
Globalization, Poverty, and Inequality since 1980

David Dollar

One of the most contentious issues of globalization is the effect of global economic integration on inequality and poverty. This article documents five trends in the modern era of globalization, starting around 1980. The first trend is that growth rates in poor economies have accelerated and are higher than growth rates in rich countries for the first time in modern history. Developing countries' per capita incomes grew more than 3.5 percent a year in the 1990s. Second, the number of extremely poor people in the world has declined significantly—by 375 million people since 1981—for the time in history. The share of people in developing economies living on less than \$1 a day has been cut in half since 1981, though the decline in the share living on less than \$2 per day was much less dramatic. Third, global inequality has declined modestly, reversing a 200-year trend toward higher inequality. Fourth, within-country inequality in general is not growing, though it has risen in several populous countries (China, India, the United States). Fifth, wage inequality is rising worldwide. This may seem to contradict the fourth trend, but it does not because there is no simple link between wage inequality and household income inequality. Furthermore, the trends toward faster growth and poverty reduction are strongest in developing economies that have integrated with the global economy most rapidly, which supports the view that integration has been a positive force for improving the lives of people in developing areas.

Globalization has dramatically increased inequality between and within nations.

—Jay Mazur (2000)

Inequality is soaring through the globalization period, within countries and across countries. And that's expected to continue.

—Noam Chomsky

All the main parties support nonstop expansion in world trade and services although we all know it . . . makes rich people richer and poor people poorer.

—Walter Schwarz, *The Guardian*

We are convinced that globalization is good and it's good when you do your homework . . . keep your fundamentals in line on the economy, build up high levels of education, respect rule of law . . . when you do your part, we are convinced that you get the benefit.

—President Vicente Fox of Mexico

There is no way you can sustain economic growth without accessing a big and sustained market.

—President Yoweri Museveni of Uganda

We take the challenge of international competition in a level playing field as an incentive to deepen the reform process for the overall sustained development of the economy. WTO membership works like a wrecking ball, smashing whatever is left in the old edifice of the former planned economy.

—Jin Liqun, Vice Minister of Finance of China

There is an odd disconnect between debates about globalization in developed economies and developing economies. Among intellectuals in developed areas one often hears the claim that global economic integration is leading to rising global inequality—that is, that integration benefits rich people proportionally more than poor people. In the extreme claims poor people are actually made out to be worse off absolutely (as in the epigraph from Schwarz). In developing economies, though, intellectuals and policymakers often view globalization as providing good opportunities for their countries and people. To be sure, they are not happy with the current state of globalization. The epigraph from President Yoweri Museveni, for example, comes from a speech that blasts rich countries for their protectionism against poor countries and lobbies for better market access. But the point of these critiques is that integration—through foreign trade, foreign investment, and immigration—is basically a good thing for poor countries and that rich countries could do a lot more to facilitate integration—that is, make it freer. The claims from antiglobalization intellectuals in rich countries, however, lead inescapably to the conclusion that integration is bad for poor countries and that therefore trade and other flows should be more restricted.

The first goal of this article is to document what is known about trends in global inequality and poverty over the long term and during the recent wave of globalization that began around 1980. Global inequality is used to mean different things in

different discussions—distribution among all the citizens of the world, distribution within countries, distribution among countries, distribution among wage earners—all of which are used in this article. A second goal of the article is to relate these trends to globalization.

The first section briefly discusses the growing integration of developing economies with industrialized countries and with each other, starting around 1980. The opening of large developing countries, such as China and India, is arguably the most distinctive feature of this wave of globalization. The second section, the heart of the article, presents evidence in support of five trends in inequality and poverty since 1980:

- Growth rates in poor countries have accelerated and are higher than growth rates in rich countries for the first time in modern history.
- The number of extremely poor people (those living on less than \$1 a day) in the world has declined significantly—by 375 million people—for the first time in history, though the number living on less than \$2 a day has increased.
- Global inequality has declined modestly, reversing a 200-year trend toward higher inequality.
- Within-country inequality is generally not growing.
- Wage inequality is rising worldwide. This may seem to contradict the fourth trend, but it does not because there is no simple link between wage inequality and household income inequality.

The third section then tries to draw a link between the increased integration and accelerated growth and poverty reduction. Individual cases, cross-country statistical analysis, and micro-evidence from firms all suggest that opening to trade and direct investment has been a good strategy for such countries as the China, India, Mexico, Uganda, and Vietnam. The conclusions for policy in the fourth section are very much in the spirit of the comments from Presidents Fox and Museveni. Developing economies have a lot to do to develop in general and to make effective use of integration as part of their development strategy. Rich countries could do a lot more with foreign aid to help with that work. As Museveni indicates, access to markets in rich countries is important. A lot of protections remain in Organisation for Economic Co-operation and Development (OECD) markets from the goods and people of developing economies, and globalization would work much better for poor people if developing areas had more access to those markets.

Growing Integration between Developed and Developing Economies

Global economic integration has been going on for a long time. In that sense, globalization is nothing new. What is new in this most recent wave of globalization is the

way developing countries are integrating with rich countries. As in previous waves of integration, this change is driven partly by technological advances in transport and communications and partly by deliberate policy choices.

Earlier Waves of Globalization

From 1820 to 1870 the world had already seen a fivefold increase in the ratio of trade to gross domestic product (GDP) (table 1). Integration increased further in 1870–1914, spurred by the development of steam shipping and by an Anglo-French trade agreement. In this period the world reached levels of economic integration comparable in many ways to those of today. The volume of trade relative to world income nearly doubled from 10 percent in 1870 to 18 percent on the eve of World War I. There were also large capital flows to rapidly developing parts of the Americas, and the ownership of foreign assets (mostly Europeans owning assets in other countries) more than doubled in this period, from 7 percent of world income to 18 percent. Probably the most distinctive feature of this era of globalization was mass migration. Nearly 10 percent of the world's population permanently relocated in this period (Williamson 2004). Much of this migration was from poor parts of

Table 1. Measures of Global Integration

Year	Capital Flows	Trade Flows	Transport and Communications Costs (constant US\$)		
	Foreign Assets/ World GDP (%)	Trade/GDP (%)	Sea Freight (average ocean freight and port charges per ton)	Air Transport (average revenue per passenger mile)	Telephone Call (average price for a 3-minute call between New York and London)
1820	—	2	—	—	—
1870	6.9	10	—	—	—
1890	—	12	—	—	—
1900	18.6	—	—	—	—
1914	17.5	18	—	—	—
1920	—	—	95	—	—
1930	8.4	18	60	0.68	245
1940	—	—	63	0.46	189
1945	4.9	—	—	—	—
1950	—	14	34	0.30	53
1960	6.4	16	27	0.24	46
1970	—	22.4–20	27	0.16	32
1980	17.7	—	24	0.10	5
1990	—	26	29	0.11	3
1995	56.8	—	—	—	—

Source: Crafts (2000) for capital flows; Maddison (1995) and Crafts (2000) for trade flows; World Bank (2002) for transport and communications costs.

— not available.

Europe to the Americas. But there was also considerable migration from China and India (much of it forced migration in India). While global indicators showed considerable integration in 1870–1914, this was also the heyday of colonialism, and most of the world's people were greatly restricted in their opportunities to benefit from the expanding commerce.

Global integration took a big step backward during the two world wars and the Great Depression. Some discussions of globalization today assume it was inevitable, but this dark period is a powerful reminder that policies can halt and reverse integration. By the end of this dark era both trade and foreign asset ownership were back close to their levels of 1870—the protectionist period undid 50 years of integration. The era of free migration was also at an end, as virtually all countries imposed restrictions on immigration.

From the end of World War II to about 1980, industrialized countries restored much of the integration that had existed among them. They negotiated a series of mutual trade liberalizations under the auspice of the General Agreement on Tariffs and Trade. But liberalization of capital flows proceeded more slowly, and not until 1980 did the level of ownership of foreign assets returned to its 1914 level. Over this period there was also modest liberalization of immigration in many industrialized countries, especially the United States. In this postwar period of globalization, many developing economies chose to sit on the sidelines. Most developing areas in Asia, Africa, and Latin America followed import-substituting industrialization strategies, keeping their levels of import protection far higher than in industrialized countries to encourage domestic production of manufactures and usually restricting foreign investment by multinational firms to encourage the growth of domestic firms. While limiting direct investment, several developing economies turned to the expanding international bank borrowing sector in the 1970s and took on significant amounts of foreign debt.

