknesses. The rule of law is weak, corruption is endemic and education is both poor and very poorly distributed.

JEL classifications: E66; O57; P52.

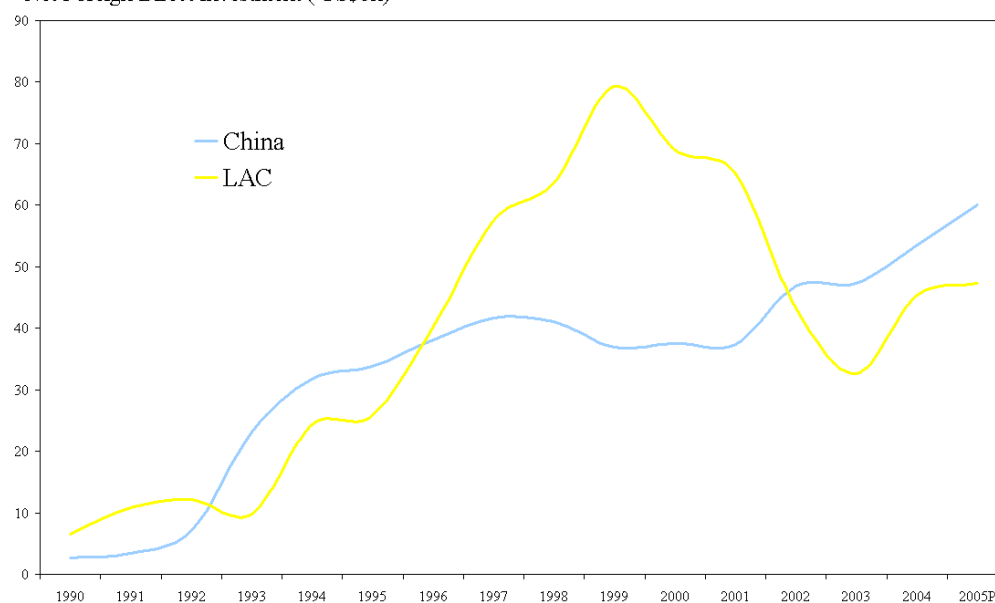
Keywords: China; Latin America; economic growth; investment climate.

1. Introduction

China has been the world's fastest-growing economy for the last three decades. Since economic reforms started in 1978, the economy has shown average real growth of 9.4 per cent per year. Eliminating the most obvious factors of overestimation that the official statistics may contain, Alwyn Young (2003) has estimated this growth as 1.7 percentage points lower, with annual per capita income growth at 6.1 per cent instead of the officially reported 7.8 per cent.³ Even with Chinese growth rates two or three points lower than officially reported, however, Latin America does not shine in comparison. Its average annual growth rate since 1978 has been only 2.3 per cent. While per capita income in China increased more than sevenfold between 1978 and 2005 according to official figures (or fourfold with Young's adjustments), Latin America reported an average increase of only 20 per cent. While manufacturing has led in China with average growth rates of over 12 per cent, the performance of the Latin American manufacturing sector has been disappointing too; its annual average growth was only 0.3 percent in the 1980s and 2.5 percent in the 1990s.⁴

Since China joined the World Trade Organisation in December 2001, these divergences have attracted growing attention because of fears that competition from Chinese products was having a devastating effect on clothing *maquilas*, electronics products industries and many other industrial products from thousands of companies around Latin America. Competition from China may be one reason for the decline in foreign direct investment (FDI) to Latin America (Figure 1-1)⁵. Mexico's FDI inflows fell from \$26.6 billion in 2001 to \$11 billion in 2003, and 960 firms left the country with an estimated loss of over 300 000 jobs (254 000 in the *maquilas* alone).⁶ Although these trends partly reversed in 2004, as FDI rose to \$14.4 billion with an estimated increase of 70 000 *maquiladora* jobs, fears mounted again when FDI fell back to \$11.3 billion in 2005. For Latin America as a whole, although FDI climbed from a low of \$32.6 billion in 2003 to an estimated \$47.3 billion in 2005, it remains substantially below its 1999 peak of \$79.3 billion.⁷

Figure 1-1
Net Foreign Direct Investment (US\$bn)



P Preliminary
Source: CEPAL (various years) for Latin America and the Caribbean (LAC) and World Bank (various years), the Economist (2005) and International Monetary Fund, IMF (various years) for China

This chapter attempts to assess whether fears that China will displace Latin America in the coming decades are well grounded. Several studies have tackled this issue from a microeconomic perspective, comparing factor endowments, export structures or key cost components such as labour or transportation costs.⁸ This one takes a different approach. It tries to compare China and Latin America based on the main variables closely associated with growth and/or the ability of countries to attract foreign direct investment, along the lines of recent empirical literature. While this approach does not lend itself to empirical testing, it provides a more comprehensive and balanced view of China's economy, which may be useful both to prospective investors and to practitioners and analysts, especially those already familiar with Latin America.

The chapter argues that China's strengths relative to Latin America derive from the size of the economy, its macroeconomic stability, the abundance of low-cost labour, the rapid expansion of its physical infrastructure and its ability to innovate. China's main weaknesses are by-products of the lack of separation between market and state. This results in poor corporate governance, a fragile financial system and a tendency to misallocate savings, currently manifested through excess investment in many sectors. China also shares several deep deficiencies with Latin America. In both regions, the rule of law is weak, corruption is endemic and education is poor and very poorly distributed. Broadly based innovation is discouraged by the lack of respect for property rights and by norms and practices that inhibit

competition. In the medium term, both China's and Latin America's ability to correct their institutional flaws will determine their capacity to achieve higher income levels and fully to integrate into the world economy.

2. China's Strengths

Countries do not compete, but companies compete, as Paul Krugman (1994) cautions. China's growth does not occur at the expense of Latin America's, even if some foreign investors have preferred to go to China. In fact, Chinese growth has most certainly been favourable to Latin America, simply because China is the most powerful source of world economic growth. Since 2000, China's contribution to global GDP growth (in purchasing-power-parity terms) has been bigger than that of the United States, and more than half as big as the combined contribution of India, Brazil and Russia, the three next-largest emerging economies (The Economist, 23 March, 2006). This results in expanded markets and better export prices, especially for primary goods, which are a very important source of external revenue for Latin America. It also results in higher world savings, which help to finance countries with external deficits, as is usually the case for Latin American countries and the United States. The enormous US current-account deficit, which benefits Latin America, can be sustained only by direct external financing from China and other Asian countries. Consequently, underscoring China's strengths in relation to Latin America is useful for understanding why China is more successful, but it does not mean that conditions in Latin America would be better if China lacked these strengths.

Size

China is the sixth largest economy in the world, and at the growth rates it has enjoyed in recent decades it appears set to become the largest in less than 40 years, based on GDP valued at market exchange rates. With GDP valued at PPP rates, however, it already is the world's second largest economy and will overtake the United States in less than a decade if both countries maintain their current growth rates. China's also has an impressive importance in world trade, because it is more integrated with it than are other countries such as India, Brazil and the United States. These countries' exports and imports are no more than 25 per cent of GDP, but China's trade represents half of its GDP at market value.⁹

Size generates advantages because it helps attract foreign investment to exploit the domestic market and produce for export, tapping the enormous supply of labour that is China's most abundant resource.¹⁰ In such a huge economy, companies can exploit the economies of scale in production, transport and marketing that are decisive for penetrating international markets (Hummels, 2004). The large Chinese cities also offer opportunities to exploit economies of agglomeration, facilitating the formation of company clusters that complement and compete with each other. This factor is crucial for developing and exploiting skilled labour resources and expanding sectors that depend on knowledge and innovation. In China, however, other factors — such as the special status of state companies and the poor innovation climate — prevent companies from fully using these advantages.

