Global Economic Integration and Global Inequality

David Dollar[1]

Gaps between the poorest and the richest people and countries have continued to widen…This continues the trend of two centuries. Some have predicted convergence, but the past decade has shown increasing concentration of income among people, corporations, and countries.

– UN Human Development Report 1999

…globalization has dramatically increased inequality between and within nations.

– Jay Mazur, Foreign Affairs

…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

The evidence strongly suggests that global income inequality has risen in the last twenty years.

– Robert Wade

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

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1. Development Research Group, World Bank. Views expressed are those of the author and do not necessarily reflect official views of the World Bank, its Executive Directors, or its member countries.

There is an odd disconnect between debates about globalisation in the North and the South. Among intellectuals in the North one often hears the claim that global economic integration is leading to rising global inequality – that is, that it benefits the rich proportionally more than the poor. In the extreme claims, the poor are actually made out to be worse-off absolutely (as in the quote from Walter Schwarz). In the South, on the other hand, intellectuals and policy-makers often view globalisation as providing good opportunities for their countries and their people. To be sure, they are not happy with the current state of globalisation. President Museveni's quote above, for example, comes in the midst of a speech in the US where he blasts the rich countries for their protectionism against poor countries and lobbies for better market access. But the point of such critiques is that integration – through foreign trade, foreign investment, and immigration – is basically a good thing for poor countries and that the rich countries could do a lot more to facilitate this integration – that is, make it freer. The claims from anti-globalisation intellectuals of the North, on the other hand, lead inescapably to the conclusion that integration is bad for poor countries and that therefore trade and other flows should be more restricted.

The main goal of this essay is to link growing economic integration ('globalisation') with trends in growth, poverty, and inequality in the developing world. The phrase '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 – and the paper takes up all the different meanings.

The first half of the essay looks at the link between heightened integration and economic growth of developing countries. The opening-up of big developing countries such as China and India is arguably the most distinctive feature of the wave of globalisation that started around 1980. Individual cases, cross-country statistical analysis, and micro evidence from firms all suggest that this opening-up to trade and direct investment has been a good strategy for such developing countries as China, India, Mexico and Uganda.

How have the economic benefits of globalisation been distributed and what has happened as a result to global poverty and inequality? These are the questions addressed in the second half of this essay. In particular, Section 2 presents evidence in support of five trends in inequality and poverty since 1980:

- Trend #1 – Poor country growth rates have accelerated.
- Trend #2 – The number of poor people in the world has declined significantly, the first such decline in history.
- Trend #3 – Global inequality (among citizens of the world) has declined – modestly – reversing a 200-year-old trend toward higher inequality.
- Trend #4 – There is no general trend toward higher inequality within countries; in particular, among developing countries inequality has decreased in about as many cases as it has increased.
- Trend #5 – Wage inequality is rising worldwide (which may seem to contradict Trend #4, but it does not because wages are a small part of household income in

developing countries, which make up the bulk of the world in terms of countries and population).

The conclusions for policy from this review of globalisation and global inequality are very much in the spirit of the comments from Presidents Fox and Museveni. Developing countries have a lot of 'homework' to do in order 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 homework. And, as Museveni indicates, access to rich country markets is important. There remains a lot of protection in OECD markets against the goods and people of the developing world, and globalisation would do more for developing country growth if developing countries and their people had freer access to those rich country markets.

1. Is there a Link from Integration to Growth?

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. (Romer 1993, p 544)

Many developing countries have become more integrated with the global economy in the past two decades, and at the same time their growth rates have accelerated (examples would be Bangladesh, China, India, Mexico, Uganda and Vietnam). A natural question to ask is whether there is a link. In other words, could countries such as Bangladesh, China, India, and Vietnam have grown as rapidly as they have, if they had remained as closed to foreign trade and investment as they were in 1980? This is not the kind of question that can be answered with scientific certainty, but there are several different types of evidence that we can bring to bear on it.

It is useful to begin with what one would expect from economic theory. As suggested by the quote from Paul Romer, traditional growth theory focused on accumulation and the 'object gap' between poor countries and rich ones. If the important thing is just to increase the number of factories and workplaces, then it does not matter if this is done in a closed environment or a state-dominated environment. That was the model followed in the extreme by China and the Soviet Union, and to a lesser extent by most developing countries, who followed import-substituting industrialisation strategies throughout the 1960s and 1970s. It was the disappointing results from that approach that led to new thinking both from policy-makers in developing countries as well as from economists studying growth. Romer was one of the pioneers of the new growth theory that put more emphasis on 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 and rich nations.

What is the evidence on integration spurring growth? There are a large number of case studies that show how this process can work in particular countries. Among the countries that were very poor in 1980, China, India, Vietnam and Uganda provide an interesting range of examples.

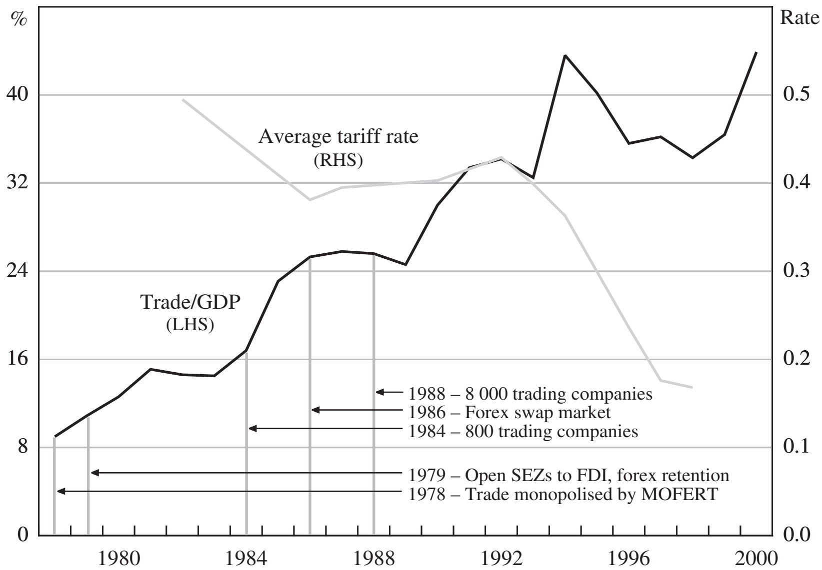
China

China's initial reforms in the late 1970s focused on the agricultural sector and emphasised strengthening property rights, liberalising prices, and creating internal markets. As indicated in Figure 1, liberalising foreign trade and investment were also part of the initial reform program. In the 1980s China removed administrative barriers to trade, before turning to major tariff reductions in the 1990s. The role of international linkages is described in this excerpt from a case study by Richard Eckaus:

> After the success of the Communist revolution and the founding of the People's Republic of China, the nation's international economic policies were dominated for at least thirty years by the goal of self-reliance. While this was never interpreted as complete autarky, the aspiration for self-reliance profoundly shaped trade policy, especially with the market economies.
>
> 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.
>
> The creation of an 'open door' policy did not mean the end of foreign trade planning. Although Chinese policy became committed to the expansion of its international trade, the decision-making processes and international trade mechanisms of the pre-reform period continued in full force for several years, to a modified degree for several more years, and still continue to be evident in the licensing controls. At the same time, international transactions outside of the state planning system have been growing. 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.
>
> While GNP was growing at 9 percent from 1978 to 1994, exports grew at about 14 percent and imports at an average of 13 percent per year.
>
> The successes contradict several customary generalisations about transition economies and large developing countries – for example, that the transition from central planning to market orientation cannot be made without passing through a difficult period of economic disorganization and, perhaps decline; and that the share of international trade in very large

economies cannot grow quickly due to the difficulties of penetrating foreign markets on a larger scale. (Eckaus 1997, p 415)

