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Why economic growth trends differ so much across developing countries: the globalization debate and its relevance to Pakistan

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Kiel Working Paper No. 1091

**Why Economic Growth Trends Differ So
Much Across Developing Countries**

**The Globalization Debate and Its Relevance to
Pakistan**

by

Peter Nunnenkamp

January 2002

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Why Economic Growth Trends Differ So Much Across Developing Countries

The Globalization Debate and Its Relevance to Pakistan

Abstract

The claim of globalization critics that the income gap to industrial countries is bound to widen for essentially all developing countries as a consequence of economic globalization is in conflict with empirical evidence. Economic performance differs tremendously across developing countries. We discuss several factors such as capital accumulation, openness to trade and foreign indebtedness which may explain the varying experience with globalization in regard to per capita income growth and income distribution. Economic restructuring is shown to represent an important – though frequently neglected – link between globalization and country-specific performance. We conclude that national policymakers continue to have effective leverage to promote economic catching-up and poverty alleviation in the countries they govern.

Keywords: economic growth, income inequality, economic restructuring, openness to trade, globalization critics

JEL classification: O10, O57

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I. INTRODUCTION

Listening to globalization critics, it appears that essentially all countries are fighting a losing battle in dealing with economic globalization. Globalization is blamed for having caused unemployment, wage pressure and social erosion in industrial countries. More specifically, the integration of developing and newly industrializing countries into the global division of labor is said to result in significant labor market pressure in industrial countries. At the same time, many developing countries are supposed to be left on the sidelines when it comes to participating in globalization. The few winners of globalization seem to have gone after various emerging markets were hit by severe financial crises since the mid-1990s.

Obviously, globalization critics do not care much about consistency in their reasoning. How to attribute labor market problems in industrial countries to the emergence of new competitors with lower per-capita income, if most developing countries remained outsiders and if international income diversity widened across the board? The solution to this "puzzle", suggested in this paper, is that easy generalizations are inappropriate for assessing the consequences of globalization. Economic performance differs tremendously, both within the group of industrial countries and within the

group of developing and emerging economies, even though the globalizing environment was very much the same for all countries.

The relevant question therefore is to identify the factors behind the varying experience with globalization.¹ According to our basic proposition, economic restructuring represents the crucial – and often neglected – link between globalization and country-specific performance. As a corollary of this proposition, we reject the widely held belief that globalization renders national policymakers powerless. National policymakers continue to have effective leverage to promote a process of economic catching up and poverty alleviation in the countries they govern.

II. INTEGRATION OF DEVELOPING COUNTRIES INTO THE GLOBAL DIVISION OF LABOR: SOME STYLIZED FACTS

The generalized claim of globalization critics that developing countries are left on the sidelines is in serious conflict with patterns of international trade and foreign direct investment (FDI), which represent the two major driving forces of globalization. It is true, however, that various groups of

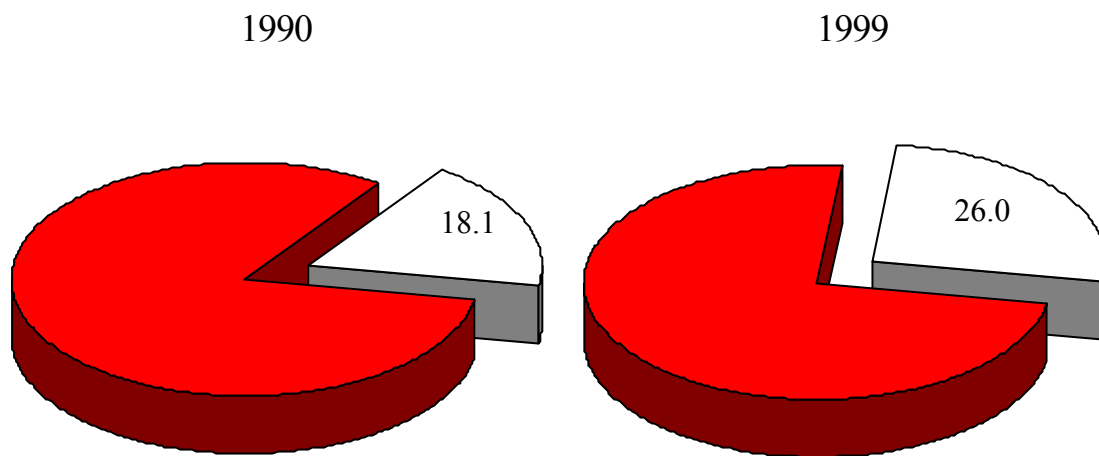
¹ The performance of industrial countries in the era of globalization is not discussed in any detail in this paper; see Gundlach and Nunnenkamp (1997) on this issue.

developing countries participated in globalization to a strikingly different degree.

All non-OECD countries taken together succeeded in increasingly penetrating the markets for manufactured goods in industrial countries. During the 1990s, developing countries increased their market share in OECD countries from 18 percent to 26 percent (Figure 1). Asian developing countries further strengthened their market position, and supplied about two thirds of OECD imports of manufactured goods from all developing countries in 1999 (Figure 2). This development is particularly striking, as various protectionist measures (notably non-tariff measures) of industrial countries targeted Asian competitors in the first place.

By contrast, suppliers from Africa were granted trade preferences, e.g. in the context of the EU's agreement with ACP countries. Nonetheless, Africa suffered persistent marginalization in OECD markets for manufactured goods. This contrast suggests that local supply conditions were more important than discriminatory trade policies of OECD countries for shaping the developing countries' participation in world trade.

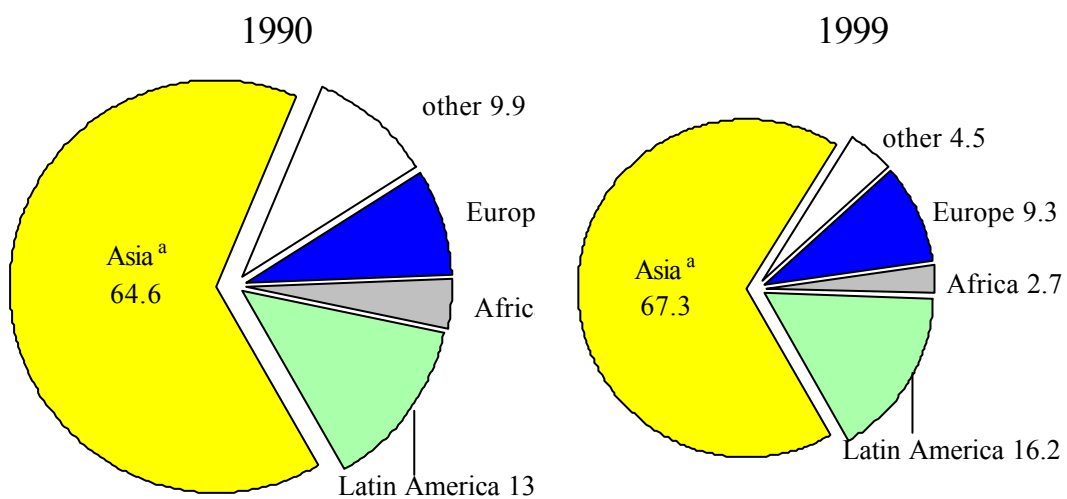
Figure 1 — Share of Non-OECD Countries^a in OECD Imports of Manufactured Goods (percent)



^aIncluding Mexico, South Korea, Hungary and Poland.

Source: OECD (2001).

Figure 2 — OECD Imports of Manufactured Goods from Developing Countries by Region (percent)



^aExcluding Middle East.

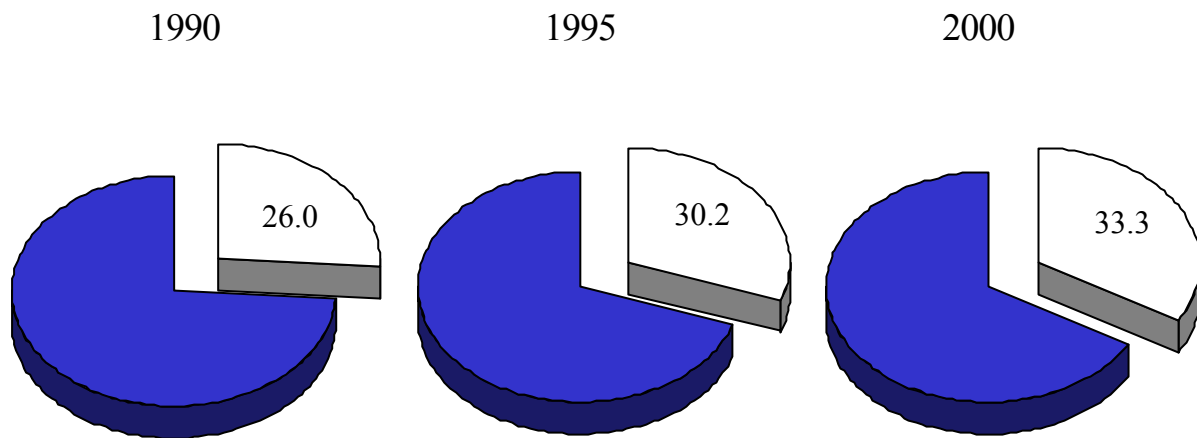
Source: OECD (2001).

The picture is similar with regard to FDI. All developing countries hosted one third of worldwide FDI stocks in 2000, a rise of more than seven percentage points within a decade (Figure 3). However, booming FDI did not benefit all developing countries alike (Figure 4):²

- The recent financial crisis notwithstanding, Asia remained the most attractive host region for foreign direct investors.
- The rising share of Central and Eastern Europe in worldwide FDI flows is obviously related to the demise of socialist regimes in this region, the opening up towards world markets and the prospect of accession to the EU.
- Latin American countries were concerned that the emergence of Central and Eastern Europe as a new competitor for FDI would result in FDI diversion at their expense. The evidence suggests otherwise. The observation that Latin America regained attractiveness to FDI in the course of the 1990s supports the view that new investment opportunities give rise to *additional* FDI, rather than resulting in FDI diversion.

² For a more detailed evaluation, see Nunnenkamp (2001a).

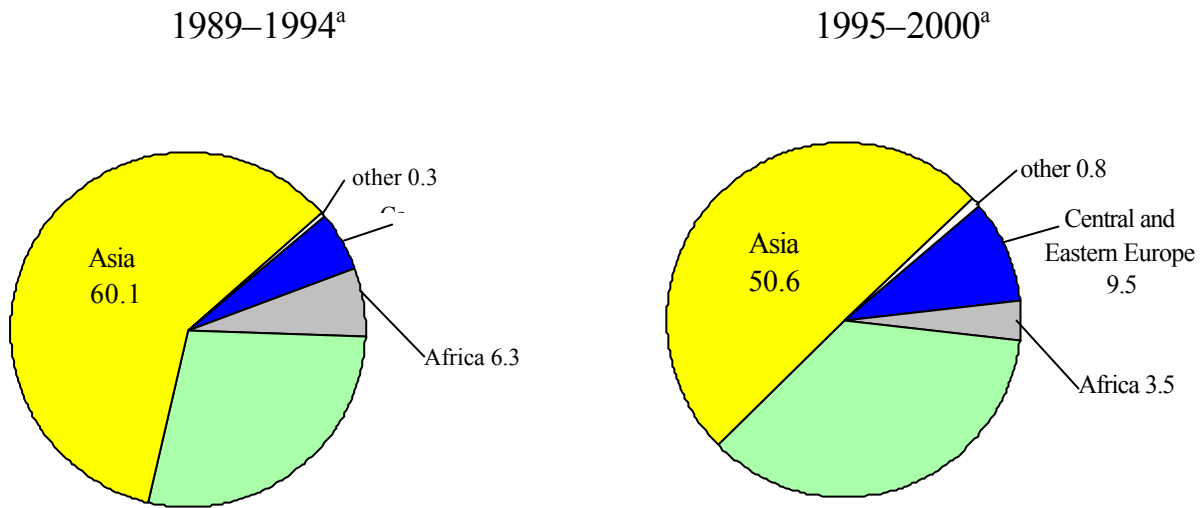
Figure 3 — Share of All Developing Countries^a in Worldwide FDI Stocks, 1990–2000 (percent)



^aIncluding Central and Eastern Europe

Source: UNCTAD (2001).

Figure 4 — Regional Distribution of FDI Flows to Developing Countries (percent)



^aPeriod average

Source: UNCTAD (2001).

