# THE GLOBALIZATION RORSCHACH TEST:

# INTERNATIONAL ECONOMIC INTEGRATION, INEQUALITY AND THE ROLE OF GOVERNMENT

# NANCY BRUNE and GEOFFREY GARRETT\*

## November 2004

## Forthcoming in Annual Review of Political Science vol. 8, 2005

In this review essay, we address the three principal questions that have dominated the debate over the distributive effects of globalization. First, how has globalization affected inequality among countries? Second, how has globalization affected inequality within countries? Third, how has globalization affected the ability of national governments to redistribute wealth and risk within countries? We conclude that despite the proliferation of social science research on the consequences of globalization, there is no solid consensus in the relevant literatures on any of these questions. This is because scholars disagree about how to measure globalization and about how to draw causal inferences about its effects.

Keywords: globalization, inequality, economic growth, government spending, privatization

<sup>\*</sup> Nancy Brune is a doctoral candidate at Yale University. She can be reached at <u>nbrune@isop.ucla.edu</u>. Geoffrey Garrett is Vice Provost and Dean of the International Institute, Director of the Ronald W. Burkle Center for International Relations, and Professor of Political Science at UCLA. He can be reached at <u>ggarrett@international.ucla.edu</u>. The authors Alexandra Guisinger, David Nickerson and Jason Sorens for their assistance with data collection. Many of the thoughts discussed here have also been influenced by conversations with Sebastian Edwards, Stephan Haggard, Edward Leamer, Robert Kaufman, Ronald Rogowski, Kenneth Scheve, Mathew Slaughter and George Tsebelis.

We've seen the result (of globalization). The spread of sweatshops. The resurgence of child labor, prison and forced labor. Three hundred million more in extreme poverty than 10 years ago. Countries that have lost ground. A boom in busts in which a generation of progress is erased in a month of speculation. Workers everywhere trapped in a competitive race to the bottom. (AFL-CIO President John J. Sweeney at the International Confederation of Free Trade Unions Convention, April 4, 2000)<sup>1</sup>

... those who protest free trade are no friends of the poor. Those who protest free trade seek to deny them their best hope for escaping poverty. (President George W. Bush, July 18, 2001)<sup>2</sup>

## 1. Introduction

The polarized debate over the effects of economic globalization-the international integration of markets for goods, services and capital-resembles a giant Rorschach test. Intelligent analysts have access to the same information but conclude they are witnessing completely different realities playing out. Supporters not only claim that globalization is good for international business; they also consider it the best way to enrich and empower poor people and poor countries. But for critics, globalization only lines the pockets of a small global elite at the expense of labor, developing countries and the planet—and there is little eviscerated national governments can do about it.

Why is the debate so polarized? The age old push and pull of distributive and partisan politics over the spoils of the market is at least partially responsible. But the scholarly community has not helped—and not because of lack of effort. Studying the effects of globalization on the economy and on politics is a growth industry across the social sciences. The problem is that no consensus has yet emerged from all this research, for two reasons. Measuring globalization is notoriously difficult and contested. So, too, is the drawing of inferences about

<sup>1</sup> http://www.aflcio.org/publ/speech2000/sp0404.htm

<sup>2</sup> Los Angeles Times, July 18, 20001, page 1.

cause and effect between economic integration and other notional "outcome" variables, all of which often tend to trend together.

In this essay, we try to make sense of the debate over globalization. We do not presume to make definitive statements about the facts nor about causal relationships. Rather, we strive to focus the debate on three key questions that preoccupy political economists:

- 1. How has globalization affected inequalities in the distribution of incomes *between* richer and poorer countries?
- 2. How has globalization affected inequalities in the distribution of incomes *within* countries?
- 3. How has globalization affected the capacity of the state to redistribute wealth and economic risk?

From the standpoint of mainstream economic theory, the answers to these questions are clear. Since Adam Smith at least, it has been an article of faith that openness to the international economy is good for national economic growth.<sup>3</sup> The Ricardian notion of "comparative advantage" still provides the basic rationale: openness (to both trade and international capital) allows countries to specialize in (and then to export) their comparative advantage while importing products in which they are disadvantaged. Other arguments, such as the importance of openness to realizing scale economies, have been added to the equation over time. But these only reinforce the mantra that openness is good.

Globalization should be particularly beneficial in developing countries. Poorer countries should always be "catching up" up to richer ones—because because it is easier to borrow technology than to invent it and because labor tends to be more productive (lower costs per unit

<sup>&</sup>lt;sup>3</sup> For a recent dissenting view by a Nobel-prize winning economist that has stirred up considerable controversy, if not consternation in the field, see Samuelson (2004).

of production) in poorer countries. Openness should accelerate the catch up process by exposing developing countries to the knowledge of the developed world (not only technology but also management skills and the like), as well as by ensuring that markets and investment are available to them.

Turning to the distribution of income within countries, the canonical Heckscher-Ohlin-Samuelson (HOS) model of trade (which can readily be adapted to international investment) implies that globalization should affect inequality very differently in developed versus developing countries. Openness should increase inequality in countries where capital and skilled labor are abundant, but it should have precisely the opposite effect—reducing inequality—where less-skilled labor is relatively abundant. The intuition is simple. With fewer barriers to international flows of goods and investment, relative wages will rise in sectors in which a country has comparative advantage. Higher-income countries tend to be comparatively advantaged in capital and skilled labor, whereas lower income countries have a comparative advantage in less skilled labor. Globalization should thus increase inequality in wealthier countries, but reduce it in poorer ones.

Finally, most economists and leftwing critics agree that openness to the international economy constrains governments from intervening in the domestic economy. Economists tend to view smaller, "downsized" government as a virtue; the left decries it as undermining the historical ability of governments to alter market allocations of wealth and risk in favor of the less fortunate. But both sides are united in the view that either international competition ruling out market-unfriendly government interventions in the economy (generous unemployment insurance or restrictions on the abilities of firms to fire workers, for example). Moreover, the international

mobility of capital allows investors to vote with their feet, exiting countries that pursue policies of which business disapproves.

But are these standard suppositions about inequality and the scope of government borne out in reality? The short answer is that "it depends": on how economic integration is measured; and, on how one analyzes the linkages among globalization, the distribution of income among and within countries, and the size of government. As a result, arguments can be—and have been—made that run directly counter to the conventional wisdom.

