

Nunnenkamp, Peter

Research Report

Why economic performance and international competitiveness differ so much between Latin America and Asia

Provided in Cooperation with:

Kiel Institute for the World Economy – Leibniz Center for Research on Global Economic Challenges

Suggested Citation: Nunnenkamp, Peter (2003) : Why economic performance and international competitiveness differ so much between Latin America and Asia, Institut für Weltwirtschaft (IfW), Kiel

This Version is available at:

<https://hdl.handle.net/10419/4320>

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.

November 2003

Why Economic Performance and International Competitiveness Differ So Much between Latin America and Asia

Peter Nunnenkamp

(Kiel Institute for World Economics)

Paper for

Konrad-Adenauer-Foundation in Rio de Janeiro

I. THE GROWTH AND COMPETITIVENESS RECORD OF LATIN AMERICA AND ASIA

After the "lost decade" of the 1980s, Latin America risks falling further behind in the process of economic globalization. For almost all Latin American countries, the gap between their per-capita income (measured in purchasing power parity) and the per-capita income of the United States has widened since 1980. Chile and, to a lesser extent, the Dominican Republic were exceptions and caught up with the United States. In sharp contrast, the large majority of South and East Asian countries narrowed the income gap, some of them quite significantly (e.g., Korea and China).

Latin America also lags considerably behind Asia with regard to the growth-related competitiveness ranking published by the World Economic Forum (2003) for 80 developed and developing countries. With the exception of Chile and Trinidad & Tobago, all Latin American countries rank in the bottom half of the overall sample (Figure 1). Moreover, the lowest step of the competitiveness ladder is crowded with Latin American countries. The competitiveness ranking of some Asian countries falls short of their relatively favorable growth performance in the past. For example, Indonesia and Sri Lanka succeeded to some extent to narrow the income gap to the United States in 1980-2001, while the competitiveness of both countries is rated fairly low. Yet, seven out of 13 Asian countries rank in the upper half of the overall sample; some of them have even made it to the top floor of the ranking.

Figure 1 to be inserted somewhere here

In the following, we address several factors which may help explain the striking differences between Latin America's and Asia's growth performance and competitiveness. Section II raises the proposition that Asia has made more effective use of the driving forces of economic globalization by penetrating world markets and attracting foreign direct investment (FDI). In Section III, we discuss the claim of globalization critics that pursuing economic policies along the lines of the so-called Washington Consensus proved counterproductive in Latin America. Subsequently, we compare the two regions with regard to institutional development (Section IV) and their endowment of complementary factors of production (Section V). These two aspects can reasonably be considered vitally important for benefiting from globalization. Against this backdrop, we conclude by identifying major policy challenges; the focus in Section VI is on the two largest Latin American economies, Brazil and Mexico.

The general approach adopted in the subsequent analysis is to identify competitive strengths and weaknesses for a group of about 20 Latin American economies compared to a reference group of about twelve competitors in South and East Asia. Depending on data availability, the size of both samples varies slightly between the different steps of our analysis.

II. MAKING USE OF GLOBALIZATION: LATIN AMERICA AND ASIA COMPARED

In order to benefit from globalization, developing countries and developed countries alike have to make effective use of the driving forces of this phenomenon. In this section, we focus on international trade and FDI which are frequently regarded as major driving forces of globalization. Accordingly, successful globalizers should have penetrated international goods markets and should have attracted internationally mobile factors of production, notably FDI.

Asia has clearly been more successful than Latin America in making use of international trade opportunities. As a first indication to this effect, Jack Smith, Chairman of General Motors until recently, observed that walking around department stores in developed countries it looks as if everything is made in China (*The Economist* 2003). As a matter of fact, developing countries in Asia accounted for almost one quarter of world trade in manufactured goods in 2001, compared to little more than four percent exported by Latin America (Table 1). Furthermore, according to survey results presented by the World Economic Forum (2003: indicator 10.11), Asian countries are typically serving a broader set of foreign markets than Latin American countries, with Chile representing an exception.

