



Disparities in Global Integration

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Thanks in part to the benefits of global integration, more developing countries are on course to start catching up with industrial countries. But slow integrators run the risk of falling further behind unless they change their policies.

THE LAST decade saw an upswing in the pace of global economic integration; the ratio of world trade volumes to real GDP rose by 1.2 percentage points a year over 1985–94, three times faster than in the previous decade and faster even than in the 1960s. Global foreign direct investment (FDI) also surged, doubling as a share of world GDP, to reach nearly \$200 billion in the early 1990s. Developing countries as a group participated in this trend, but there were wide disparities in the pace of global integration, with many countries becoming less integrated with the world economy during this period.

This is a matter of concern, since the pace and level of integration are empirically associated with economic growth, and there are good theoretical reasons to expect integration and growth to be mutually enhancing. That many developing countries became less engaged in the world economy should not be cause for fatalism or despair, however, because the evidence indicates that government policies play a large role in determining the extent to which countries can draw on the benefits of global integration for economic growth.

The experience of fast-integrating developing countries provides powerful practical lessons for countries that want to expand their engagement with the world economy in order to enhance their growth performances. After all, some of today's fast integrators were yesterday's weak performers.

Measuring integration

Global economic integration can be measured in different ways. Here we focus on the benefits of increased participation in the world economy: exposure to new ideas, technologies, and products; improved resource allocation; heightened competition as a spur to achieving world standards of efficiency; wider options for consumers; and the ability to tap cheaper sources of

finance internationally. Our choice of indicators is eclectic, spanning a variety of measures such as ratios of international trade and foreign direct investment to GDP (both indicative, among other things, of openness to outside knowledge), creditworthiness ratings (a measure of access to international capital markets), and the share of manufactures in exports (an imperfect measure of a country's ability to produce at world standards and absorb technical knowledge).

Although the aggregate ratio of developing country trade (exports plus imports of goods and nonfactor services) to GDP rose strongly over the last decade, more than three-fourths of the increase was accounted for by just 10 countries. Indeed trade ratios fell in 44 of 93 developing countries. Viewed by region, trade ratios fell in sub-Saharan Africa, were flat in the Middle East and North Africa, and barely edged forward in South Asia (Chart 1). One study (Coe, Helpman, and Hoffmaister, 1995) found that the size of spillovers from research and development in industrial countries on productivity in developing countries rose as developing countries imported more from Organization for Economic Cooperation and Development (OECD) member countries, and that such spillovers could account

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Chart 1
Trade expanded over the past decades

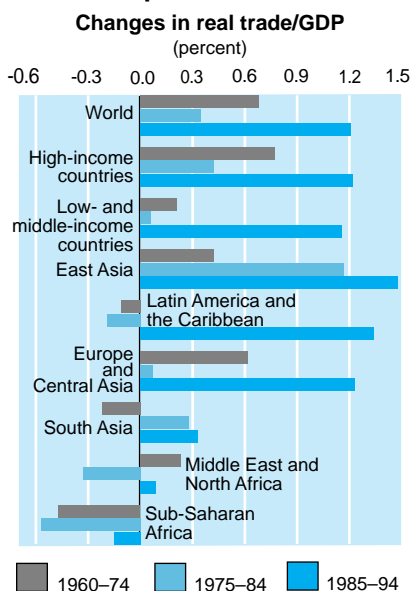
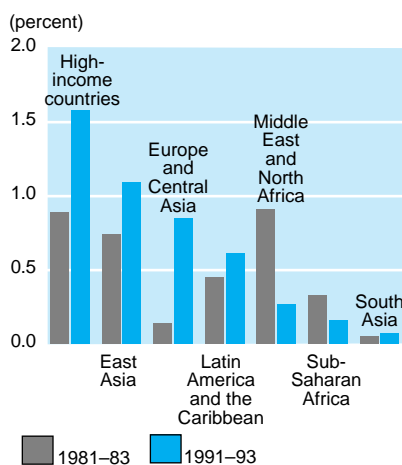


Chart 2
Investment is uneven
Foreign direct investment/GDP



Sources: World Bank data and staff estimates.

for most of the rise in developing countries' total factor productivity during 1971-90.