Figure 1: Trade Reforms and Trade Volumes
China



Sources: China Statistical Yearbook, various issues; World Bank database

India

It is well-known that India pursued an inward-oriented strategy into the 1980s and got disappointing results in terms of growth and poverty reduction. Bhagwati 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.
>
> The former two adversely affected the private sector's efficiency. The last, with the inefficient functioning of public sector enterprises, impaired additionally the public sector enterprises' contribution to the economy. Together, the three sets of policy decisions broadly set strict limits to what India could get out of its investment. (Bhagwati 1992, p 48)

Under this policy regime India's growth in the 1960s (1.4 per cent per annum) and 1970s (–0.3 per cent) was disappointing. During the 1980s India's economic performance improved. However, 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 describes the key reform measures and their results as follows:

> 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. (Srinivasan 2001, p 245)

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

Vietnam

The same collection that contains Eckaus's study of China also has a case study of Vietnam:

> Vietnam has made a remarkable turnaround during the past decade. In the mid-1980s the country suffered from hyperinflation and economic stagnation; it was not able to feed its population; and hundreds of thousands of people were signaling their dissatisfaction by fleeing in unsafe boats. A decade later, the government had restored macroeconomic stability; growth had accelerated to the 8–9 per cent range; the country had become the second largest rice exporter in the world; and overseas Vietnamese were returning with their capital to take advantage of expanding investment opportunities. During this period there has also been a total transformation of Vietnam's foreign trade and investment, with the economy now far more open than ten years ago.
>
> 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 per cent *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 per cent 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), labour-intensive manufactures, and tourist services.

> The current account deficit declined from more than 10 per cent of GDP in 1988 to zero in 1992. Normally, the collapse of financing in this way would require a sharp cutback in imports. However, Vietnam's export growth was sufficient to ensure that imports could grow throughout this adjustment period. It is also remarkable that investment increased sharply between 1988 and 1992, while foreign aid [from the Soviet Union] was drying up. 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 per cent of GDP in 1992. (Dollar and Ljunggren 1997, p 455)

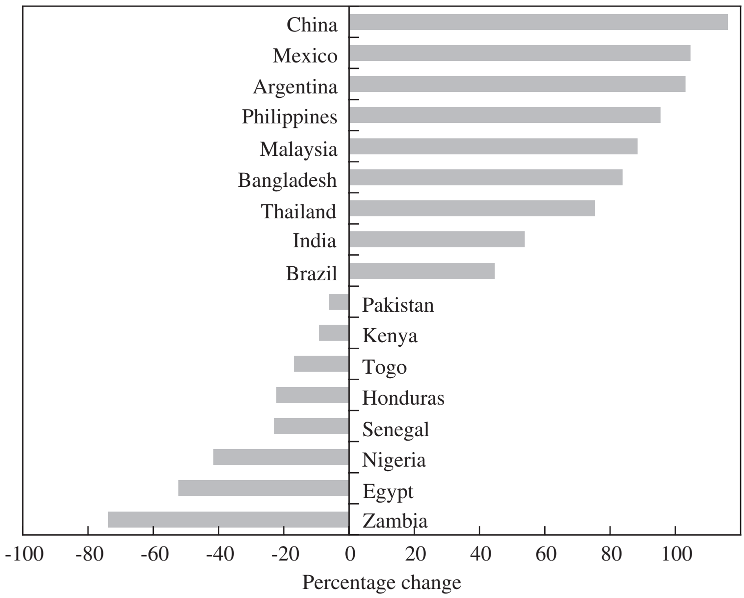
Uganda

Uganda has been one of the most successful reformers in Africa during this recent wave of globalisation, 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 is described in Collier and Reinikka:

> Trade liberalization has been central to Uganda's structural reform program. During the 1970s, export taxation and quantitative restrictions on imports characterized trade policy in Uganda. Exports were taxed, directly and implicitly at very high rates. All exports except for coffee collapsed under this taxation. For example, tea production fell from a peak of 20,000 tons in the early 1970s to around 2,000 tons by the early 1980s, and cotton production fell from a peak of 87,000 tons, to 2,000 tons. By contrast, coffee exports declined by around one-third.
>
> Part of the export taxation was achieved through overvaluation of the exchange rate, which was propelled by intense foreign exchange rationing, but mitigated by an active illegal market. Manufacturing based on import substitution collapsed along with the export sector as a result of shortages, volatility, and rationing of import licenses and foreign exchange. President Amin's policy toward foreign investment was dominated by confiscation without compensation, and he expelled more than 70,000 people from the Asian community.
>
> 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.
>
> By the mid 1990s, the import tariff schedule had five *ad valorem* rates between 0 and 60 per cent. For more than 95 per cent of imported items the tariff was between 10 and 30 per cent. During the latter half of the 1990s, the government implemented a major tariff reduction program. As a result, by 1999 the tariff system had been substantially rationalized and liberalized, which gave Uganda one of the lowest tariff structures in Africa. The maximum tariff is now 15 per cent on consumer goods, and there are only two other tariff bands: zero for capital goods and 7 per cent for intermediate imports.
>
> The average real GDP growth rate was 6.3 per cent per year during the entire recovery period (1986–99) and 6.9 per cent 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 per cent , and import volumes grew at 13 per cent . The value of noncoffee exports increased fivefold between 1992 and 1999. (Collier and Reinikka 2001)

These cases provide persuasive evidence that openness to foreign trade and investment – coupled with complementary reforms – can lead to faster growth in developing countries. However, individual cases always beg the question, how general are these results? Does the typical developing country that liberalises 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. Among developing countries, some have had large increases in trade integration (measured as the ratio of trade to national income), while others have had small increases or even declines over the past 20 years (Figure 2). In general, the countries that have had large increases in trade, have also had accelerations in growth. This relationship persists after controlling for reverse causality from growth to trade and for changes in other institutions and policies (Dollar and Kraay 2001b). All of the cross-country studies suffer from potential problems of omitted variables and mis-specification, but they are nonetheless useful for summarising patterns in the data.

Figure 2: Change in Trade/GDP
1977–1997, selected countries



A final piece of evidence about integration and growth comes from firm-level studies and links us back to the quote from Paul Romer. Developing countries often have large productivity dispersion across firms making similar things: high-productivity and low-productivity firms co-exist 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, then their exits represent productivity improvements for the industry. While the destruction and creation of new firms is a normal part of a well-functioning economy, too often attention is simply paid to the destruction of firms, missing half of the picture. The increase in exits is only part of the adjustment. Granted, it is the first and most painful part of the adjustment. However, if there are not significant barriers to factor mobility or other barriers to entry, the other side is that there are new entrants. The exits are often front-loaded, but the net gains over time can be substantial.

Wacziarg (1998) uses 11 episodes of trade liberalisation in the 1980s to look at the issue of competition and entry. Using data on the number of establishments in each sector, he calculates that entry rates were 20 per cent higher among countries that liberalised compared to ones that did not. This estimate may reflect other policies that accompanied trade liberalisation such as privatisation and deregulation, so this is likely to be an upper bound of the impact of trade liberalisation. 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 while exit rates may be significant, *net* turnover rates are usually very low. Thus, entry rates are usually of a comparable magnitude to the exit rates. Using plant-level data from Morocco, Chile and Columbia spanning several years in the 1980s, when these countries initiated trade reforms, indicates that exit rates range from 6 to 11 per cent a year, and entry rates from 6 to 13 per cent. 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, p 6).