Table 1 — Shares in International Trade and Worldwide Stocks of Foreign Direct Investment: Latin America Compared to Asia, 1980–2002 (percent)

	Trade ^a		FDI stocks	
	Latin America	Asia ^b	Latin America	Asia ^b
1980	1.4	7.8	7.2	5.5
1990	1.6	14.6	6.0	7.1
2002 ^c	4.3	22.6	10.7	12.2
^a Manufactured goods. – ^b Excluding Middle East and developed countries such as Japan; excluding Hong Kong in the case of FDI stocks. – ^c 2001 in the case of trade.				

Source: UN, Monthly Bulletin of Statistics (2002); UNCTAD, World Investment Report (2003).

In contrast to trade, Latin America is not lagging behind Asia in drawing on FDI. Both regions host a similar share in global FDI stocks (Table 1). In recent years, the contribution of FDI inflows to overall capital formation was much higher in Latin America (19 percent in 1997–2002) than in Asia (11 percent; UNCTAD 2003: Annex table B.5). Nevertheless, Latin America appears to have derived less benefits from FDI. The correlation between inward FDI and the growth of per-capita income is loose at best for this region (Nunnenkamp 2003a). The absence of significantly positive growth effects of FDI may be due to several factors:

- In various Latin American host countries, notably in Brazil, FDI traditionally was local-market oriented and concentrated in capital and technology intensive manufacturing industries in which host countries lacked international competitiveness. Nunnenkamp and Spatz (2003) show that the growth effects of market-seeking FDI tend to be smaller than the growth effects of efficiency-seeking FDI.
- Foreign investors operating in protected Latin American markets often had to meet local-content requirements. In other words, the degree of competition through imports was limited for both foreign investors and local input suppliers. The lack of competition had "a demonstrably negative impact on the hosts' prospects for development" (Moran 1999: 45). Recent trade liberalization notwithstanding, the World Economic Forum (2003: indicator 2.11) reveals that the costs of importing foreign equipment are still higher in most Latin American countries than in Asia.
- Survey results also indicate that FDI brings somewhat less new technology to Latin America (World Economic Forum 2003: indicator 3.04).¹ As we will show in Section V below, productivity enhancing spillovers of FDI to local enterprises were constrained further by an insufficient endowment of Latin American host countries with complementary factors of production. The relevant literature, summarized by Kokko (2002), suggests that the extent to which local enterprises benefit from spillovers has an important say on the economic growth effects of FDI.

¹ At the same time, licensing as another means to acquire new technology appears to be more common in Asia than in Latin America (World Economic Forum 2003: indicator 3.05).

- Finally, the empirical study of Agosin and Mayer (2000) shows that FDI has crowded out domestic investment in Latin America, whereas FDI induced additional domestic investment in Asia.

Taken together, the evidence on Latin America's weak integration into international trade and the disappointingly weak effects of FDI in this region invite the question whether the less successful participation in globalization can be attributed to **internal** bottlenecks to higher per-capita income growth and better competitiveness.

III. THE WASHINGTON CONSENSUS: THE WRONG RECIPE FOR LATIN AMERICA?

Globalization critics blame the so-called Washington Consensus for being largely responsible for Latin America's poor growth performance. According to these critics, conventional policy prescriptions, notably macroeconomic stabilization measures as well as deregulation and liberalization programs, utterly failed to deliver what the proponents of the Washington Consensus had promised. In particular, the policy conditions attached to IMF and World Bank financing are said to have added to Latin America's problems, rather than providing (part of) the solution.

Several indicators are considered in the following in order to evaluate the claim that major elements of the Washington Consensus proved counterproductive. Alternatively, we check whether an insufficient implementation of conventional policy prescriptions may account for Latin America's poor growth performance:

- Efforts at macroeconomic stabilization are reflected in the rate of inflation.
- Attempts at reducing the role of the state are captured by the share of government consumption in GDP.
- Import liberalization and stronger world-market orientation are proxied by the shares of imports and exports in GDP.