Trade restrictions are a main source of distortions between domestic and international prices and result in resource misallocations and reduced competition from imports. Trade restrictions vary greatly across developing regions despite the widespread trend toward trade liberalization over the past decade. Tariffs in South Asia, averaging around 45 percent in the early 1990s, remain far higher than in other regions, while those in the Middle East and North Africa and sub-Saharan Africa—in the 25-30 percent range—have shown little

Table 1
Developing countries show wide disparities in their speed of integration ¹

Ranking	(number of countries)					
	East Asia	South Asia	Latin America and the Caribbean	Middle East and North Africa	Sub-Saharan Africa	Europe and Central Asia
Fast integrators	6	3	5	2	2	5
Moderate integrators		2	5	4	10	2
Weak integrators	3		9	2	10	
Slow integrators			2	5	14	2
Total	9	5	21	13	36	9

Source: World Bank staff estimates.

¹ Speed of integration of developing countries, early 1980s to early 1990s.

change since the second half of the 1980s. In contrast, many countries in Latin America and East Asia, as well as several in Central and Eastern Europe, have substantially reduced their average tariffs, to a range of 10-15 percent.

The distribution of FDI across developing countries is also highly skewed. Eight countries accounting for 30 percent of developing country GDP garnered two-thirds of overall foreign direct investment flows during 1990-93. Regions with particularly low ratios of foreign direct investment to GDP included South Asia, sub-Saharan Africa, and the Middle East and North Africa (Chart 2). Over the past decade, ratios of foreign direct investment to GDP fell in 37 of the 93 countries studied; nearly all of them were in sub-Saharan Africa, Latin America, and the Middle East and North Africa. Like trade, foreign direct investment is a significant indicator of integration, in part because of its potential for diffusing technology and skills. A recent study (Borensztein, de Gregorio, and Lee, 1995) found that a 1 percentage point increase in the ratio of foreign direct investment to GDP in developing countries during 1971-89 was associated with a 0.4-0.7 percentage point increase in per capita GDP growth, with the impact varying positively with educational attainment, an indication of a country's ability to absorb technology.

Two other indicators that shed light on disparities in integration are country credit ratings and the share of manufactures in exports. The credit ratings generated by banks or rating agencies measure both access to private capital markets and the terms of that access. In those compiled by *Institutional Investor* (March 1995) during 1993-95, over half of all developing countries were in the bottom quarter of the range of possible credit ratings. These countries, most of which had no access at

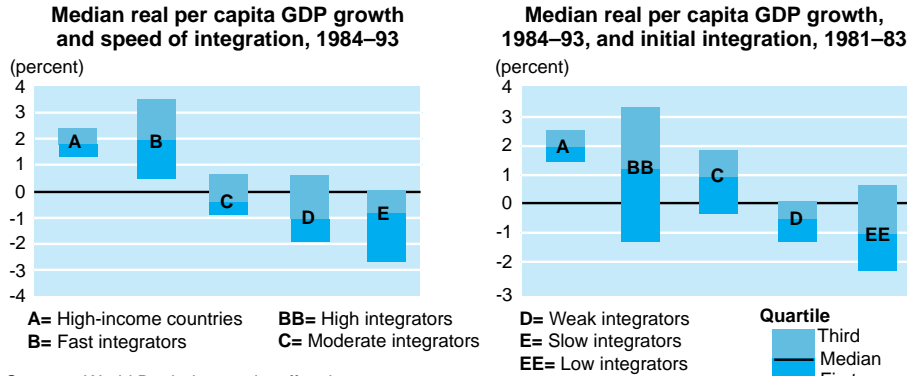
all to medium- or long-term private capital markets, included half or more of the countries in sub-Saharan Africa, Latin America (chiefly Central America and the Caribbean), Eastern Europe and Central Asia (almost all the countries of the former Soviet Union), and nearly half the countries in the Middle East and North Africa. Among those countries whose ratings were in the next-to-bottom quarter, many had some access to private markets but often only at rates 500 or more basis points (that is, 5 or more percentage points) over benchmark US rates. In contrast, countries in the top quarter of ratings, all of which were high-income countries, can typically borrow larger amounts relative to their economic size, and can borrow both more cheaply (at rates that are 50 basis points or less above benchmark US rates) and at longer maturities.