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 (Liu and Tybout 1996; Roberts and Tybout 1996; Aw, Chung and Roberts 2000). In Taiwan, Aw *et al* (2000) find that 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.

While these studies shed some light on why open economies are more innovative and dynamic, they also remind of us 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 for developing new skills, then everyone can benefit. But without such policies there can be some big losers.

I want to close this section with a nice point from the economic historians Peter Lindert and Jeffrey Williamson (2001) concerning 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.' (pp 29–30)

2. Accelerated Growth and Poverty Reduction in the New Globalisers

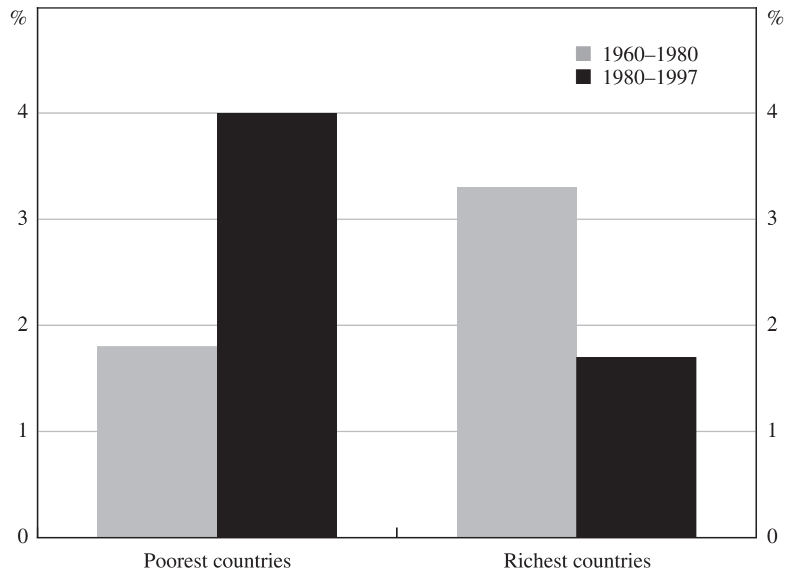
Much of the debate about globalisation concerns its effects on poor countries and poor people. In the introduction I quoted a number of sweeping statements asserting that global economic integration is leading to growing poverty and inequality in the world. The reality of what is happening with poverty and inequality is far more complex, and to some extent runs exactly counter to what is being claimed by anti-globalists. Hence in this section I am going to focus on the trends in global poverty and inequality. Let's get the facts straight, and then we can have a more fruitful debate about what is causing the trends. The trends that I want to highlight in this section are that: (1) growth rates of the poorest countries have accelerated in the past 20 years and are higher than rich-country growth rates; (2) there was a large net decline in the number of poor in the world between 1980 and 2000, the first such decline in history; (3) measures of global inequality (such as the global Gini coefficient) have declined modestly since 1980, reversing a long historical trend toward greater inequality; (4) there is no pattern of rising inequality within countries, though there are some notable cases in which inequality has risen; and (5) there is a general pattern of rising wage inequality (larger wage increases for skilled workers relative to those of unskilled workers). It may seem that Trend #5 runs counter to Trend #4, but I will explain why it does not. Nevertheless, Trend #5 is important and helps explain some of the anxiety about globalisation in the industrial countries.

2.1 Trend #1: Poor country growth rates have accelerated

We have reasonably good data on economic growth going back to 1960 for about 125 countries, which make up the vast majority of world population. If you take the poorest one-fifth of countries in 1980 (that is, about 25 countries), the *population-weighted* growth rate of this group was 4 per cent per capita from 1980 to 1997, while the richest-fifth of countries grew at 1.7 per cent (Figure 3). This phenomenon of the fastest growth occurring in the poorest countries is new historically; the growth rates of these same countries for the prior two decades (1960–1980) were 1.8 per cent for the poor group and 3.3 per cent for the rich group. Data going back further in time are not as good, but there is evidence that richer locations have been growing faster than poorer locations for a long time.

Now, the adjective 'population-weighted' is very important. If you ignore differences in population and just take an average of poor-country growth rates, you will find average growth of about zero for poor countries. Among the poorest quintile of countries in 1980 you have both China and India, and you also have quite a few small countries, particularly in Africa. Ignoring population, the average growth of Chad and China is about zero, and the average growth of Togo and India is about zero. Taking account of differences in population, on the other hand, one would say that the average growth of poor countries has been very good in the past 20 years. China obviously carries a large weight in any such calculation about the growth of countries that were poor in 1980. But it is not the only poor country that did well. India, Bangladesh and Vietnam have also had accelerated growth and grown faster than rich countries in the recent period. A number of African economies, notably Uganda, have also had accelerated growth.

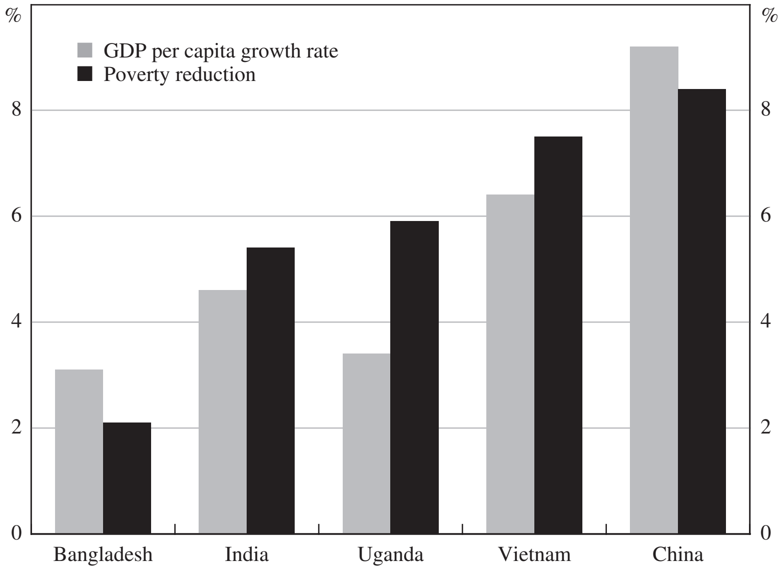
Figure 3: Growth Rates of the Poorest and Richest Quintiles of Countries
Population-weighted



2.2 Trend #2: The number of poor people in the world has declined

The most important point that I want to get across in this section is that poverty reduction in low-income countries is very closely related to the growth rate in these countries. Hence, the accelerated growth of low-income countries has led to unprecedented poverty reduction. By poverty, we mean subsisting below some absolute threshold. Most poverty analysis is carried out with countries' own poverty lines, which are set in country context and naturally differ. In the 1990s we have more and more countries with reasonably good household surveys and their own poverty analysis. Figure 4 shows five poor countries that have benefited from increased integration, and in each case significant poverty reduction has gone hand-in-hand with faster growth. Poverty reduction here is the rate of decline of the poverty rate, based on the country's own poverty line and analysis.