- As in trade, Africa's share in global FDI continued to decline, even though average annual FDI flows to Africa almost doubled when comparing 1989–94 and 1995–2000.

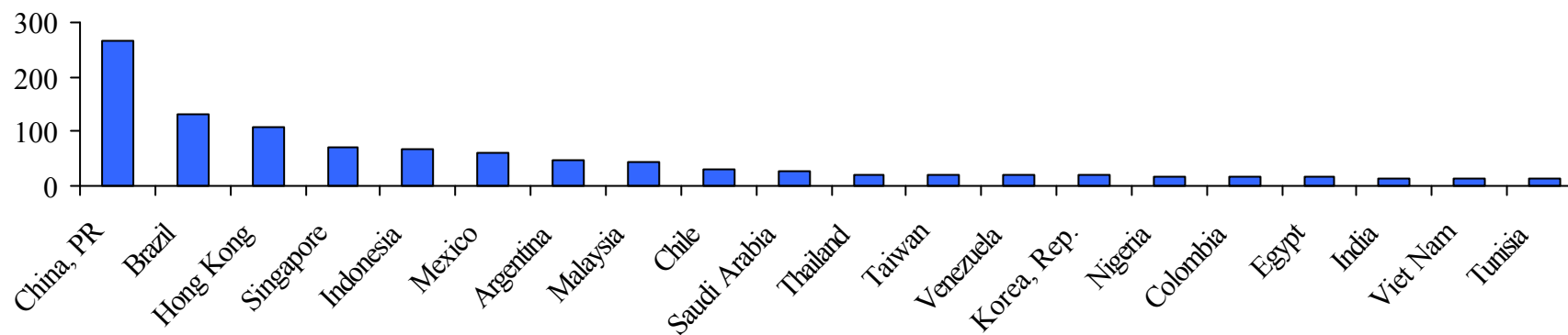
A widely perceived problem with FDI in developing countries concerns its high concentration in a few large and fairly advanced developing economies (e.g. UNCTAD 1995; Collins 1998). This notion seems to imply that most developing countries do not have reasonable chances to attract FDI. However, this concern is largely unjustified as it is based on the distribution of FDI in absolute terms.

The upper panel of Figure 5 lists the 20 top performers among developing countries, measured by inward FDI stocks in 1998.³ This rather small group indeed accounted for more than 80 percent of inward FDI stocks in all developing countries. It is also true that the group of top performers in absolute terms mainly consists of either large countries such as China, Brazil, Indonesia, Mexico and Argentina, or economies with fairly high per-capita income such as Hong Kong and Singapore. This ranking provides a distorted picture on developing countries' attractiveness to FDI.

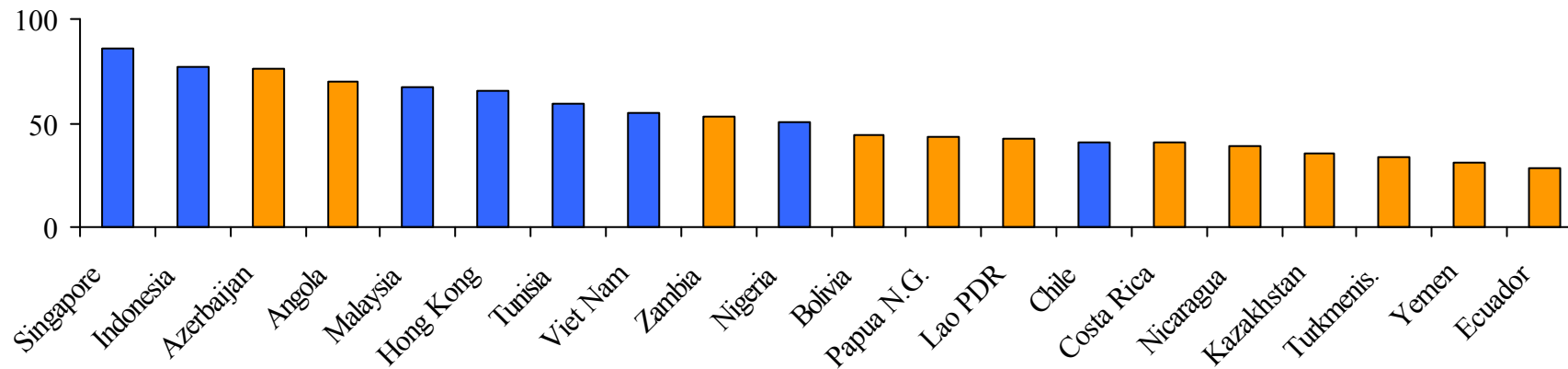
³ In 1998, Pakistan hosted US\$ 9.2 billion of FDI stocks and ranked 22nd.

Figure 5 — Inward FDI Stocks: Top 20 Developing Countries^a, 1998

US-\$ billion



percent of GDP^b



^aExcluding Caribbean financial centers. – ^bExcluding developing countries with a population of 3 million and less.

Source: UNCTAD (2000).

Inward FDI stocks have to be considered in relative terms, in order to avoid a large-country bias and assess locational attractiveness appropriately.

The lower panel of Figure 5 relates inward FDI stocks to the host countries' GDP.⁴ Caribbean tax havens and developing countries with a population of less than three million are excluded from this ranking; both groups include economies with extremely high FDI/GDP ratios, which may be due to a few FDI projects in the case of very small countries. Even though the sample is reduced in this way, the ranking changes significantly when inward FDI stocks are considered in relative terms.⁵ Just eight of the 20 top performers in absolute terms are also among the 20 top performers in relative terms (see the shaded bars in Figure 5). Moreover, the distribution of inward FDI in relative terms is considerably less uneven than the distribution of absolute stocks. In conclusion, there is little justification for the pessimistic view, according to which just a few developing countries can draw on FDI.

⁴ By this measure, Pakistan (14.4 percent) was significantly less attractive than Yemen and Ecuador (28–30 percent) which represented the tail of the top 20.

⁵ FDI is largely resource-based in several smaller and less advanced countries with high FDI/GDP ratios (e.g., in Azerbaijan, Angola and Zambia). Nevertheless, a fairly heterogeneous set of smaller and less advanced countries proved attractive to FDI in relative terms; for details, see Nunnenkamp (2001a: 6 ff.) and the literature given there.

III. CATCHING UP AND FALLING BACK

Penetrating OECD markets and attracting FDI are not ends in themselves. Rather, the integration of developing countries into global trade and investment patterns should be considered a means to spur economic growth. Exports generate revenues which may be used to finance urgently needed imports of capital goods. These, in turn, tend to increase labor productivity and offer income gains. FDI inflows do not only allow for higher investment, but may also provide access to internationally available technologies and management know-how.

It is here that globalization critics seem to have an important point. They are right in stressing that developing countries which suffered a widening income gap to industrial countries outnumber developing countries which narrowed the income gap. However, globalization critics are wrong when they conclude from this pattern that the just mentioned transmission mechanisms utterly failed to deliver income gains and that developing countries cannot escape falling back in the era of globalization.

In the following, we consider the change in per-capita income (purchasing power parity) of developing countries in 1980–2000, relative to the per-capita income of the United States, to indicate longer-term processes of catching up and falling back. Countries with bars above (below) the

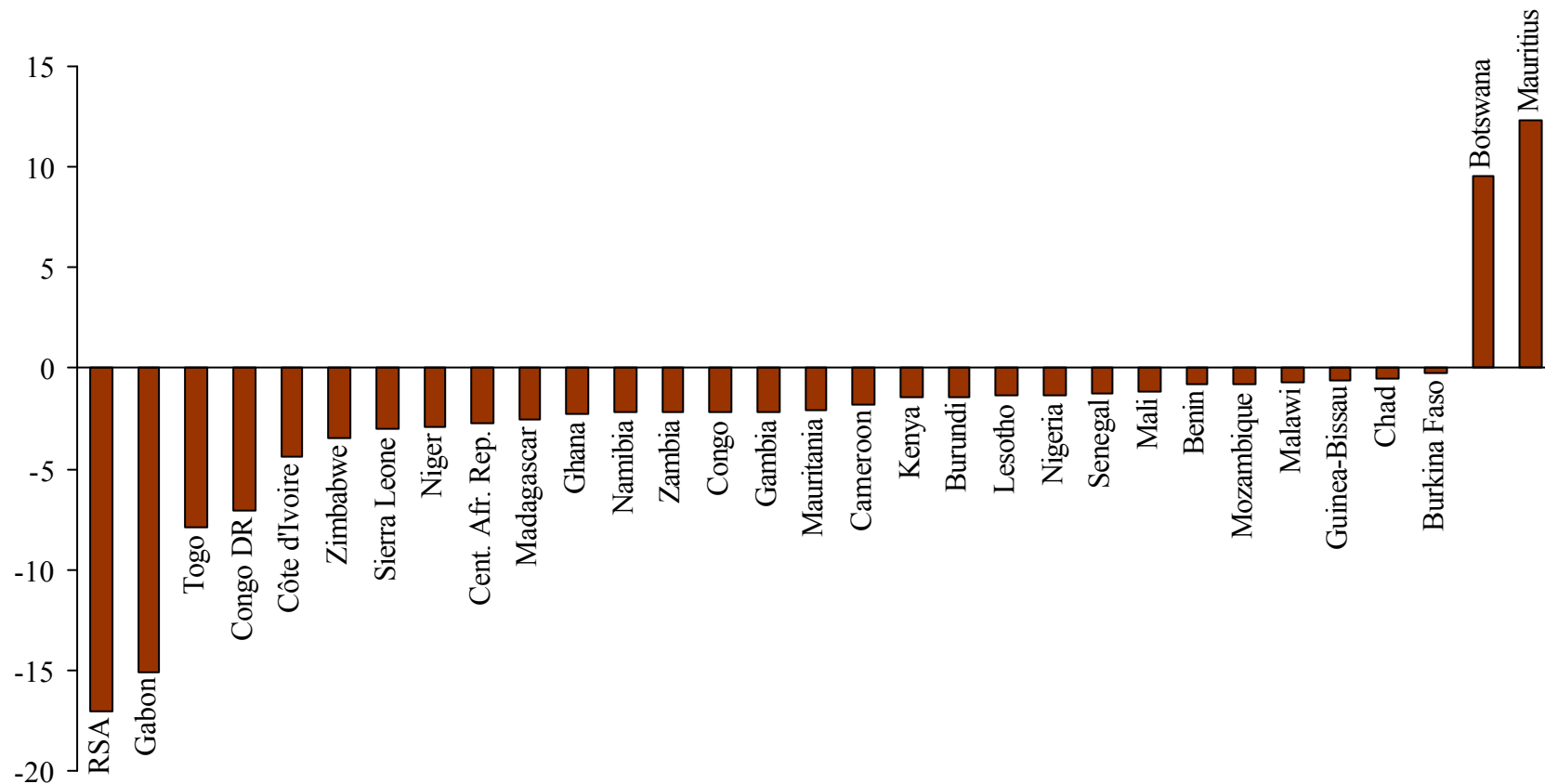
horizontal axis in Figures 6–8 experienced higher (lower) income growth than the benchmark of industrial countries represented by the United States. The balance of catching up versus falling back is most heavily tilted to the latter in Africa, where just two out of 31 countries narrowed the income gap to the United States (Figure 6). Figure 7 reveals a similarly depressing picture for Latin America. In contrast to Africa, however, much depends on the period of observation in the case of Latin America.⁶

A strikingly different picture is provided by Asia (Figure 8). In this region, almost all sample countries have caught up economically. While relative income gains remained small in South Asian economies, including Pakistan, some East and Southeast Asian economies reported substantial gains in relative income.

The claim of globalization critics that increasing world-market integration went along with widening income disparities between countries refers to the larger number of developing economies that failed to catch up with industrial countries. By contrast, the World Bank (2002: 1 f.) argues: "Between countries, globalization is now mostly reducing inequality." This

⁶ One in two Latin American countries outperformed the United States in terms of per-capita income growth in 1987–1995, when economic policy reforms gathered momentum in this region (Nunnenkamp 1998a).