Sustained Growth

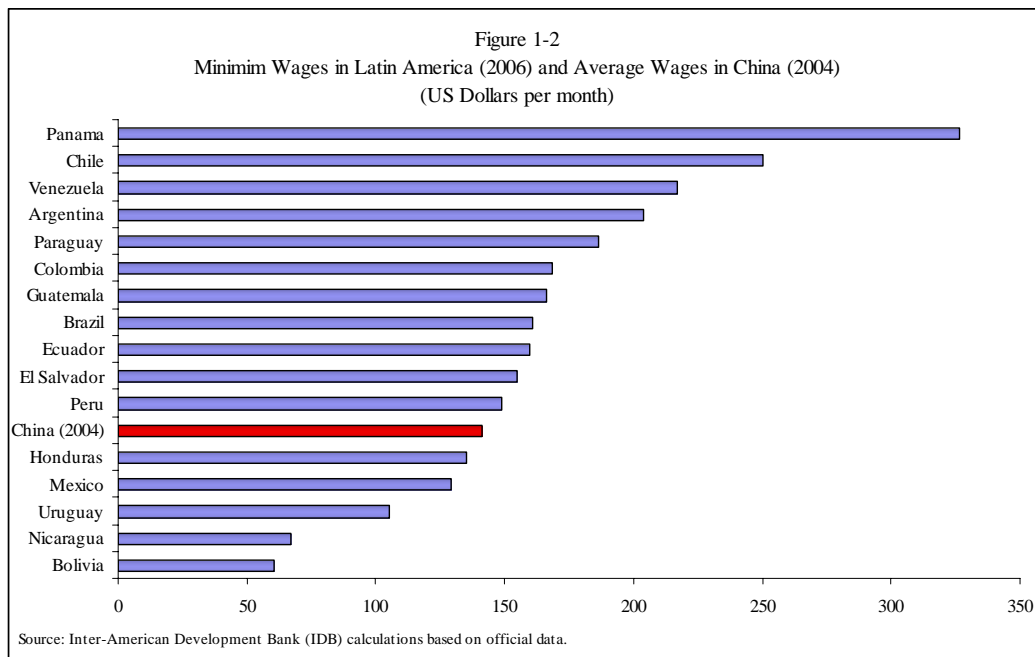
The best-known international competitiveness indicator is the Growth Competitiveness Index published annually by the World Economic Forum. Its latest edition ranks China 54th among 125 countries (World Economic Forum, 2006) This does not seem very exceptional, but it is 23 places higher than that of the median Latin American country. Because of its construction method, the index tends to relate closely to countries' income levels, which means that richer countries always tend to occupy higher positions. After controlling for income, however, China occupies an extraordinary relative position. In Latin America, only Chile holds a place significantly higher than that predicted by its income level. Countries that have such good positions tend to grow more rapidly later — and conversely for countries with poor positions.¹¹ The indicator thus provides a good barometer of the quality of the environment for the future development of productive activity, because it incorporates factors crucial for economic growth, such as macroeconomic stability, the quality of institutions and the environment for technological improvements and innovation.

China's stable macroeconomic environment, especially, makes it stand out in comparison with Latin America. China ranks at 6th according to this indicator, outperforming the typical country of any developing region. The typical Latin American country ranks at 77, revealing Latin America as the region with one of the world's most severe macroeconomic instability, only second to Africa. As is discussed below, the quality of China's institutions and its environment for innovation leave much to be desired, although they are not bad for China's income level.

Underlying the macroeconomic indicator are the level and stability of economic growth and the good risk ratings that international analysts assign to China on the basis of its growth record, low inflation rates, low levels of government debt and the soundness of its international reserves and external balance. Naturally, this has a certain amount of circularity. Because China has had rapid and stable growth in the past, it receives good risk ratings that maintain the expectation of sustained growth, which becomes a self-fulfilling prophecy. The opposite could be said of most Latin American countries. These expectations, however, are a double-edged sword. Although they provide time to solve macroeconomic or structural imbalances, they also tempt countries to ignore them. This could be the case for the weaknesses of the Chinese financial system, addressed further below. It also applies to the repressed appreciation of the *renminbi*, whereby an excess supply of foreign exchange has given rise to a gargantuan accumulation of international reserves. In 2005 alone, China's international reserves increased by \$209 billion, reaching \$818.9 billion (or 42.8 per cent of GDP at current prices).¹² This represents a "war chest" that, along with other features of the Chinese economy, offers protection against the risks of a sudden stop in capital flows and other external sector risks. Nevertheless, high reserves exert pressure on the money supply¹³ and on the prices of key assets such as real estate, and they may eventually lead to inflation. What seems to have prevented inflation so far is the combination of fast income growth (which boosts money demand) and rapid productivity increases (which ameliorate the effect of cost increases for labour and other inputs).

Cheap and Abundant Manpower

Abundant cheap labour is China's most evident advantage in attracting foreign investment and exporting manufactures. The average wage in manufacturing was only \$141 a month in 2004,¹⁴ lower than the current minimum wage in most Latin American countries (Figure 1-2). In 1990 the average wage was \$36 a month, which implies a 10.2 per cent average annual increase. This does not differ substantially from the economic growth rate of the period (9.7 per cent) or the growth rate of workers' productivity in the overall economy (8.5 per cent).



That industrial wages have risen at the rate of economic growth does not signify restrictions on the total labour supply. According to official sources,¹⁵ the working-age population totalled 897 million in 2003, 84.8 per cent of which effectively participated in the labour market. This is one of the highest participation rates in the world, possibly thanks to the culture of incorporation of women and the low fertility rates promoted by the communist system. Although employment in the overall economy has grown by only 2.5 per cent annually since 1980 (and by only 1.1 per cent since 1990), the most dynamic sectors have not suffered from labour shortages because there is redundant labour in agriculture and the state companies. Employment outside these two sectors grew at 7.9 per cent annually in 1980-2001 and at 5.3 per cent in 1990-2001 (Brooks and Tao, 2003). This process is far from exhausted. The inefficient sectors have an estimated 160 million surplus workers, and in the next quarter century the rural population could decline by 300 million people (Wolf, 2003).

Despite its importance, a multitude of restrictions only gradually being relaxed constrain rural-urban migration. The most important traditional constraint is the system of household registration (*hukou*), which is required in order to remain in the cities and have access to jobs and the basic services of education, healthcare and social security.¹⁶ Migration has also been limited by emigrants' fear of losing land ownership rights in their rural areas of origin and by the stricter limit in the cities on the permitted number of births per household. Since 2001, people with stable employment and residents have had permission to register in over 20 000 small towns and cities without fear of losing land rights, and several taxes on

migrants have been dismantled. Severe restrictions persist in most large cities, however, and some time will pass before the 2001 reform is fully applied even in the small cities (Brooks and Tao, 2003).

The movement of labour into more efficient sectors has been the major source of total factor productivity (TFP) increases, which have contributed around 3 per cent per year to GDP growth over the past two decades (Table 1.1). Based on the differences in average labour productivity between agriculture, manufacturing and the service sector, the OECD has calculated that about one-fourth of the increase in productivity (and one-fifth of the change in income per capita) since 1983 has come from the reallocation of labour. Yet its actual contribution could be higher, since the productivity of the marginal worker who leaves agriculture is estimated at one-sixteenth that of the marginal urban worker. Although the contribution of sectoral change to GDP growth weakened in the second half of the 1990s, it has picked up since 2000 and is certainly far from finished (OECD, 2005).