Recent Wave of Globalization

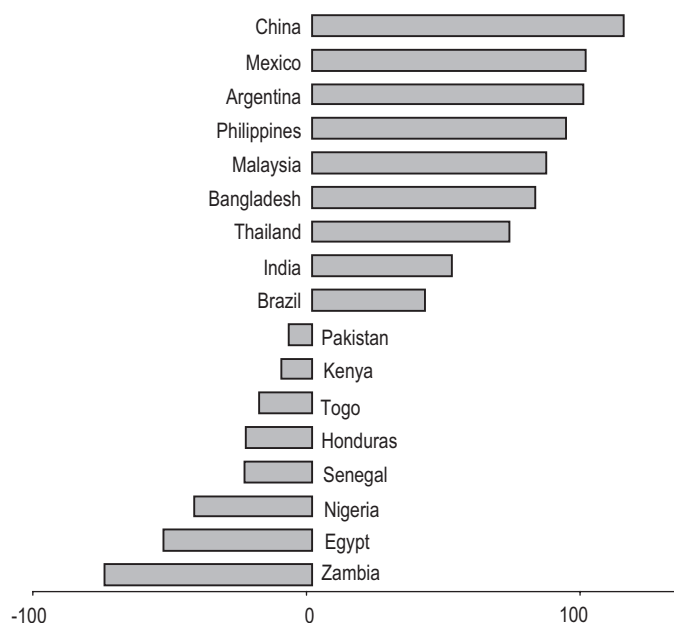
The most recent wave of globalization started in 1978 with the initiation of China's economic reform and opening to the outside world, which roughly coincides with the second oil shock, which contributed to external debt crises throughout Latin America and in other developing economies. In a growing number of countries in Latin America, South Asia, and Sub-Saharan Africa political and intellectual leaders began to fundamentally rethink development strategies. The distinctive part of this latest wave of globalization is that the majority of developing economies (in terms of population) shifted from an inward-focused strategy to a more outward-oriented one.

This altered strategy can be seen in the huge increases in trade integration of developing areas over the past two decades. China's ratio of trade to national income

has more than doubled, and countries such as Mexico, Bangladesh, Thailand, and India have seen large increases as well (figure 1). But several developing economies trade less of their income than two decades ago, a fact that will be discussed later. The change has not been only in the amount, but also in the nature of what is traded. Twenty years ago, nearly 80 percent of developing country merchandise exports were primary products: the stereotype of poor countries exporting tin or bananas had a large element of truth. The big increase in merchandise exports in the past two decades, however, has been of manufactured products, so that 80 percent of today's merchandise exports from developing countries are manufactures (figure 2). Garments from Bangladesh, CD players from China, refrigerators from Mexico, and computer peripherals from Thailand—these are the modern face of developing economy exports. Service exports from developing areas have also increased enormously—both traditional services, such as tourism, and modern ones, such as software from Bangalore, India.

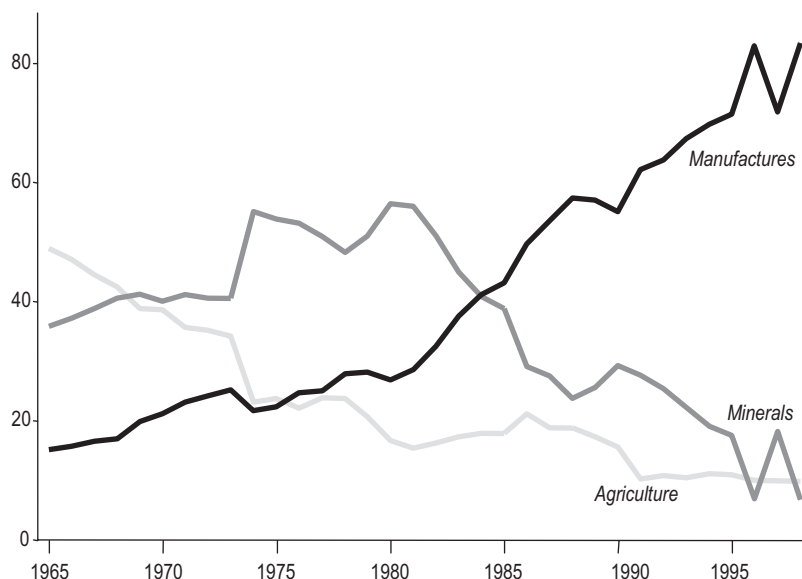
Manufactured exports from developing economies are often part of multinational production networks. Nike contracts with firms in Vietnam to make shoes; the “world car” is a reality, with parts produced in different locations. So part of the answer to why integration has taken off must lie with technological advances that

Figure 1. Change in Trade as a Share of GDP, Selected Countries, 1977–97 (%)



Source: World Bank (2002).

Figure 2. Developing Country Exports by Sector, 1965–99 (% of total)



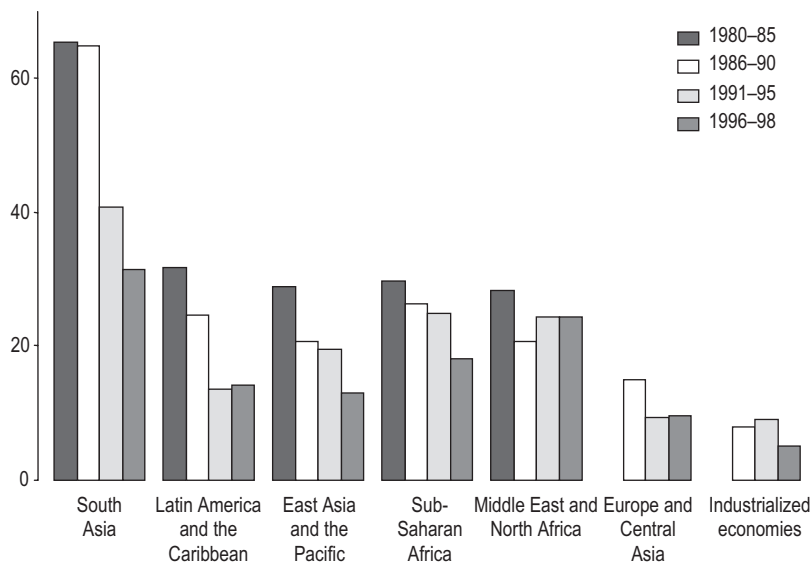
Source: World Bank (2002).

make integrated production feasible (see table 1 for evidence of the dramatic declines in the cost of air transport and international communications). But part of the answer also lies in policy choices of developing economies. China and India had almost totally closed economies, so their increased integration would not have been possible without steps to gradually liberalize trade and direct foreign investment.

Some measure of this policy trend can be seen in average import tariff rates for developing economies. Since 1980 average tariffs have declined sharply in South Asia, Latin America and the Caribbean, and East Asia and Pacific, whereas in Africa and the Middle East there has been much less tariff-cutting (figure 3). These reported average tariffs, however, capture only a small amount of what is happening with trade policy. Often the most pernicious impediments are nontariff barriers: quotas, licensing schemes, restrictions on purchasing foreign exchange for imports, and the like. China started to reduce these nontariff impediments in 1979, which led to a dramatic surge in trade (figure 4). In 1978 external trade was monopolized by a single government ministry.¹ Specific measures adopted in China included allowing a growing number of firms, including private ones, to trade directly and opening a foreign exchange market to facilitate this trade.

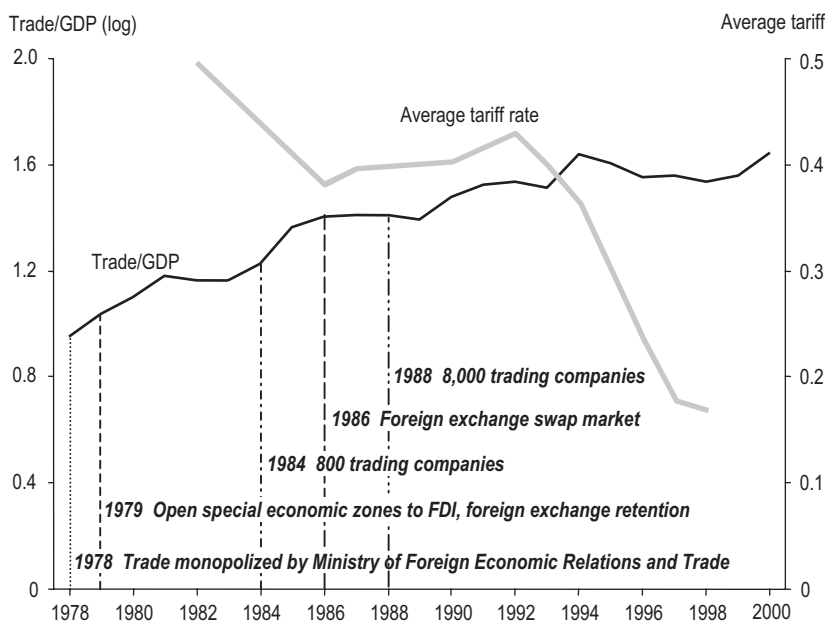
Another major impediment to trade in many developing areas is inefficient ports and customs administration. For example, it is much more expensive to ship a container of textiles from a Mombasa, Kenya, port to the East Coast of the United States

Figure 3. Average Unweighted Tariff Rates, by Region, 1980–98 (%)



Source: World Bank (2002).

Figure 4. Trade Reforms and Volumes in China, 1978–2000



Source: Dollar and Kraay (2003).

than from Asian ports such as Mumbai, Shanghai, Bangkok, or Kaohsiung, Taiwan (China), even though Mombasa is closer (Clark and others 2004). The extra cost, equivalent to an 8 percent export tax, is due to inefficiencies and corruption in the port. Long customs delays often act as import and export taxes. Developing economies that have become more integrated with the world economy have reasonably well-functioning ports and customs, and their improvement has often been a deliberate policy target. Several countries, including Kenya, trade less of their income today than 20 years ago; surely this is partly the result of restrictive trade policies, defined broadly to include inefficient ports and customs.