The development of these indicators over time reveals that Latin America has clearly moved into the direction suggested by the Washington Consensus (Table 2). Sharply declining rates of inflation point to an impressive macroeconomic stabilization record. Reduced government consumption, relative to GDP, indicates that the state played a less important role in most

Latin American economies in recent years. On average, Latin America also has opened up to international trade. Nevertheless, import penetration as well as export orientation remains considerably weaker than in Asia. According to the change in trade shares between 1980–1984 and 1997–2001, Latin America has been less enthusiastic than Asia about world-market integration. This corroborates the survey result, reported in Section II, that the costs of importing foreign equipment continue to be relatively high in Latin America.

Table 2 — Implementation of the Washington Consensus: Selected Indicators for Latin America and Asia^a, 1980-2001

	Latin America		Asia	
	1980–1984 ^b	1997–2001 ^b	1980–1984 ^b	1997–2001 ^b
Inflation (percent)	56.8	10.5	10.9	6.4
Government consumption (percent of GDP)	13.9	12.5	10.4	10.2
Imports (percent of GDP)	27.7	37.5	32.4	46.5
Exports (percent of GDP)	24.7	30.4	27.4	47.8
^a Unweighted average of about 20 Latin American and about 12 Asian countries; sample size varies slightly depending on data availability. – ^b Annual average.				

Source: World Bank, World Development Indicators (2003).

All in all, implementation of the Washington Consensus was not complete, but implementation deficits are unlikely to bear major responsibility for Latin America's relatively poor economic performance. Therefore, we turn to the question whether conventional policy recipes were counterproductive. For several reasons, this claim is not convincing either. First, we ran cross-country correlations between the countries' economic growth performance on the one hand and various policy-related variables, including those listed in Table 2, on the other hand for a larger sample of about 75 developing countries from all regions. The results, reported in more detail in Nunnenkamp (2003b), do not support the view of globalization critics. Some policy-related variables, including the investment ratio and openness to trade, are correlated with growth in a significantly positive way. The correlation turned out to be insignificant for other variables, including the rate of inflation and government consumption. However, none of the variables considered to reflect the spirit of the Washington Consensus went along with lower per-capita income growth across the sample of developing countries.

Second, the comparison between Latin America and Asia underscores these findings. Note that Asia has not only performed better than Latin America in terms of income growth and competitiveness (Section I), but also appears to have adhered more strictly to the stabilization and trade liberalization mantra of Washington-based institutions. All indicators presented in Table 2 are more in line with the Washington Consensus for the reference group of Asian countries than for Latin America. The opposite pattern should have prevailed if conventional policy prescriptions had been counterproductive. Finally, within Latin America, the case of Chile is in serious conflict with the claim of globalization critics. As mentioned in Section I, Chile was the top Latin American performer with respect to per-capita income growth in 1980-2001 and the competitiveness ranking of the World Economic Forum (2003). At the same time, this country is typically regarded as the region's model reformer, having been the frontrunner in implementing conventional stabilization and liberalization measures.

All this is not to ignore the limitations of policy reforms along the lines of the Washington Consensus. Recent research suggests that standard policy recipes have paid insufficient attention to more fundamental bottlenecks to growth and competitiveness. It could, therefore, be argued that the Washington Consensus proved insufficient to push Latin America on a higher growth trajectory. The next sections address two major issues in this regard: the institutional framework in which economic agents operate, and the endowment of complementary local factors of production.

IV. INSTITUTIONAL DEVELOPMENT IN LATIN AMERICA AND ASIA

Recent research has highlighted the vital role institutions play for explaining international differences in per-capita income. For example, Easterly and Levine (2002) reject the view that bad economic policies represent the ultimate cause of underdevelopment and poor economic performance. Rather, economic policies are considered to be the transmission mechanism through which the institutional framework in a country impacts on its economic performance. This provides sufficient reason to raise the question whether Latin America's relatively poor growth and competitiveness record can be attributed to institutional deficiencies.