We organize the remainder of this article around these issues. Section 2 discusses the different way globalization can be measured. Section 3 assesses the impact of globalization on differences in per capita incomes across nations. Section 4 examines the relationship between international economic integration and inequality within countries. Section 5 then analyses the impact of globalization on the government's ability to intervene in the economy—among other things to redistribute wealth and social risk. Section 6 summarizes our conclusions about the state of the field and where it might go in the future.

### 2. Measuring Globalization

#### International Economic Flows

Figure 1 presents the most basic facts about globalization in the 1980s and 1990s, normalized so that 1980 =100. International trade (exports and imports) grew over four times as quickly as global Gross Domestic Product (GDP), increasing about 280% over the two decades to reach over \$16 trillion (in 1995 dollars)—fully half of world GDP. Capital flows across national borders—inflows and outflows of both foreign direct investment (FDI) and portfolio investment (shorter term investments and bank lending, but excluding foreign exchange

transactions that are estimated at almost two trillion dollars a day)—grew by almost 600% to roughly \$10 trillion per year, or 30% of global GDP.

# Figure 1. here

The simplest way to examine the causal impact of globalization is to correlate these global increases in economic flows with other outcomes of interest. For example, if the global distribution of income has become more unequal in recent decades, it is tempting to conclude that globalization is implicated as a causal agent (as in Milanovic 2003). But several important phenomena—the expansion of democracy as well as markets, the information technology revolution, etc.—trended together during the 1980s and 1990s. This covariation makes it very difficult to draw irrefutable conclusions about causality among these data series.<sup>4</sup>

Moreover, these global aggregates belie considerable variations in the connections between specific national economies and international markets. Table 1 presents a list of the most and least internationally-integrated countries based on economic flows in the late 1990s. The top ten biggest traders were very rich, very small or both, whereas the smallest traders were very large, very poor, or both (consistent with "gravity" models of trade). A similar pattern was evident for capital flows, though here per capita income played the dominant role.

# Table 1. here

<sup>&</sup>lt;sup>4</sup> This critique holds equally true even if one uses more sophisticated indicators of international economic integration. For example, following the seminal work of Feldstein and Horioka (1980), many economists believe that the correlation between national savings and investment across a group of countries is a far better indicator of the international mobility of capital than is the magnitude of flows themselves. Whereas high flows might merely suggest instability in the investment environment, declining saving-investment correlations would indicate that domestic investment is less constrained by domestic savings—meaning capital would be more internationally mobile.

The rankings were quite different, however, with respect to changes in international economic flows over the 1980s and 1990. Several countries in the top 10 with respect to changes in trade—China, Mexico, Thailand, and Turkey—are probably not surprising to close observers of the international economy. But very few people would have guessed that Ghana, Laos, Nicaragua or Nigeria would appear on the list, nor that the top 10 would fail to include a single industrialized democracy. The bottom 10 (featuring countries where trade as a portion of GDP declined by more than 25%) was more predictable, dominated by nations from the Middle East and Sub-Saharan Africa. But the list also includes Japan, where declining trade went hand-in-hand with economic stagnation. The countries in which international capital flows increased the most were nothing if not eclectic. The bottom 10 was more predictable. But the sheer magnitude in the decline in capital flows in these countries is worth emphasizing (more than 45% from 1980-1984 levels) given common perceptions that economic integration is ubiquitous.

Should one measure the extent to which a country is "globalized" in terms of the *level* of international economic flows or *changes* in these flows? Sensible arguments have been made on both sides. Proponents of levels-based analyses ask rhetorically: surely, political economic dynamics are very different in a trading state like Singapore than in the United States, even though trade has grown more quickly in recent years in America? But this argument can be reversed: global*ization* is a process, not a steady state phenomenon. From this perspective, open economies such as Belgium and the Netherlands, which have been dealing with the effects of international markets for decades, do not face the same types of new globalization pressures faced by large countries like China and India where rates of recent growth in international transactions have been much steeper.

Other scholars believe that all flows-based measures—levels or changes—are flawed because these are driven by phenomena that are unrelated to "real" openness. For example, given how strongly trade is predicted by per capita income, market size and geographic location— some argue that it is residuals in such gravity models that indicate effective openness to international trade (Dowrick 1994). Similarly on the capital side, Frankel (1993) pioneered the analysis of "covered" interest rate differentials between countries—the difference between interest rates in one country and those in an offshore benchmark (typically, the eurodollar), controlling for forward exchange rate expectations. Frankel notes that high flows might indicate volatility in the investment climate, rather than openness to cross border movements, per se.

#### Foreign Economic Policy

But perhaps one should not concentrate on economic flows, or revealed indicators of openness, at all? Much of the popular and academic debate about globalization holds governments at least partially accountable for what has happened by changing tariffs and non-tariff barriers to trade and current and capital account policies. Figure 2 presents global averages for tariffs and a new financial openness index (FOI) (Brune 2004). Since higher tariffs represent less openness whereas higher FOI scores indicate more openness, these global trends are very similar to those on international economic flows—openness has increased dramatically in recent years.

# Figure 2 here

Table 2 reports the top and bottom ten countries in terms of both levels and changes in tariffs and the FOI. Comparing the columns gives one a very different picture of national economic policies depending on which measure is used. The list of most open countries in terms of tariffs and financial openness policies includes several small economies—such as Hong Kong, New Zealand and Switzerland—where governments have decided to do whatever they can to promote international economic integration. The list of the countries with the highest tariffs was dominated by Southeast Asia and Sub-Saharan Africa. With respect to financial openness, more than 50 countries, many from North Africa and the Middle East, Southeast Asia and Sub-Saharan Africa, retain completely closed capital and current accounts. In terms of *changes* in economic policies, the top 10 lists with respect to both tariffs and financial openness featured several Latin American countries. Nations from North Africa and the Middle East were strongly represented in both bottom 10 lists—and several actually increased tariffs and as well as restrictions on the current and capital accounts during the 1990s.

## Table 2 here

Table 3 presents the correlations among all the possible combinations of levels and changes of economic flows and foreign economic policies at the national level. The most striking feature of the table is the weakness of most associations. Only three correlations in the table exceed 0.50, between: levels and changes in capital flows; levels and changes in the FOI; and btween levels of trade and capital flows in the late 1990s. For the remainder, the simple take away is this. In marked contrast with the similarities in global trends across all indicators of globalization in recent decades, there are not only marked differences in the integration of different countries into the international economy, but also dramatic variations in the extent of integration.