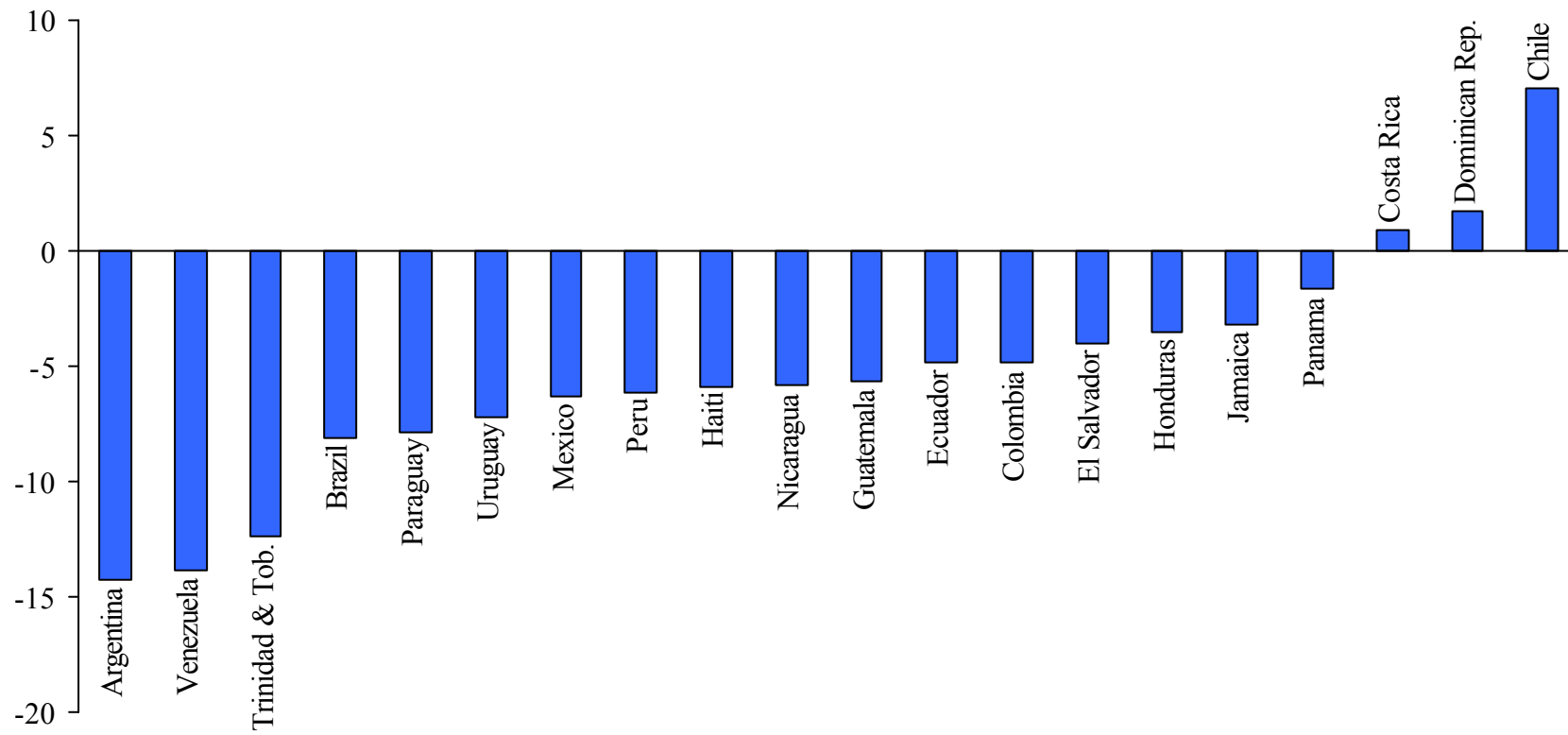
Figure 6 — Africa: Catching Up and Falling Back^a, 1980–2000



^aChange in per-capita income (PPP), relative to the United States, in 1980-2000 (percentage points).

Source: World Bank (a).

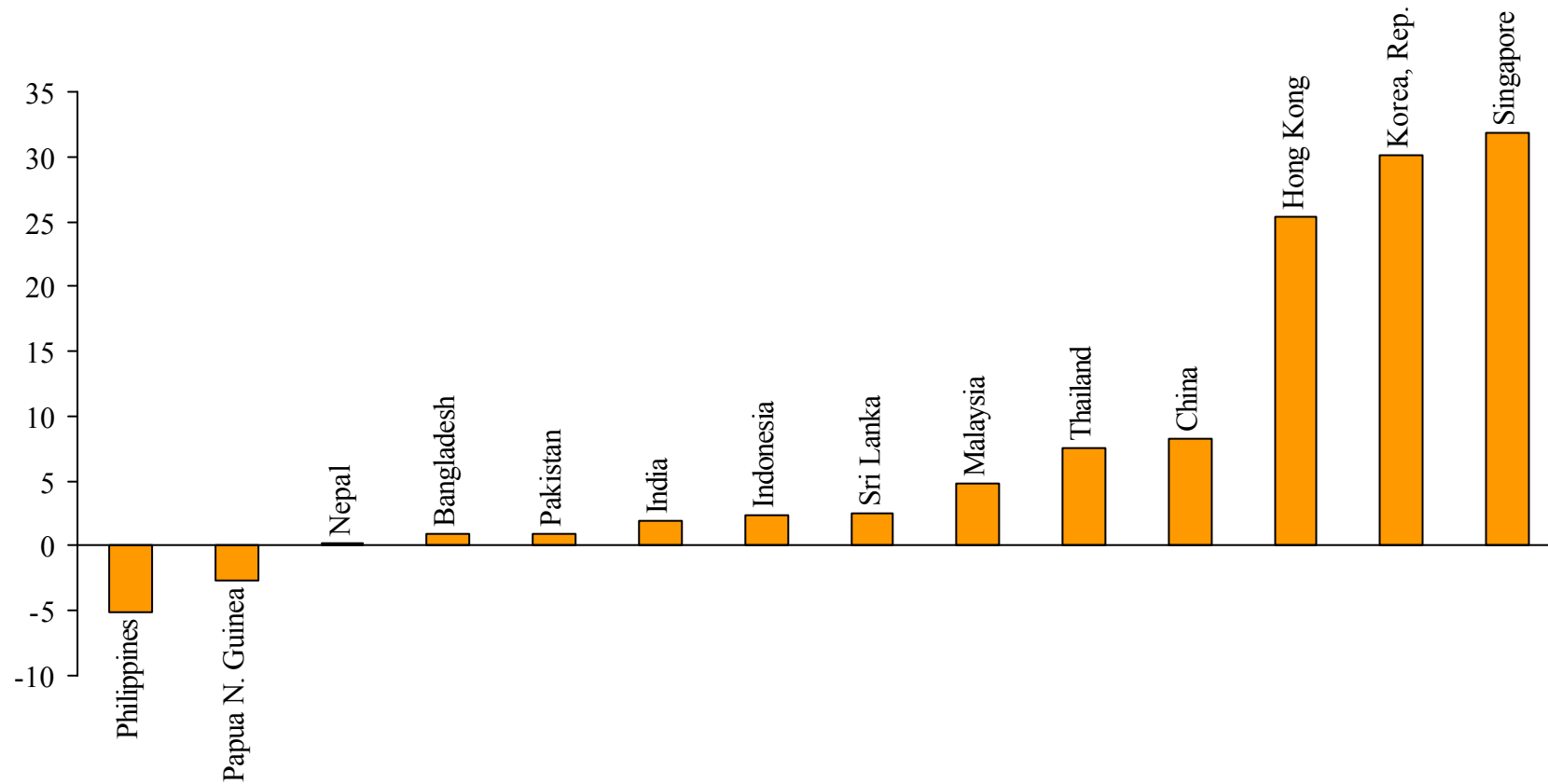
Figure 7 — Latin America: Catching Up and Falling Back^a, 1980–2000



^aChange in per-capita income (PPP), relative to the United States, in 1980-2000 (percentage points).

Source: World Bank (a).

Figure 8 — Asia: Catching Up and Falling Back^a, 1980–2000



^aChange in per-capita income (PPP), relative to the United States, in 1980-2000 (percentage points).

Source: World Bank (a).

conclusion holds once the number of people living in weak and strong growth performers among developing countries is taken into account.⁷ Furthermore, globalization critics tend to ignore that it is one thing to list the large number of countries falling back, and a completely different thing to argue that these countries were bound to fall back because of globalization.

In an earlier paper, we ran some simple correlations in order to get a clue of factors that may explain the vastly different growth performance across developing countries.⁸ Table 1 summarizes relevant findings:

- First, economic growth was correlated with restructuring of employment and production. For example, higher growth was achieved where the employment share of agriculture declined more significantly.⁹ The correlation becomes even stronger when the change in the employment share of agriculture in 1980–1990 is correlated with the change in per-

⁷ According to World Bank (2002), about 3 billion people live in "new globalizing" developing countries, reporting a considerably higher per-capita income growth than industrial countries in the 1990s. On the other hand, developing countries with about 2 billion people have been left out of the process of globalization.

⁸ For data sources and a detailed discussion of results, see Nunnenkamp (1998b).

⁹ Note that this correlation turned out to be significant despite growth-reducing effects resulting from distortionary government policies. In various developing countries, scarce resources were misallocated by (implicit) taxation of agriculture and the corresponding subsidization of industry (World Bank 1986: chapter 4).

capita income since 1987 (instead of 1980). This suggests that restructuring employment was a cause, rather than a consequence of higher income growth.

Table 1 — Income Developments, Economic Restructuring and Economic Policy: Cross-country Correlations^a

Correlation with:	Change in per-capita income, relative to the US, 1980-1995
Change in employment share of agriculture, 1980-1990	-0.52* (74)
Change in the share of manufactured exports in total exports, 1980-1995	0.35* (35)
Index of export concentration, 1980	-0.33* (70)
Average share of investment in GDP, 1980-1995	0.55* (57)
Average years of schooling, 1990	0.43* (62)
Change in the share of imports in GDP, 1993-1995 vis-à-vis 1980-1982	0.32* (65)
Growth of imports of capital goods, 1980-1994	0.74* (38)
Growth of stocks of foreign direct investment, 1985-1990	0.50* (68)
aNumber of observations in brackets. – * significant at 5 percent level.	

Source: Nunnenkamp (1998b)

- Second, an increasing share of manufactured exports in total exports and a more diversified export structure went along with higher income growth. Additional calculations (in which the income variable was lagged) revealed that the restructuring of exports preceded, rather than followed catching up.
- Third, growth trends are significantly correlated with factor accumulation, i.e. variables which national policymakers can influence in order to promote economic restructuring and an increase in productivity. The more resources were devoted to investment, the higher was per-capita income growth. This applied not only to fixed capital formation but also to human capital formation, proxied by average years of schooling in Table 1. The latter result is in line with findings of Barro (1991) and Mankiw et al (1992), according to which differences in human capital formation explain a significant part of cross-country differences in per-capita income.
- Finally, the correlations support the view that catching up is easier when countries open up towards the world economy (Sachs and Warner 1995). All three indicators of openness considered in Table 1 are

correlated positively with income growth.¹⁰ In particular, the calculations underline the relevance of capital goods imports and FDI for achieving income gains by drawing on internationally available technologies.

In summary, the correlations support our basic proposition that economic restructuring as well as policies encouraging factor accumulation and openness to trade and FDI help developing countries narrow the income gap to industrial countries.