As large parts of the relevant literature, this section makes use of the data on institutions presented by Kaufmann et al. (2002). Institutional development is portrayed in six dimensions in this source: voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption. The assessments reported below

refer to the years 2000/01, and range from -2.5 to 2.5 , with higher values corresponding to better institutional development. The comparison is between 22 Latin American countries and 15 developing countries in Asia.

According to the average of the six dimensions listed above, institutional development in Latin America (-0.03) is only marginally inferior to institutional development in Asia (0.05). However, governments in Latin America are considered less effective than Asian governments; the average indicator value for the former is -0.23 , compared to 0.13 for the latter. Latin America also lags behind Asia in enforcing the rule of law (-0.32 vs. 0.06) and in controlling corruption (-0.24 vs. -0.05). Institutional deficiencies in the former two dimensions appear to be particularly relevant: A simple correlation exercise revealed that the rule of law and government effectiveness are the two institutional dimensions that were correlated most strongly with income growth across our sample of 37 Latin American and Asian countries. On the other hand, Latin America is ahead of Asia with regard to voice and accountability (0.26 vs. -0.11), but the correlation of this institutional dimension with income growth turned out to be insignificant.

Yet, it remains open to question whether differences in institutional development provide the key to explaining the pronounced differences in terms of growth and competitiveness between Latin America and Asia. Both regions have in common that institutional development varies greatly between individual countries. Measured by the average of the six dimensions, institutional development in Latin America ranges from -1.0 in Haiti to 1.1 in Chile; the variation within the Asian reference group is fairly similar (from -0.8 in Indonesia to 1.6 in Singapore). The observation that, among Latin American countries, institutional development is most advanced in Chile may help explain why this country achieved its favorable growth and competitiveness record. On the whole, however, the correlation between economic growth and the dimensions of institutional development turned out to be less strong than the correlation between growth and other endowment factors, which are discussed next.

V. FACTOR ACCUMULATION AND COMPLEMENTARY FACTORS OF PRODUCTION

The previous sections have shown that neither the policy measures forming the core of the Washington Consensus nor the differences in institutional development provide a fully convincing explanation of Latin America's relatively poor performance in the era of

globalization. Against this backdrop, this section considers a broader set of endowment factors, largely by drawing on survey results of the World Economic Forum (2003).

The evidence on factor accumulation and complementary factors of production, summarized in Table 3, conveys a clear message. In almost all respects, the Asian reference group has outperformed Latin American competitors by a considerable margin. The average share of gross fixed capital formation in GDP was more than four percentage points lower in Latin America. Human capital formation appears to be just marginally inferior in Latin America when looking only at average years of schooling. However, survey results on the quality of schooling and education point to a pronounced competitive disadvantage compared to Asia. Likewise, economic growth in Latin America seems to be constrained by less developed infrastructure.

Table 3 — Factor Accumulation and Complementary Factors of Production: Latin America versus Asia^a

	Latin America	Asia
Gross fixed capital formation (percent of GDP), annual average 1980–2001	20.9	25.1
Average years of schooling, 2000	6.1	6.4
Quality of public schools ^b	2.5	3.8
Quality of math and science education ^b	3.2	4.6
Overall infrastructure quality ^b	3.0	4.2
Financial market sophistication ^b	3.5	4.0
Local supplier quality ^b	3.8	4.5
Company spending on R&D ^b	2.9	3.7
Capacity of companies for innovation ^b	2.7	3.4
Productivity-related wage costs ^b	3.4	4.4
Nature of competitive advantage ^b	3.2	3.5
^a Unweighted average of about 20 Latin American countries and about 13 developing countries in Asia; sample size varies slightly depending on data availability. — ^b Survey results ranging from 1 (poor competitiveness) to 7 (strong competitiveness).		

Source: World Bank (2003); World Economic Forum (2003); Barro and Lee (2000).