Thus, one key development in this current wave of globalization is a dramatic change in the way many developing countries relate to the global economy. Developing economies as a whole are a major exporter of manufactures and services—many of which compete directly with products made in industrialized countries. The nature of trade and competition between rich and poor countries has fundamentally changed.

Accelerated Growth and Poverty Reduction in Developing Economies

Some of the debate about globalization concerns its effects on poor countries and poor people. The introduction quotes several sweeping statements that assert that global economic integration is increasing poverty and inequality in the world. But the reality is far more complex—and to some extent runs exactly counter to what is being claimed by antiglobalists. Thus, this section focuses on the trends in global poverty and inequality, and the following section links them to global integration. The trends of the last 20 years highlighted here are:

- Growth rates of developing economies have accelerated and are higher than those of industrialized countries.
- The number of extremely poor people (those living on less than \$1 a day) has declined for the time in history, though the number of people living on less than \$2 a day has increased.
- Measures of global inequality (such as the global Gini coefficient) have declined modestly, reversing a long historical trend toward greater inequality.
- Within-country inequality in general is not growing, though it has risen in several populous countries (China, India, the United States).
- Wage inequality in general has been rising (meaning larger wage increases for skilled workers than for unskilled workers).

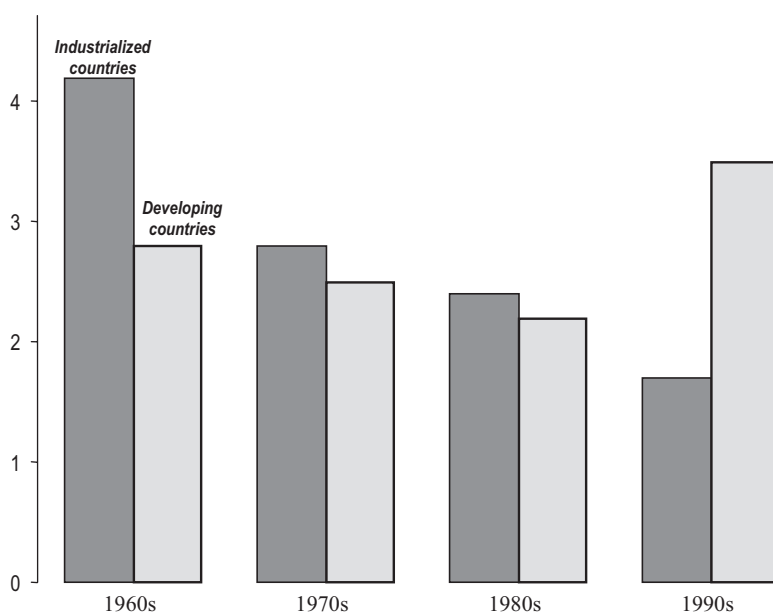
The fifth trend may seem to run counter to the fourth trend; why it does not will be explained here. The fifth trend is important for explaining some of the anxiety about globalization in industrialized countries.

Growth Rates in Developing Economies Have Accelerated

Reasonably good data on economic growth since 1960 for about 100 countries that account for the vast majority of world population are summarized in the Penn World Tables (Center for International Comparisons 2004). Aggregating data on growth rates for industrialized countries and developing economies for which there are data since 1960 shows that in general growth rates have declined in rich countries while accelerating in developing countries (figure 5). In particular, in the 1960s growth of OECD countries was about twice as fast as that of developing areas. Per capita growth rates in rich countries have gradually declined from about 4 percent in the 1960s to 1.7 percent in the 1990s—close to the long-term historical trend rate of the OECD countries. The rapid growth in the 1960s was still to some extent a rebound from the destruction of World War II as well as a payoff to economic integration among rich countries.

In the 1960s and early 1970s, the growth rate of developing economies was well below that of rich countries, a paradox whose origin has been long debated. The slower growth of less developed economies was a paradox because neoclassical growth theory suggested that other things being equal poor countries should grow

Figure 5. GDP per Capita Growth Rate, by Country Type, 1960s–1990s (%)



Source: Center for International Comparisons (2004).

faster. This pattern finally emerged in the 1990s, with per capita growth in developing countries of about 3.5 percent—more than twice the rate of rich countries.

This high aggregate growth depends heavily on several large countries that were among the poorest in the world in 1980 but that have grown well since then. Ignoring differences in population and averaging growth rates in poor countries over 1980–2000 result in an average growth of about zero for poor countries. China, India, and several small countries, particularly in Africa, are among the poorest quintile of countries in 1980. Ignoring population, the average growth of Chad and China is about zero, and the average growth of India and Togo is about zero. Accounting for differences in population, though, the average growth of poor countries has been very good in the past 20 years. China obviously carries a large weight in any calculation of the growth of poor countries in 1980, but it is not the only poor country that did well: Bangladesh, India, and Vietnam also grew faster than rich countries in the same period. Several African economies, notably Uganda, also had accelerated growth.

The Number of Extremely Poor People Has Declined by 375 Million Globally

The most important point in this section is that poverty reduction in low-income countries is very closely related to the GDP growth rate. The accelerated growth of low-income countries has led to unprecedented poverty reduction. By poverty I mean subsisting below some absolute threshold. Most poverty analyses are carried out with countries' own poverty lines, which are set in country context and naturally differ.

China, for example, uses a poverty line defined in constant Chinese yuan. The poverty line is deemed the minimum amount necessary to subsist. In practice, estimates of the number of poor in a country such as China come from household surveys carried out by a statistical bureau. These surveys aim to measure what households actually consume. Most extremely poor people in the world are peasants, and they subsist to a large extent on their own agricultural output. To look only at their money income would not be very relevant, because the extremely poor have only limited involvement in the money economy. Thus measures ask households what they actually consume and attach a value to their consumption based on the prices of different commodities. So a poverty line is meant to capture a certain real level of consumption. Estimating the extent of poverty is obviously subject to error, but in many countries the measures are good enough to pick up large trends. In discussing poverty it is important to be clear on the poverty line being used. In global discussions international poverty lines of either \$1 a day or \$2 a day, calculated at purchasing power parity, are used. For discussions of global poverty a common line should be applied to all countries.

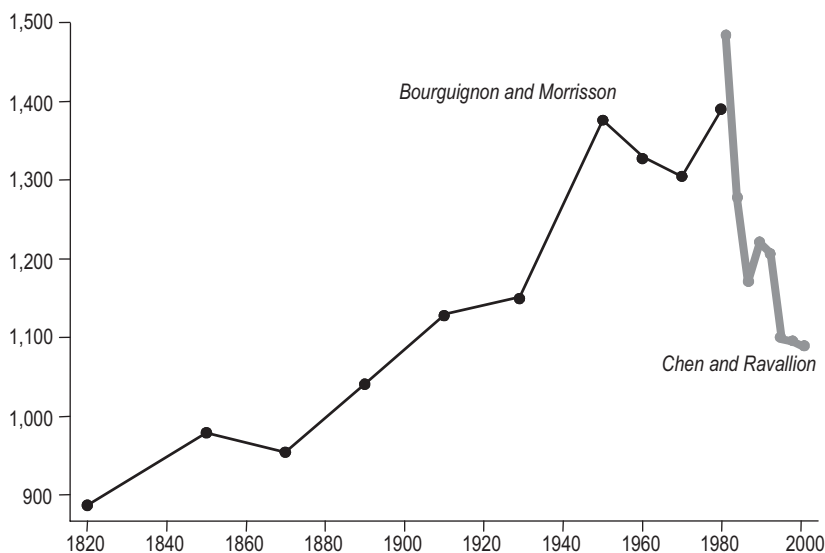
Chen and Ravallion (2004) used household survey data to estimate the number of poor people worldwide based on the \$1 a day and \$2 a day poverty lines back to

1981. They found that the incidence of extreme poverty (consuming less than \$1 a day) was basically cut in half in 20 years, from 40.4 percent of the population in developing economies in 1981 to 21.1 percent in 2001. It is interesting that the decline in \$2 a day poverty incidence was not as great, from 66.7 percent to 52.9 percent, over the same period.

Poverty incidence has been gradually declining throughout modern history, but in general population growth has outstripped the decline in incidence so that the total number of poor people has actually risen. Even in 1960–80, a reasonably prosperous period for developing economies, the number of extremely poor people continued to rise (figure 6).² Most striking in the past 20 years is that the number of extremely poor people declined by 375 million, while at the same time world population rose by 1.6 billion. But the decline was not steady: in 1987–93 the number of extremely poor people rose, as growth slowed in China and India underwent an economic crisis. After 1993 growth and poverty reduction accelerated in both countries.

The 1981–2001 decline in the number of extremely poor people is unprecedented in human history. At the same time many of those who rose above the very low \$1 a day threshold are still living on less than \$2 a day. The number of people living on less than \$2 a day increased between 1981 and 2001 by nearly 300 million. About half the world's population still lives on less than \$2 a day, and it will take several more decades of sustained growth to bring this figure down significantly.

Figure 6. Extreme Poverty in the World, 1820–2001 (millions of people living on less than \$1 a day)



Source: Bourguignon and Morrisson (2002); Chen and Ravallion (2004).