Table 1.1. Sources of Output Growth in China and Latin America

	China		Latin America	
	1983-1993	1993-2003	1980-1990	1990-2000
GDP growth	10.5	8.9	1.3	3.3
Capital contribution	4.8	5.2	0.9	1.2
Employment contribution	1.3	0.3	1.8	1.7
Education contribution	1.0	1.0	1.3	1.0
Total factor productivity (residual)	3.6	2.4	-2.7	-0.6
<i>of which:</i>				
Sectoral change	1.5	0.1

Sources: For China OECD (2005), and for Latin America IDB (2001).

Latin America has also witnessed significant rural-urban migration. In 1980, half the population of the typical country of the region lived in the countryside; currently only one-third does so.¹⁷ Yet this migration has not resulted in appreciable increases in productivity. In contrast with China, productivity has had a *negative* contribution to Latin American growth, especially in the 1980s, but also more recently. The most important exception is Chile, where it has added 1.8 percentage points to average growth in the last 20 years (Loayza *et al.*, 2002).¹⁸ The shift of employment from country to city has not helped much because of the modest rural-urban labour-productivity gap (typically 30 percent, see IDB, 1998) and because the sectors with the highest productivity in the cities have generated few jobs. As a result, Latin America, unlike China, has not succeeded in using the surplus labour from its inefficient sectors.

One of the reasons for this difference, although clearly not the only one, is the extremely protectionist nature of Latin American labour legislation in comparison with China's or, more accurately, with that in China's dynamic sectors. Latin America regulates in considerable detail the length of the working day as well as vacations and other worker benefits. Laws further govern conditions for the dismissal of workers and the compensation (typically fairly high) that employers must pay when they cannot demonstrate compliance with them. China has no similar national labour code. The traditional "iron rice bowl" system made state companies responsible for the obligations of labour protection and social security, which they independently granted to their workers as a mechanism for maintaining discipline in exchange for life-long job security. These benefits were very generous in other respects too, and they remain an unresolved problem for many companies. This traditional system has led to demands for improvements in pay, non-wage benefits and hiring and dismissal conditions, which vary from region to region and are partly negotiable between private companies and the local authorities and/or the labour unions. Consequently, current labour legislation for private companies provides less protection of employment conditions and job security than typical laws in Latin America, and its application is also much less predictable (OECD, 2003).

Although China has an enormous reserve of rural labour that could sustain growth during the coming decades, the longer-term prospect is hardly encouraging because of the demographic trends stemming from the one-child policy. For every person over 60 years of age, there are currently some six of working age. This ratio has held for more or less half a century, but it is beginning to fall. By 2040 China will have only two working-age people for every person over 60. Latin America starts from a younger demographic base, so that until 2040 it will keep the six-to-one ratio that China now enjoys (UN, 2002). China will then confront an enormous social burden that will require it to raise taxes quite far above the levels typical of Latin America.

The Physical Infrastructure Boom

Until 20 years ago China's transport, communications and energy infrastructure was very much below the standard of Latin America's most developed countries. Although serious deficiencies persist and it is difficult to meet the fast-growing demand for infrastructure services of all kinds, recent improvements have been truly noteworthy, especially in roads, ports, telecommunications and electricity, which will likely contribute to sustaining growth. Because of the privatization process, many Latin American countries have

also made good progress, although concentrated largely in the areas of telecommunications and, to a lesser extent, electricity and ports. In China, investment in infrastructure has grown much faster than the economy as a whole (rising from 2-3 percent of GDP in the early eighties to around 9 percent in 1998-2002). This has not been the case in Latin America, where investment in areas that have not attracted private sector attention has been neglected. Total (public and private) spending in infrastructure in Latin America is currently less than 2% of its GDP, down from 3.7% during 1980-85.¹

China's railways, the backbone of the transport system, have received large investments in recent years, including a second line from Beijing to Kowloon (Hong Kong) and the extension of the network to distant areas such as Kashgar in Xinjiang and to Tibet. The total length of railways in operation reached 61 000 km in 2004, up from 53 400 km in 1990. High-speed rails lines will reduce the travel time between Shanghai and Beijing from 13 hours to less than five, as part of an ambitious scheme to construct 5 400 km of high-speed rail track between 2006 and the end of the decade. Progress on roads has been even more remarkable. Since the early 1990s, inter-provincial expressways increased from zero to 34 300 km in 2004, and the total length of highways rose to 1.9 million km. Port facilities have also improved appreciably in recent years. China has 200 ports, some of them among the world's ten largest, but many are too shallow for large container ships. The most important current project is the expansion of Shanghai's port, the first phase of which was inaugurated in late 2005. The whole project will take another 15 years to complete.

China also is addressing the serious limitations facing its electricity infrastructure. The government plans to raise installed capacity from 290 GW in 2000 to 550 GW by 2010. The telecommunications sector is going through an unprecedented boom. China now has more cable television subscribers (115 million at the end of 2004) and more mobile-telephone customers (335 million in 2004) than the United States. It also has 312 million fixed telephone lines and 94 million Internet subscribers. According to the government, the extension of the optical fibre network will bring broadband multimedia access to all urban homes by 2010 (EIU, 2006; *The Economist*, 30 March 2006).

The Ability to Innovate

With its present low level of income, China will need over two decades at current growth rates to reach half the income per capita (PPP) of the United States. A small economy

¹ Fay and Morrison (2005).

in this situation would use all of that time to continue exploiting external technological development. China's size, however, imposes the need to conquer increasingly sophisticated goods markets with ever-higher technological and innovative content, and this is exactly what China has done. Supported by a massive inflow of FDI to its high-technology sectors, China has become the top provider of electronic goods. "China for the first time [in 2004] surpassed America to export the most technology wares around the world, according to new figures from the Organisation for Economic Co-operation and Development. The crossover took place [in 2004], when China exported \$180 billion of computers, mobile phones and other digital stuff, exceeding America's international sales of \$149 billion. A year earlier, in 2003, China's technology exports had overtaken those of both the European Union and Japan." (The Economist, 14 December, 2005). The pace of innovation, as measured by the number of patents, is also picking up. China accounted for 130,000 patent applications in 2004 (the most recent year for which figures are available). That makes it number 5 globally, according to the World Intellectual Property Organization, a United Nations agency. Although China was still far behind Japan (with 450,000 patents in 2004) and the United States (with 403,000), its 2004 patent applications were six times the number in 1995.

These achievements result from a long-term, multi-pronged innovation strategy that started in the 1950s with the support of technologies deemed critical for national defence and moved in the mid-1980s to the adoption of key advanced civilian technologies. Research and development (R&D) commitments have climbed in recent years and now exceed 1 per cent of GDP (Naughton, 2004).¹⁹ With the important exception of Brazil, where R&D represents 0.9 per cent of GDP, R&D efforts in most Latin American countries are much smaller, at 0.2-0.6 per cent of GDP (IDB, 2001). The Chinese government has long recognized that planners do not have the technical capabilities to evaluate new technology, and it has therefore encouraged research institutions to commercialise their research products. Industrial policies also support innovation in software and integrated circuits with research funding, preferential procurement policies and tax exemptions. Crucially, both foreign-invested and domestic firms enjoy preferences. Policies generally apply across the board, with no attempt to "pick winners". Research incentives seem to have paid off handsomely. According to a 2000 R&D survey, enterprises now make some 60 per cent of China's R&D outlays. The creation of Chinese technology standards as opposed to global ones recently has further encouraged innovation. This gives Chinese firms a competitive advantage, because it delays the entry of foreign technology holders into the Chinese market and gives Chinese firms bargaining power with foreign suppliers over technology and intellectual property. This strategy has

been instrumental in the development of some new digital technologies to the advantage of Chinese (and Chinese Taipei) firms. Despite or because of the failure of some earlier attempts, Latin American governments dismantled their incipient industrial policies in the 1990s and only now are starting to reconsider them.