Survey respondents consider the principal nature of competitive advantage to be fairly similar in both regions: On average, Latin American countries are just slightly behind in shifting the major sources of competitive advantage in international markets from low production costs and the availability of natural resources to the supply of unique products and the application of unique production processes. Yet, it is in various regards that Latin America is less prepared to participate successfully in globalization (Table 3). First of all, it should be noted that the group of twelve countries ranking at the bottom of the World Economic Forum's survey on productivity adjusted wages comprises ten Latin American countries. Moreover, competitive disadvantages are not restricted to relatively high labor costs. Asia has been more successful in developing internationally competitive suppliers. Asian companies are reported to spend more resources on R&D than their Latin American competitors. It fits into this picture that the latter tend to rely more on licensing or imitating foreign companies to obtain technology, while Asian companies conduct more research and pioneer their own products and processes (see Table 3 on the capacity of companies for innovation).

In summary, it is mainly in terms of local endowments of complementary factors of production that the average Latin American country differs from the average Asian country. Several of these factors are likely to have an important say on whether or not a particular country can participate successfully in globalization. The concluding section will show that competitive strengths and weaknesses differ considerably between major Latin American countries.

VI. COUNTRY-SPECIFIC CHALLENGES: THE CASES OF BRAZIL AND MEXICO

The policy challenges ensuing from fiercer global competition depend on (i) the relevance of the various determinants of economic growth, and (ii) the competitive position of a particular country relative to other countries. The relevance of the growth determinants discussed in the previous sections is assessed, in an admittedly tentative way, by bivariate (rank) correlations

with the growth performance across the sample of Latin American and Asian countries.² Country-specific policy challenges are then derived for Brazil and Mexico which represent the two largest Latin American economies.

The front column of Figure 2 lists the complete set of growth determinants in descending order of relevance. The ranking is remarkable in some respects. According to the underlying correlation exercise, human capital formation promotes growth, but it is mainly the quality of education that matters (rather than average years of schooling). Openness to trade, reflected in the breadth of export markets and the costs of importing equipment, appears to be much more important for growth than openness with regard to FDI, reflected in FDI-related technology transfers and the ratio of FDI inflows to GDP. Furthermore, productivity adjusted wages turn out to be moderately important for growth, while the innovative capacity of local companies and their spending on R&D seem to play an even more decisive role in the middle-income countries which dominate our sample.

Figure 2 to be inserted somewhere here

At the same time, Figure 2 shows that competitive strengths and weaknesses vary considerably between Latin American countries. Brazil and Mexico face different policy challenges, even though they rank closely together in terms of past growth performance³ and overall competitiveness (see Figure 1 above):

- Mexico lacks pronounced competitive strengths in areas which, according to Figure 2, are strongly relevant to growth. This is in striking contrast to Brazil's favorable ranking with regard to innovative capacity of local companies, company spending on R&D, and the quality of local suppliers.