Figure 4: Poverty Reduction Closely Related to Growth
Per cent per annum, 1992–1998



Notes: Data for Bangladesh are for 1992–2000; data for India are for 1993–1999

China, for example, uses a poverty line defined in constant Chinese *yuan.* The poverty line is the amount of Chinese currency that you need to buy the basket of goods that the Chinese authorities deem the minimum necessary to subsist. In practice, estimates of the number of poor in a country such as China come from household surveys carried out by the statistical bureau, surveys that aim to measure households' real income or consumption. Most of the extreme poor in the world are peasants, and they subsist to a large extent on their own agricultural output. To look only at what money income they have would not be very relevant, since the extreme poor have only limited involvement in the money economy. Thus, what Chinese and other poverty analyses do is include imputed values for income in kind (such as own production of rice). So, a poverty line is meant to capture a certain real level of income or 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 what poverty line one is talking about. In global discussions one often sees reference to international poverty lines of either US$1 per day or US$2 per day, and I will explain how these relate to national poverty lines.

While Figure 4 shows the close relationship between growth and poverty reduction in five countries in the 1990s, it is not easy to extend the analysis to all countries in the world or back in time to 1980, because good household surveys are lacking for many developing countries. However, discussions of global poverty during this most recent era of globalisation are made easier by the fact that in 1980 a large majority of the world's poor lived in China and India, both of which have reasonably good national data on poverty. Bourguignon and Morrisson (2002) estimate that there were 1.4 billion people in the world subsisting on less than US$1 per day in 1980. Take this as a rough estimate around which there is a lot of uncertainty. Still, it is clear that at least 60 per cent of these poor were in China and India. So, what has happened to global poverty is going to depend to a very considerable extent on these two countries.

The Chinese statistical bureau estimates that the number of people with incomes below their national poverty line has declined from 250 million in 1978 to 34 million in 1999 (Figure 5).[2] Now, this Chinese poverty line is defined in constant Chinese *yuan* and it is possible to translate this into US dollars for the purpose of comparison with other countries. This conversion is best done with a purchasing power parity (PPP) exchange rate. This is the exchange rate between the Chinese *yuan* and the US dollar that would lead to the same price in the US and China for a representative basket of consumer goods. It is the normal basis for making international comparisons of living standards. Evaluated at PPP in this way, the Chinese poverty line is equivalent to about 70 US cents per day – quite a low poverty line. Using information on the distribution of income in China, it is possible to make a rough estimate of the number of people with income under a higher poverty line – for example, US$1 per day at PPP. A rough estimate of the number of people in China in 1978 consuming less than US$1 per day would be in the ballpark of 600 million.[3] It may be surprising that the number is so much larger than the estimate of 250 million living on less than 70 US cents per day. But in 1978 a large mass of the population was concentrated in the range between 70 US cents and US$1.

India's official poverty data also show a marked drop in poverty over the past two decades. India's consumption-based poverty line translates to about 85 US cents per day at PPP. By that line, the Indian statistical bureau estimates that there were 330 million poor people in India in 1977, and the number declined to 259 million in 1999. We can make a similar rough estimate of the number of poor living under a higher poverty line of US$1 per day, using information on the distribution of income in Indian surveys.

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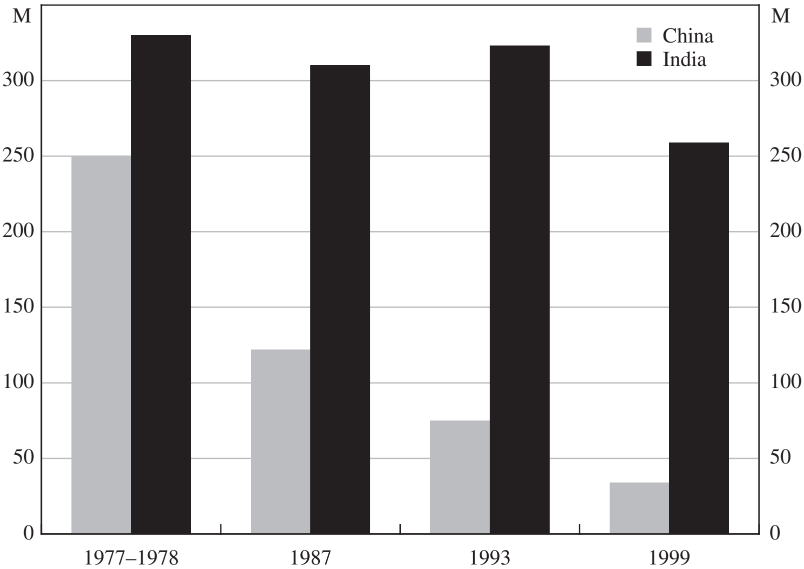
2. This estimate is only for the rural population of China. However, the available survey data show that there were almost no urban families living under this poverty line, either in 1980 or today. So, the estimate can be taken as a reasonable approximation of overall extreme poverty in China.

3. The mean income in the rural household survey in China, converted into 1993 US dollars with the Summers and Heston PPP exchange rate, is about US$200 per year in 1978. Using the information on the distribution of income in the 1981 sample, the earliest available, the estimated number of people in China with income less than US$1 per day would be as high as 750 million. The number *consuming* less than US$1 per day would be smaller, since even the very poor have some savings in China. Also, the early surveys may not have done a good job with imputed consumption from housing and other durables. For these reasons I take 600 million as a rough but conservative estimate of the number of poor (consuming less than US$1 per day) at the beginning of China's economic reform.

Figure 5: Poverty has Declined According to China' and India's National Poverty Lines

Number of people



Notes: India's national poverty line – roughly US$0.85 per day; China's national poverty line – roughly US$0.70 per day.

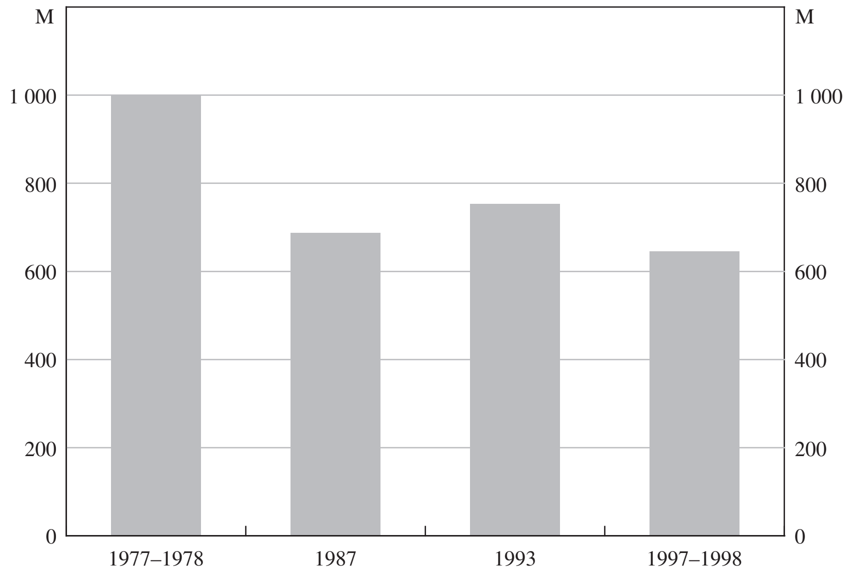
In Figure 6, I combine rough estimates of US$1 per day poverty in China and India. In 1977–78 there were somewhere around 1 billion people in these two giant countries who were subsisting on less than US$1 per day at PPP; by 1997–98 the estimated number had fallen to about 650 million (according to the estimates of Chen and Ravallion (2001)). This poverty reduction is all the more remarkable, because their combined population increased by nearly 700 million people over this period.

It is easy to quibble about specific numbers, but no amount of quibbling can get around the fact that there has been massive poverty reduction in China and India. These countries' own data and poverty analysis show large poverty reduction, using lines that are below US$1 per day. The poverty reduction using a common international line of US$1 per day would be larger.