Nevertheless, the environment for innovation in China has several limitations, many of them similar to those found in most Latin American countries. Irksome procedures hinder starting new companies; access to credit and capital markets is very limited; property rights are weakly protected; and competition is restricted by geographical and infrastructure barriers that raise the cost of transport and by a multiplicity of local protection mechanisms for industries in the form of operating permits, requirements for use of local raw materials, taxes and other restrictions (World Bank, 2003a). This suggests that it is time to look at the other side of the mountain.

3. China's Weaknesses

The lack of separation between the state and the market is the overriding weakness of the Chinese economy. The state does not just simply interfere strongly in the decisions of other economic agents, as in Latin America before the wave of structural reforms of the last 20 years, but it also is the most important agent in domestic and international production as well as in marketing decisions. In fact, the state remains the main employer and the main channel for the allocation of savings. The lack of separation between the state and the market extends to all aspects of economic activity and is aggravated because the state is not a cohesive, centralised entity but a thousand-headed hydra that operates at all levels. It becomes evident in poor corporate governance, major risks in the financial sector and the use of a variety of controls that favour state-owned enterprises and reduce market discipline. Overinvestment in many sectors is a current manifestation of inadequate market discipline.

State-Owned Enterprises and Corporate Governance

In China it is not possible to define precisely the dividing line between public and private property. The introduction of non-state forms of production began with the system of rural responsibility that led to the privatisation of agriculture (although not rural land, which remains under state or community control) and to the proliferation of “town and village enterprises,” small and medium-sized light manufacturing firms. The success of this experiment led the government in 1984 to initiate reforms in state industrial companies,

which are continuing. The objective of the process was to improve efficiency in the state sector while preserving the state ownership of these companies. In the process, the Chinese state has experimented with an enormous variety of forms of state, collective, foreign and individual ownership, all of which currently coexist around a nucleus of large state companies, which in 2001 accounted for 47.3 per cent of investment in the fixed assets of the economy and 44 per cent of industrial production. Even by then, however, the number of state companies had fallen by two-thirds, to 34 500 from 87 900 in 1995, as a result of the “grab the big and let the small go” strategy announced by Zhu Rongji in 1998 (*China Economic Quarterly*, 2003, pp. 20ff.). As a result, the share in value added of state-and collectively controlled firms in the business sector declined from 46.5 per cent in 1998 to 36.7 per cent in 2003 (OECD, 2005).

The last step in this reform process was the establishment in 2003 of the State-owned Assets Supervision and Administration Commission (SASAC), which currently exercises direct control over 169 large state companies, guaranteeing that the three largest firms in the main economic sectors remain state-owned and that 30 per cent to 50 per cent will be “national champions” or “globally competitive” multinationals by 2010. This does not mean that the other state companies will necessarily be privatised, but rather that they will have to support themselves. An explicit reform objective is to expand state control capacity through the laws and regulations on ownership and corporate governance. The preferred way to restructure state companies throughout China is to set up an operating company to hold the productive assets. This company is in turn owned by a state-owned holding company. These holding companies exercise control and assume responsibility for the social obligations that all state companies had in the past (education, housing, social security). Many state-controlled operating companies offer shares on the stock market, a mechanism that in practice also contributes to expanding state control because the minority shareholders lack the rights common in other countries. In addition, the reliability of accounting systems and external auditing is very poor, and the practice of selling shares among holders to manipulate their value is rampant, according to the international indicators of the World Economic Forum. Moreover, the Corporation Law has been designed to facilitate the corporatisation of state companies, impose earnings reinvestment requirements and restrict the composition of boards of directors in ways detrimental to independent control of private companies.²⁰

Because state-owned enterprises are structured to respond more to the political and strategic objectives of the Communist Party than to market signals, it is not surprising that investment decisions, often flawed, lead to overinvestment. Foreign firms are also

encouraged, especially by local governments through a variety of incentives, to invest in sectors that may bring political recognition. Excess capacity is rampant in steel, aluminium and cement, sectors under the control of the government, but it is also noticeable in automobiles, electronics, communications equipment and many other sectors with high foreign participation. The major risk caused by overinvestment is that many state-owned firms may find it impossible to honour their financial commitments to the already overextended official banks.

The Financial System

The financial system, without doubt the Achilles' heel of the Chinese economy, has traditionally served state companies. Although China has one of the deepest financial systems in the world — in 2004 the stock of domestic credit rose to 160.7 per cent of GDP and the value of the broader money supply in circulation expanded to 184.9 per cent of GDP (EIU, 2006) — in practice access to credit is restricted to state-controlled companies and the largest private-sector firms. Small and medium-size businesses, which account for more than half of GDP, receive less than 10 per cent of total bank loans (OECD, 2005).²¹ In the opinion of businesses consulted by the World Economic Forum, China restricts access to credit more than do most Latin American countries, where typical ratios are 30 per cent of GDP. Because equity-market access also tilts in favour of incumbent (especially state-owned) firms, efficient methods to allocate savings are clearly wanting.

The banking system is dominated by four major state banks originally oriented to separate sectors: the Bank of China, the China Construction Bank, the Industrial and Commercial Bank of China and the Agricultural Bank of China. The People's Bank of China operates as the central bank (and until recently as regulator of the banking system), and there are many state-owned commercial banks, most of them regional. Until 2003 only one private bank other than branches of foreign banks could offer international services. Since 2003 foreign banks have been able to provide services in local currency to Chinese companies, and at the end of 2006 they were authorized to offer services to individuals. Pursuant to commitments made by China on its accession to the World Trade Organization, the geographical restrictions on the operation of foreign banks were finally eliminated in 2006.

These limitations contrast with the freedom of entry and operation that has existed in most Latin American financial systems since the reforms of the 1990s. The main weakness of the Chinese financial system does not relate to these restrictions, however, but to the poor quality of regulation and supervision. According to official figures for the end of 2002, the

non-performing debts of the four major state banks equalled 26 per cent of their assets (*Oxford Analytica*, 17 July 2003). By September 2005, the non-performing loan ratio of the big four banks had declined to 10.1 per cent (EIU, 2005), due to policies adopted to clean their portfolios. The real bad-debt ratio is thought to be higher, however, because of the practice of refinancing financially troubled state companies at interest rates controlled by the government.²²

The government has taken several measures to deal with the problems of the major banks. In 1998 it gave them a \$33 billion capital injection and transferred their bad debts to asset-management corporations for liquidation. In 2003 the Chinese Banking Regulation Commission was established, and in January 2004, a new capital injection of \$45 billion went to two of the four largest state banks (Bank of China and China Construction Bank), which raised their capital to risk-weighted assets ratios from 7 per cent to 16 per cent (the international standard is 8 per cent). In 2005 a further \$15 billion was injected into the Industrial and Commercial Bank of China, and in late 2005 the China Construction Bank became listed in Hong Kong and raised \$8 billion from international investors. In 2006, the Bank of China and the Industry and Commerce Bank of China went public. ICBC public offering has become the largest in world history (around \$22 billion) and its market capitalization could be around \$130 billion²³. However, . banks will remain under central government control and their management will stay exposed to political influences.²⁴

Many Latin American countries have experienced banking crises in the last 20 years, which have forced them to strengthen their systems of supervision and prudential regulation, raising them above levels current in China. Needless to say, the macroeconomic volatility characteristic of Latin American countries is a source of vulnerability that China has not had to face, at least so far. Yet ample evidence shows that financial liberalisations often turn sour in countries that lack adequate institutional infrastructure, because previous systems of interest-rate controls and directed credit may have created weak bank portfolios and failed to promote good “credit cultures” (Caprio and Hanson, 2001). Such concerns fully apply to China. Research on financial crises has also shown that when basic institutions that govern credit markets are flawed (*i.e.* when the rule of law is weak, creditors are unprotected and regulation is deficient) liberalisation increases the likelihood of a crisis (Demirgüç-Kunt and Detragiache, 1998; Arteta *et al.*, 2001). Thus, even as current conditions in the financial sector pose a threat to Chinese stability, reform and eventual liberalisation will not be risk-free either.