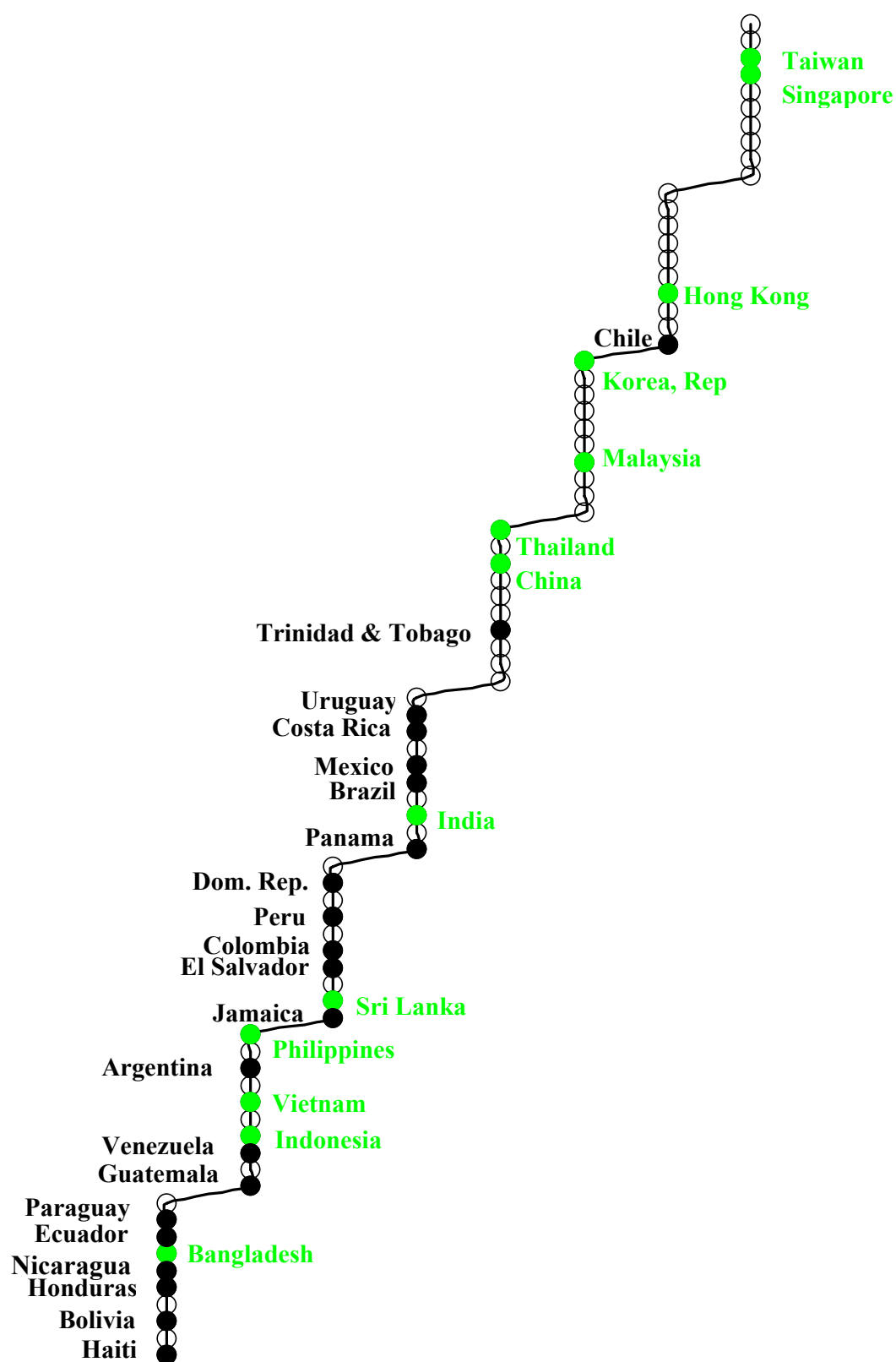
² This simple approach has several limitations. Bivariate correlations may not adequately reflect the **relative** importance of different growth determinants. Due to data constraints, we refer to recent survey data (World Economic Forum 2003) and institutional assessments (Kaufmann et al. 2002). While this is appropriate for assessing current policy challenges, earlier information on these variables would be required for correctly explaining past growth trends. By contrast, the use of concurrent data on growth and macroeconomic conditions, notably inflation, may reveal undistorted correlation results, but exaggerates current competitive disadvantages of Latin American countries with fairly low inflation rates in recent years.

³ For both countries, the per-capita income gap vis-à-vis the United States widened by almost eight percentage points between 1980 and 2001 (World Bank 2003).