Table 3 here

Different scholars have used different combinations of globalization measures in their analyses of its effects, often even while seeking to answer the same question. Milanovic (2003) assumed that globalization-however measured-has been increasing over time, and hence has had a causal impact on the changes in global inequality and growth he observed. Dollar and Kraay (2001b) and the related World Bank World Development Report (2003) based their work on growth and poverty on levels of and (to a lesser extent) changes in trade. Rodrik (1998), too, used trade levels to measure globalization and its effect on the public economy, although he subsequently criticized Dollar and Kraay for doing the same (Rodrik 2000 & 2001). Garrett (2001) and Garrett and Mitchell (2001) used changes in trade and capital mobility to reassess Rodrik's work on the public economy. Birdsall and Hamoudi (2002) argue that policy based measures are better indicators of globalization, as Garrett (1998), Quinn (1997) and Swank (2003) have done with respect to the effects of capital controls on government spending, taxation and growth, and as Garrett (2004) did with respect to tariff reductions and growth. Clearly, what these different scholars have found with respect to the consequences of globalization has likely been significantly influenced by how they have chosen to measure the phenomenon.

### 3. Globalization and Differences in Per Capita Incomes between countries

The most frequently debated effect of globalization concerns "inequality." But at least four important measurement issues have been raised in discussions of income distribution trends around the world:

- 1. Should inequality be measures among countries or within them?
- 2. Should inequality be measured globally or disaggregating into national experiences?
- 3. Should incomes be compared in terms of market exchange rates or adjusted for purchasing power parity?

4. Should the experiences of countries we counted equally or weighting by national population?

This section concentrates on the latter three questions with respect to inter-national differences in incomes. We then explore inequality within countries in Section 4.

#### Global Gini coefficients

Economists have long debated whether cross-country comparisons of per capita income should be computed using the rates at which currencies are actually exchanged (determined either by market forces or government fiat) or those that are adjusted according to purchasing power parity (PPP, determined by adjusting per capita incomes according to the prices of the same "basket of goods and services" in different countries). Traded exchange rates, in theory, should converge over time on those adjusted by PPP. But in practice, market exchange rates have consistently "undervalued" the currencies (and hence incomes) of developing countries in recent years, often by a factor of two or more.

As a result, moving from market exchange rates to PPP-based comparisons substantially lessens the estimated amount of inter-country inequality in the world at any given point in time. But there is still considerable debate on the more important issue of whether global inequality has been increasing or decreasing in recent years. The United Nations Development Program's <u>Human Development Report 2002</u> reported that inequality between countries has increased in recent decades—using traded exchange rates. So too did Shultz (1998) and Dowrick and Akmal (2003). However, using PPP-adjusted rates, Sala-i-Martin (2002) found little recent change in between-country inequality.

But a bigger issue in terms of estimates of inequality concerns the appropriate weightings to use for countries of different sizes.<sup>5</sup> Studies that treat countries as equal units of analysis tend to find evidence of increasing divergence in per capita incomes across countries in recent decades (Sheehey 1996). In contrast, weighting countries according to their populations results in estimates of decreasing international inequality (Boltho and Toniolo 1999, Firebaugh 1999, Schultz 1998).

Figure 3 demonstrates the impact of population-weighted vs. "all countries equal" measures of inter-country inequality, using a single Gini coefficient (higher scores denote more inequality, on a scale from 0 to 1) for all countries in the world. The impact of China—with annual economic growth rates of nearly 10% for over twenty years and more than one sixth of the world's population—is clear. Moreover, economic growth in India, the world's second largest country, has approached Chinese rates in the past decade. If one weights the experiences of these two countries in terms of the fully one-third of the world's population they represent, global inter-country inequality declined by about 8% during the 1980s and 1990s—from a Gini of around .54 in 1980 to one of .50 in 2000. But if one were to count them only as 2 countries (i.e. the unweighted average in Figure 3), the inter-country Gini coefficient would have increased by about the same amount over the two decades.

Figure 3. here

Of course, even population-weighted inter-country Gini coefficients do not capture true "global" inequality because they do not take into account the distribution of income within a country. Measuring real global inequality is difficult. As Sala-i-Martin (2002) has noted, one

<sup>5</sup> See Firebaugh (1999) for a thorough consideration of the effects of country size on estimates of international inequality.

cannot simply combine inter- and intra-country Ginis because within-country measures refer to individuals (or households) whereas the across country measure refers to countries. Nonetheless, several scholars have gone on to calculate what they consider effective global (i.e. comparing all people on earth) indices of inequality (Bourguignon and Morrision 1999, Dikhanov and Ward 2003, Dowrick and Akmal 2003, Milanovic 2003, Sala-i-Martin 2002). The strongest conclusion to emerge from these studies is that changes in the global distribution of income in recent decades have been largely the product of inter-country trends rather than changes in the income distributions within countries (Bourguignon and Morrison 2002, Goesling 2001, Kozeniewicz and Moran 1997, Li, Squire and Zou 1998).

#### **Differences in National Growth Rates**

Even if one were confident that a single measure (such as a global Gini) can capture the amount of inter-country inequality in the world, problems of causal inference with respect to the impact of globalization on it would still abound. The simplest analytic move would be first to note that the world has globalized in recent decades, and then to assume that this has had a causal effect on the changes in inter-country inequality that have been observed. But other phenomena, such as democratization, privatization and deregulation, have also swept around the world in the recent past. More importantly, the extent to which different countries are integrated into global markets continues to vary considerably.

As a result of these considerations, many studies of the relationship between globalization and international inequality compare the experiences of different countries rather than global trends: have "globalizers" experienced faster rates of per capita economic growth than "non-globalizers"? Have the benefits of globalizing been greater in developing countries

than in developed ones? Economic theory suggests that the answers to both questions are "yes." But proving this econometrically is difficult.

The primary problem is that even if trade does increase economic growth rates, there is little doubt that growth stimulates trade (indeed, this is at the core of gravity models of trade). The ensuing issues of endogeneity, simultaneity and reverse causation have led economists interested in the trade-growth relationships to search for instruments for trade that cannot possibly be caused by growth—such as a country's size and geographic location (Frankel and Romer 1999). Needless to say, this approach takes off the table the issues of most interest to students of globalization.

Economists also believe that openness should speed "conditional convergence" in crossnational incomes (as Robert Barro (1997) labels it). The deadweight losses of protectionism are likely to be larger in less developed countries. FDI and trade transfer technology and know-how (i.e. management skills) to poorer countries. Financial integration offers an escape from the capital scarcities that constrain investment in LDCs and allows greater distribution of risk. Moreover, integration into international markets imposes external disciplines on developing countries that their political systems cannot produce domestically.