The share of manufactures in total exports may provide some information on countries' access to gains from technology transfer and their ability to produce at world standards, although it also reflects their stage of development and factor endowments. Two-thirds of the 93 developing countries reviewed in our study had a share of manufactured products in exports of a third or less during 1983-92, while half stood at less than 20 percent. Sub-Saharan Africa's share of manufactured products in exports was less than 10 percent, while the Middle East and North Africa, and Latin America and the Caribbean averaged 20-25 percent. These regions also experienced the lowest rates of growth in shares of manufactured exports in total exports over the past ten years.

To summarize these trends, we formulated a "speed-of-integration index" derived from changes between the early 1980s and the early 1990s in four of the indicators discussed above: the ratio of real trade to GDP,

Chart 3

Integration speeds growth



the ratio of foreign direct investment to GDP, *Institutional Investor's* credit ratings, and the share of manufactures in exports. The speed-of-integration index is the simple average of changes in these four indicators over the period, expressed as standardized scores. Using levels of these variables (but adjusting the trade ratios for the size of countries' economies) yields a level-of-integration index.

On the basis of the index, developing countries are grouped in four quartiles ranging from "fast integrators" (those with the highest index values) through "moderate" and "weak" to "slow" integrators in the lowest quartile (see Table 1). The "fast integrator" quartile contained most of the fast-growing East Asian exporters, as well as reformers such as Argentina, Chile, and Mexico in Latin America; Morocco in the Middle East; Ghana and Mauritius in Africa; and the Czech Republic, Hungary, Poland, and Turkey in Europe. At the other end of the spectrum, the "weak" and "slow" integrator quartiles included not only most of the low-income countries in sub-Saharan Africa but also many middle-income countries in Latin America and the Middle East and North Africa.

Integration and growth

Chart 3 documents the empirical association between higher speeds of integration and faster growth. The high-income countries and fast integrators among the developing countries achieved median per capita GDP growth of about 2 percent a year over the past decade. Moreover, the experience of the fast integrators was not merely a reflection of the gains made by the high-growth East Asian countries, although the latter were important. Excluding the East Asian countries, fast integrators still achieved median per capita growth of 1.5 percent a year, well above the rates

achieved by the other classes of integrators. There was also an association between growth during 1984-93 and the level of integration prevailing at the beginning of the period. This is consistent with studies that have found growth to be positively associated with open policy regimes. For the most part, only fast-integrating developing countries saw their per capita incomes converge toward industrial country levels over the past decade.

The positive effect of freer trade and foreign investment on growth is undoubtedly one of the most critical factors explaining the relation between integration and growth. But this is only one part of the story. Growth itself tends to promote integration. Imports rise faster than incomes, as consumers satisfy tastes for a more

diverse range of products. The rising returns to capital associated with faster growth lead to increases in developing countries' imports of capital goods. Fast-growing countries attract more foreign direct investment and obtain better credit terms.

The close association between growth and the speed of integration also suggests that both are likely to be affected by a number of common factors, including changes in the external environment, the institutional setting, and government policies. Policies that are good for growth are also apt to

be good for integration, though some aspects of policy will have particular relevance for integration.

Good policies count

Sound policies play an important role in determining both growth and the speed of integration. Policy reforms designed to increase growth and stability are likely to influence a country's speed of integration, both directly and through their effect on growth. Three types of policies affect the speed of integration relatively quickly: macroeconomic policy, trade and FDI regimes, and telecommunications and transportation infrastructure.

Macroeconomic instability may affect integration directly, through its impact on foreign direct investment, other foreign

Table 2
Macroeconomic instability undermines fast integration

	Integration policy and performance, 1984-93 (percent)				
	High-income countries	Developing countries			
		Fast integrators	Moderate integrators	Weak integrators	Slow integrators
CPI inflation ¹	3.63	13.40	16.86	23.86	19.89
Change in CPI inflation	-5.22	-2.81	-0.22	8.21	19.77
CPI inflation volatility ²	1.65	7.24	7.63	14.21	13.27
Black market premium	0.00	0.12	0.56	0.41	0.48
Real exchange rate volatility ²	0.06	0.13	0.20	0.27	0.40
Per capita GDP	2.03	2.09	-0.40	-1.04	-0.92
GDP volatility ²	1.89	2.61	3.09	4.39	3.60
Budget balance/GDP	-2.46	-2.37	-6.66	-3.70	-5.92
Change in budget deficit	1.16	1.88	0.79	0.38	-2.54
Budget balance volatility ²	2.27	2.31	2.82	2.79	4.53

Sources: World Bank data and staff estimates.