While there has clearly been poverty reduction in Asia, it is also clear that poverty has been rising in Africa, where most economies have been growing slowly or not at all for the past 20 years. Chen and Ravallion (2001) estimate that the number of poor (consuming less than US$1 per day) in Sub-Saharan Africa increased from 217 million in 1987 to 301 million in 1998. There is not comparably good data for 1980, but we know that the region was not doing well in the 1980–1987 period. If the rate of increase of poverty was about the same in the 1980–1987 period, as in 1987–1993, then the increased poverty in Africa during the 1980–1998 period would be about 170 million people.

Figure 6: Rough Estimates of US$1 per Day Poverty for China and India Combined

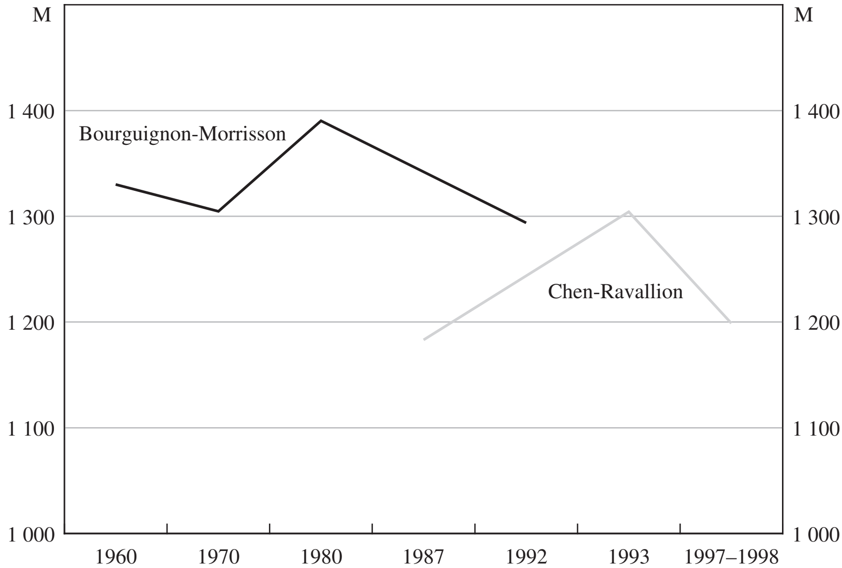
Number of people



Any careful estimate of worldwide poverty is going to depend primarily on trends in China, India, and Sub-Saharan Africa. Putting together these trends reveals a large net decline in the number of poor since 1980. This is an important historical shift. Bourguignon and Morrisson (2002) estimate that the number of very poor people in the world (US$1 per day line) increased up through 1980 (Figure 7). Between 1960 and 1980 the number of poor grew by about 100 million. Between 1980 and 1992, however, the number of poor fell by about 100 million in their estimate. Chen and Ravallion (2001) use a different methodology to estimate a further decline of about 100 million between 1993 and 1998. The same study found an increase in global poverty between 1987 and 1993, which may seem at odds with the Bourguignon-Morrisson results. However, a look back at Figures 5 and 6 reveals that the poor in China and India combined have done well over the past 20 years, *except for the period from 1987 to 1993, when poverty in China and India temporarily rose.* During that period India had a macroeconomic crisis and a sharp recession, and in China the growth of rural incomes slowed significantly.

Indian data for 1999/2000 show further declines that have not been incorporated in the global estimates for 1997/98. Based on the well-documented poverty reduction in China and India, and their weight in world poverty, we can be confident that 200 million is a conservative estimate of the poverty reduction since 1980. In many ways, however, adding up the good experiences and the bad experiences conceals more than it reveals. Certainly it is good news that large poor countries in Asia have done well (not just China and India, but Bangladesh and Vietnam as well). But that is no consolation to the growing number of poor in Africa, where economies continue to languish (with the occasional bright spot such as Uganda).

Figure 7: Number of Very Poor has Fallen since 1980
Number of people living on less than US$1 per day



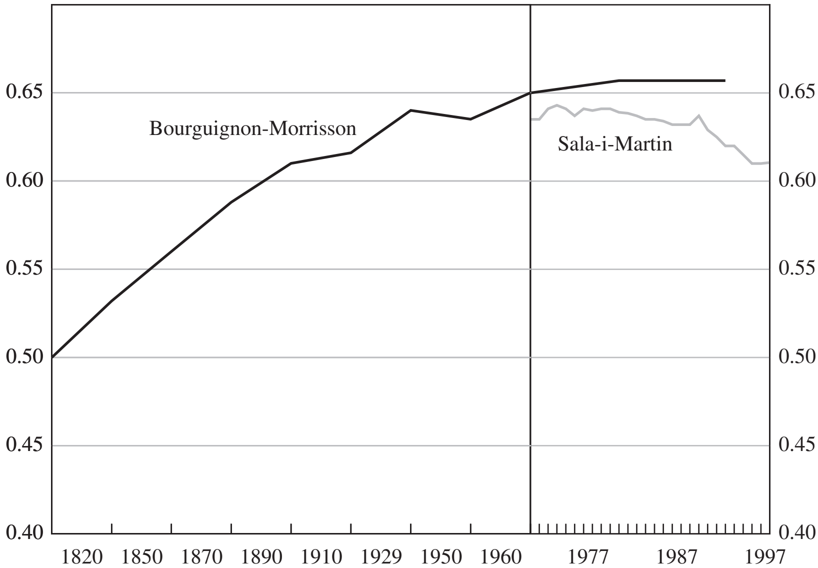
Sources: Bourguignon and Morrison (2001, 2002); Chen S and M Ravallion, 'How Did the World's Poorest Fare in the 1990s?', World Bank Development Research Group Working Paper No 2409, 2000.

2.3 Trend #3: Global inequality has declined (modestly)

People use the phrase 'global inequality' casually to mean a number of different things. But the most sensible definition would be the same one we use 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 a number of possible measures, of which the Gini coefficient is the best known. Xavier Sala-i-Martin (2002) finds in a new paper that any of the standard measures of inequality show a decline in global inequality since 1980. Subjectively, I would describe this as a modest decline, and one about which we do not have a lot of statistical confidence. But, even if global inequality is flat, it represents an important reverse of a long historical pattern of rising global inequality and contradicts the frequent claims that inequality is rising.

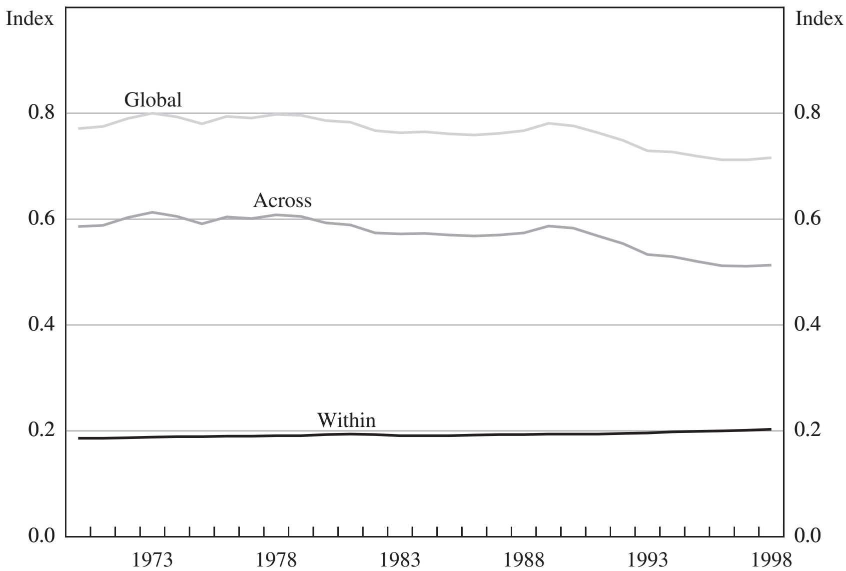
Bourguignon and Morrisson (2002) calculate the global Gini measure of inequality going back to 1820. Obviously we do not have a lot of confidence in these early estimates, but they illustrate a point that is not seriously questioned: global inequality has been on the rise throughout modern economic history.The Bourguignon-Morrisson estimates of the global Gini have it rising from 0.50 in 1820 to about 0.65 around 1980 (Figure 8). Sala-i-Martin estimates that the global Gini has since declined to 0.61. Other measures of inequality such as the Theil index or the mean log deviation show a similar decline. The latter measures have the advantage that they can be decomposed into inequality among countries (differences in