Have developing countries in fact benefited from integration into the world economy? Two influential studies, based on trade integration, say that they have. Using a composite openness index, Sachs and Warner (1995) concluded that trade is an important driver of economic growth in developing countries. But numerous methodological questions have been raised about this index, notably by Rodriguez and Rodrik (1999) who trenchantly attacked Sachs and Warner for using an index that was almost taulologically connected with economic growth. Using very different measures and methods, Dollar and Kraay (2001b) drew the same conclusion about the benefits of trade as Sachs and Warner. But Rodrik (2000) again charged that many of the methodological choices made by Dollar and Kraay reflected a particular ideology ("trade is good") rather than sound scientific judgment. Notably, Rodrik contended that since Dollar and Kraay relied heavily on increases in trade flows to measure globalization, the alternative interpretation cannot be rejected that countries that have grown quickly, for whatever reason, have become magnets for trade.

Garrett (2004), using changes in tariffs rather than changes in trade flows, argued that whereas low-income developing countries (such as China and India) have benefited from lowering protectionist barriers, countries in the middle of the global income distribution (like Mexico and Poland) have, if anything, suffered. Others (Dikhanov and Ward 2003, Sala-i-Martin 2002, Sutcliffe 2003) argue that whereas a small group of industrialized countries at the top of the distribution have benefited from trade openness middle-income (and poor) countries have been getting poorer.<sup>6</sup> In contrast, Birdsall (2002) contended that that globalizers among low-income countries have fared badly because they have not yet reached the minimum development threshold – in terms of human capital, physical infrastructure, political institutions and the like – to benefit from international openness. Similarly Agenor (2003) claimed that low-income countries have been hurt not because it goes too far, but because it does not go far enough.

Countries opening their borders to capital flows should also benefit from the efficient allocation of investment. But these gains must be balanced against the potential costs ensuring of volatility. There has been less empirical work on the capital mobility-growth relationship than on the causal impact of trade, but again the results are again contradictory. Using a binary indicator

<sup>6</sup> Dikhanov and Ward (2003) estimate that the share of OECD population falling into the wealthiest global decile increased from 42.5% to 55.3%. Only 8.6% of OECD's population was in poorest decile. In 1999, Africa contributed 50% to poorest global decile whereas in 1970, its share was only 16%. Also, 39% of Africans were found in lowest global decile in 1999, compared with 17% in 1990.

of capital account openness for a sample of roughly 100 developing and developed countries, Rodrik (1998) argued that there was no association between (the level of) capital account openness and growth. In contrast, Quinn (1997) used a more nuanced 4-point scale for about 60 nations (and a greater proportion of developed countries), and concluded that countries that that opened their capital accounts more quickly (i.e. a change measure) grew faster. Subsequently Edwards (2001) showed that using both Quinn and Rodrik's measures, capital account openness tended to be good for growth in developed countries, but not for developing nations. Edwards' findings are consistent with the post-Asia crisis consensus in the policy community—including the IMF—that the efficiency benefits of capital mobility are only likely to outweigh the costs in countries where domestic financial institutions are well enough developed to manage the risks associated with volatile inflows and outflows (Fischer 1998).

In sum, this section demonstrates the enormous amount of scholarly attention that has been paid in recent years across the social sciences to changes in the inter-national distribution of income, and the effects of globalization on them. But unfortunately, the work is sufficiently diverse in its methods, measures and conclusions to have given giving the pundits on all sides ample evidence to reinforce their prejudices.

In fact, only two conclusions can be safely drawn from the literature. First, two developing countries, China and India, have achieved spectacular growth rates in recent years. Because of their size, their experiences have—appropriately—a marked impact on how we view the effects of globalization. They have both opened to international trade (but much less to international capital), and they have achieved spectacular rates of growth. But whether, when and how their experiences generalize to other countries is unclear.

Second, the wave of capital account liberalization in developing countries did not have the large benefits predicted by its proponents during the halcyon days of the "Washington consensus" in the late 1980s and early 1990s. Countries need strong domestic financial institutions to maximize the gains from global financial integration and to deal with its inherent volatility. For much of the developing world, this means that gradualism with respect to capital account liberalization is likely to be the best policy for years to come.

The jury is still out on the trade-growth nexus if one is interested in recent developments, particularly with respect to the impact of removing protectionist barriers to trade. Economic growth will always stimulate trade, creating enormous barriers to isolating the independent effects of trade growth on economic activity. Thus scholars should focus on the vital policy question of whether, when and how countries should remove tariff and non-tariff barriers to trade.

## 4. Globalization and Inequality Within countries

Two stylized facts are frequently bandied about with respect to the impact of globalization on inequality within countries. First, globalization is deemed to have undercut manufacturing employment in the industrialized countries in a generalized "giant sucking sound" of jobs lost to the developing world. Second, the resulting new jobs in the developing world are in "sweatshops" that pay workers much less than for similar work done in developed countries. As result of the twin dynamics, so goes the popular wisdom, workers around the world are losing out from globalization—increasing inequality with countries all around the world.

As we indicated in the introduction, the very influential HOS perspective supports the first stylized fact with respect to a prediction of increasing income inequality in the first world. But it contradicts the second by arguing that less skilled workers newly employed in manufacturing should differentially benefit from globalization in developing countries lowering inequality within these nations.

Much of the policy debate, however, focuses not on the relative incomes but rather on the absolute plight of people at the bottom of the income spectrum, i.e. on "poverty." But measuring poverty is more art than science. The official 2003 poverty line in the US for an individual was \$8,980.<sup>7</sup> On this definition, most of the world lives in poverty. But in the development community, the poverty threshold is conventionally deemed to be much lower—individuals living on less than "a dollar a day." The World Bank now reports the poverty data using \$1.08 per day as the cut off (a dollar a day, measured in PPP terms, and adjusted for inflation in recent years). As Table 4 indicates, while roughly one sixth of the world's population (over a billion people) continues to live in poverty, the World Bank claims that the rate of poverty around the world declined appreciably during the 1990s.<sup>8</sup>

# Table 4 here

This headline statistic of poverty reduction, however, belies enormous regional variations. Simply excluding China from the calculation, for example, halves the estimated amount of poverty reduction. Moreover, as the China example illustrates, changes in poverty rates are affected by two distinct phenomena: how quickly a country (or region) is growing; and, how the benefits of this economic growth are distributed among its citizens. We have already discussed differences in the growth trajectories among countries.