Given the difficulties of reforming the financial sector, equity-market liberalisation could in principle make a major difference in China. More financially developed countries experience larger than average boosts from equity-market liberalisation, which suggests that China could obtain an important benefit. Again, however, this effect tends to be muted in countries like China with poor legal systems and weak investor protection (Bekaert *et al.*, 2004).

The Trade Regime and International Transactions

Like Latin America, China has drastically cut tariffs and eliminated most restrictions on imports in the last 20 years. The average tariff rate fell from 43.3 per cent in 1985 to 12.7 per cent in 2002, a drop slightly slower than in Latin America but similar in scope (Yang, 2003). Shortly after Latin America did so, China unified its exchange market in 1994, and in 1996 it eliminated the main restrictions on foreign-exchange trading associated with international trade. In other respects, however, international goods and capital transactions remain subject to restrictions that do not exist in Latin America. Only authorized companies may engage in international trade transactions. Until 2005, regulations prevented privately owned firms from entering a number of sectors, such as infrastructure, public utilities and financial services. All incoming capital is deposited in a special account, and payments or transfers against these accounts require approval from the State Administration of Foreign Exchange (SAFE). Until early 2006, foreigners could invest only in B shares, which do not have the same rights as regular A shares. New rules allow some overseas investors to buy A shares as long as they purchase at least 10 per cent stakes in listed companies and hold the stock for at least three years. All outward capital operations require authorization from SAFE, and Chinese investment abroad is regulated and controlled by the China Securities Regulatory Commission (OECD, 2003). However, also since 2006, some domestic investors (Qualified Domestic Institutional Investors, QDIIs) have been authorized to invest domestic funds in foreign markets. Therefore, China is starting to experiment, in a various cautious way, with a gradual liberalization of its capital markets.

Misleading Indicators, Uncharted Paths

Given the lack of separation between the state and the market, one must interpret many economic indicators with caution. For example, financial depth does not reflect ease of access to credit because the state largely controls the credit systems. For the same reason, the total savings ratio is not a good indicator of the economy's investment capacity, or at least of

investment capacity according to efficiency criteria. According to official statistics, China's saving and investment rates — at close to 50 per cent of GDP (or 44 per cent and 40 per cent of GDP, respectively, to accord with recent revisions to 2004 GDP²⁵) — are among the world's highest and more than double the rates typical in Latin America. One might think that rapid economic growth is the natural result of such rates, but causality could go in the opposite direction. The real engine of growth functions through the movement of labour into the most efficient sectors, which have lower intensities of capital use than do the state companies and to a large extent finance their investments through external savings, *i.e.* from foreign investment. Although the private sector has been the main source of growth, China is not evolving into a typical capitalist economy. The lack of separation between state and market encourages business leaders to create a corporatist association between companies and government. This will not lead to an expansion of space for private initiative on market conditions, but rather to a symbiosis of the interests of government and large private companies. A recent study found that over 40 per cent of private entrepreneurs in companies with annual incomes over one million *renminbis* (\$120 800) have become members of the Communist Party, while only 5 per cent of the general population are party members. The growing numbers of business associations have also begun to play a similar role, supported by business people's conviction that they can influence official decisions (Dickson, 2003).

4. Common Weaknesses of China and Latin America

With its growing economic weight in the world, its high saving and investment ratios and its prodigious industrial capacity, China can seem like a developed country. Yet it remains an economy with low economic, social and institutional development and as such shares a series of weaknesses with Latin American countries. As economic development progresses, these weaknesses may become more troubling. Some observers even talk of an eventual "Latin Americanisation of China: the possibility that growing income inequalities and an ill-regulated rush to privatize could precipitate economic and political upheaval" (*The Economist*, 25 March 2006).

Limited and Unequal Education

The Chinese and Latin American labour forces currently have similar levels of education, a little less than six years on average, according to the well known Barro and Lee (2000) database. China has made rather more rapid progress than Latin America, but both

regions have lagged behind the East Asian tigers and remain far below the average education level (ten years) of developed countries. As in Latin America, considerable regional inequalities mark education in China. For example, enrolment rates in junior secondary education vary from 49 per cent in Tibet and about 60-70 per cent in seven other lagging provinces to about 99 per cent in Beijing, Shanghai, Tianjin and Zhejiang. In the lagging provinces only 70 per cent of the students complete the nine-year compulsory education curriculum, compared with 100 per cent in East China (World Bank, 2003a).²⁶ Many rural schools lack funds and must survive with fee donations from parents, a practice that the government hopes to eradicate by the end of 2007. Absenteeism and early school dropout are frequent despite the compulsory nine years of study.

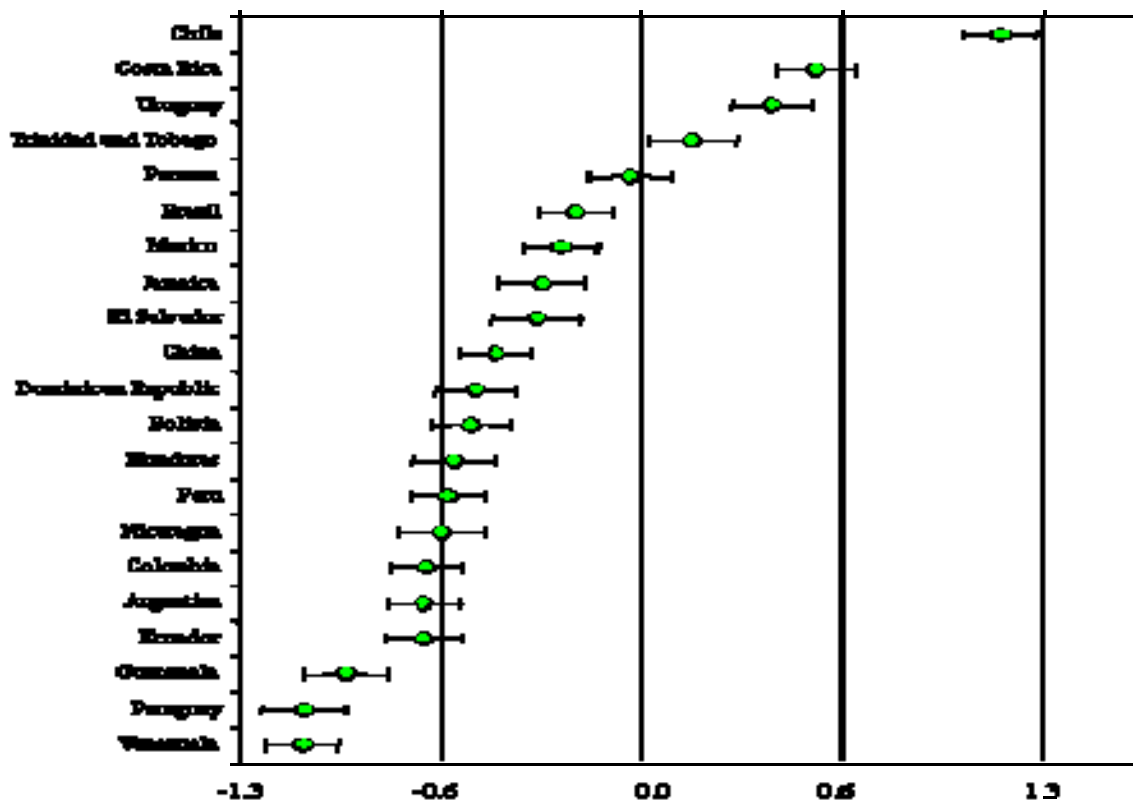
As in Latin America, the improvement of education at low and middle levels is constrained on the supply side by limitations on resources and glaring organisational deficiencies and on the demand side by a lack of economic incentives to encourage families to keep their children in school. The emergence of economic opportunities, however, has raised the return on education, especially at the highest educational levels, again as in Latin America. For example, the gap between the returns on university and primary education rose from 25 per cent in the late 1980s to almost 80 per cent in the late 1990s (World Bank, 2003a). Income concentration has reflected these changes. The Gini coefficient of income per capita increased from 0.35 in 1989 to 0.44 in 2000 (World Bank, 2003a), and to nearly 0.5 in 2005 according to some sources,²⁷ not far from Latin America's average coefficient of 0.53 (De Ferranti *et al.*, 2003).