Although the overall decline in extreme poverty is positive news, performance has varied by region. South Asia and East Asia and Pacific grew well and reduced poverty, but Sub-Saharan Africa had negative growth between 1981 and 2001 and a rise in poverty: the number of extremely poor people there increased from 164 million (41.6 percent of the population) to 316 million (46.9 percent of the population). Two-thirds of extremely poor people still live in Asia, but if strong growth there continues, global poverty will be increasingly concentrated in Africa.

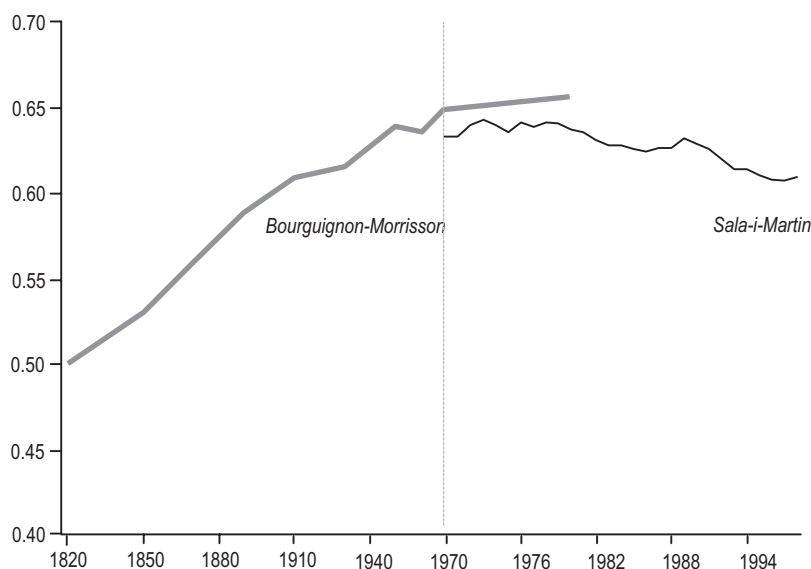
Global Inequality Has Declined Modestly

Global inequality is casually used to mean several things, but the most sensible definition is the same as for a country: line up all the people in the world from the poorest to the richest and calculate a measure of inequality among their incomes. There are several measures, of which the Gini coefficient is the best known. Bhalla (2002) estimates that the global Gini coefficient declined from 0.67 in 1980 to 0.64 in 2000 after rising from 0.64 in 1960. Sala-i-Martin (2002) likewise finds that all the standard measures of inequality show a decline in global inequality since 1980. Both Bhalla and Sala-i-Martin combine national accounts data on income or consumption with survey-based data on distribution. Deaton (2004) discusses the problems of using national accounts data for studying poverty and inequality, noting among other things that the growth rates in national accounts data for China and India are arguably overestimated. This bias would tend to exaggerate the decline in global inequality over the past 25 years. Hence, there is a fair degree of uncertainty about the magnitude of the estimated decline in global inequality.³

For historical perspective, Bourguignon and Morrisson (2002) calculate the global Gini coefficient back to 1820. Although confidence in these early estimates is not high, they illustrate an important point: global inequality has been on the rise throughout modern economic history. Bourguignon and Morrisson estimate that the global Gini coefficient rose from 0.50 in 1820 to about 0.65 around 1980 (figure 7). Sala-i-Martin (2002) estimates that it has since declined to 0.61.

Other measures of inequality such as mean log deviation show a similar trend, rising until about 1980 and then declining modestly after (figure 8). Roughly speaking, the mean log deviation is the percent difference between average income in the world and the income of a randomly chosen individual who represents a typical person. Average per capita income in the world today is around \$5,000, but the typical person lives on 20 percent of that, or \$1,000. The advantage of the mean log deviation is that it can be decomposed into inequality between countries (differences in per capita income across countries) and inequality within countries. This decomposition shows that most inequality in the world can be attributed to inequality among

Figure 7. Global Gini Coefficient, 1820–1997

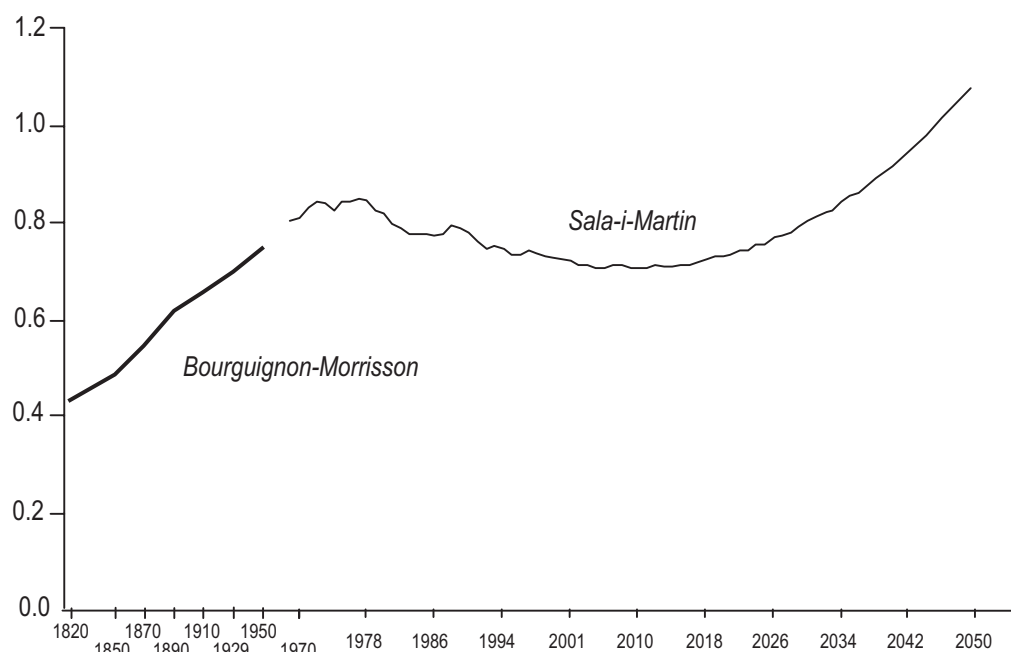


Source: Bourguignon and Morrisson (2002); Sala-i-Martin (2002).

countries. Global inequality rose from 1820 to 1980, primarily because already relatively rich countries (those in Europe and North America) grew faster than poor ones. As noted in the discussion of the first trend, that pattern of growth was reversed starting around 1980, and the faster growth in such poor countries as Bangladesh, China, India, and Vietnam accounts for the modest decline in global inequality since then.⁴ (Slow growth in Africa tended to increase inequality, faster growth in low-income Asia tended to reduce it, and Asia's growth modestly outweighed Africa's.)

Thinking about the different experiences of Africa and Asia, as in the last section, helps give a clearer picture of what is likely to happen in the future. Rapid growth in Asia has been a force for greater global equality because that is where the majority of the world's extremely poor people lived in 1980—and they benefited from growth. But if the same growth trends persist, they will not continue to be a force for equality. Sala-i-Martin (2002) projects future global inequality if the growth rates of 1980–98 persist: global inequality will continue to decline until about 2015, after which global inequality will rise sharply (see figure 8). A large share of the world's poor people still lives in India and other Asian countries, so that continued rapid growth there will be equalizing for another decade or so. But increasingly poverty will be concentrated in Africa, so that if slow growth persists there, global inequality will eventually rise again.

Figure 8. Global Household Inequality, 1820–2050 (mean log deviation)



Source: Bourguignon and Morrisson (2002); Sala-i-Martin (2002).

Within-Country Inequality Is in General Not Growing

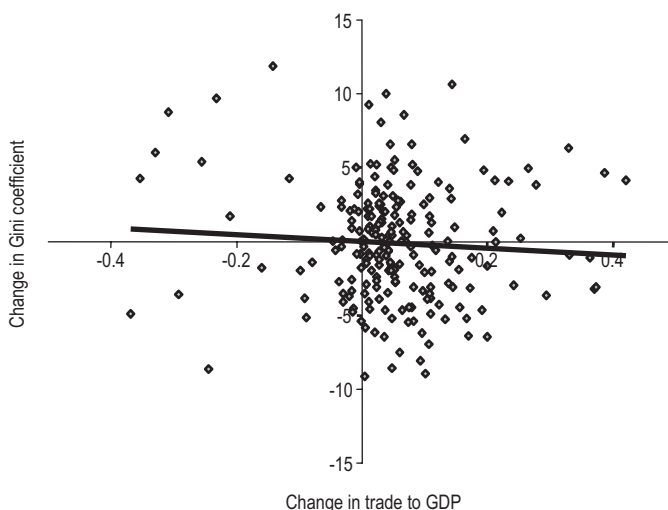
The previous analysis shows that inequality within countries has a relatively small role in measures of global income inequality. But people care about trends in inequality in their own societies (arguably more than they care about global inequality and poverty). So a different question is what is happening to income inequality within countries. One common claim about globalization is that it leads to greater inequality within countries and thus fosters social and political polarization.