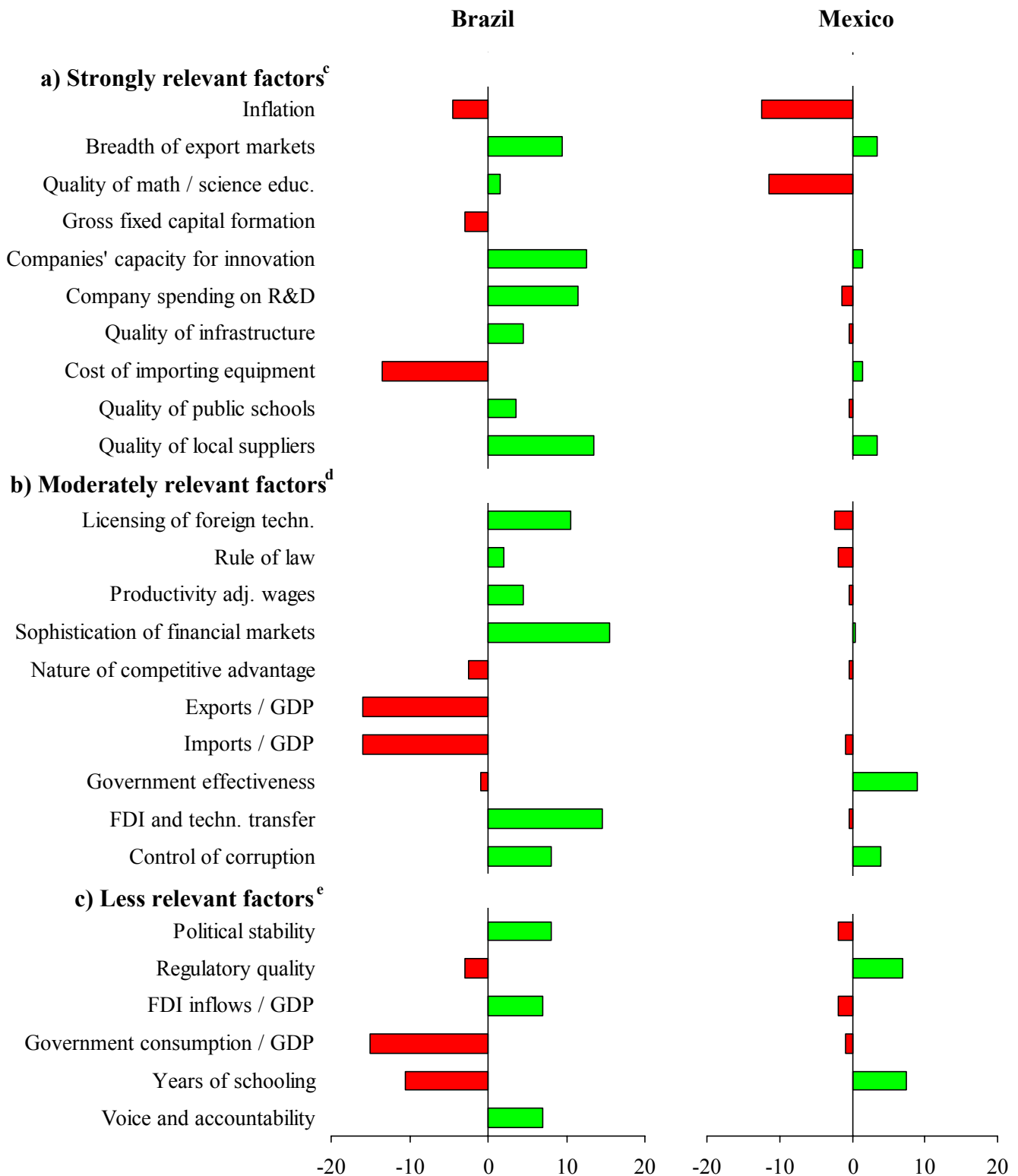
- Likewise, Brazil is better placed than Mexico with regard to other complementary factors of production, including the quality of education and financial market development. The particularly poor quality of math and science education represents a major policy challenge for Mexico.
- On the other hand, Brazil lags considerably behind Mexico when it comes to openness to trade. This is even though Brazil serves a broader set of export markets, while Mexico's exports are extremely concentrated on the US market. For Brazil to become more closely integrated into international production networks, it would have to tackle particularly high costs of importing equipment.
- Finally, Brazil is reported to draw more heavily on internationally available technologies through licensing and FDI. As noted earlier, however, especially the ratio of FDI inflows to GDP may be less relevant to economic growth than widely assumed.