Figure 8: Bourguignon-Morrison and Sala-i-Martin – Global Gini Coefficient



Sources: Bourguignon and Morrison (2002, Table 1); Sala-i-Martin (2002, Figure 7)

Figure 9: Inequality Decomposition – Theil Index

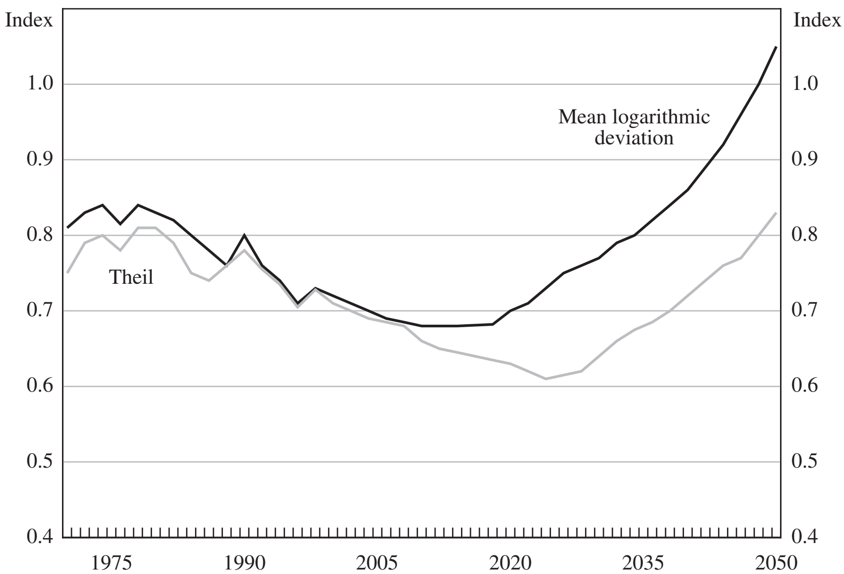


Source: Sala-i-Martin (2002, Table 2)

per capita income across countries) and inequality within countries. What this decomposition shows is that most of the inequality in the world can be attributed to inequality among countries (Figure 9). Global inequality rose from 1820 to 1980 primarily because regions already relatively rich in 1820 (Europe, North America) subsequently grew faster than poor locations. As noted above (Trend #1), that pattern of growth was reversed starting around 1980, and the faster growth in poor locations such as China, India, Bangladesh and Vietnam accounts for the modest decline in global inequality since then. (Slow growth in Africa tended to increase inequality, faster growth in low-income Asia tended to reduce it, and the latter outweighed the former, modestly.)[4]

Thinking about the different experiences of Asia and Africa, 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 extreme poor lived in 1980 and they benefited from the growth. However, if the same growth trends persist, they will not continue to be a force for equality. Sala-i-Martin projects future global inequality if the growth rates of 1980–1998 persist: global inequality will continue to decline until the year 2015 or 2020 (depending on the measure of inequality), after which global inequality will rise sharply (Figure 10). A large share of the world's poor still live in India and other

Figure 10: Global Projections if Same Growth as 1980–1998



Source: Sala-i-Martin (2002, Figure 17)

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 Sala-i-Martin 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). If you refer back to Figure 6, you will see that the period from 1988 to 1993 was the one period in the past 20 years that was not good for poor people in China and India.

Asian countries, so that continued rapid growth there will be equalising for another decade or so. But more and more, poverty will be concentrated in Africa, so that if its slow growth persists, global inequality will eventually rise again.

2.4 Trend #4: There is no general trend toward higher inequality within countries; in particular, among developing countries inequality has decreased in about as many cases as it has increased

The analysis immediately above shows that inequality within countries plays a relatively small role in measures of global income inequality. Nevertheless, people care about trends in inequality in their own societies (arguably more than they care about global inequality and poverty). So, a different issue is, what is happening to income inequality within countries? One of the common claims about globalisation (see the quotes in the introduction) is that it is leading to greater inequality within countries and hence fostering social and political polarisation.

To assess this claim Aart Kraay and I (Dollar and Kraay 2001a) collected income distribution data from over 100 countries, in some cases going back decades. We found first of all that there is no general trend toward higher or lower inequality within countries. One way to show this is to look at the growth rate of income of the poorest 20 per cent of the population, relative to the growth rate of the whole economy. In general, growth rate of income of the poorest quintile is the same as the per capita growth rate (Figure 11). This is equivalent to showing that the bottom quintile share (another common measure of inequality) does not vary with per capita income. We found that this relationship has not changed over time (it is the same for the 1990s as for earlier decades). In other words, some countries in the 1990s had increases in inequality (China and the US are two important examples), while other countries had decreases. We also divided the sample between rich and poor countries to explore a Kuznets-type relationship (or, equivalently, included a quadratic term) and found that income of the poor tends to rise proportionately to per capita income in developing countries, as well as in rich ones.

Most important for the debate about globalisation, we tried to use measures of integration to explain the changes in inequality that have occurred. But changes in inequality are not related to any of these measures of integration. For example, countries in which trade integration has increased show rises in inequality in some cases and declines in inequality in others (Figure 12). So too for other measures such as tariff rates or capital controls. Figure 4 showed five good examples of poor countries that have integrated actively with the world economy: in two of these (Uganda and Vietnam) income distribution has shifted in favour of the poor during integration, which is why poverty reduction has been so strong in these cases. In low-income countries in particular much of the import protection was benefiting relatively rich and powerful groups, so that integration with the global market can go hand-in-hand with declines in income inequality.