To assess this claim Dollar and Kraay (2002) collected income distribution data from more than 100 countries, in some cases going back decades. They found no general trend toward higher or lower inequality within countries. Focusing on the share of income going to the bottom quintile, another common measure of inequality, they found increases in inequality for some countries (for example, China and the United States) in the 1980s and 1990s and decreases for others. They also tried to use measures of integration to explain the changes in inequality that have occurred, but none of the changes were related to any of the measures. For example, countries in which trade integration increased showed rises in inequality in some

cases and declines in others (figure 9). They found the same results for other measures, such as tariff rates and capital controls. Particularly in low-income countries, much of the import protection benefited relatively rich and powerful groups, so that integration with the global market went hand in hand with declines in income inequality. It is widely recognized that income distribution data have a lot of measurement error, which makes it difficult to identify systematic relationships, but given the available data, there is no robust evidence that integration is systematically related to higher inequality within countries.

There are two important caveats to this conclusion. First, inequality has risen in several very populous countries, notably China, India, and the United States. This means that a majority of citizens of the world live in countries in which inequality is rising. Second, the picture of inequality is not so favorable for rich countries in the past decade. The Luxembourg Income Study, using comparable, high-quality income distribution data for most rich countries, finds no obvious trends in inequality through the mid- to late 1980s. Over the past decade, through, inequality has increased in most rich countries. Because low-skilled workers in these countries now compete more with workers in developing economies, global economic integration can create pressure for higher inequality in rich countries while having effects in poor countries that often go the other way. The good news from the Luxembourg Income Study is that “domestic policies and institutions still have large effects on the level and trend of inequality within rich and middle-income nations, even in a globalizing world. . . . Globalization does not force any single outcome on any country”

Figure 9. Correlation between Change in Gini Coefficient and Change in Trade as a Share of GDP



Source: Dollar and Kraay (2002).

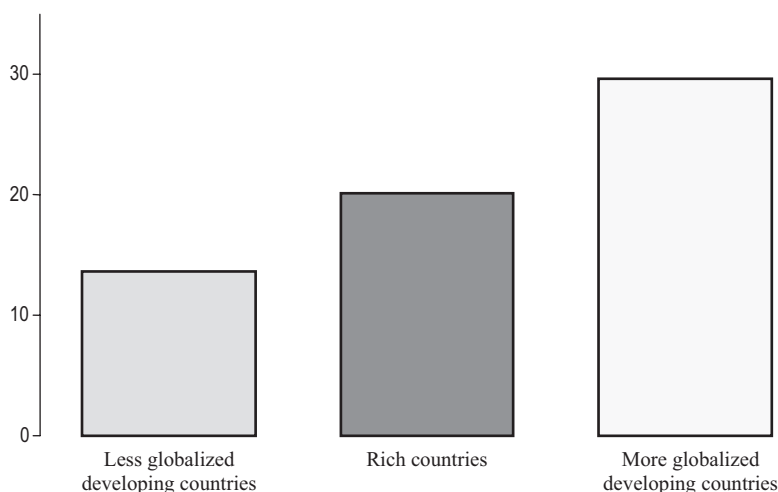
(Smeeding 2002, p. 179). In other words, some rich countries have maintained stable income distributions in this era of globalization through their social and economic policies (on taxes, education, welfare, and the like).

Wage Inequality Is Rising Worldwide

Much of the concern about globalization in rich countries relates to workers, wages, and other labor issues. The most comprehensive examination of globalization and wages used International Labour Organization data from the past two decades (Freeman and others 2001). These data look across countries at what is happening to wages for very specific occupations (for example, bricklayer, primary schoolteacher, nurse, autoworker). The study found that wages have generally been rising fastest in more globalized developing economies, followed by rich countries, and then less globalized developing economies (figure 10). More globalized developing economies are the top third of developing economies in terms of increased trade integration over the past 20 years (Dollar and Kraay 2004). Less globalized developing economies are the remaining developing economies. The fastest wage growth is occurring in developing economies that are actively increasing their integration with the global economy.

Although the general rise in wages is good news, the detailed findings from Freeman and others (2001) are more complex and indicate that certain types of workers benefit more than others. First, increased trade is related to a decline in the gender

Figure 10. Wage Growth by Country Type, 1980s–1990s (%)



Source: Freeman and others (2001).

wage gap. More trade appears to lead to a more competitive labor market in which groups that have been traditionally discriminated against—women, for example—fare especially well (Oostendorp 2002). Second, the gains from increased trade appear to be larger for skilled workers. This finding is consistent with other work showing a worldwide trend toward greater wage inequality—that is, a larger gap between pay for educated workers and pay for less educated and unskilled workers. Galbraith and Liu (2001), for example, find a worldwide trend toward greater wage inequality among industries. Wages in skill-intensive industries, such as aircraft production, have been going up faster than wages in low-skill industries, such as garments.

If wage inequality is going up worldwide, how can income inequality not be rising in most countries? There are several reasons. First, in the typical developing economy wage earners make up a small share of the population. Even unskilled wage workers are a relatively elite group. Take Vietnam, for example, a low-income country with a survey of the same representative sample of households early in liberalization (1993) and five years later. The majority of households in the country (and thus in the sample) are peasants. The household data show that the price of the main agricultural output (rice) went up dramatically while the price of the main purchased input (fertilizer) actually went down. Both movements are related directly to globalization because over the survey period Vietnam became a major exporter of rice (raising its price) and a major importer of fertilizer from cheaper producers (lowering its price). Poor families faced a much bigger wedge between rice's input price and output price, and their real income went up dramatically (Benjamin and Brandt 2002). So, one of the most important forces acting on income distribution in this low-income country had nothing to do with wages.

Several rural households also sent a family member to a nearby city to work in a factory for the first time. In 1989 the typical wage in Vietnamese currency was the equivalent of \$9 a month. Today, factory workers making contract shoes for U.S. brands often make \$50 a month or more. So the wage for a relatively unskilled worker has gone up nearly fivefold. But wages for some skilled occupations, for example, computer programmers and English interpreters, may have gone up 10 times or more (Glewwe and others 2004). Thus, a careful study of wage inequality is likely to show rising inequality. But how wage inequality translates into household inequality is very complex. For a surplus worker from a large rural household who obtains a newly created job in a shoe factory, earnings increase from \$0 to \$50 a month. If many new wage jobs are created, and if they typically pay much more than people earn in the rural or informal sectors, a country can have rising wage inequality but stable or even declining income inequality. (The Gini coefficient for household income inequality in Vietnam actually declined between 1993 and 1998, according to Glewwe 2004b.)

In rich countries most household income comes from wages, but household income inequality and wage inequality do not have to move in the same direction. If

there are changes in the way that people partner and combine into households, household inequality can rise even if wage inequality stays the same. Another point about wage inequality and household income inequality relevant to rich countries is that measures of wage inequality are often made before taxes are taken out of earnings. If the country has a strongly progressive income tax, inequality measures from household data (which are often made after taxes are taken out of earnings) do not have to follow pretax wage inequality. Tax policy can offset some of the trends in the labor market.

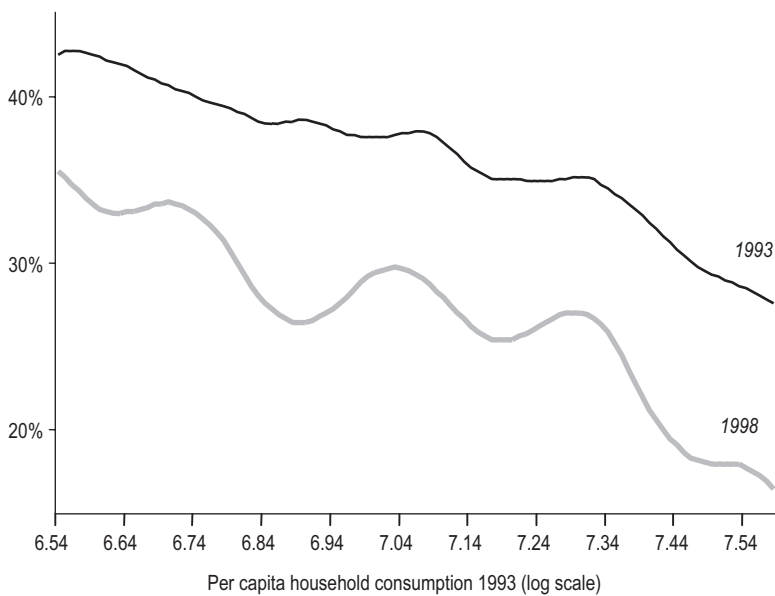
Finally, households can respond to increased wage inequality by investing more in their children's education. A higher economic return to education is not a bad thing, as long as there is equal access to education for all. Vietnam saw a tremendous increase in the secondary school enrollment rate in the 1990s—from 32 percent in 1990–91 to 56 percent in 1997–98 (Glewwe 2004a). This increase partly reflects society's and the government's investment in schools (supported by aid donors) and partly reflects households' decisions. If little or no return to education is perceived (that is, no jobs at the end of the road), it is much harder to convince families in poor countries to send their children to school. Where children have decent access to education, a higher skill premium stimulates a shift of the labor force from low-skill to higher-skill occupations.

It should also be noted that there has been a large decline in child labor in Vietnam since the country started integrating with the global market. There is ample evidence that child labor is driven primarily by poverty and educational opportunities. Child labor is more prevalent in poor households, but between 1993 and 1998 it declined for all income groups (figure 11). The change resulted from the fact that everyone was richer than they were five years earlier and from the expansion of schooling opportunities.