<sup>7</sup> This is according to the Department of Health and Human Services, http://aspe.hhs.gov/poverty/03poverty.htm.

<sup>8</sup> The World Bank's findings are reflected in other studies such as Sutcliffe (2003) and Dikhanov and Ward (2003) but disputed by Wade (2003), Reddy and Pogge (2003) and Ravillion (2003).

With respect to inequalities in the distribution of income within countries, the basic phenomenon one wishes to measure is how widely a country's national income is shared. Complete equality would be manifest if every person earned the same income; complete inequality would obtain if a single person held all national income. This is what the Gini coefficient is designed to capture. The hypothetical extremes on this coefficient are 0 (complete equality) to 1.00 (complete inequality), but the effective range for Ginis measuring national income distributions is between .30 and .50.

The most widely used data set on within-country inequality is the World Income Inequality Database (WIID 2000), a time series of national Gini coefficients that builds on the foundational work of Deininger and Squire (1996) at the World Bank.<sup>9</sup> Using the WIID data, Figure 4 shows that within-country inequality for the world as a whole (comprising un-weighted national average for all countries with available data) decreased in the 1970s, but has subsequently increased, particularly in the developing world. On these these data income inequality remained increased marginally in high-income countries in recent years, but not by nearly the amount one might have expected from all the punditry on the subject. Thus, the WIID data report inequality trends that are precisely the opposite of what the HOS perspective implies about the effects of increasing international economic integration.

# Figure 4. here

WIID suffers, however, from two important limitations. First, it mixes apples and oranges in terms of what is actually measured. For example, some surveys used in WIID were based on incomes people received, others on expenditures people made. Some surveys were for

<sup>9</sup> WIID data contains more country year observations and draws from a broader scope of the D-S data.

households, others for individuals. Some report gross incomes, some net incomes (after taxes and government transfers). The second shortcoming is the WIID's quite limited coverage of the developing world, both in terms of countries and years of data.

It is thus not surprising that others have tried to find better measures of inequality. The most recent data set to emerge is from the University of Texas Inequality Project (UTIP). UTIP derives wage inequality measures from industrial surveys of wages in the manufacturing sector conducted by the United Nations Industrial Development Organization (UNIDO). The good news is that UTIP comprises many more country-year observations, with much greater representation from the developing world, than WIID does.<sup>10</sup> The bad news is that far from everyone is employed in the manufacturing sector (with services dominant in developed countries and agriculture dominant in developing countries). UTIP seeks to deal with this problem by adjusting its scores in accordance with the observed relationship between UNIDO industrial pay data and WIID income inequality data (where both measures exist).<sup>11</sup>

Interestingly, however, as Figure 5 indicates, the patterns of within-country inequality in UTIP tend to trend in the same directions as the WIID data—a modest decline in global inequality in the 1970s, followed by rising inequality since. But the distribution of the increase in inequality in UTIP is closer to that predicted by HOS, with the increases concentrated in the developed world.

Figure 5. here

<sup>10</sup> For the whole 1980-1998 period for all countries, there are 429 country-year observations in the national WIID dataset; there are 1741 in UTIP over the same period.

<sup>11</sup> See Galbraith and Kum (2003) for a lengthy discussion of WIID, UNIDO and UTIP.

What about the globalization-inequality relationship at the national level? The evidence is mixed with respect to the developed countries. Income inequality has clearly increased in the United States and the United Kingdom and most analysts conclude that globalization is at least partially responsible. Galbraith and Kum (2002) using UTIP data, as well as Cornia and Kiiski (2001) and Sala-i-Martin (2002) using WIID data, argue that this finding can be generalized to other developed nations. But there are several other WIID-based studies arguing that openness has, if anything, been associated with less inequality in the industrial world (Barro 2000, Higgins and Williamson 1999, Lundberg and Squire 2000, and Spilimbergo, Londono and Szekely 1999). The same lack of consensus is evident with respect to globalization and within-country inequality in the developing world. Different studies conclude that market integration has increased inequality (Agenor 2003, Cornia and Court 2001, Kremer and Maskin 2002), reduced inequality (Barro 2000, Heston and Summers 1991, Higgins and Williamson 1999, Kapstein and Milanovic 2002, Schultz 1998), or had no impact in less developed nations (Dollar and Kraay 2001a).

Despite these contradictory studies, three conclusions can be made about inequality within countries and the impact of globalization on it.

First, changes in the distribution of income among countries have been far greater in recent years than changes in the distribution of income within countries—with big effects on poverty in the developing world, among other things. But even if globalization-induced higher growth rates are indeed lifting all boats, the adjustment costs of greater openness tend to be borne more by the poor in developing countries, as Wood (1994) first argued.

Second, Gini coefficients differ much more across countries than they do over time. In the developed countries, the strength of organized labor has played a major role in influencing

20

cross national differences in inequality (Lange and Scruggs 2002, Rueda and Pontusson 2000, Wallerstein 1999). In the developing world, initial distributions of land and education seem to have had a marked impact on national inequality trajectories (Birdsall and Lodono 1997 and 1998).

Third, in cases where inequality has clearly increased in recent years, skill biased technological change (i.e. computerization) has been a far more important cause than globalization. In the US data, estimates vary between 10% and 33% for the proportion of increased income inequality that can be attributed to trade growth (Feenstra and Hanson 1999, Freeman 1998, Katz and Utor 1999).

#### 5. Globalization and Government spending

Let us now turn to the impact of globalization on the ability of governments to use the policy tools of the state to redistribute wealth and risk within their countries. There are two very different positions in the literature. But they share the presumption (the veracity of which we explored in the previous section) that globalization adversely affects lower socioeconomic strata in society. The "compensation" argument suggests that government has grown precisely in order to cushion globalization's dislocations on those who have been harmed by it. Some go further to suggest that "smart" government interventions—for example, in education, in securing property rights and in research and development—actually increase national competitiveness in global markets. The "competition" thesis, in contrast, contends that competitive pressures in international goods and services markets, as well as mobile capital in search of higher rates of return, have placed substantial downward pressure on interventionist government policies that the markets view as inefficient.