Another common feature of education structures in China and Latin America is the concentration of public expenditure at the tertiary level. In contrast with the United States or South Korea, where public spending per student is less at the tertiary than at the secondary level, Mexico and Chile spend more than twice as much on a university student than a secondary student. In China the gap is 5:1 (De Ferranti *et al.*, 2003). This reflects the priority that the government gives to higher education in a bid to speed up the country's technological progress. In 2004 China had 13.3 million university students, up from 5.6 million in 2000, engineering and management being the two most popular courses. China had 820 000 students in postgraduate programs (up from 301 000 in 2000), as well as 115 000 students studying abroad (EIU, 2006). Since nothing comparable is happening in Latin America, the education structures of the two regions seem likely to diverge.

Corruption and Weak Rule of Law

If anything is important for development, institutions and particularly respect for the law and control of corruption predominate (Easterly and Levine, 2002; Rodrik *et al.*, 2002; Dollar and Kraay, 2002). According to Kaufmann *et al.* (2005), respect for the rule of law in China falls well below the world average; it is on a level similar to those of El Salvador or the Dominican Republic and significantly below those of Chile, Costa Rica and Uruguay (Figure 1-3). This measure of the rule of law synthesizes various indicators and expert opinions that reflect the degree of respect for rules, contracts, legal security and property, as well as the backing of the judicial system. On control of corruption China ranks even lower, on a level with the Dominican Republic, Jamaica and Honduras and substantially below Chile, Costa Rica and Uruguay (Figure 1-4). In this system of indicators, corruption means the unlawful appropriation of public resources for private purposes.

Figure1-3. Rule of Law, 2005

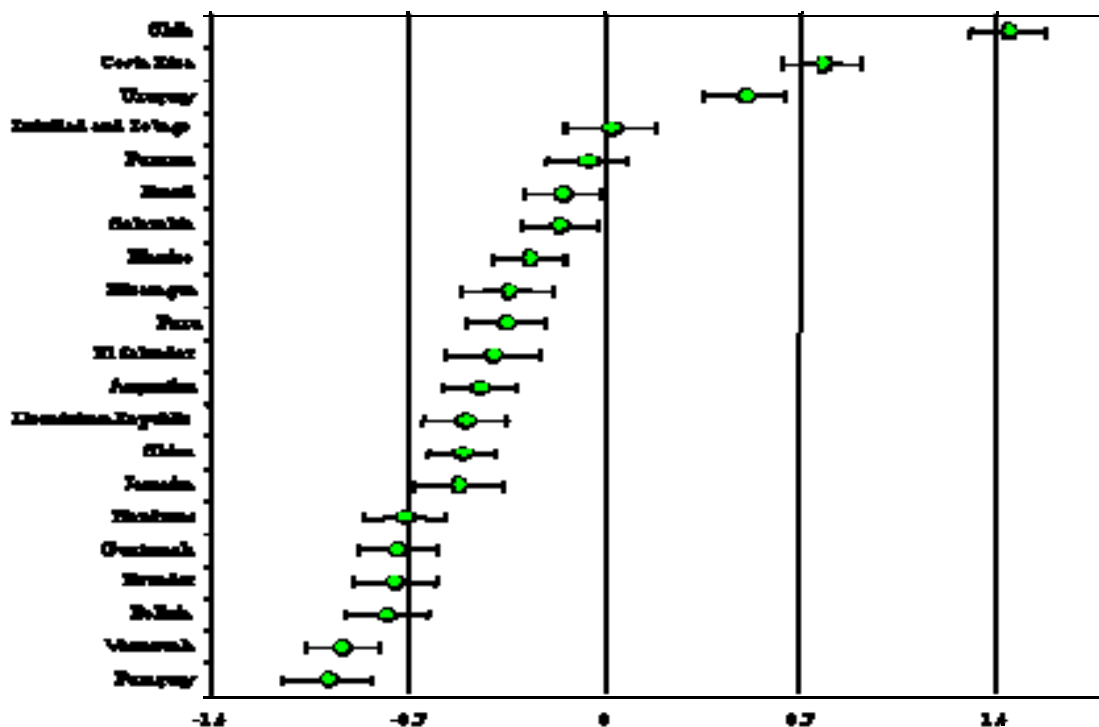


Source: Kaufmann, D, A. Kraay and M. Mastruzzi (2005). "Governance Matters IV: Governance Indicators for 1996-2004". Draft, May 2005

Scale: Distance (in standard deviations) with respect to world average.

Dots represent central values and lines 95% confidence intervals for each country, based on a wide set of indicators.

Figure 1-4. Control of Corruption, 2005



Source: Kaufmann, D, A. Kraay and M. Mastruzzi (2005). "Governance Matters IV: Governance Indicators for 1996-2004". Draft, May 2005

Scale: Distance (in standard deviations) with respect to world average.

Dots represent central values and lines 95% confidence intervals for each country, based on a wide set of indicators.

Although the rule of law is almost as weak in China as in the average Latin American country, the problem manifests itself with appreciable differences. In Latin America the homicide rate in the average country is 13 per 100 000 people; in China it is only 2.2 (IDB, 2000; Interpol, 2004). China also has low rates of other forms of violence and anti-social behaviour, such as robbery or sexual crime, which traditionally have been strongly punished. In China the weak rule of law becomes much more evident in the lack of secure property rights, especially in rural areas, the weakness of contracts and the unpredictability of judicial decisions.

Although the judicial systems of both China and Latin America suffer from serious weaknesses, these deficiencies have radically different origins. In Latin America, justice operates with complex and formalistic procedures derived from the Napoleonic Code that delay decisions, lessen their transparency and limit access to the courts. Because of this legalistic tradition, lawyers are numerous and play an important role in economic activities. China, on the other hand, has no tradition of this kind. During the Mao Zedong period the law

remained subordinate to political ideology, and the judicial system hardly existed, although national and local authorities controlled summary judicial mechanisms and mediation systems.