From this discussion of wage trends, it is easy to see why some labor unions in rich countries are concerned about integration with developing economies. It is difficult to prove that integration is increasing wage inequality, but it seems likely that integration is one factor. Concerning the immigration side of integration, Borjas and others (1997) estimate that flows of unskilled labor into the United States have reduced wages for unskilled labor by 5 percent from where they otherwise would be. Immigrants who find new jobs earn much more than they did before (10 times as much, according to World Bank 2002), but their competition reduces the wages of U.S. workers already doing such jobs. Similarly, imports of garments and footwear from countries such as Bangladesh and Vietnam create jobs for workers that pay far more than other opportunities in those countries but put pressure on unskilled wages in rich countries.

Thus overall the era of globalization has seen unprecedented reduction of extreme poverty and a modest decline in global inequality. But it has put real pressure on less skilled workers in rich countries—a key reason why the growing integration is controversial in industrialized countries.

Figure 11. Child Labor and Household Consumption Levels in Vietnam, 1993 and 1998



Source: Edmonds (2001).

Is There a Link between Integration and Poverty Reduction?

To keep track of the wide range of explanations that are offered for persistent poverty in developing nations, it helps to keep two extreme views in mind. The first is based on an object gap: Nations are poor because they lack valuable objects like factories, roads, and raw materials. The second view invokes an idea gap: Nations are poor because their citizens do not have access to the ideas that are used in industrial nations to generate economic value...

Each gap imparts a distinctive thrust to the analysis of development policy. The notion of an object gap highlights saving and accumulation. The notion of an idea gap directs attention to the patterns of interaction and communication between a developing country and the rest of the world.

—Paul Romer (1993)

Developing economies have become more integrated with the global economy in the past two decades, and growth and poverty reduction have accelerated. A natural question is whether there is a link between the two. In other words, could countries

such as Bangladesh, China, India, and Vietnam have grown as rapidly if they had remained as closed to foreign trade and investment as they were in 1980? This cannot be answered with scientific certainty, but several different types of evidence can be brought to bear on it.

It is useful to begin with what to expect from economic theory. As the quote from Romer suggests, traditional growth theory focuses on accumulation and the “object gap” between poor countries and rich ones. If increasing the number of factories and workplaces is the only important action, it does not matter whether the environment is closed or dominated by the state. This model was followed in the extreme by China and the Soviet Union, and to a lesser extent by most developing economies, which followed import-substituting industrialization strategies throughout the 1960s and 1970s. The disappointing results from this approach led to new thinking by policymakers in developing areas and economists studying growth. Romer was one of the pioneers of the new growth theory that emphasized how innovation occurs and is spread and the role of technological advance in improving the standard of living. Different aspects of integration—sending students abroad to study, connecting to the Internet, allowing foreign firms to open plants, purchasing the latest equipment and components—can help overcome the “idea gap” that separates poor countries from rich countries.

What is the evidence on integration spurring growth? Some of the most compelling evidence comes from case studies that show how this process can work in particular countries. Among the countries that were very poor in 1980, China, India, Uganda, and Vietnam provide an interesting range of examples:

China

China’s initial reforms in the late 1970s focused on the agricultural sector and emphasized strengthening property rights, liberalizing prices, and creating internal markets. Liberalizing foreign trade and investment were also part of the initial reform program and played an increasingly important role in growth as the 1980s proceeded (see figure 4). The role of international links is described in a case study by Eckaus (1997, pp. 415–37):

China’s foreign trade began to expand rapidly as the turmoil created by the Cultural Revolution dissipated and new leaders came to power. Though it was not done without controversy, the argument that opening of the economy to foreign trade was necessary to obtain new capital equipment and new technology was made official policy....Most obviously, enterprises created by foreign investors have been exempt from the foreign trade planning and control mechanisms. In addition, substantial amounts of other types of trade, particularly the trade of the township and village enterprises

and private firms, have been relatively free. The expansion of China's participation in international trade since the beginning of the reform movement in 1978, has been one of the most remarkable features of its remarkable transformation.

India

It is well known that India pursued an inward-oriented strategy into the 1980s with disappointing results in growth and poverty reduction. Bhagwati (1992, p. 48) crisply states the main problems and failures of the strategy:

I would divide them into three major groups: extensive bureaucratic controls over production, investment and trade; inward-looking trade and foreign investment policies; and a substantial public sector, going well beyond the conventional confines of public utilities and infrastructure.

Under this policy regime India's growth in the 1960s (1.4 percent a year) and 1970s (−0.3 percent) was disappointing. During the 1980s India's economic performance improved, but this surge was fueled by deficit spending and borrowing from abroad that was unsustainable. In fact, the spending spree led to a fiscal and balance of payments crisis that brought a new, reform government to power in 1991. Srinivasan (1996, p. 245) describes the key reform measures and their results:

In July 1991, the government announced a series of far reaching reforms. These included an initial devaluation of the rupee and subsequent market determination of its exchange rate, abolition of import licensing with the important exceptions that the restrictions on imports of manufactured consumer goods and on foreign trade in agriculture remained in place, convertibility (with some notable exceptions) of the rupee on the current account; reduction in the number of tariff lines as well as tariff rates; reduction in excise duties on a number of commodities; some limited reforms of direct taxes; abolition of industrial licensing except for investment in a few industries for locational reasons or for environmental considerations, relaxation of restrictions on large industrial houses under the Monopolies and Restrictive Trade Practices (MRTP) Act; easing of entry requirements (including equity participation) for direct foreign investment; and allowing private investment in some industries hitherto reserved for public sector investment.

In general, India has seen good results from its reform program, with per capita income growth above 4 percent a year in the 1990s. Growth and poverty reduction have been particularly strong in states that have made the most progress liberalizing the regulatory framework and providing a good environment for delivery of infrastructure services (Goswami and others 2002).

Uganda

Uganda has been one of the most successful reformers in Africa during this recent wave of globalization, and its experience has interesting parallels with Vietnam's. It, too, was a country that was quite isolated economically and politically in the early 1980s. The role of trade reform in its larger reform context is described in Collier and Reinikka (2001, pp. 30–39):

Trade liberalization has been central to Uganda's structural reform program....In 1986 the NRM government inherited a trade regime that included extensive nontariff barriers, biased government purchasing, and high export taxes, coupled with considerable smuggling. The nontariff barriers have gradually been removed since the introduction in 1991 of automatic licensing under an import certification scheme. Similarly, central government purchasing was reformed and is now subject to open tendering without a preference for domestic firms over imports....The average real GDP growth rate was 6.3 percent per year during the entire recovery period (1986–99) and 6.9 percent in the 1990s. The liberalization of trade has had a marked effect on export performance. In the 1990s export volumes grew (at constant prices) at an annualized rate of 15 percent, and import volumes grew at 13 percent. The value of noncoffee exports increased five-fold between 1992 and 1999.

Vietnam

The same collection that contains Eckaus's (1997) study of China also has a case study of Vietnam, analyzing how the country went from being one of the poorest countries in the 1980s to being one of the fastest growing economies in the 1990s (Dollar and Ljunggren 1997, pp. 452–55):

That Vietnam was able to grow throughout its adjustment period can be attributed to the fact that the economy was being increasingly opened to the international market. As part of its overall effort to stabilize the economy, the government unified its various controlled exchange rates in 1989 and devalued the unified rate to the level prevailing in the parallel market. This was tantamount to a 73 percent *real* devaluation; combined with relaxed administrative procedures for imports and exports, this sharply increased the profitability of exporting.

This...policy produced strong incentives for export throughout most of the 1989–94 period. During these years real export growth averaged more than 25 percent per annum, and exports were a leading sector spurring the expansion of the economy. Rice exports were a major part of this success in

1989; and in 1993–94 there was a wide range of exports on the rise, including processed primary products (e.g., rubber, cashews, and coffee), labor-intensive manufactures, and tourist services. . . . In response to stabilization, strengthened property rights, and greater openness to foreign trade, domestic savings increased by twenty percentage points of GDP, from negative levels in the mid-1980s to 16 percent of GDP in 1992.

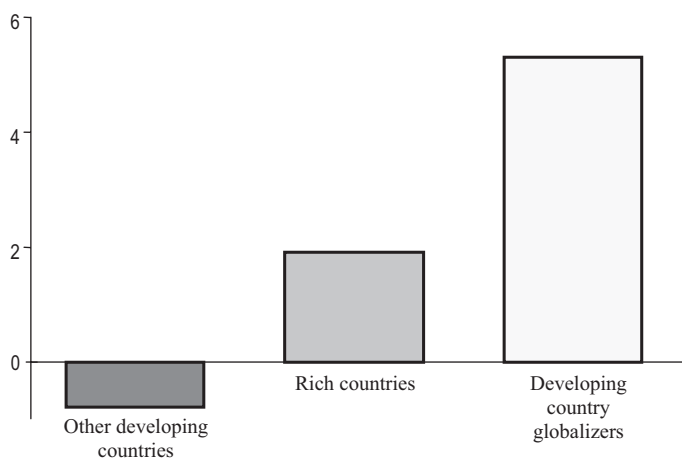
Are These Individual Country Findings Generalizable?