Figure 11: Growth is Good for the Poor

Average annual change in log

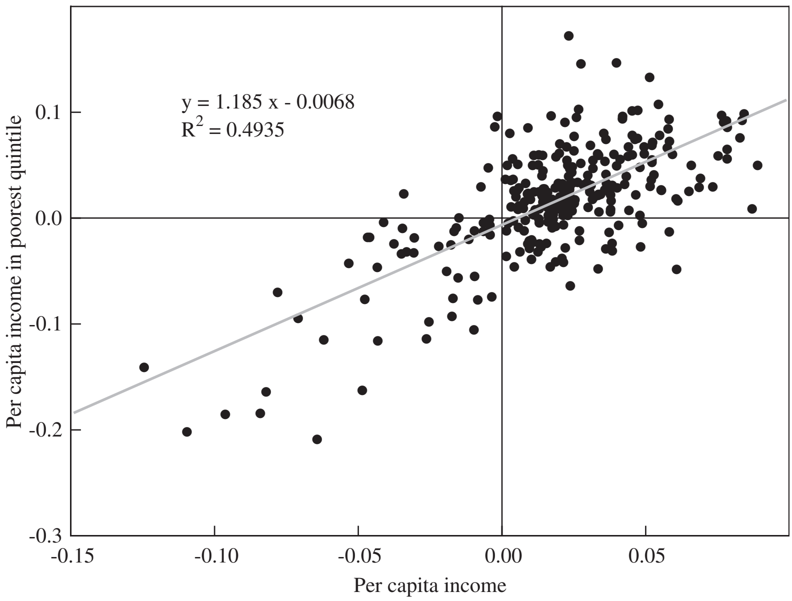
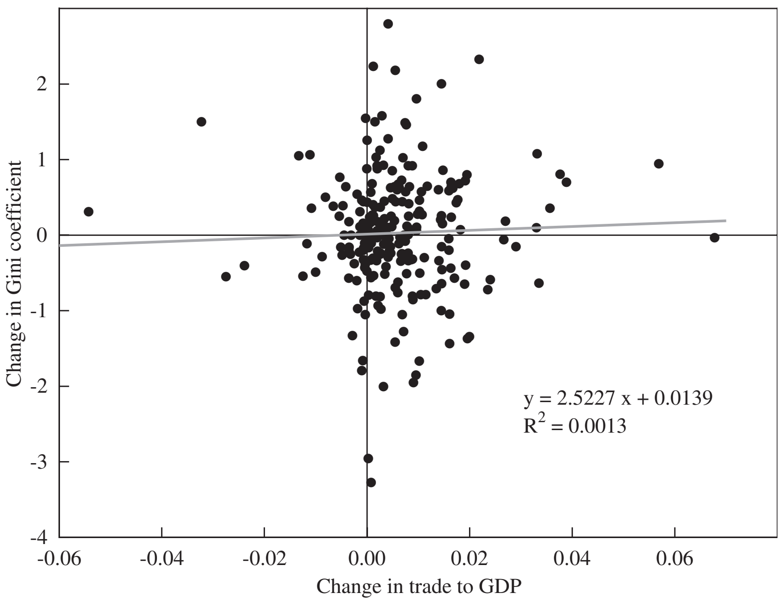


Figure 12: Increased Trade has No Correlation with Changes in Inequality



While it is true that there is no general trend toward higher inequality within countries when looking at all the countries of the world, the picture is not so favourable if one looks only at rich countries and only at the last decade. The Luxembourg Income Study (LIS) has produced comparable, high-quality income distribution data for most of the rich countries. This work finds no obvious trends in inequality up through the mid to late 1980s. Over the past decade, on the other hand, there have been increases in inequality in most of the rich countries. Because low-skilled workers in these countries are now competing more with workers in the developing world, it is certainly plausible that global economic integration creates pressures for higher inequality in rich countries, while having effects in poor countries that often go the other way. The good news from the LIS studies is that '[g]lobalisation does not force any single outcome on any country. Domestic policies and institutions still have large effects on the level and trend of inequality within rich and middle-income nations, even in a globalising world...' (Smeeding, this volume, p 179). In other words, among rich countries some have managed to maintain stable income distributions in this era of globalisation through their social and economic policies (on taxes, education, welfare).

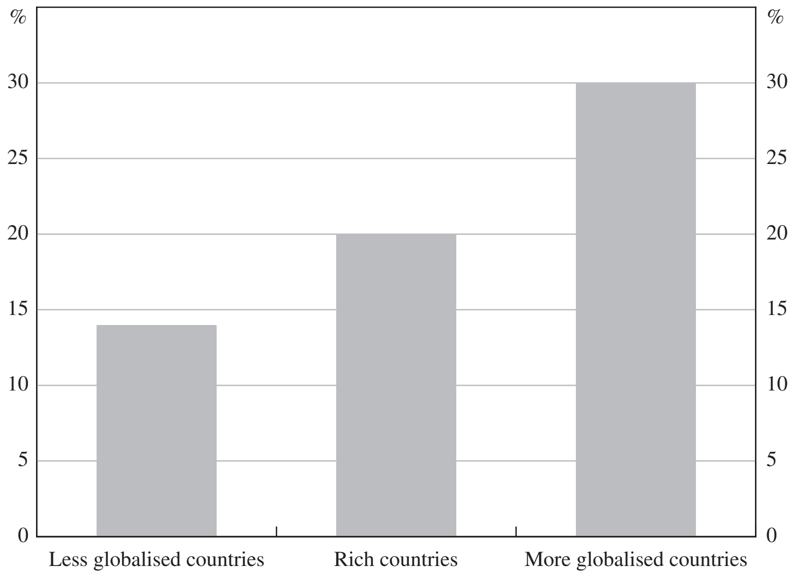
2.5 Trend #5: Wage inequality is rising worldwide

Much of the concern about globalisation in rich countries relates to workers and what is happening to wages and other labour issues. The most comprehensive examination of globalisation and wages used International Labour Organisation data on very detailed occupational wages going back two decades (Freeman, Oostendorp and Rama 2001). These data look across countries at what is happening to wages for very specific occupations (bricklayer, primary school teacher, nurse, auto worker). What the study found is that wages have generally been rising faster in globalising developing countries than in rich ones, and faster in rich ones than in non-globalising developing countries (Figure 13).[5] However, their detailed findings are far more complex. First, there is a timing issue. Trade liberalisation is often associated with reduced wages initially, followed by increases past the initial level. Second, foreign direct investment (FDI) is very strongly related to wage increases, while trade has a weaker relationship. Locations that are able to attract FDI are the ones that have had the clearest gains for workers (examples would be northern Mexico, China, Vietnam), whereas countries that liberalise trade and get little foreign investment see weaker benefits. Finally, the gains are relatively larger for skilled workers. This finding is consistent with other work showing that there has been a worldwide trend toward greater wage inequality – that is, a larger gap between pay for educated workers and pay for less educated/skilled workers.

5. Dollar and Kraay (2001b) divide developing countries into more globalised and less globalised; the more globalised are the top one-third of developing countries in terms of increases in trade to GDP between the late 1970s and the late 1990s. The Freeman, Oostendorp and Rama study uses this classification.

Figure 13: Poor Countries that Globalised Have Seen the Fastest Growth in Wages

Wage growth between 1980s and 1990s



If wage inequality is going up worldwide, how can it be that income inequality is not rising in most countries? There are several reasons why these two trends are not inconsistent. Most important, in the typical developing country wage earners are a tiny fraction of the population. Even unskilled wage workers are a relatively elite group. Take Vietnam as an example, a low-income country where we have a survey of the same representative sample of households early in liberalisation (1993) and five years later. The majority of households in the sample and in the country are peasants. What we see in the household data is that the price of the main agricultural output (rice) went up dramatically while the price of the main purchased input (fertiliser) actually went down. These price movements are directly related to globalisation, because over this period Vietnam became a major exporter of rice (supporting its price) and a major importer of fertiliser from cheaper producers (lowering its price). The typical poor family got a much bigger 'wedge' between its 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 has nothing to do with wages.