IV. ECONOMIC GROWTH, FACTOR ACCUMULATION AND OPENNESS: HOW PAKISTAN COMPARES WITH OTHER EMERGING MARKETS

In this section, we reconsider the empirical nexus between factor accumulation, openness and economic growth for a smaller sample of 18 emerging economies in Asia, Latin America and Central Europe; the period of observation for changes in per-capita income, relative to the United

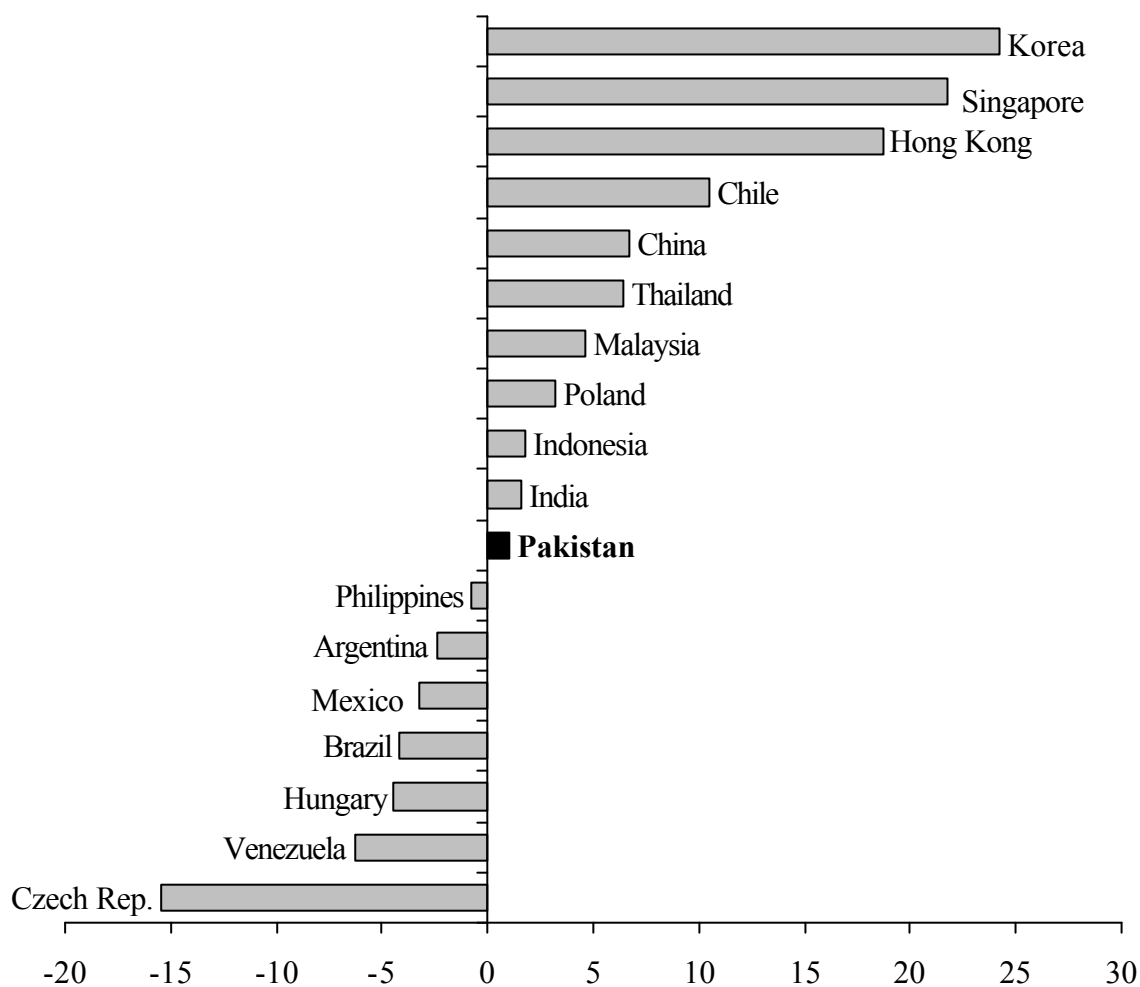
¹⁰ One must obviously be careful about drawing conclusions on causality. However, as Peter Lindert and Jeffrey Williamson note with reference to the trade-growth link, "the doubts that one can retain about each individual study threaten to block our view of the overall forest of evidence. Even though no one study can establish that openness to trade has unambiguously helped the representative Third World economy, the preponderance of evidence supports this conclusion." (quoted as in World Bank 2002: 5).

States, is 1985–2000. The reason is that various emerging economies have been hit by financial crises since the 1990s. These countries are frequently labelled the latest victims of globalization, a conclusion which is shown to be mistaken. Pakistan is included in our sample, whenever comparable data are available, in order to provide a clue of some policy challenges facing this country. Even though Pakistan was not seriously affected by the East Asian crisis, it had to reschedule its foreign debt owed to the Paris Club and private bondholders in 1999.

Growth trends differed tremendously across emerging markets (Figure 9). While per-capita incomes in some Latin American and Central European countries¹¹ declined considerably relative to per-capita income in the United States, some Asian economies narrowed the income gap by about 20 percentage points. Catching up was less impressive in Thailand, Malaysia and Indonesia than in Korea. Yet the ranking in Figure 9 is clearly at odds with the claim that financial crises in these four Asian economies have nullified previous gains from globalization.

¹¹ The extremely poor performance of the Czech Republic, especially compared to Poland, is due to two factors. According to World Bank data on per-capita GNP (in purchasing power parity), the former Czechoslovakia suffered a much more serious transition crisis than Poland in the early 1990s. Furthermore, per-capita GNP declined in the Czech Republic in the late 1990s.

Figure 9 — Emerging Markets: Catching Up and Falling Back^a, 1985–2000



^aChange in per-capita income (PPP), relative to the United States, in 1985–2000 (percentage points).

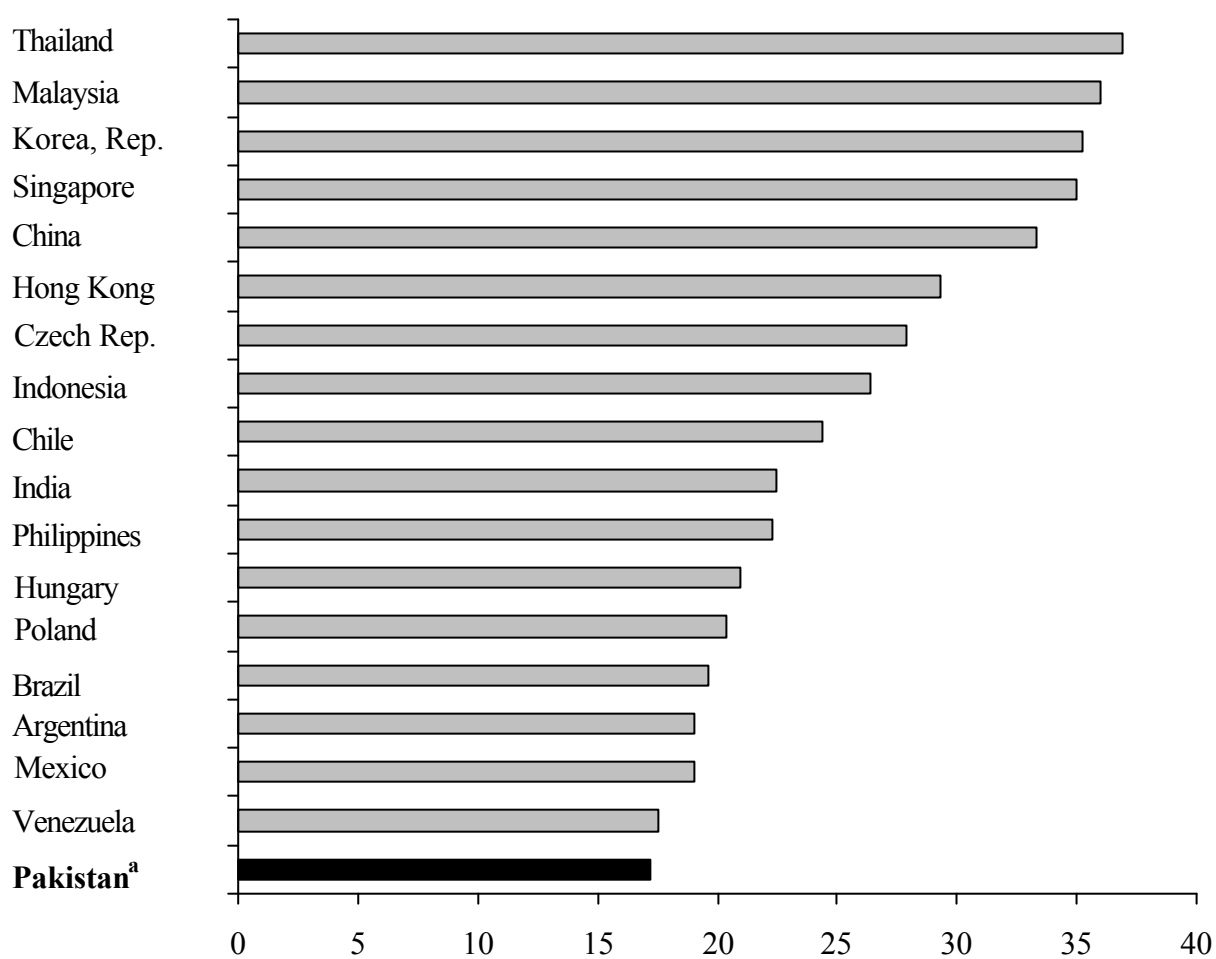
Source: World Bank (a).

As mentioned before, Pakistan's growth performance was rather poor, particularly by Asian standards. The subsequent evidence does not provide a comprehensive explanation; yet it indicates major policy challenges facing Pakistan:

- In the 1990s, Pakistan reported the lowest investment ratio among the 18 sample countries (Figure 10). This is most likely to have hindered catching up. Plotting annual average investment ratios against the change in per-capita income of our sample countries, Figure 11 reveals a clearly positive correlation. The coefficient of the investment variable is significant at the 1 percent level.
- Strictly comparable data on average years of schooling (Figure 12) are not available for Pakistan. Other proxies of human capital formation indicate, however, that Pakistan was far down the list in this regard, too.¹² Taking the correlation results of Figure 13 on schooling and

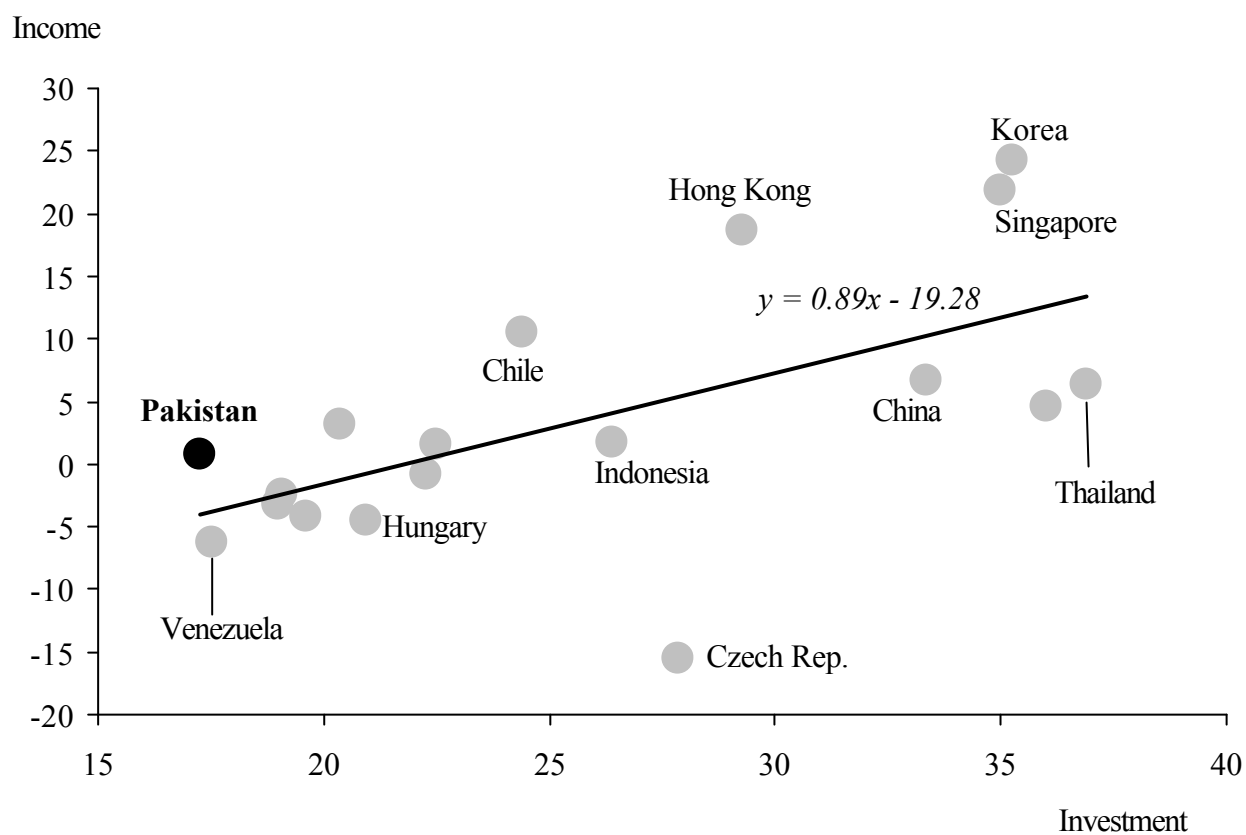
¹² For example, public spending on education amounted to 2.8 percent of GNP in Pakistan in 1995. Among the 18 countries under consideration, only Indonesia and China reported a lower share (1.4 and 2.3 percent, respectively); the sample average was 3.7 percent. Moreover, Pakistan ranked at the bottom by a wide margin with regard to secondary school enrollment (23 percent in 1990, compared to a sample average of 60 percent). All data are from World Bank (a).