These cases provide persuasive evidence that openness to foreign trade and investment—coupled with complementary reforms—can lead to faster growth in developing economies. But individual cases always beg the question, how general are these results? Does the typical developing economy that liberalizes foreign trade and investment get good results? Cross-country statistical analysis is useful for looking at the general patterns in the data. Cross-country studies generally find a correlation between trade and growth. To relate this to the discussion in the first section, some developing economies have had large increases in trade integration (measured as the ratio of trade to national income), and others have had small increases or even declines. In general, the countries that had large increases also had accelerations in growth. The group of developing economy globalizers identified by Dollar and Kraay (2004) had population-weighted per capita growth of 5 percent in the 1990s, compared with 2 percent in rich countries and –1 percent for other developing countries (figure 12). This relationship between trade and growth persists after controlling for reverse causality from growth to trade and for changes in other institutions and policies (Dollar and Kraay 2003).

A third type of evidence about integration and growth comes from firm-level studies and relates to the epigraph from Romer. Developing economies often have large productivity dispersion across firms making similar things: high-productivity and low-productivity firms coexist, and in small markets there is often insufficient competition to spur innovation. A consistent finding of firm-level studies is that openness leads to lower productivity dispersion (Haddad 1993; Haddad and Harrison 1993; Harrison 1994). High-cost producers exit the market as prices fall; if these firms were less productive or were experiencing falling productivity, their exits represent productivity improvements for the industry. Although the destruction and creation of new firms is a normal part of a well-functioning economy, attention is simply too often paid to the destruction of firms—which misses half the picture. The increase in exits is only part of the adjustment—granted, it is the first and most painful part—but if there are no significant barriers to entry, there are also new entrants. The exits are often front loaded, but the net gains over time can be substantial.

Wacziarg (1998) uses 11 episodes of trade liberalization in the 1980s to examine competition and entry. Using data on the number of establishments in each sector,

Figure 12. Per Capita GDP Growth Rates, by Country Type, 1990s (% , based on GDP in purchasing power parity terms)



Source: Dollar and Kraay (2004).

he calculates that entry rates were 20 percent higher in countries that liberalized than in countries that did not. This estimate may reflect other policies that accompanied trade liberalization, such as privatization and deregulation, so this is likely to be an upper bound of the impact of trade liberalization. However, it is a sizable effect and indicates that there is plenty of potential for new firms to respond to the new incentives. The evidence also indicates that exit rates may be significant, but entry rates are usually of a comparable magnitude. Plant-level data from Chile, Colombia, and Morocco spanning several years in the 1980s when these countries initiated trade reforms indicate that exit rates range from 6 percent to 11 percent a year and entry rates from 6 percent to 13 percent. Over time the cumulative turnover is quite impressive, with a quarter to a third of firms having turned over in four years (Roberts and Tybout 1996).

The higher turnover of firms is an important source of the dynamic benefit of openness. In general, dying firms have falling productivity and new firms tend to increase their productivity over time (Aw and others 2000; Liu and Tybout 1996; Roberts and Tybout 1996). Aw and others (2000) find that in Taiwan (China) within a five-year period the replacement of low-productivity firms with new, higher-productivity entrants accounted for half or more of the technological advance in many Taiwanese industries.

Although these studies shed some light on why open economies are more innovative and dynamic, they also show why integration is controversial. There will be more dislocation in an open, dynamic economy—with some firms closing and others

starting up. If workers have good social protection and opportunities to develop new skills, everyone can benefit. But without these policies there can be some big losers.

Surveys of the literature on openness and growth generally find the totality of the evidence persuasive. Winters (2004, p. F4), for example, concludes: "While there are serious methodological challenges and disagreements about the strength of the evidence, the most plausible conclusion is that liberalisation generally induces a temporary (but possibly long-lived) increase in growth. A major component of this is an increase in productivity." Similarly, economic historians Lindert and Williamson (2001, pp. 29–30) sum up the different pieces of evidence linking integration to growth: "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." They go on to note the "empty set" of "countries that chose to be less open to trade and factor flows in the 1990s than in the 1960s and rose in the global living-standard ranks at the same time. As far as we can tell, there are no anti-global victories to report for the postwar Third World. We infer that this is because freer trade stimulates growth in Third World economies today, regardless of its effects before 1940."

Making Globalization Work Better for Poor People

So far, the most recent wave of globalization starting around 1980 has been associated with more rapid growth and poverty reduction in developing economies and with a modest decline in global inequality. These empirical findings from a wide range of studies help explain what otherwise might appear paradoxical: opinion surveys reveal that globalization is more popular in poor countries than in rich ones. In particular, the Pew Research Center for the People and the Press (2003) surveyed 38,000 people in 44 countries in all developing regions. In general, there was a positive view of growing economic integration worldwide. But what was striking in the survey was that views of globalization were distinctly more positive in low-income countries than in rich ones.

Although most people expressed the view that growing global trade and business ties are good for their country, only 28 percent of people in the United States and Western Europe thought that such integration was "very good." By contrast, the share who thought integration was very good was 64 percent in Uganda and 56 percent in Vietnam. These countries stood out as particularly proglobalization, but respondents from developing economies in Asia (37 percent) and Sub-Saharan Africa (56 percent) were also far more likely to find integration "very good" than respondents from rich countries. Conversely, a significant minority (27 percent) in rich countries thought that "globalization has a bad effect" on their country,

compared with a negligible number of households in developing economies in Asia (9 percent) or Sub-Saharan Africa (10 percent).

Developing economies also had a more positive view of the institutions of globalization. Some 75 percent of households in Sub-Saharan Africa thought that multinational corporations had a positive influence on their country, compared with only 54 percent in rich countries. Views of the effect of the International Monetary Fund, the World Bank, and the World Trade Organization (WTO) were nearly as positive in Africa (72 percent of households said they had a positive effect on their country). By contrast, only 28 percent of households in Africa thought that antiglobalization protestors had a positive effect on their country. Views of the protestors were more positive in the United States and Western Europe (35 percent said the protestors had a positive effect on their country).

Although global economic integration has the potential to spur further growth and poverty reduction, whether this potential is realized depends on the policies of developing economies and the policies of industrialized countries. True integration requires not just trade liberalization but also wide-ranging reforms of institutions and policies, as the cases of China and India illustrate so clearly. Many of the countries that are not participating very much in globalization have serious problems with the overall investment climate, for example, Kenya, Myanmar, Nigeria, and Pakistan. Some of these countries also have restrictive policies toward trade. But even if they liberalize trade, not much is likely to happen without other measures. It is not easy to predict the reform paths of these countries. (Consider the relative successes cited here: China, India, Uganda, Vietnam. In each case their reform was a startling surprise.) As long as there are locations with weak institutions and policies, people living there are going to fall further behind the rest of the world in terms of living standards.

Building a coalition for reform in these locations is not easy, and what outsiders can do to help is limited. But one thing that industrialized countries can do is make it easy for developing areas that do choose to open up to join the club of trading nations. Unfortunately, in recent years rich countries have made it harder for poor countries to do so. The General Agreement on Tariffs and Trade was originally built around agreements concerning trade practices. Now, however, a certain degree of institutional harmonization is required to join the WTO, for example, on policies toward intellectual property rights. The proposal to regulate labor standards and environmental standards through WTO sanctions would take this requirement for institutional harmonization much farther. Developing economies see the proposal to regulate their labor and environmental standards through WTO sanctions as a new protectionist tool that rich countries can wield against them.

Globalization will proceed more smoothly if industrialized countries make it easy for developing economies to have access to their markets. Reciprocal trade liberalizations have worked well throughout the postwar period. There still are significant protections in OECD countries against agricultural and labor-intensive products that are important to developing economies. It would help substantially to reduce these protections. At the

same time, developing economies would benefit from opening their own markets further. They have a lot to gain from more trade in services. Also, 70 percent of the tariff barriers that developing areas face are from other developing economies. So there is much potential to expand trade among developing areas, if trade restrictions are further eased. But the trend to use trade agreements to impose an institutional model from OECD countries on developing economies makes it more difficult to reach trade agreements that benefit poor countries. The current Doha round of WTO negotiations is taking up these issues of market access, but it remains to be seen whether rich countries are willing to significantly reduce their trade barriers in agriculture and labor-intensive manufactures.

Another reason to be pessimistic about further integration of poor economies and rich ones is geography. There is no inherent reason why coastal China should be poor—or southern India, or Vietnam, or northern Mexico. These locations were historically held back by misguided policies, and with policy reform they can grow very rapidly and take their natural place in the world income distribution. However, the same reforms are not going to have the same effect in Chad and Mali. Some countries have poor geography in the sense that they are far from markets and have inherently high transport costs. Other locations face challenging health and agricultural problems. So, it would be naive to think that trade and investment can alleviate poverty in all locations. Much more could be done with foreign aid targeted to developing medicines for malaria, HIV/AIDS, and other health problems in poor areas and to building infrastructure and institutions in these locations. The promises of greater aid from Europe and the United States at the Monterrey Conference were encouraging, but it remains to be seen if these promises will be fulfilled.

So integration of poor economies with rich ones has provided many opportunities for poor people to improve their lives. Examples of the beneficiaries of globalization can be found among Chinese factory workers, Mexican migrants, Ugandan farmers, and Vietnamese peasants. Lots of nonpoor people in developing and industrialized economies alike also benefit, of course. But much of the current debate about globalization seems to ignore the fact that it has provided many poor people in developing economies unprecedented opportunities. After all the rhetoric about globalization is stripped away, many of the practical policy questions come down to whether rich countries are going to make it easy or difficult for poor communities that want to integrate with the world economy to do so. The world's poor people have a large stake in how rich countries answer these questions.