Quite a few rural households also sent a family member to a nearby city to work in a factory for the first time. I worked on Vietnam for the World Bank from 1989 to 1995, and one of the issues that I covered was the manufacturing sector. When I first started visiting factories in the summer of 1989, the typical wage in local currency was the equivalent of US$9 per month. Now, factory workers making contract shoes for US brands often make US$50 per month or more. So, the wage for a relatively unskilled worker has gone up something like five-fold. But wages for some of the skilled occupations – say, computer programmer or English interpreter – may have gone up 10 times or even more. Thus, a careful study of wage inequality is likely to show rising inequality. However, how wage inequality translates into household inequality is very complex. For a surplus worker from a large rural household who gets one of the newly created jobs in a shoe factory, earnings go from zero to US$50 per month. Thus, if a large number of new wage jobs are created and if these typically pay a lot more than people earn in the rural or informal sector, then a country can have rising wage inequality but stable or even declining income inequality (in Vietnam the Gini coefficient for household income inequality actually declined between 1993 and 1998). In rich countries, on the other hand, where most people are wage earners, the higher wage inequality is likely to translate into higher household income inequality, which is what we have seen over the past decade.

A third point about wage inequality and household income inequality that is relevant for rich countries is that measures of wage inequality are often made pre-tax. If the country has a strongly progressive income tax, then inequality measures from household data (which are often post-tax) do not have to follow wage inequality, pre-tax. Tax policy can offset some of the trends in the labour market.

Finally, there is the important issue that households can respond to increased wage inequality by investing more in the education of their children. A higher economic return to education is not a bad thing, provided that there is fair access to education for all. In Vietnam, there has been a tremendous increase in the secondary school enrolment rate in the 1990s (from 32 to 56 per cent). This increase partly reflects the society's and the government's investment in schools (supported by aid donors), but more children going to school also reflects households' decisions. If there is little or no perceived return to education, it is much harder to get 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 labour force from low-skill to higher-skill occupations.

From this discussion it is easy to see why some labour unions in rich countries are concerned about integration with the developing world. It is difficult to prove that the integration is leading to this greater wage inequality, but it seems likely that integration is one factor. Concerning the immigration side of integration, Borjas, Freeman and Katz (1997) estimate that flows of unskilled labour into the US have reduced wages for such labour by 5 per cent from where they would be otherwise. The immigrants who find new jobs earn a lot more than they did before (10 times as much in one study), but their competition reduces wages of the US workers who were already doing such jobs. Similarly, imports of garments and footwear from countries such as Vietnam and Bangladesh create jobs for workers there that pay far more than other opportunities in those countries, but put pressure on unskilled wages in the rich countries.

Thus, overall the era of globalisation has seen unprecedented poverty reduction and probably a modest decline in global inequality. However, it has put real pressure on less-skilled workers in rich countries, and this competitive pressure is a key reason why the growing integration is controversial in the industrial countries and why there is a significant political movement to restrict the opportunities of poor countries. More generally, the integration causes disruption in both rich countries and poor ones. Some people are thrown out of work, some capitalists lose their investments; in the short run there are clearly winners and losers. To some extent the extreme claims of anti-globalists that integration is leading to higher inequality across and within countries – claims that are not borne out by the evidence – distract attention from the real issues. Globalisation is disruptive, it produces relative winners and losers, and there are public policies that can mitigate these bad effects (social protection, investment in education). The key policy issue is whether to try to mitigate the bad effects of integration or to roll back integration.

3. Making Globalisation Work Better for the Poor

What are the implications of these findings – for developing countries, for rich countries, and for non-government organisations that care about global poverty? So far, the most recent wave of globalisation starting around 1980 has been a powerful force for equality and poverty reduction. But it would be naïve to think that this will inevitably continue.

Whether global economic integration continues to be an equalising force will depend on the extent to which poor locations participate in this integration, and that in turn will depend on both their own policies and the policies of the rich world. True integration requires not just trade liberalisation, but also wide-ranging reforms of institutions and policies. If we look at some of the countries that are not participating very strongly in globalisation, many of them have serious problems with the overall investment climate: Kenya, Pakistan, Burma and Nigeria would all be examples. Some of these countries also have restrictive policies toward trade, but even if they liberalise trade not much is likely to happen without other measures. It is not easy to predict the reform paths of these countries. (If you think about some of the relative successes that I have cited – 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 and 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 the rich countries can do is to make it easy for developing countries that do choose to open up, to join the club. Unfortunately, in recent years the rich countries have been making it harder for countries to join the club of trading nations. The GATT was originally built around agreements concerning trade practices. Now, however, a certain degree of institutional harmonisation is required to join the World Trade Organisation (WTO) (for examples, on policies toward intellectual property rights). The proposal to regulate labour standards and environmental standards through WTO sanctions would take this requirement for institutional harmonisation much farther. Power in the WTO is inherently unbalanced: size matters in the important area of dispute settlement where only larger countries can effectively threaten to retaliate against illegal measures. If the US wins an unfair trade practices case against Bangladesh it is allowed to impose punitive duties on Bangladeshi products. Owing to the asymmetry in the size of these economies the penalties are likely to impose a small cost on US consumers and a large one on Bangladeshi producers. Now, suppose the situation is reversed and Bangladesh wins a judgment against the US. For Bangladesh to impose punitive duties on US products is likely to hurt its own economy much more than the US. Thus, developing countries see the proposal to regulate their labour and environmental standards through WTO sanctions as inherently unfair and as a new protectionist tool that rich countries can wield against them.

So, globalisation will proceed more smoothly if the rich countries make it easy for developing countries to benefit from trade and investment. Reciprocal trade liberalisations have worked well throughout the post-war period. There still are serious protections in OECD countries against agricultural and labour-intensive products that are important to developing nations. It would help substantially to reduce these protections. At the same time, developing countries would benefit from further openings of their own markets. They have a lot to gain from more trade in services. Also, 70 per cent of the tariff barriers that developing countries face are from other developing countries. So, there is a lot of potential to expand trade among developing countries, if trade restrictions were further eased. However, the trend to use trade agreements to try to impose an institutional model from the OECD countries on Third World countries makes it more difficult to reach trade agreements that benefit poor countries.

Another reason to be pessimistic concerns geography. There is no inherent reason why coastal China should be poor – or southern India, or Vietnam, or northern Mexico. These locations historically were 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 Mali or Chad. 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 naïve 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, AIDS, and other health problems of poor areas and to building infrastructure and institutions in these locations. The promises for greater aid from the US and Europe at the Monterrey Conference were encouraging, but it remains to be seen if these promises are fulfilled.

The importance of geography also raises the issue of migration – the missing flow in today's globalisation. Migration from locations that are poor because of either weak institutions and/or difficult physical geography could make a large contribution to reducing poverty in the lagging regions. Most migration from South to North is economically motivated. This migration raises the living standard of the migrant and benefits the sending country in three ways – reducing the labour force raises wages for those who remain behind, migrants typically send a large volume of remittances back home, and their presence in the OECD economy can support the development of trade and investment networks. These benefits are strongest if the migrant is relatively unskilled, since this is the part of the labour force that is in over-supply in much of the developing world.

Each year 83 million people are added to world population, 82 million of these in the developing world. Furthermore, populations in Europe and Japan are ageing and the labour forces there will begin to shrink without more migration. So, there are clear economic benefits to more migration of unskilled workers from the South to the North, and yet this flow remains highly restricted and very controversial because of its impact on society and culture. Because the economic pressures are so strong, however, growing volumes of illegal immigration are taking place – and some of the worst abuses of 'globalisation' occur because we are not globalised when it comes to labour flows.

Realistically, none of the OECD countries is going to adopt open migration. But there is a good case to be made to revisit migration policies. Some of the OECD countries have a strong bias in their immigration policies toward highly skilled workers, spurring 'brain drain' from the developing world. This policy pushes much of the unskilled flow into the illegal category. If OECD countries would accept – legally – more unskilled workers, it should help with their own looming labour shortages, improve living standards in sending countries, and reduce the growing illegal human trade with all of its abuses.

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

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