In summary, more research is required to assess the relative importance of the various determinants of economic growth and international competitiveness. Hence, policy conclusions remain tentative at this stage. Yet, the above discussion may help approach the question of how to improve the competitive position of Latin American countries in the era of globalization. It turns out that policy challenges go far beyond the prescriptions of the so-called Washington Consensus. Most pressing needs for reform tend to differ from country to country, and should be identified on the basis of a detailed account of competitive strengths and weaknesses. In this context, the endowment of complementary factors of production, ranging from the quality of schooling and education to the innovative capacity of local companies, deserves particular attention.

Figure1 — Growth Competitiveness Index Ranking 2002: Latin America versus Asia



Source: World Economic Forum (2003).

Figure 2 — Growth Factors^a: Competitive Strengths and Weaknesses of Brazil and Mexico^b

^aGrowth factors listed in descending order of relevance, as given by the (absolute) size of the coefficient of correlation with the growth performance of 31-34 sample countries in 1980-2001.— ^bDifference between Brazil's and Mexico's rank position and the median of the sample, with negative difference (red bars) indicating competitive disadvantages.— ^cCoefficient of correlation > 0.5— ^dCoefficient of correlation > 0.25, but < 0.5.— ^eCoefficient of correlation < 0.25.

Source: WEF (2003); World Bank (WDI 2003); Kaufmann et al (2002); Barro and Lee (2000).

REFERENCES

- Agosin, M.R., and R. Mayer (2000). Foreign Investment in Developing Countries: Does it Crowd in Domestic Investment? UNCTAD Discussion Paper No. 146, Geneva.
- Barro, R.J., and J.-W. Lee (2002). International Data on Educational Attainment. <http://www.worldbank.org/research/growth/ddbarle2.htm>
- Easterly, W., and R. Levine (2002). Tropics, Germs, and Crops: How Endowments Influence Economic Development. National Bureau of Economic Research, NBER Working Papers 9106. Cambridge, MA.
- Kaufmann, D., A. Kraay, and P. Zoido-Lobaton (2002). Governance Matters, II: Updated Indicators for 2001–02. World Bank, Washington, D.C. (<http://www.worldbank.org/wbi/governance/govdata2001.htm>).
- Kokko, A. (2002). Globalisation and FDI Incentives. Paper presented at the World Bank ABCDE Conference in Oslo, forthcoming in conference volume.
- Moran, T.H. (1999). Foreign Direct Investment and Development: A Reassessment of the Evidence and Policy Implications. In: OECD, *Foreign Direct Investment, Development and Corporate Responsibility*. Paris (OECD).
- Nunnenkamp, P. (2003a). Ausländische Direktinvestitionen in Lateinamerika: Enttäuschte Hoffnungen trotz attraktiver Standortbedingungen? *Lateinamerika Analysen* 5: 25–60.
- Nunnenkamp, P. (2003b). Wachstumsdivergenz zwischen Entwicklungsländern: Hat die Entwicklungsökonomie versagt? *Zeitschrift für Wirtschaftspolitik* 52 (2): 227–253.
- Nunnenkamp, P., and J. Spatz (2003). Foreign Direct Investment and Economic Growth in Developing Countries: How Relevant Are Host-country and Industry Characteristics? Institute for World Economics, Kiel Working Papers 1176, Kiel.
- The Economist* (2003). The Misery of Manufacturing. September 25, 2003.
- UN (2002). Monthly Bulletin of Statistics. New York (United Nations).
- UNCTAD (2003). World Investment Report. New York (United Nations).
- World Bank (2003). World Development Indicators, CD-RoM 2003. Washington, D.C.
- World Economic Forum (2003). The Global Competitiveness Report 2002–2003. New York (Oxford University Press).