Figure 10 — Gross Fixed Investment, percent of GDP (period average 1990–1999)



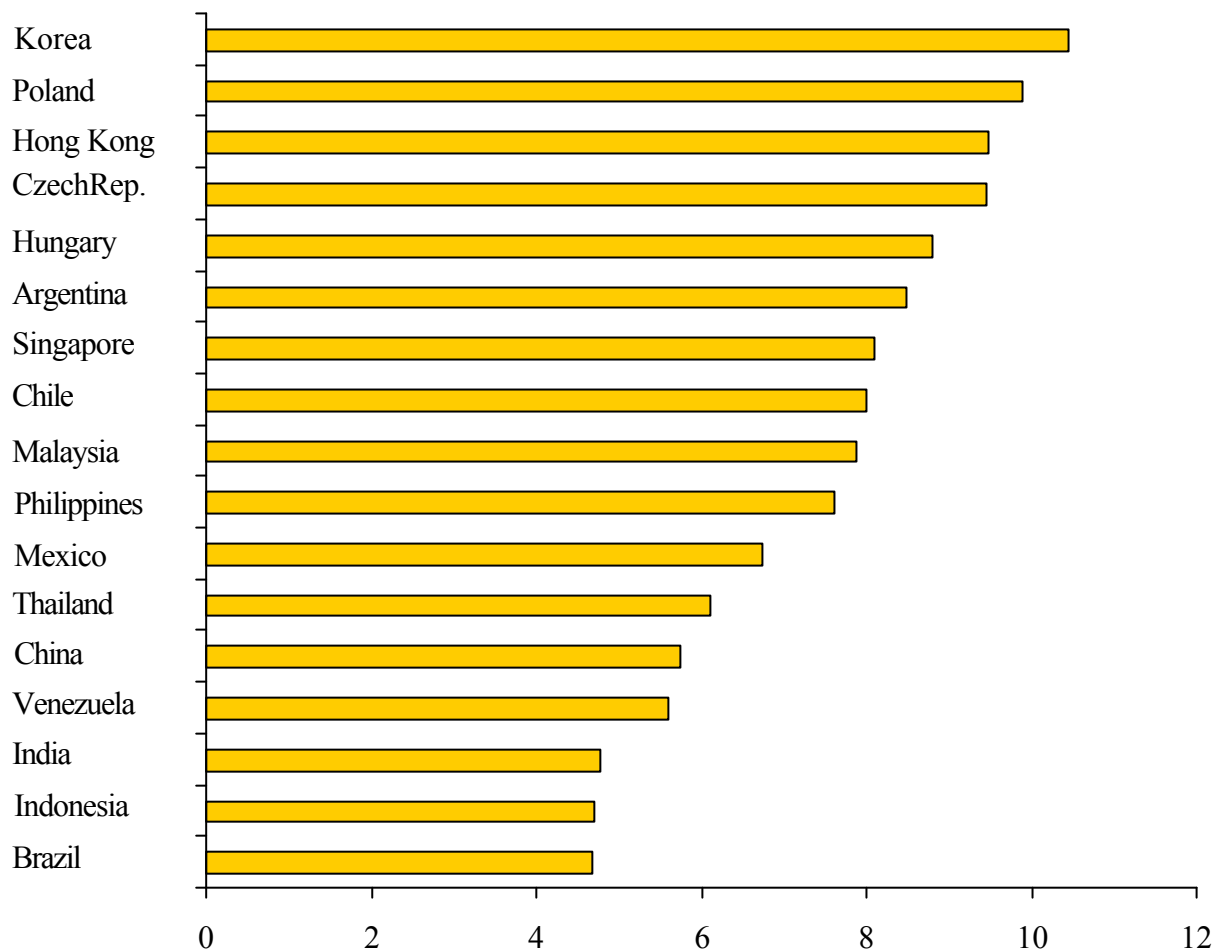
a1990-1998.

Source: World Bank (a); World Economic Forum (2000; for 1999).

Figure 11 — Per-capita Income Growth^a and Investment^b

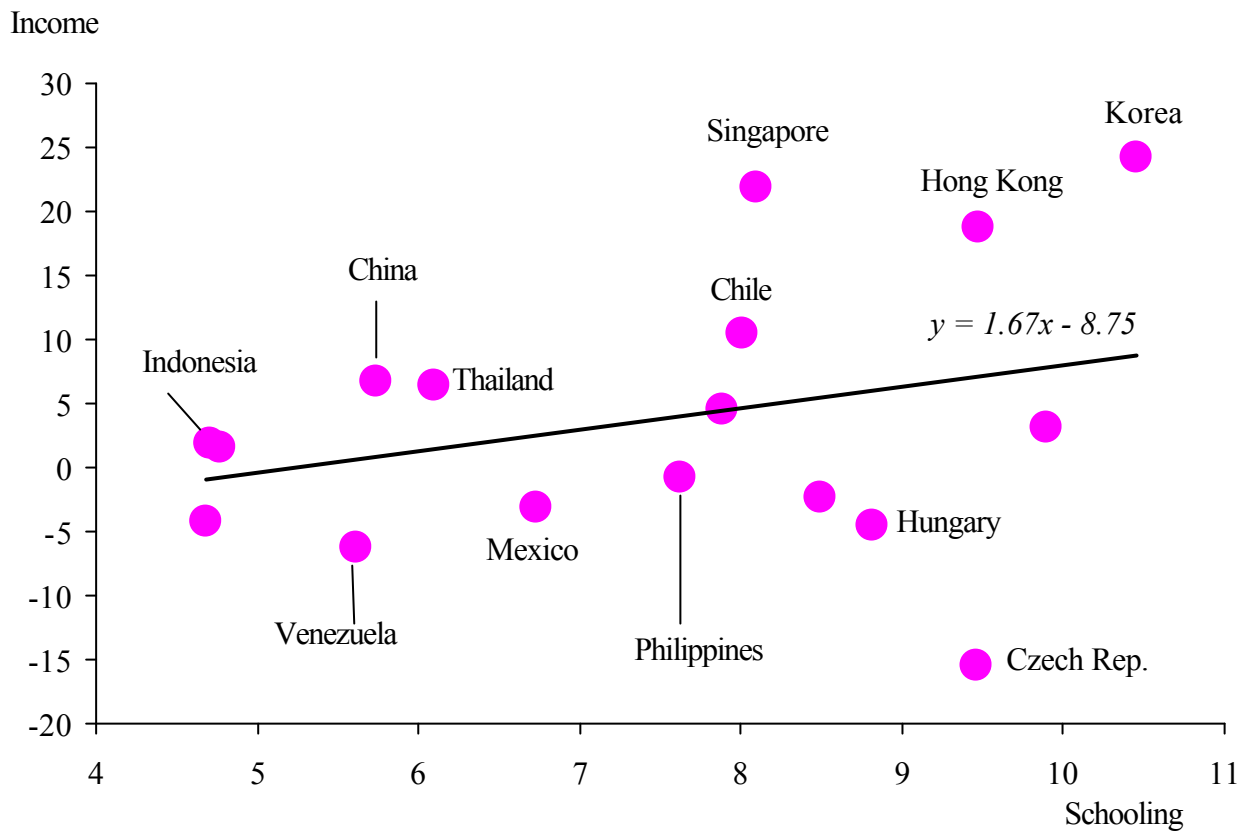
^aChange in per-capita income (PPP), relative to the United States, in 1985–2000 (percentage points). — ^bAverage share of gross domestic fixed capital formation in GDP, 1990–1999.

Source: World Bank (a).

Figure 12 — Average Years of Schooling^a

^aRefers to population age 25 and up; Pakistan not available.

Source: World Economic Forum (2000).

Figure 13 — Per-capita Income Growth^a and Average Years of Schooling

^aChange in per-capita income (PPP), relative to the United States, in 1985–2000 (percentage points); Pakistan not included as comparable data on schooling were not available.

Source: World Bank (a); World Economic Forum (2000).

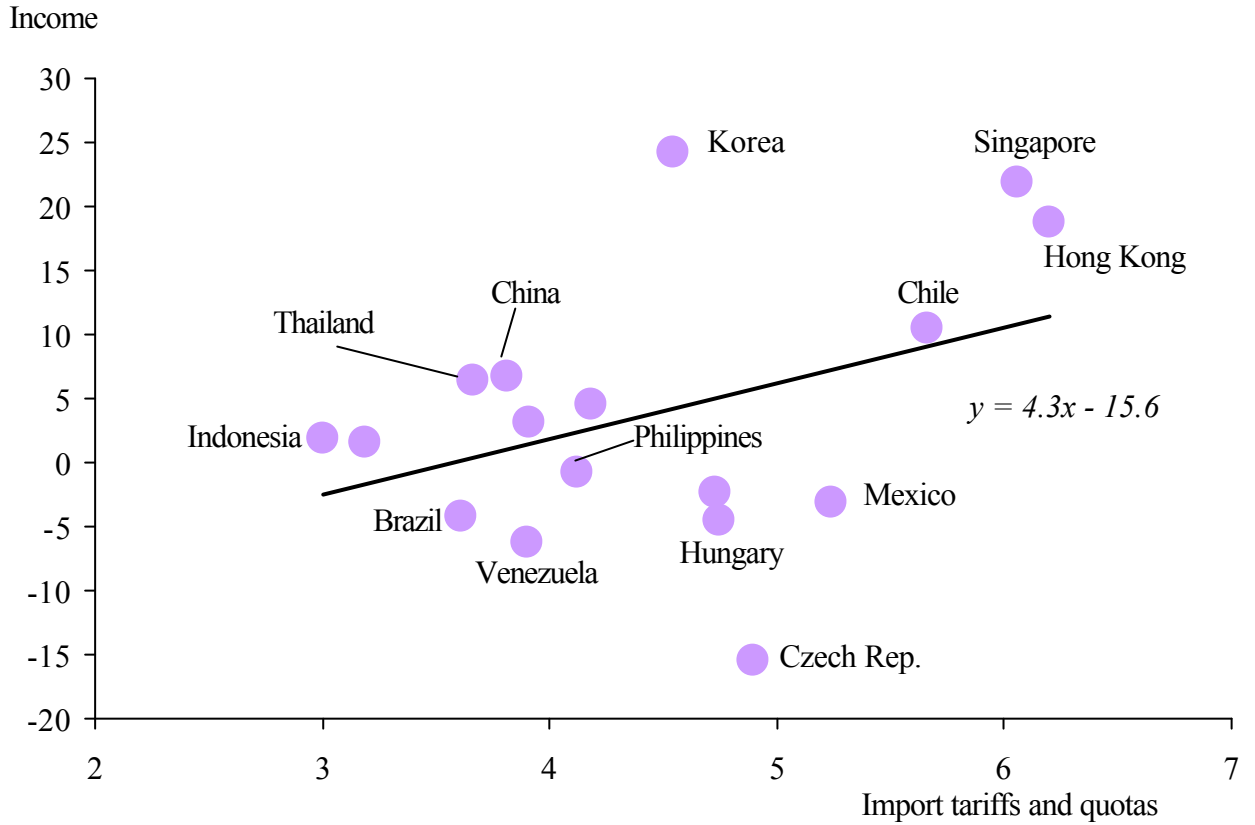
income growth as a yardstick,¹³ insufficient human capital formation represented a second bottleneck to catching up more quickly.

- A third factor impeding a more favorable growth performance of Pakistan seems to be related to openness to trade. According to Figure 14, emerging economies with relatively low import barriers tend to grow faster than more closed economies.¹⁴ Again, Pakistan had to be excluded from this correlation exercise, as strictly comparable data were lacking. Yet Pakistan can be classified a relatively closed economy according to World Bank data on the significance of import duties. In percent of imports, duties were higher only in India (22 percent) than in Pakistan (19 percent).¹⁵

¹³ Similar results were achieved when taking 1990-data on secondary school enrollment (in percent of the population of the relevant age group) as the independent variable. The rather poor statistical fit of the equation given in Figure 13 (adjusted R²: 0.03) improves considerably when the Czech Republic and Hungary are excluded from the regression (adjusted R²: 0.31; coefficient of the schooling variable significant at the 2 percent level). Both countries rank fairly high in terms of schooling, while their poor growth performance in the period under consideration was largely due to the transition crisis following the (political and economic) regime change.