Figure 6 presents data on the size of government for total general government consumption expenditures and revenues from privatization (both as a share of GDP) in the 1980s and 1990s. General government consumption represents spending on the public provision of public services such as health, education and public administration (essentially the wage bill of government). As Rodrik (1998) notes, since transfer programs like public pensions and unemployment insurance are small in the developing world, general government consumption is a good bellwether for general trends in the public economy around the world. Total revenues from privatization, in contrast, speak to microeconomic reform, highlighting the decline of state-owned enterprises, conventionally understood to prop up employment and wages in enterprises that are not subject to market competition—albeit in the guise of providing collective goods under-supplied by the market. In the past twenty years, very little nationalization has taken place, making privatization revenues an easy quantitative indicator of market-oriented microeconomic reform.

# Figure 6 here

The most striking fact about global government consumption spending is that it has hovered in a very narrow band, between 16.5% and 17.5% of GDP, throughout the past couple of decades. Interestingly, the same pattern of slight declines in the 1980s followed by increases in the 1990s holds in both developed and developing countries.

But whereas as government consumption spending remained stable, privatization swept around the world during the 1980s and 1990s. It is important note, however, how much smaller global privatization revenues have been than government spending remains. More than one trillion dollars in state-owned assets have been sold off around the world since the mid-1980s (Brune, Garrett and Kogut 2004). All tolled, this sums to only about 3% of today's global GDP.

Turning to the cross-national evidence, the relationship between international economic integration and the public economy has been studied for decades.<sup>12</sup> Cameron (1978) first showed that trade and the size of government were positively correlated in the OECD. Twenty years later, Rodrik (1998) and others (Dion 2004, Rudra and Haggard 2001) demonstrated that this relationship held for developing countries as well. These studies, however, were based on levels of trade and spending. There is growing evidence that the relationship is reversed when *changes* in trade and changes in spending are considered—faster trade growth has been associated with slower growth (or deeper cuts) in government spending both in the OECD (Garrett and Mitchell 2001, Kapstein 1999, Kapstein and Milanovic 2002) and in the developing world (Garrett 2001, Kaufman and Segura-Ubiergo 2001).

There is less research on the financial openness-size of government relationship. Rodrik (1997) hypothesized that the positive trade-spending nexus would be reversed for capital mobility—on the reasonable assumption that governments will be forced to cut taxes, and ultimately spending, to keep footloose capital from exiting—and presented some preliminary evidence to this effect for the OECD. Subsequent research, however, has failed to reveal any clear negative correlations, and indeed some positive ones, between capital mobility and the size of the public sector among the industrial democracies (Garrett and Mitchell 2001, Quinn 1997, Swank 2002, Swank and Steinmo 2002). Marginal tax rates have declined. But investment allowances, depreciations and other deductions have also been reduced. The result has been a broader base of capital taxation and a stable overall tax take from corporate income. Data

<sup>12</sup> See Garrett (1998b) and Schulze and Ursprung (1999) for reviews of the literature.

limitations have militated against similar work on taxation in the developing world, but Garrett (2001) found no evidence that increasing capital mobility reduced government spending for a sample of nearly one hundred developed and developing nations.

In light of the ambiguous relationship between openness and the size of government, recent studies have probed deeper by disaggregating governments spending into categories such as transfers and expenditures on health and education. According to Kaufman and Segura-Ubiergo (2001), the negative effect of openness has operated primarily through social security transfers (mainly pensions) in developing countries, whereas health and education expenditures have proved far less vulnerable. This is consistent with Garrett's (1998) work on the OECD. Dion (2004) goes further by arguing that trade openness has been associated with more investment in human capital (especially in authoritarian regimes).

There is much less work on the impact of globalization on privatization than there is on spending and taxing. The conventional wisdom, however, is that since state-owned enterprises are inherently inefficient, one should expect globalization (and hence more competition) to have fueled privatization. But in the most systematic study of privatization around the world, Brune, Garrett and Kogut (2004) did not find any association between a country's trade and foreign direct investment patterns and the size of its privatizations. Instead, privatization revenues tended to be higher in countries under IMF programs—not because the IMF demanded larger scale privatization programs, but rather because the markets valued formerly state-owned assets more highly in countries subject to the general policy disciplines associated with the IMF.

Taking all the research on the impact of international economic integration on government policy, the evidence does not lend strong support to the conventional view that globalization will drive out inefficient government programs. The strongest support for this

24

contention concerns changes at the margins in economic integration and in government spending and taxation, but even the evidence is not yet compelling.

There are two reasons for the resilience of government. As the recent difficulties the French and German governments have encountered in trying to reform their welfare states have demonstrated, political support for the public economy remains very high—all the more so when citizens feel that globalization is threatening their traditional quality of life. But it is probably also the case that government is not as "inefficient" as is often presumed. Government spending on education, health care and physical infrastructure may well produce economically-important collective goods that are under supplied by the market but also vitally important in the era of globalization. It is also not clear that public sector monopolies are any less efficient than the private sector ones that have often been the result of privatization.

### Conclusion

In this essay we have reviewed the voluminous literature on the effects of globalization on inequality among and within countries and on the size and scope of government. Neither the optimistic vision of the Washington consensus nor the inveterate pessimism of its critics is vindicated. Rather, both sides can point to studies that support their positions. This lack of consensus is the product both of substantial measurement issues with respect to globalization and to inequality and of the difficulties in drawing strong causal inferences among factors that tend strongly to covary.

It would be wrong, however, to suggest that we have not made any progress towards better understanding globalization and its impact. With respect to measuring globalization, studies that focus more on changes than levels of international economic activity, and on policy constraints rather than on flows themselves, seem better designed to generate insight into the

25

causal relationships—particularly with respect to the roles governments have played and may play in the future in accentuating or curtailing market trends. With respect to international inequality, scholars now understand the enormous impact of the individual experiences of China and India on global distributional outcomes. With respect to inequality within countries, we now know that the large differences between national levels of inequality have been remarkably resilient to change in recent decades. And where they have changed appreciably, technological innovation seems to have been at least as important as globalization.

But there is clearly a long way to go before we will really understand the effects of globalization. Perhaps the best way forward is to acknowledge the limitations of the kind of cross-national quantitative research that dominates the literature. Small differences in methods and measurement often have very large effects on overall results. Scholars might be better off using simpler measures of statistical association, making sure they are robust to different measures, and then thinking harder about the underlying micro-foundations of the proposed causal arguments. Well-designed comparative case studies may often be gainfully employed to buttress and illuminate large-N studies. But the bottom line is that more work should be done. The underlying issues at stake are far too important to do otherwise.