Since 1978, a body of laws has been created by transplant from abroad with little adaptation, and an incipient legal tradition has slowly begun to emerge. In 1985 there were only 13 403 qualified lawyers in all of China, and half of them worked only part time. By 2000 the number had risen to 117 260, mainly full-time. Nonetheless, it is mistaken to think that the rule of law will prevail as a direct result of the number of lawyers, courts and cases settled. Except in some of the large coastal cities, most of the more than 200 000 judges in China are retired officials of the People's Liberation Army who lack legal training and independence. Even more serious, the incipient legal system seems alien to Chinese cultural tradition. As one report has noted, "In many respects it is like a transplant or graft that is in danger of being rejected by the many natural antibodies it encounters." (OECD, 2003, p. 113)

In both China and Latin America, legal gaps and the lack of consistency and credibility of judicial decisions militate against a broad-based system of innovation. Protection of intellectual property rights is weak and ineffectual. Even so, China has made substantial progress in the last 20 years by setting up specialised courts to deal with property rights, and a patent registration system has gained credibility, as reflected in the growth of applications (over 170 000 in 2000). Like Latin America, however, China has not yet assimilated a culture of respect for international intellectual property, while the rules for the protection of patents, trademarks and commercial rights are imprecise and of limited effect (OECD, 2003).

A judicial system such as China's is hardly immune to corruption. More generally, however, the problem of corruption in China stems from the omnipresence of the state in its attempt to control economic decisions to preserve the power of the Communist Party. The reform process initiated in the late 1970s has prompted continuous conflict between the need to create new spaces for decision-making by economic agents to improve efficiency and the expansion of potential sources of illegal income in the effort to maintain state control over other spaces. The land-ownership control system still in force provides a good example. Corruption originates in two simple facts: all land is owned by the state, and administrative decision determines the value of rights of use. As a result, access to land is difficult without illegal payments to the district or municipal officials who control rights of use. A press source reported that 84 per cent of sales of land rights in Shanghai in recent years occurred through illegal mechanisms (*China Economic Quarterly*, 2003). Other recognized areas of corruption

are residence permits, customs and banks. A striking and especially problematic feature of corruption in China lies in its growing decentralisation as a result of the erosion of central state control over sub-national entities and their officials in the wake of the growth and diversification of private economic activity.²⁸

Conclusion

China's rapid growth, its ability to attract foreign investment and its success as an exporter all cause concern among entrepreneurs and governments in Latin America. Although it is wrong to believe that good performance by one country comes at the expense of others, China is forcing Latin America rapidly to restructure some of its productive sectors in order to defend its position in international markets. This chapter has shown that China enjoys great strengths relative to Latin America, deriving from the size of its economy, the macroeconomic stability that it has enjoyed so far, the abundance of low-cost labour, the rapid expansion of its transport, electricity and communications infrastructure and its ability to innovate. Yet China also has weaknesses. Their principal source lies in the lack of separation between market and state, which explains the inefficiency of China's state enterprises, the deficiencies of its corporate norms and the fragility of its enormous financial system (the economy's high level of savings notwithstanding). In several ways the Chinese economy does not differ substantially from that of the typical Latin American country. The rule of law is weak and corruption is endemic. Education is poor and very poorly distributed, despite important scientific and technical advances at the university level. The lack of respect for property rights, the difficulty of starting businesses and the norms and practices that inhibit competition all conspire against innovation. Thus public institutions will be the battlefield in the attempt by both regions to attract foreign direct investment and create environments conducive to private initiative.

References

- Arteta, C., B. Eichengreen and C. Wyplosz (2001), “When Does Capital Account Liberalization Help More Than It Hurts?”, CEPR Discussion Paper No. 2910, Centre for Economic Policy Research, London.
- Barro, R.J. and J-W. Lee (2000), “International Data on Educational Attainment: Updates and Implications”, mimeo., Harvard University, Cambridge, MA.
- Bekaert, G., C. R. Harvey and Christian Lundblad (2004), “Does Financial Liberalization Spur Growth?”, National Bank of Belgium Working Paper No. 53, Brussels.
- Brooks, R. and R. Tao (2003), “China’s Labor Market Performance and Challenges.” IMF Working Paper WP/03/210. Washington, DC.
- Caprio, G. and J. A. Hanson (2001) “The Case for Liberalization and Some Drawbacks.”, in G. Caprio, P. Honohan and J. Stiglitz (eds), *Financial Liberalization: How Far, How Fast?*, Cambridge University Press, Cambridge, United Kingdom.
- CEPAL (2005). *La Inversión Extranjera Directa En América Latina Y El Caribe 2005*”, CEPAL, Santiago de Chile, Chile.
- Cepal (various years). “Balance Preliminar de las Economías de América Latina y el Caribe” Santiago de Chile, Chile.
- Hantasasawat B., Fung, Iizaka and Siu, (2004), *Foreign Direct Investment in East Asia and Latin America: Is there a People’s Republic of China Effect?* ADB Institute Discussion Paper No.17.
- China Economic Quarterly*, 2003, 7(3).
- De Ferranti, D., Perry, G. Ferreira, F. and Walton M. (2003), *Inequality in Latin America and the Caribbean: Breaking with History?*, World Bank, Washington DC.
- Demirgüç-Kunt, A. and E. Detragiache (1998), “The Determinants of Banking Crises in Developing and Developed Countries.” *IMF Staff Papers* 45(1): 81-109.
- Devlin, Robert, Antoni Estevadeordal and Andrés Rodríguez (eds.), (2006), *The Emergence of China. Opportunities and Challenges for Latin America and the Caribbean*. Inter-American Development Bank. David Rockefeller Center for Latin American Studies, Harvard University.
- Dickson, B. J. (2003), *Red Capitalists in China: The Party, Private Entrepreneurs, and Prospects for Political Change*, Cambridge University Press, Cambridge, United Kingdom.

- Dollar, D. and A. Kraay (2002), “Institutions, Trade, and Growth”, mimeo, World Bank, Washington DC.
- Duenwald, C. and J. Aziz (2003), “The Growth-Financial Development Nexus”, in W. Tseng and M. Rodlauer (eds.), *China: Competing in the Global Economy*, IMF, Washington DC.
- Easterly, W. and R. Levine (2002), “Tropics, Germs, and Crops: How Endowments Influence Economic Development”, mimeo, Institute for International Economics, Washington DC.
- Economist Intelligence Unit (EIU) (2005), *China: Country Report*, Economist Intelligence Unit, London, United Kingdom, December.
- Economist Intelligence Unit (EIU) (2006), *China: Country Profile 2006*, Economist Intelligence Unit, London, United Kingdom.
- The Economist* (2006), 25 March and 30 March.
- García-Herrero, Alicia and Daniel Santabárbara, (2005), “Does China Have an Impact on Foreign Direct Investment to Latin America?”, Bank of Spain, Working Paper. Unpublished.
- Geng Xiao (2005), “Round-Tripping Foreign Direct Investment in the People’s Republic of China: Scale, Causes and Implications”. <http://www.adbi.org/research-paper/2005/01/20/880.prc.fdi.rp/>
- Hummels, D. (2004), “The Role of Geography and Size”, mimeo, Inter-American Development Bank, Integration and Regional Programs Department, Washington DC.
- Inter-American Development Bank (IDB) (2000), *Development beyond Economics. Economic and Social Progress Report 2000*, IDB, Washington DC.
- Inter-American Development Bank (IDB) (2001), *Competitiveness: The Business of Growth. Economic and Social Progress Report 2001*. IDB, Washington DC.
- international monetary fund (imf) (various years). *World Economic Outlook Database*, IMF, Washington DC
- Interpol (2004), *International Crime Statistics*,
<http://www.interpol.int/Public/Statistics/ICS/downloadList.asp>
- Johnson, I. (2004), *Wild Grass: Three Stories of Change in Modern China*, Pantheon Books, New York.
- Kaufmann, D., A. Kraay and M. Mastruzzi (2005), “Governance Matters IV: Governance Indicators for 1996-2004”, draft, May 2005. World Bank. Washington D.C.