¹⁴ The level of significance of the openness variable improves from 12 percent to 4 percent, if the Czech Republic is excluded from the regression given in Figure 14.

¹⁵ Import duties averaged 7 percent of imports in 15 sample countries (comparable data were not available from World Bank (a) for Brazil, Chile and Hong Kong); all figures on import duties refer to 1997.

Figure 14 — Per-capita Income Growth^a and Openness to Trade^b

^aChange in per-capita income (PPP), relative to the United States, in 1985–2000 (percentage points). — ^bImport tariffs and quotas; score ranging from 1 (=highest import barriers) to 7 (=lowest import barriers); Pakistan not available.

Source: World Bank (a); World Economic Forum (1999).

All in all, the evidence suggests three conclusions. First, income gains achieved by some emerging economies in the process of globalization have not been erased by recent financial crises. Second, the statistical relations between income growth and some of its driving forces, identified in previous research for a larger group of developing countries, appear to be validated for emerging economies even at times of financial market volatility. Third, Pakistan fits into the general picture, as its poor record on factor accumulation and openness went along with a persistently large income gap to industrial countries.

V. SOME UNJUSTIFIED CONCERNS

Several objections may be raised against the reasoning in the previous sections. Two major concerns of globalization sceptics are discussed in the following, namely that foreign indebtedness hinders economic catching up, however favorable other growth determinants might be, and that world market integration results in greater income inequality within emerging economies. Both concerns are of relevance to Pakistan, a low-income

country with a high incidence of absolute poverty¹⁶ and a significant foreign debt.¹⁷

Excessive foreign debt may hinder economic growth by providing a disincentive to investment.¹⁸ In case of a debt overhang, the present value of expected debt-service payments falls short of outstanding foreign debt. The debtor country may service its debt fully by increasing investment, but has little incentive to do so as the returns to investment will accrue to foreign creditors exclusively. This reasoning is underlying the argument that debt relief may benefit not only debtors (by adding to their disposable income) but also foreign creditors (by expanding overall income to be shared by debtors and creditors).

The empirical relevance of this reasoning to our sample of emerging economies can be assessed by correlating their foreign debt burden with investment and income growth. The correlation should be negative, if high foreign debt discouraged investment and growth. The foreign debt burden

¹⁶ According to World Bank (2001: Annex Table 2), almost 85 percent of the population lived on less than US\$ 2 per day.

¹⁷ In World Bank (2000), Pakistan was classified moderately indebted, which means that the present value of debt service exceeded 132 percent of exports or 48 percent of GNP.

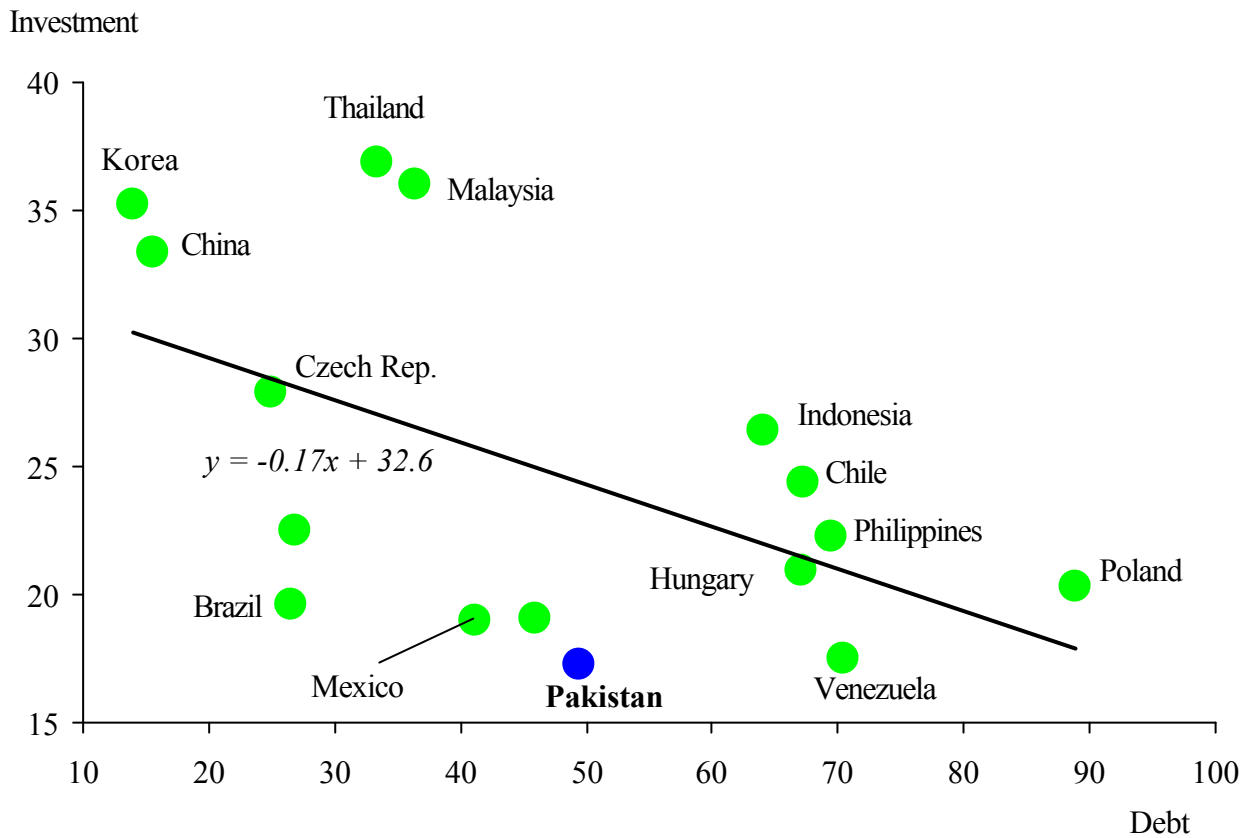
¹⁸ For a more rigorous analysis, see Corden (1988) as well as Sachs and Huizinga (1987).

is measured by total external debt outstanding in 1990, in percent of the debtor countries' GNP (World Bank 2000).¹⁹

Disincentive effects of foreign debt appear to be relevant with regard to the investment ratio in the 1990s. The adjusted R^2 of the equation given in Figure 15 is 0.24, and the coefficient of the debt variable is significant (at 3 percent).²⁰ Yet, per-capita income growth was not affected by a higher foreign debt burden; the coefficient of the debt variable in Figure 16 is insignificant and the adjusted R^2 of the equation is even negative. Taken together, these results are in some conflict with the proposition of a debt overhang in highly indebted emerging economies within our sample. It rather seems that productivity increases in countries with a higher debt burden and a lower investment ratio were roughly comparable to productivity increases in less indebted countries. A possible explanation is that financing constraints resulting from a high debt burden have led

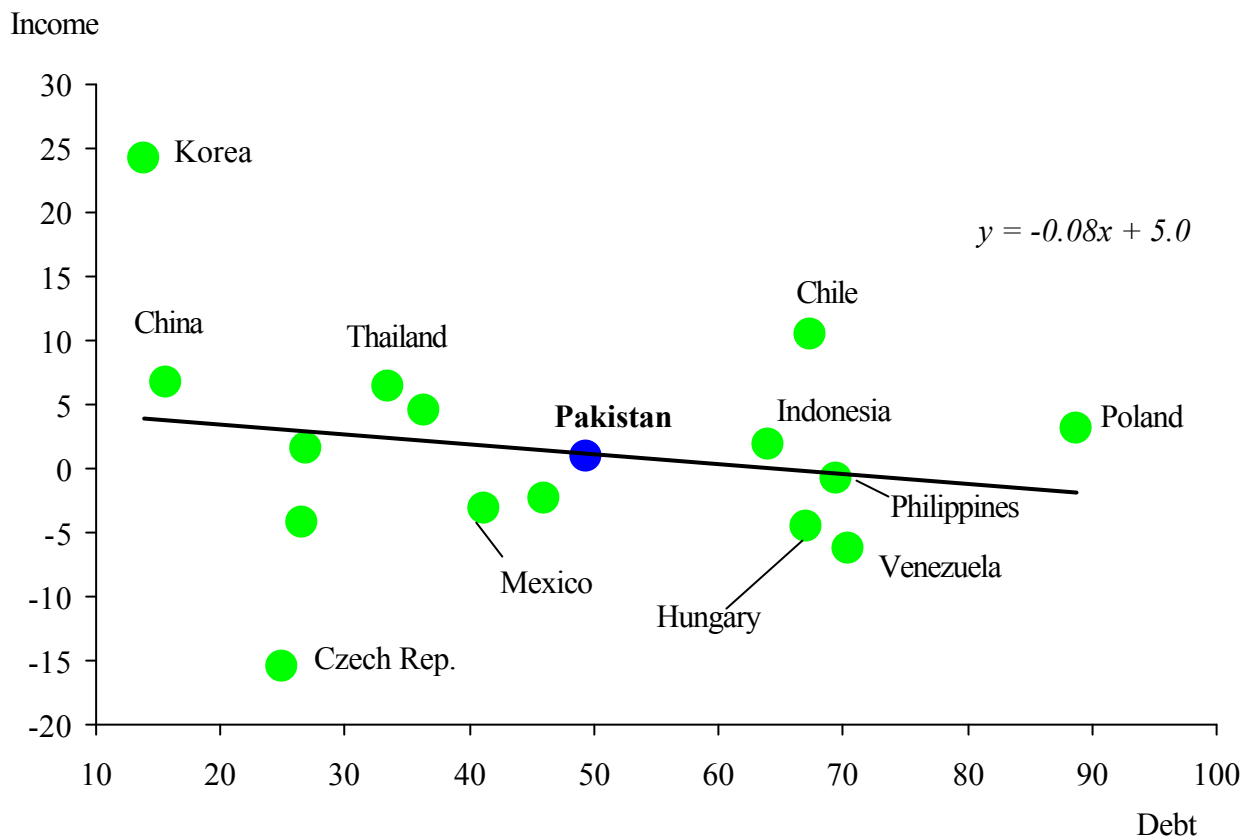
¹⁹ From this source, data on the *present value* of external debt is available only since the late 1990s. Taking 1999-data on this variable results in completely insignificant correlations with both the investment ratio and per-capita income growth. However, this procedure does not capture possible effects of debt on *subsequent* investment and growth.

²⁰ The correlation turned out to be somewhat weaker when the debt variable was defined as total debt-service payments in 1990, in percent of exports of goods and services.

Figure 15 — Gross Fixed Investment^a and Foreign Indebtedness^b

aAs given in Figure 10. — bTotal external debt outstanding in 1990 (Czech Republic:1992) in percent of gross national product; not available for Hong Kong and Singapore.

Source: World Bank (a); World Bank (2000).

Figure 16 — Per-capita Income Growth^a and Foreign Indebtedness^b

aChange in per-capita income (PPP), relative to the United States, in 1985–2000 (percentage points). — bTotal external debt outstanding in 1990 (Czech Republic:1992) in percent of gross national product; not available for Hong Kong and Singapore.

Source: World Bank (a); World Bank (2000).

debtors to cut less productive investment in the first place, whereas the debt-overhang proposition would suggest otherwise.

There is no convincing evidence either justifying the concern that world-market integration and the ensuing overall income gains come at the cost of increasing income inequality within emerging economies. A substantial body of research suggests just the opposite, i.e. economic growth and poverty alleviation going hand in hand.²¹

- Moser and Ichida (2001) focus on three non-income measures of poverty in Sub-Saharan Africa. They find that economic growth was an important factor leading to higher life expectancy, declining infant mortality and increasing rates of primary school enrollment in 1972–1997. Furthermore, they find no evidence that the adoption of structural adjustment programs has increased poverty in this region.
- Dollar and Kraay (2000) analyze the relationship between income of the bottom fifth of the population and per-capita GDP in a sample of 80 countries covering four decades. The authors come up with several conclusions: First, income of the poor rises one-for-one with overall growth. Second, the poverty-growth relationship has not changed in

²¹ For a recent overview, see World Bank (2002).

recent years, i.e. incomes of the poor did not fall more than proportionately during economic crises. Third, openness to foreign trade benefits the poor to the same extent that it benefits the whole economy.