Note: Contains data for 88 countries for which there were adequate tariff data. The balanced data set for this sample allows comparison across policy areas, such as between macroeconomic and trade policy. Values for integration classes are medians. Changes in inflation and budget deficit are averages for 1981-83 and 1991-93.

¹ CPI denotes consumer price index.

² Standard deviation.

capital inflows, and investment in the export sector. A considerable body of research in recent years has investigated the adverse effects of uncertainty on investment. These effects are likely to apply particularly strongly to foreign investors, who know less about the country than domestic investors, have greater choice in pursuing alternatives, and are likely to attach a higher risk to a more unstable economy. Countries that suffer from greater macroeconomic instability tend to be slower integrators (Table 2). Slow integrators have generally had higher inflation, greater exchange rate volatility, and particularly adverse trade-to-GDP and FDI-to-GDP ratios. Slow integrators also have had large fiscal deficits, which are the most important source of macroeconomic instability.

Restrictive trade and FDI policies limit integration by restricting imports and inhibiting capital inflows. Trade restrictions reduce the profitability of exporting relative to serving the domestic market and blunt incentives to adopt international standards of product quality and process efficiency. Higher tariff levels are thus associated with lower trade-to-GDP ratios, after adjusting for the tendency of big economies to trade less relative to GDP. Because many foreign

investors operate complex international supply networks, protection and its associated red tape reduces a country's attractiveness. In some developing countries (for example, China, Hungary, and Malaysia in recent years), foreign direct investors account for a large share of exports.

The third policy area affecting the pace of integration is the availability and proper maintenance of adequate economic infrastructure, in particular telecommunications and transportation facilities. High-quality communications are essential for countries that aim to participate in the globalized production structures established by multinational corporations; to respond promptly to rapidly changing market conditions in industrial countries; or to participate in new export markets for long-distance services such as data processing, software programming, back-office services, and customer support.

Prospects

World Bank projections for developing countries suggest that the income gap between fast and slow integrators will continue to widen over the next 10 years. Though the growth performance of slow integrators is expected to improve,

compared with that of the last 10 years, in the absence of an acceleration of economic reforms, it is likely to remain well below that of the fast integrators, including the high-income countries. Other factors underpinning this projection are slow growth of demand for primary commodity exports; continued, though gradual, declines in commodity prices; and continued poor savings and investment performance in many slow integrators. The projections further underline the need for a significant improvement in the quality of policies in the slow integrators. [F&D]

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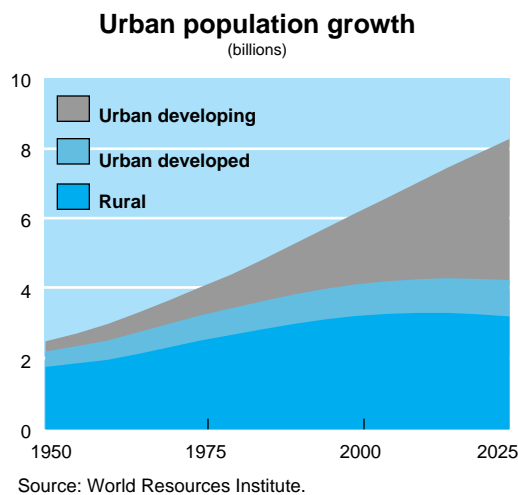
This article draws on material from "Disparities in Global Integration," a background paper prepared by the authors for Global Economic Prospects 1996 (Washington: World Bank).

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Correction:

On page 50 of the June 1996 issue of *Finance & Development*, the color keys for "Rural" and "Urban developing" in Chart 1 of the article, "Urbanization: The Challenge for the Next Century," were inadvertently switched. Below is a corrected version of the chart.



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