#### LITERATURE CITED

- Agenor, P. 2003. Does Globalization Hurt the Poor? Manuscript. Washington, DC: World Bank.
- Barro, R. 1997. Determinants of Economic Growth: A Cross-Country Empirical Study. Cambridge: MIT Press.
- Barro, R. 2000. Inequality and Growth in a Panel of Countries. *Journal of Economic Growth* 5(1): 87-120.
- Birdsall, N. 2002. Asymmetric Globalization: Global Markets Require Good Global Politics. Center for Global Development Working Paper No. 12.
- Birdsall, N. and A. Hamoudi. 2002. Commodity Dependence, Trade and Growth: When 'Openness is Not Enough.' Center for Global Development Working Paper No. 7.
- Birdsall, N and JL Londono. 1997. Asset Inequality Matter: An Assessment of the World Bank's Approach to Poverty Reduction. *American Economic Review* 87:32-37.
- Birdsall, N. and JL Londono. 1998. No Trade-Off: Efficient Growth via More Equal Human Capital Accumulation. In *Beyond Trade-offs: Market Reforms and Equitable Growth in Latin America*. Washington, DC: IADB and Brookings Institution.
- Boltho, A and G Toniolo. 1999. The assessment: the twentieth century achievements, failures, lessons. *Oxford Review of Economic Policy* 15(4): 1-17.
- Bourguignon, F and C Morrison. 1999. The Size Distribution of Income Among World Citizens, 1820-1990. Mimeo. Paris: DELTA.
- Bourguignon, F and C Morrison. 2002. Inequality Among World Citizens: 1820-1992. *American Economic Review* 92(4): 727-744. Washington, DC: World Bank.
- Brune, N. 2004. Explaining Financial Liberalization Around the World. Ph.D. Dissertation. Yale University.

- Brune, N, G Garrett and B Kogut. 2004. The IMF and the Global Spread of Privatization. IMF Staff Papers. July 2004.
- Cameron, DR. 1978. The Expansion of the Public Economy. *American Political Science Review* 72: 1243-1261.
- Cornia, G and J Court. 2001. Inequality, growth and poverty in the area of liberalization and globalization- a policy brief. (World Institute for Development Economics Research. United Nations University.)
- Cornia, G and S Kiiski. 2001. Trends in Income Distribution in the Post-World War II Period: Evidence and Interpretation. WIDER Discussion Paper No. 89. Helsinki: United Nations University World Institute for Development Economics Research.
- Deaton, A. 2001. Counting the world's poor: problems and possible solutions. *The World Bank Research Observer* 16 (2): 125-47.
- Deninger K and L Squire. 1996. A new dataset measuring income inequality. *World Bank Economic Review* 10: 565-591.
- Dikhanov, Y and M Ward. 2003. Evolution of the Global Distribution of Income. Working Paper.
- Dion, 2004. Globalization, Political Institutions, and Social Spending Change in Middle Income Countries, 1980-1999. Presented at 2004 American Political Science Association Annuall Meeting, Chicago.

Dollar, D and A Kraay. 2001a. Growth Is Good for the Poor. World Bank Research Paper.

- Dollar, D and A Kraay. 2001b. Trade, Growth and Poverty. World Bank Research Paper
- Dowrick, S. 1994. Openness and Growth. *RBA Annual Conference Volume* 1994-02, Reserve Bank of Australia.

- Dowrick, S and M Akmal. 2003. Contradictory trends in global income inequality: a tale of two biases. Working Paper.
- Edwards, S. 2001. Capital Mobility and Economic Performance: Are Emerging Economies Different? NBER Working Paper 8076.
- Feenstra, R and G Hanson. 1997. Foreign Direct Investment and Relative Wages: Evidence from Mexico's Maquiladoras. *Journal of International Economics* 48(2): 301-320.
- Feenstra, R and G Hanson. 1999. The Impact of Outsourcing and High-Technology Capital on Wages: Estimates for the United States, 1979-1990. *Quarterly Journal of Economics* 114: 907-940.
- Feldstein, M and C Horioka. 1980. Domestic Savings and International Capital Flows. *The Economic Journal* 90: 314 329.
- Firebaugh, G. 1999. Empirics of world income inequality. *American Journal of Sociology* 104: 1597-1630.
- Fischer, S. 1998. Capital account liberalization and the role of the IMF. In *Should the IMF Pursue Capital Account Convertibility?* Essays in International Finance 207. Princeton, NJ: Department of Economics, Princeton University.
- Frankel, JA. 1993. On Exchange Rates. Cambridge: MIT Press.
- Frankel, JA and D Romer. 1999. Does trade cause growth? *American Economic Review*, 89 379-399.
- Galbraith, JK. and H Kum. 2002. Inequality and Economic Growth. UTIP Working Paper No.21. (Austin: University of Texas).
- Garrett, G. 1998a. Partisan Politics in the Global Economy. New York: Cambridge University Press.

- Garrett, G. 1998b. Global Markets and National Politics. *International Organization* 52: 787-824.
- Garrett, G. 2000a. The causes of globalization. Comparative Political Studies 33: 941-991.
- Garrett, G. 2000b. Capital Mobility, Exchange Rates and Fiscal Policy in the Global Economy. *Review of International Political Economy* 7: 153-170.
- Garrett, G. 2001. Globalization and Government Spending Around the World. *Studies in Comparative International Development* (forthcoming).

Garrett, G. 2004. Globalization's Missing Middle. Foreign Affairs 83(6): 72-83.

- Garrett, G and D Mitchell. 2001. Globalization, Government Spending and Taxation in the OECD. *European Journal of Political Research*.
- Goesling, B. 2001. Changing Income Inequalities within and between Nations: New Evidence. *American Sociological Review* 66: 745-61.
- Heston, A and R Summers. 1991. The Penn World Tables (Mark 5): An Expanded Set of International Comparisons, 1950-1988. *Quarterly Journal of Economics*. pp. 327-68.
- Higgins, M and JG Williamson. 1999. Explaining Inequality the World Round. NBER Working Paper 7224.
- Human Development Report. 1999. United Nations Development Programme, New York: Oxford University Press.

Kapstein, E. 1999. Sharing the Wealth. New York: Norton.

Kapstein E and B Milanovic. 2002. Income and Influence: Social Policy in Emerging Market Economies. The Upjohn Institute.