- In another paper, the same authors evaluate the effect of globalization on inequality and poverty (Dollar and Kraay 2001). They identify a group of "post-1980 globalizers" among developing countries. This country group outperformed the rich industrial countries in terms of economic growth in the 1990s, which was in sharp contrast to the rest of the developing world.²² The study reveals a strong positive effect of trade on growth, whereas there is little systematic evidence of a relationship between changes in trade volumes (or other globalization measures considered by these authors) and changes in the income share of poor segments of the population. Hence, the authors conclude that the increase in growth rates that accompanies expanded trade leads to proportionate increases in incomes of the poor.
- The message that trade liberalization has a positive effect on employment and income of the poor is echoed by Bannister and Thugge (2001). It is stressed, however, that the links between trade reform and

²² At the same time, the number of poor people "is falling rapidly in the new globalizers and rising in the rest of the developing world" (World Bank 2002: 7).

poverty are diverse and complex and that the transitional costs of trade reform may fall disproportionately on the poor. Therefore, the authors suggest to mitigate transitional costs by carefully designing trade reform, and to implement complementary reforms that facilitate the participation of the poor in formal markets (e.g. provision of infrastructure, technical assistance, credit and training).

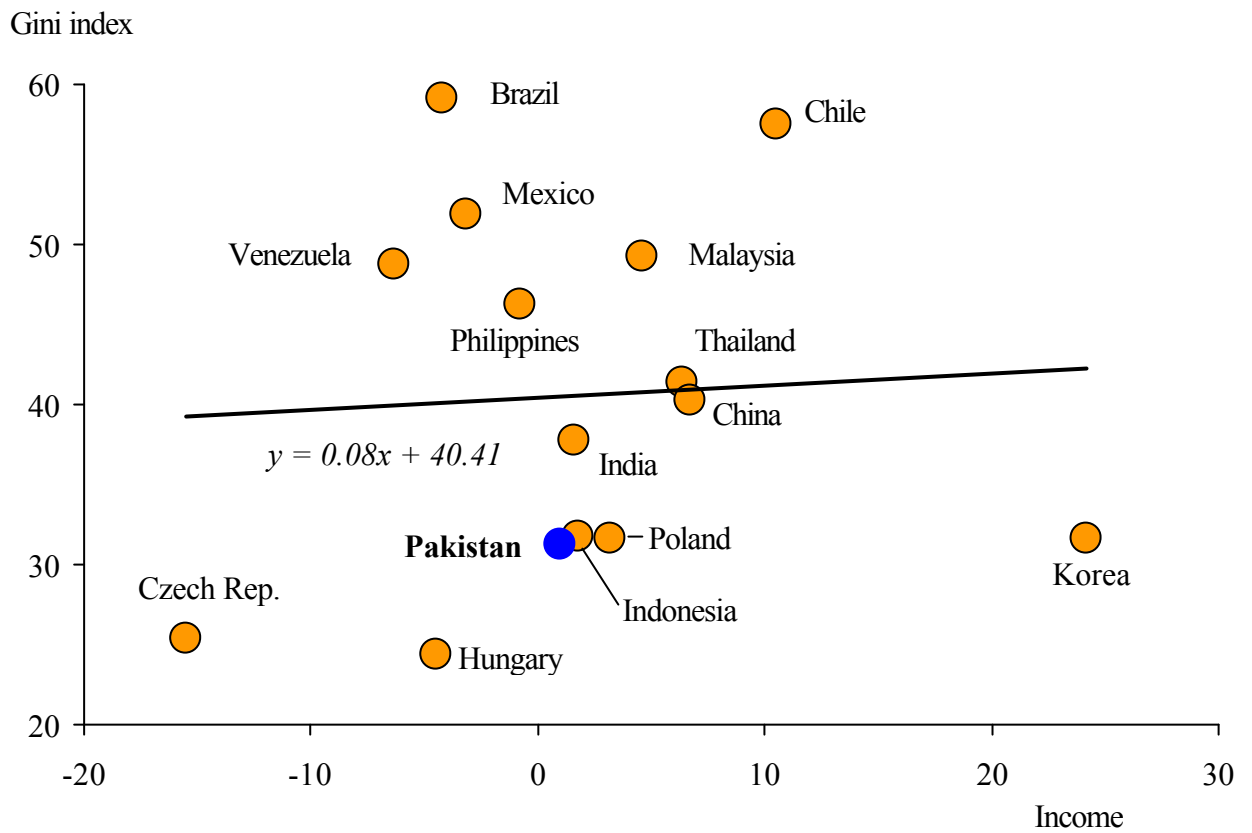
Rather than delving deeper into the analytical links between trade reform, economic growth and poverty alleviation, or trying to explain diverse episodes in specific countries, we stick to our simple correlation approach to check whether the experience across our sample of 18 emerging economies is more in line with the research just summarized or with the claims of globalization critics. We consider the Gini index and, where possible, its change over time as a measure of income inequality. This focus on relative poverty means that absolute poverty may well have declined even if openness to trade and economic catching up were associated with higher income inequality.

However, the correlations suggest that relative poverty was not significantly affected by more liberal trade policies and higher overall income growth in our sample. The adjusted R^2 s of all correlations shown in Figures 17–20 are extremely low (mostly even negative), and the

coefficients of the trade and growth variables do not meet most generous requirements in terms of significance.

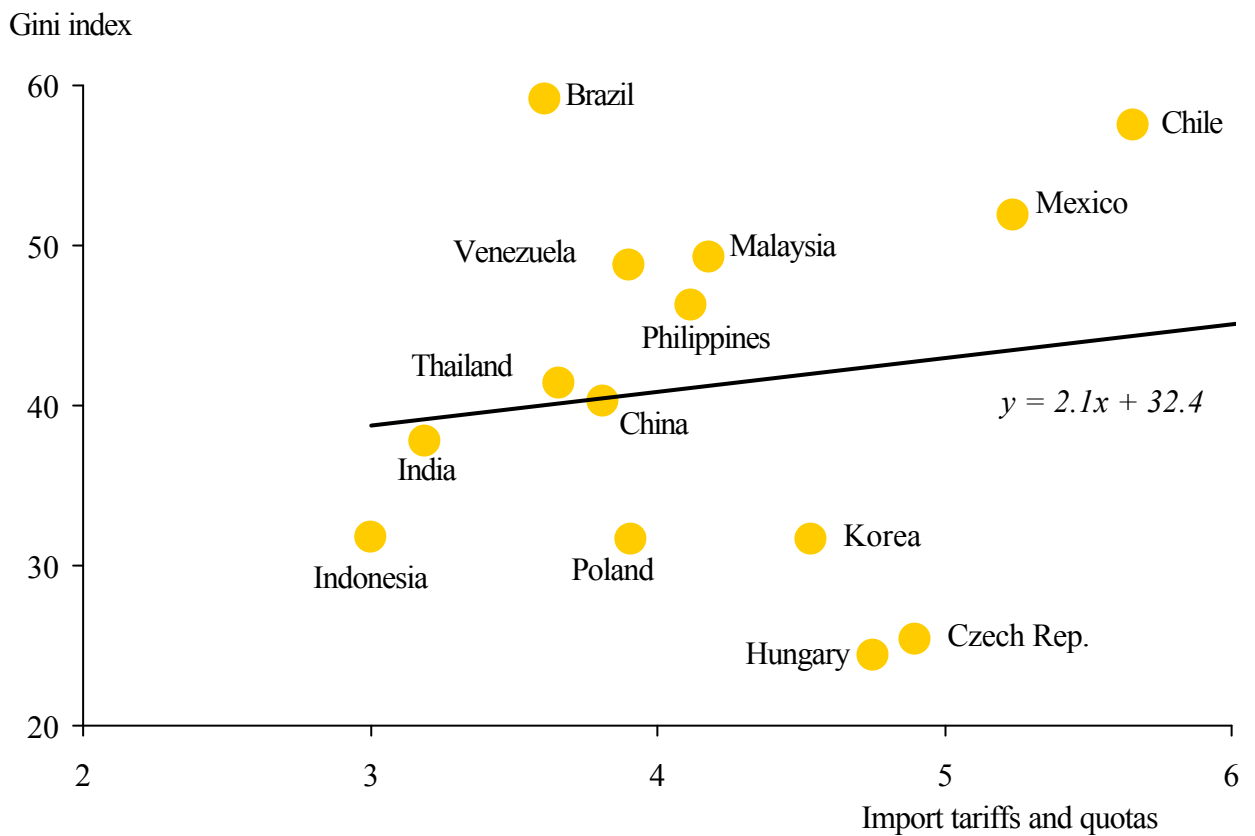
The degree of income inequality differed widely within the sample, ranging from a Gini index of about 25 in Hungary and the Czech Republic to slightly below 60 in Brazil and Chile.²³ But overall growth trends are unrelated to these differences (Figure 17). The frontrunner in terms of catching up, Korea, had a substantially less uneven income distribution than the follower Chile. Korea and Pakistan were worlds apart in terms of per-capita income growth, but very close in terms of income distribution. A similar diversity prevails when openness to imports is plotted against income inequality (Figure 18). Chile, the most open economy according to survey results of the World Economic Forum, is characterized by a similarly uneven income distribution as Brazil, which is rated relatively closed. Korea and Malaysia differ only slightly in terms of openness, but significantly in terms of income inequality.

²³ A Gini index of zero represents perfect equality, while an index of 100 implies perfect inequality.

Figure 17 — Income Inequality^a and Per-capita Income Growth^b

aGini index not available for Argentina, Hong Kong and Singapore. —
 bChange in per-capita income (PPP), relative to the United States, in 1985–2000 (percentage points).

Source: World Bank (a).

Figure 18 — Income Inequality^a and Trade Openness^b

^aGini index not available for Argentina, Hong Kong and Singapore. —

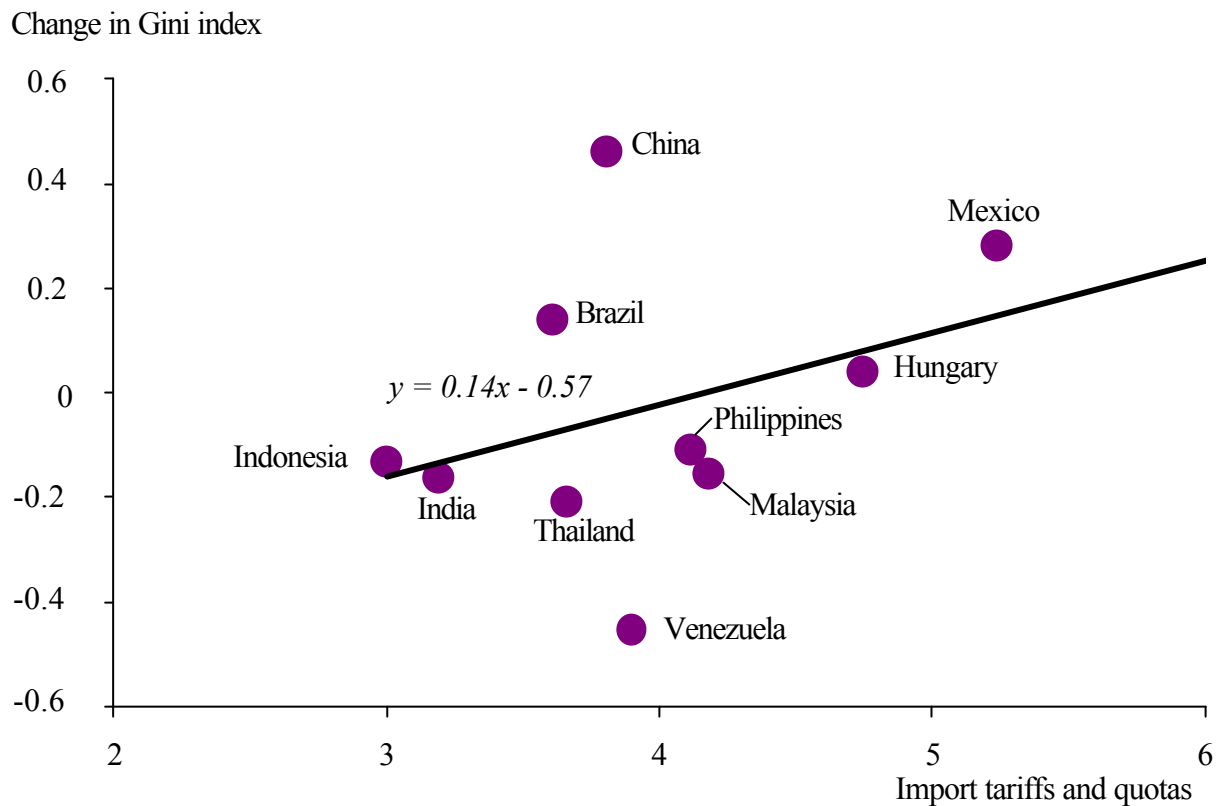
^bImport tariffs and quotas; score ranging from 1 (= highest import barriers) to 7 (= lowest import barriers); not available for Pakistan..