- Krugman, P. (1994). "Competitiveness: A Dangerous Obsession", *Foreign Affairs* 73(2): 28-44.
- Lall, D., M. Albaladejo and M. Mesquita (2004), "Latin American Industrial Competitiveness and the Challenge of Globalization", IDB INTAL-ITD Occasional Paper No. SITI-05, IDB, Washington DC.
- Loayza, N., P. Fajnzylber and C. Calderón (2002), *Economic Growth in Latin America and the Caribbean: Stylized Facts, Explanations, and Forecasts*, World Bank, Washington DC.
- Naughton, B. (2004), "China: Development Strategy and Policy Regime", mimeo, Inter-American Development Bank, Integration and Regional Programs Department, Washington DC.
- Organisation for Economic Co-operation and Development (OECD) (2003), "China: Progress and Reform Challenges", *OECD Investment Policy Reviews*, OECD, Paris.
- Organisation for Economic Co-operation and Development (OECD) (2005), "China", *OECD Economic Surveys*, volume 2005/13, OECD, Paris, September.
- Rodrik, D., A. Subramanian and F. Trebbi (2002), "Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development", mimeo, Harvard University, Cambridge MA.
- Schott, P. K. (2004), "The Relative Revealed Competitiveness of China's Exports to the United States vis-à-vis other Countries in Asia, the Caribbean, Latin America, and the OECD", mimeo, Inter-American Development Bank, Integration and Regional Programs Department, Washington DC.
- The Economist Intelligence Unit (2005), p. 27. The Economist Online "A dragon stirs". Oct 12th 2006.
- United Nations (2002), *World Population Prospects: The 2002 Revision Population Database*, <http://esa.un.org/unpp>.
- Wolf, M. (2003), "The Long March to Prosperity: Why China Can Maintain its Explosive Rate of Growth for Another Two Decades", *Financial Times*, December 9.
- World Bank (2003a), "China: Promoting Growth with Equity." Country Economic Memorandum, Report No. 24169-CHA, World Bank, Washington DC, September 15.
- World Bank (2003b), *World Development Indicators*, World Bank, Washington DC.
- World Bank (various years). *World Development Indicators Database*, World Bank, Washington DC

World Economic Forum (WEF) (2006), *The Global Competitiveness Report 2006-2007*, WEF, Geneva..

Yang, Y. (2003), “China’s Integration into the World Economy: Implications for Developing Countries”, IMF Working Paper WP/03/245, IMF, Washington DC.

Young, A. (2003), “Gold into Base Metals: Productivity Growth in the People’s Republic of China during the Reform Period”, *Journal of Political Economy*, 111(6): 1220-1261.

Endnotes

¹ This chapter is an abridged and updated version of a paper originally published in Spanish by *El Trimestre Económico*, Vol. LXXII (3), núm. 287, July-September 2005, pp. 459-493.

² The author acknowledges the editorial support provided by Juan Camilo Chaparro, Carlos Andrés Gómez-Peña and John Dunn Smith. Valuable comments by Andrea Goldstein, Roger Wilkinson and the members of the Inter-American Development Bank’s (IDB) China Task Force are greatly appreciated.

³ Note that Young’s calculations are for 1978-1998, when annual growth was 9.1 per cent according to official figures. In the opposite direction, however, the results of a national economic census conducted in 2004 indicate that the economy is 16.8 per cent larger than previously reported and that growth rates between 1994 and 2004 were up to 1.5 percentage points higher than the official 9 per cent. See *Oxford Analytica*, “China: Census expands size of economy”, December 22, 2005.

⁴ See Lall *et al.* (2004). Note, however, that according to Young manufacturing is the main source of overestimation of growth.

⁵ Competition for FDI between China and Latin America has been the subject of enquiry of some recent studies. A report by the Inter-American Development Bank (Devlin, et. al. 2006) assessed the evolution of cumulative bilateral FDI flows to Latin America and to China and calculated a coincidence index of the countries of origin of those flows. It concluded that competition appears to be low. A similar conclusion is reached by Chantasawat et. al. (2004). However, García-Herrero and Santabárbara (2005), using econometric techniques, have found that the displacement effect is large and significant since 1995, and especially so for Mexico. Nonetheless, the issue is still open to further debate, as the effects found are implausibly large, probably as a result of the difficulty of adequately controlling for the numerous factors that may influence FDI flows.

⁶ *Oxford Analytica*, “Mexico: Maquiladoras Sector will Increase Activities”, March 29, 2005.

⁷ FDI figures for Latin America come from Cepal (2005) and for China from WDI (2005) and WEO (2006). However, caution must be exercised with FDI data for China, since income flows are affected by round tripping, that is the return as FDI of Chinese capital that has gone abroad to escape foreign exchange controls. It is estimated that between 30 and 50 percent of FDI is round tripping. See Geng (2005).

⁸ For a comparison of factor endowments and export structures in China and Latin America see Schott (2004). For a comparison of transportation costs and their role in export competitiveness see Hummels (2004).

⁹ This ratio would fall to around 42 per cent with the recent revision of the size of the economy mentioned in endnote 3.

¹⁰ For the importance of market size in foreign direct investment, see IDB (2001), Chapter 18.

¹¹ For a technical discussion of this result, see IDB (2001), Chapter 1.

¹² Calculations based on data from The Economist Intelligence Unit and *The Economist* online.

¹³ Broad money supply (M2) grew by 18.7 per cent in 2003, 14.1 per cent in 2004 and 17.9 per cent year-on-year to September 2005. Source: The Economist Intelligence Unit (2005).

¹⁴ Calculation based on statistics from *China Statistical Yearbook 2005*.

¹⁵ National Bureau of Statistics of China, *China Statistical Yearbook*, various years.

¹⁶ For instance, while 67.7 per cent of local residents in a sample of five major cities have access to health insurance, just 12.4 per cent of migrants have it. See OECD (2005), page 52.

¹⁷ According to World Bank (2003b) statistics, the median percentage of rural population in the region was 50.1 per cent in 1980 and 36.5 per cent in 2000.

¹⁸ According to these authors' calculations, Chile is the only country in which productivity contributed to growth in the 1980s and 1990s.

¹⁹ 1.2 percent of GDP in 2004 according to the OECD:

http://www.oecd.org/document/26/0,2340,en_2649_201185_37770522_1_1_1_1,00.htm

²⁰ However, the legal framework for the private sector will probably improve with a new bankruptcy law to be adopted in 2006 that is acknowledged to follow international best practice, and with the likely implementation of the 2004 constitutional amendment that recognised property rights.

²¹ According to Duenwald and Aziz (2003) loans to state companies in the strict sense were 67.6 per cent of GDP in 2000 out of a total equivalent to 124.6 per

cent of GDP in that year.

²² According to "A Survey of China" published by *The Economist*, March 25th, page 13, "UBS, an investment bank, reckons that the non-performing loan stock of the big four and other Chinese banks is now only around 30%, half of its peak in the late 1990s (though that would still make China's one of the worst banking systems in Asia)".

²³ The Economist Intelligence Unit (2005), p. 27. The Economist Online "A dragon stirs". Oct 12th 2006.

²⁴ See *Oxford Analytica*, "China: Capital Injections Reflect Serious Intent," January 12, 2004, and "China: Party Stays in Charge Amid Bank Reform", October 6, 2005.

²⁵ *Oxford Analytica*, "China: Census Expands Size of Economy", December 22, 2005.

²⁶ The other lagging provinces are Guangxi, Guizhou, Hainan, Heilongjiang, Ningxia, Yunnan and Qinghai.

²⁷ http://www.chinadaily.com.cn/english/doc/2005-06/19/content_452636.htm

²⁸ Johnson (2004) provides a vivid recollection of cases of corruption with the tacit consent of the judiciary in local taxation and urban land rights.