- Katz, LF and DH Autor. 1999. Changes in the Wage Structureand Earnings Inequality. in Orley Ashtenfelter and David Card, eds. Handbook of Labor Economics, Vol. 3A, (Amsterdam: North-Holland).
- Kaufman, R and A Segura-Ubiergo. 2001. Globalization, Domestic Politics and Social Spending in Latin America. *World Politics* 53(4): 553-567.
- Korzeniewicz, RP and TP Moran. 1997. World-Economic Trends in the Distribution of Income, 1965-1992. *American Journal of Sociology* 102:1000-1039.
- Kremer, M and E Maskin. 2002. Globalization and Inequality. Working Paper. Brookings Institution Group on Globalization and Inequality.
- Lange, P and L Scruggs. 2002. Where have all the members gone? *Journal of Politics* 64(1): 126-53.
- Li, H., L. Squire and H-F. Zou. 1998. Explaining International and Intertemporal Variationsin Income Inequality. *Economic Journal*. 108: 26-43.
- Lindert, P and J Williamson. 2001. Does Globalization Make the World More Unequal? Manuscript.
- Lundberg, M and L Squire. 2000. The simultaneous evolution of growth and inequality. World Bank, Manuscript.
- Maddison, A. 2001. 'The World Economy: A Millenial Perspective'. Paris: Organization for Economic Cooperation and Development
- Milanovic, B. 2003. Can we Discern the Effect of Globalization on Income Distribution? World Bank Research Paper.
- Milanovic, B. 2000. The Two Faces Of Globalization: Against Globalization As We Know It. Manuscript. World Bank. Development Research Group.

- Milanovic. B. Forthcoming 2005. Worlds Apart: Measuring Global and International Inequality. Princeton University Press: Princeton.
- Obstfeld, M. 1994. Risk-taking, Global Diversification, and Growth. *American Economic Review* 84: 1310-1329.
- Quinn, DP. 1997. The Correlates of Change in International Financial Regulation. American Political Science Review 91: 531-551.
- Ravillion, M. 2003. How NOT to Count the Poor: A Reply to Reddy and Pogge. MS. Columbia University.
- Reddy, S and T Pogge. 2003. How NOT to Count the Poor. Columbia University. Manuscript.
- Reuda, D and J Pontusson. 2000. Wage Inequality and Varieties of Capitalism. *World Politics* 52: 350-383.
- Robbins, D. 1996. Evidence on Trade and Wages in the Developing World, Technical Paper No. 119, Paris: OECD Development Centre.
- Rodriguez, F and D Rodrik. 1999. Trade policy and economic growth: a skeptic's guide to the cross-national evidence. NBER Working Paper No. 7081, Cambridge, MA.
- Rodrik, D. 1997. Has globalization gone too far? Washington, DC: IIE.
- Rodrik, D. 1998. Why Do More Open Economies Have Bigger Government? *Journal of Political Economy* 106: 997-1032.
- Rodrik, D. 1998. Who needs capital-account convertibility? In Should the IMF Pursue Capital Account Convertibility? Essays in International Finance No. 207. Princeton, NJ: Department of Economics, Princeton University.
- Rodrik, D. 2000. Comments on "Trade, Growth, and Poverty," by D. Dollar and A. Kraay.

- Rodrik, D. 2001. Trading in illusions. Foreign Policy. 123: Mar/Apr 2001.
- Rudra, N. 2004. Openness, Welfare Spending and Inequality in the Developing World. International Studies Quarterly 48: 683-709.
- Rudra, N. 2002. Globalization and the Decline of the Welfare State in Less Developed Countries. International Organization 56: 411-445.
- Rudra and Haggard. 2001. Globalization, Domestic Politics, and Welfare. Paper presented at the Annual Conference of the American Political Science Association, 2003.
- Sachs, J. and A Warner. 1995. Economic Reform and the Process of Global Integration. Brookings Papers on Economic Activity 1: 1-118.
- Sala-i-Martin, X. 2002. The Disturbing "Rise" of Global Income Inequality. NBER Working Paper 8904. (Cambridge: NBER).
- Samuelson, Paul A. 2004. Wher Ricardo and Mill Rebut and Confirm Arguments of Mainstream Economists Supporting Globalization. *Journal of Economic Perspectives* 18(3): 135-146.
- Schultz, T. Paul. 1998. Inequality in the distribution of personal income in the world. *Journal of Population Economics* 11: 307-344.
- Sheehey, EJ. 1996. The growing gap between rich and poor countries. *World Development* 24: 1379-1384.
- Spilimbergo, A, JL Londono, and M Szekely. 1999. Income Distribution, Factor Endowments and Trade Openness. *Journal of Development Economics* 59(1): 77-101.
- Sutcliffe, B. 2003. A more or less unequal world? World Income Distribution in the 20<sup>th</sup> Century, Political Economy Research Institute, (Amherst: University of Massachusetts).
- Swank, D. 2002. *Global Capital, Political Institutions and Policy Change in Developed Welfare States.* New York: Cambridge University Press.

- Swank, D. 2003. Withering Welfare? Globalization, Political Economic Institutions, and the Foundations of Contemporary Welfare States. In Linda Weiss, ed., States and Global Markets: Bringing Domestic Institutions Back In. Cambridge, UK: Cambridge University Press.
- Swank, D and S Steinmo. 2002. The New Political Economy of Taxation in Advanced Capitalist Democracies. *American Journal of Political Science* 46 (No. 3): 477-89.
- United Nations University. 1999. World Income Inequality Database Beta 3 (WIID). WIDER: Helsinski.
- Wade, R. 2003. Is Globalization Reducing Poverty and Inequality? (Development Research Center: London).
- Wallerstein, M. 1999. Wage-Setting Institutions and Pay Inequality in Advanced Industrial Societies. American Journal of Political Science 43: 649-680.
- Williamson, J. 1993. Democracy and the 'Washington Consensus'. *World Development* 21: 1329-1336.
- Wood, A. 1994. North-South Trade, Employment and Inequality. Oxford: Clarendon Press.
- Wood, A. 1997. Openness and Wage Inequality in Developing Countries. World Bank Economic Review 11(1): 33-57.
- World Bank. 2001. From Safety Net to Springboard. Washington, DC: World Bank.
- World Bank. 2000a. World Development Report: Attacking Poverty. Washington, DC: World Bank.
- World Bank. 2003. World Development Report: Sustainable Development in a Dynamic World: Transforming Institutions, Growth, and Quality of Life. Washington, DC: World. Bank.

World Bank World Development Indicators (book and CD-ROM). Washington, DC: World Bank. Various years.