Source: World Bank (a); World Economic Forum (1999).

It is obviously more appropriate to correlate the trade and growth variables with the *change* in income distribution than with the level of the Gini index in a specific year. This meets with serious data constraints, however. The (annualized) change in the Gini index could be calculated for just 11 of our 18 sample countries, based on data for varying time spans given in Dollar and Kraay (2001). The income distribution became more even in seven countries (including Pakistan) according to this source, whereas the Gini index increased in Hungary, Brazil, Mexico and, most steeply, in China.

Figure 19 reveals that it was mainly in Mexico (and less so in Hungary) where openness to imports was associated with increasing income inequality. The case of Mexico tends to support the argument of the World Bank (2002: 5), according to which rising income inequality observed for Latin American globalizers is "due to prior extreme inequalities in educational attainment".²⁴ China and Venezuela, which were close neighbors in the rating of openness to imports, represented the extremes with respect to changes in the Gini index.

²⁴ Note also that Mexico scored very badly within a sample of emerging markets with regard to the quality of public schools as well as math and science education (Nunnenkamp 2001b).

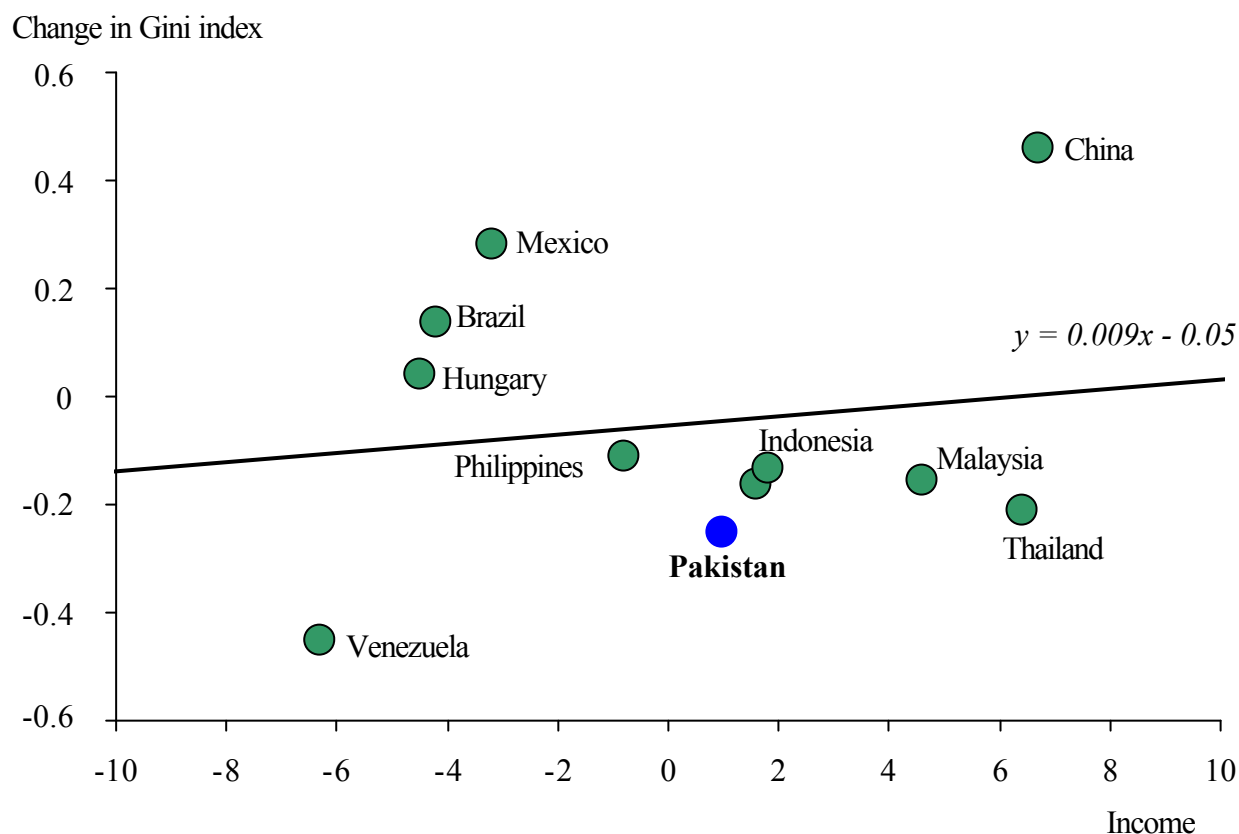
Figure 19 — Change in Income Inequality^a and Trade Openness^b

^aAnnualized for varying periods of observation, as reported in Dollar and Kraay (2001: Table 4); available from this source only for 11 countries of the sample considered here. — ^bImport tariffs and quotas; score ranging from 1 (= highest import barriers) to 7 (= lowest import barriers); not available for Pakistan.

Source: Dollar and Kraay (2001); World Economic Forum (1999).

In Figure 20, China stands out as the only country in which economic catching up to the United States was associated with a widening income inequality within the economy. Even the case of China offers at best weak support to the claim of globalization critics. The World Bank (2002: 5) considers the rise in Chinese inequality to be "far less problematic", compared to cases such as Mexico. This is because the rise started from a fairly low level of the Gini index (32 in 1980). In the late 1990s, income inequality in China (Gini index: 40.3 in 1998) was still slightly below the sample average. The World Bank (2002: 5 f.) further notes: "If this increase in inequality in China has been the price of growth, it has paid off in terms of a massive reduction in poverty. The number of rural poor in the country declined from 250 million in 1978 to just 34 million in 1999".

Apart from the interpretation of the Chinese experience, all other episodes of catching up in Figure 20 went along with reduced income inequality. At the same time, all other countries with increased income inequality failed to catch up economically. Hence, the experience of the emerging economies considered here does not support the view that a more liberal trade regime and growth-promoting policies result in rising income inequality within countries. This is not to say that participating successfully in globalization provides a panacea for overcoming deep-rooted problems of income inequality.

Figure 20 — Change in Income Inequality^a and Per-capita Income Growth^b

^aAnnualized for varying periods of observation, as reported in Dollar and Kraay (2001: Table 4); available from this source only for 11 countries of the sample considered here. — ^bChange in per-capita income (PPP), relative to the United States, in 1985–2000 (percentage points).

Source: World Bank (a); Dollar and Kraay (2001).

VI. SUMMARY AND CONCLUSIONS

Empirical evidence does not support the claim of globalization critics that world-market integration, driven by foreign trade and investment, benefits only the rich and is bound to widen income disparities. Developing and

newly industrializing economies can participate successfully in globalization and narrow the income gap to industrial countries, even though many have failed to do so. The growth performance across developing countries is highly diverse, with failures in catching up being concentrated in small economies, notably in Africa. Hence, the balance of catching up versus falling back shifts to the former, once the number of people living in successful globalizers among Third World economies is taken into account.

Within countries, "globalization generally reduces poverty because more integrated economies tend to grow faster and this growth is usually widely diffused" (World Bank 2002: 1). Furthermore, world-market integration and overall income growth have not, typically, led to greater income inequality within countries.

The vastly different experience of developing countries with globalization during the last two decades has important policy implications. In contrast to widespread concerns, national policymakers are not rendered powerless by globalization. Economic adjustment and restructuring represents the – frequently neglected – link between the globalizing environment and the growth performance of particular countries. National policymakers may promote adjustment and restructuring by removing bottlenecks to factor

accumulation, related to both physical and human capital, and by opening up their economies to foreign trade and FDI.

The task of creating a favorable investment climate has various dimensions. As the World Bank (2002: 19) notes, "a sound investment climate is not one full of tax breaks and subsidies for firms". Rather, the challenge is to create an environment of good economic governance (including control of corruption, contract enforcement and protection of property rights), to meet the demand of firms for business-related services (e.g. transport, communication), and to provide for better education and training of the labor force.

More and better education is particularly important for poor segments of the population. It is for two reasons that education of the poor should figure high on the agenda of national policymakers. First, it helps economy-wide catching up to more advanced countries. Second, broader access to education helps prevent rising income inequality within developing countries when they open up towards the world economy.

BIBLIOGRAPHY

- Bannister, Geoffrey J., and Kamau Thugge (2001). International Trade and Poverty Alleviation. International Monetary Fund, IMF Working Paper WP/01/54. Washington, D.C.
- Barro, Robert J. (1991). Economic Growth in a Cross Section of Countries. *The Quarterly Journal of Economics* 106 (2): 407–443.
- Collins, Paul (1998). Regional Trading Blocks and Foreign Direct Investment Flows and Stocks. In: John H. Dunning (ed.), *Globalization, Trade and Foreign Direct Investment*. Amsterdam: 28–48.
- Corden, W. Max (1988). Debt Relief and Adjustment Incentives: A Theoretical Exploration. International Monetary Fund, IMF Working Papers WP/88/36. Washington, D.C.
- Dollar, David, and Aart Kraay (2000). Growth Is Good for the Poor. World Bank, Washington, D.C. <http://www.worldbank.org/research>
- Dollar, David, and Aart Kraay (2001). Trade, Growth, and Poverty. World Bank, Washington, D.C. <http://www.worldbank.org/research>
- Gundlach, Erich, and Peter Nunnenkamp (1997). Labor Markets in the Global Economy: How to Prevent Rising Wage Gaps and Unemployment. Institute of World Economics, Kiel Discussion Papers 305. Kiel.
- Mankiw, N.Gregory, David Romer, and David N. Weil (1992). A Contribution to the Empirics of Economic Growth. *The Quarterly Journal of Economics* 107 (2): 407–437.
- Moser, Gary, and Toshihiro Ichida (2001). Economic Growth and Poverty Reduction in Sub-Saharan Africa. International Monetary Fund, IMF Working Paper WP/01/112. Washington, D.C.
- Nunnenkamp, Peter (1998a). Lateinamerika nach der "verlorenen Dekade": Eine Zwischenbilanz der Reformen. Institute of World Economics, Kiel Discussion Papers 324. Kiel.

- Nunnenkamp, Peter (1998b). Wirtschaftliche Aufholprozesse und "Globalisierungskrisen" in Entwicklungsländern. Implikationen für die nationale Wirtschaftspolitik und den globalen Ordnungsrahmen. Institute of World Economics, Kiel Discussion Papers 328. Kiel.
- Nunnenkamp, Peter (2001a). Foreign Direct Investment in Developing Countries. What Policymakers Should Not Do and What Economists Don't Know. Institute of World Economics, Kiel Discussion Papers 380. Kiel.
- Nunnenkamp, Peter (2001b). The Advantages of Emerging Markets in a Global World: How Mexico Compares with Major Competitors. Institute of World Economics, Kiel, mimeo.
- OECD (2001). *International Trade by Commodities Statistics*. Paris.
- Sachs, Jeffrey D., and Harry P. Huizinga (1987). US Commercial Banks and the Developing-Country Debt Crisis. *Brookings Papers on Economic Activity* 2: 555–601.
- Sachs, Jeffrey D., and Andrew M. Warner (1995). Economic Convergence and Economic Policies. National Bureau of Economic Research, NBER Working Paper 5039. Cambridge, Mass.
- UNCTAD (1995). Recent Developments in International Investment and Transnational Corporations. Trends in Foreign Direct Investment. United Nations, TD/B/ITNC/2. Geneva.
- UNCTAD (2000). *World Investment Report 2000*. United Nations, New York.
- UNCTAD (2001). *World Investment Report 2001*. United Nations, New York.
- World Bank (a). *World Development Indicators, DC-ROM*. Washington, D.C.
- World Bank (1986). *World Development Report 1986*. Oxford.
- World Bank (2000). *Global Development Finance. Analysis and Summary Tables*. Washington, D.C.
- World Bank (2001). *World Development Report 2002*. Oxford.

World Bank (2002). *Globalization, Growth, and Poverty: Building an Inclusive World Economy*. Washington, D.C. (World Bank and Oxford University Press) <http://www.worldbank.org/research>

World Economic Forum (1999). *The Global Competitiveness Report 1999*. Geneva.

World Economic Forum (2000). *The Global Competitiveness Report 2000*. New York and Oxford.