Notes

David Dollar is country director for China and Mongolia at the World Bank; his email address is ddollar@worldbank.org. This article benefited from the comments of two anonymous referees and of seminar participants at universities and think tanks in Australia, China, India, Europe, and North America.

1. The phrase *free trade* refers to a situation in which trade is not monopolized by the government, but rather is permitted to private firms and citizens as well—so China began to shift to a policy of free trade in 1979.

2. It is difficult to obtain survey-based estimates of poverty before 1980. Bourguignon and Morrisson (2002) combine what survey data are available with national accounts data to provide rough estimates of poverty since 1820. The broad trend is clear: the number of poor people in the world kept rising until about 1980.

3. Bhalla (2002) and Sala-i-Martin (2002) also estimate very large reductions in global poverty based on the national accounts data, but Deaton (2004) makes a convincing case that the survey-based estimates from Chen and Ravallion (2004) are a more reliable indicator of changes in global poverty.

4. Milanovic (2002) estimates an increase in the global Gini coefficient for the short period between 1988 and 1993. How can this be reconciled with the Bhalla (2002) and Sala-i-Martin (2002) findings? Global inequality has declined over the past two decades primarily because poor people in China and India have seen increases in their incomes relative to incomes of rich people (that is, OECD populations). As noted, 1988–93 was the one period in the past 20 years that was not good for poor people in China and India. India had a serious crisis and recession, and rural income growth in China was temporarily slowed.

References

- Aw, B. Y., S. Chung, and M. J. Roberts. 2000. "Productivity and the Decision to Export: Micro Evidence from Taiwan and South Korea." *World Bank Economic Review* 14(1):65–90.
- Benjamin, D., and L. Brandt. 2002. "Agriculture and Income Distribution in Rural Vietnam under Economic Reforms: A Tale of Two Regions." Policy Research Working Paper. World Bank, Washington, D.C.
- Bhagwati, J. 1992. *India's Economy: The Shackled Giant*. Oxford, Clarendon Press.
- Bhalla, Surjit. 2002. *Imagine There Is No Country: Poverty, Inequality, and Growth in the Era of Globalization*. Washington, D.C.: Institute of International Economics.
- Borjas, G. J., R. B. Freeman, and L. F. Katz. 1997. "How Much Do Immigration and Trade Affect Labor Market Outcomes?" *Brookings Papers on Economic Activity* 1:1–90.
- Bourguignon, F., and C. Morrisson. 2002. "Inequality among World Citizens: 1820–1992." *American Economic Review* 92(4):727–44.
- Center for International Comparisons. 2004. *Penn World Tables*. Philadelphia: University of Pennsylvania.
- Chen, S., and M. Ravallion. 2004. "How Have the World's Poorest Fared since the Early 1980s?" Policy Research Working Paper 3341. World Bank, Washington, D.C.
- Clark, Ximena, David Dollar, and Alejandro Micco. 2004. "Port Efficiency, Maritime Transport Costs, and Bilateral Trade." *Journal of Development Economics* 75(2):417–50.
- Collier, P., and R. Reinikka. 2001. "Reconstruction and Liberalization: An Overview." In *Uganda's Recovery: The Role of Farms Firms, and Government*. Regional and Sectoral Studies. Washington, D.C.: World Bank.
- Crafts, N. 2000. "Globalization and Growth in the Twentieth Century." Working Paper 00/44. International Monetary Fund, Washington, D.C.
- Deaton, Angus. 2004. "Measuring Poverty in a Growing World (or Measuring Growth in a Poor World)." Princeton University, Woodrow Wilson School of Public and International Affairs, Princeton, N.J.

- Dollar, David, and Aart Kraay. 2002. "Growth Is Good for the Poor." *Journal of Economic Growth* 7(3):195–225.
- . 2003. "Institutions, Trade, and Growth." *Journal of Monetary Economics* 50(1):133–62.
- . 2004. "Trade, Growth, and Poverty." *Economic Journal* 114(493):F22–F49.
- Dollar, David, and Borje Ljunggren. 1997. "Going Global, Vietnam." In Padma Desai, ed., *Going Global: Transition from Plan to Market in the World Economy*. Cambridge, Mass.: MIT Press.
- Eckaus, R. 1997. "Going Global: China." In Padma Desai, ed., *Going Global: Transition from Plan to Market in the World Economy*. Cambridge, Mass.: MIT Press.
- Edmonds, E. 2001. "Will Child Labor Decline with Improvements in Living Standards?" Working Paper 01-09. Dartmouth College, Department of Economics, Hanover, N.H.
- Freeman, R., R. Oostendorp, and M. Rama. 2001. "Globalization and Wages." World Bank, Washington, D.C.
- Galbraith, James, and Liaqing Liu. 2001. "Measuring the Evolution of Inequality in the Global Economy." In James Galbraith and Maureen Berner, eds., *Inequality and Industrial Change: A Global View*. New York: Cambridge University Press.
- Glewwe, Paul. 2004a. "An Investigation of the Determinants of School Progress and Academic Achievement in Vietnam." In Paul Glewwe, Nisha Agrawal, and David Dollar, eds., *Economic Growth, Poverty, and Household Welfare in Vietnam*. Washington, D.C.: World Bank.
- . 2004b. "An Overview of Economic Growth and Household Welfare in Vietnam in the 1990s." In Paul Glewwe, Nisha Agrawal, and David Dollar, eds., *Economic Growth, Poverty, and Household Welfare in Vietnam*. Washington, D.C.: World Bank.
- Glewwe, Paul, Nisha Agrawal, and David Dollar, eds. 2004. *Economic Growth, Poverty, and Household Welfare in Vietnam*. Washington, D.C.: World Bank.
- Goswami, O., A. K. Arun, Srivastava Gantakolla, and others. 2002. "Competitiveness of Indian Manufacturing: Results from a Firm-Level Survey." Research report by Confederation of Indian Industry and World Bank, Washington, D.C.
- Haddad, M. 1993. "The Link between Trade Liberalization and Multi-Factor Productivity: The Case of Morocco." Discussion Paper 4. World Bank, Washington, D.C.
- Haddad, M., and A. Harrison. 1993. "Are There Spillovers from Direct Foreign Investment? Evidence from Panel Data for Morocco." *Journal of Development Economics* 42(1): 51–74.
- Harrison, A. 1994. "Productivity, Imperfect Competition, and Trade Reform." *Journal of International Economics* 36(1–2):53–73.
- Lindert, P., and J. Williamson. 2001. *Does Globalization Make the World More Unequal?* NBER Working Paper 8228. National Bureau of Economic Research, Cambridge, Mass.
- Liu, L., and J. Tybout. 1996. "Productivity Growth in Chile and Columbia: The Role of Entry, Exit, and Learning." In M. Roberts and J. Tybout, eds., *Industrial Evolution in Developing Countries*. Oxford: Oxford University Press.
- Maddison, A. 1995. *Monitoring the World Economy 1820–1992*. Development Center Studies. Organisation for Economic Co-operation and Development, Paris.
- Mazur, J. 2000. "Labor's New Internationalism." *Foreign Affairs* 79(1):79–93.
- Milanovic, B. 2002. "True World Income Distribution, 1988 and 1993: First Calculations Based on Household Surveys Alone." *Economic Journal* 112(476):51–92.
- Oostendorp, R. 2002. "Does Globalization Reduce the Gender Wage Gap?" Free University, Economic and Social Institute, Amsterdam.
- Pew Research Center for the People and the Press. 2003. *Views of a Changing World: June 2003*. Second Major Report of the Pew Global Attitudes Project. Washington, D.C.

- Roberts, M., and J. Tybout. 1996. *Industrial Evolution in Developing Countries: Micro Patterns of Turnover, Productivity and Market Structure*. New York: Oxford University Press.
- Romer, P. 1993. "Idea Gaps and Object Gaps in Economic Development." *Journal of Monetary Economics* 32(3):543–73.
- Sala-i-Martin, X. 2002. "The Disturbing 'Rise' of Global Income Inequality." Columbia University, New York.
- Smeeding, T. M. 2002. "Globalization, Inequality and the Rich Countries of the G-20: Updated Results from the Luxembourg Income Study (LIS) and Other Places." Prepared for the G-20 Meeting, Globalization, Living Standards and Inequality: Recent Progress and Continuing Challenges, May 26–28, Sydney, Australia.
- Srinivasan, T. N. 1996. "Indian Economic Reforms: Background, Rationale, Achievements, and Future Prospects." Yale University, Department of Economics, New Haven, Conn.
- Wacziarg, R. 1998. "Measuring Dynamic Gains from Trade." Policy Research Working Paper 2001. World Bank, Washington, D.C.
- Williamson, Jeffrey G. 2004. *The Political Economy of World Mass Migration*. Washington, D.C.: American Enterprise Institute.
- Winters, L. Alan. 2004. "Trade Liberalisation and Economic Performance: An Overview." *Economic Journal* 114(493):F4–F21.
- World Bank. 2002. *Globalization, Growth, and Poverty: Building an Inclusive World Economy*. Oxford, U.K.: Oxford University Press.