THE GLOBALIZATION RORSCHACH TEST:
International Economic Integration, Inequality,
and the Role of Government

Nancy Brune¹ and Geoffrey Garrett²
¹Department of Political Science, Yale University, New Haven, Connecticut 06520; email: nbrune@isop.ucla.edu
²Ronald W. Burkle Center for International Relations and Department of Political Science, University of California, Los Angeles, California 90095; email: ggarrett@international.ucla.edu

Key Words全球化, inequality, economic growth, government spending, privatization

Abstract
In this review, we address 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 research on the consequences of globalization, there is no solid consensus in the relevant literature on any of these questions, largely because scholars disagree about how to measure globalization and about how to draw causal inferences about its effects. We also suggest possible foci for future research.

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 (see http://www.aflcio.org/mediacenter/prsptm/sp04042000.cfm for text of this speech)

[T]hose 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 (Los Angeles Times, 2001)
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: Analysts have access to the same information, but they draw completely different conclusions. Supporters claim that globalization is good for international business; they 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, poor countries, and the environment—and there is little that 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. First, measuring globalization is notoriously difficult, and the measurement methods are contested. It is also very difficult to draw inferences about cause and effect between economic integration and other outcome variables, which tend to trend together.

In this essay, we try to make sense of the debate over globalization. We do not 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 the publication of Adam Smith’s *The Wealth of Nations* in 1776, it has been an article of faith that openness to the international economy is good for national economic growth. 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.

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1For 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).
Globalization should be particularly beneficial to developing countries. Poorer countries should always be catching up to richer ones because it is easier to borrow technology than to invent it and because labor tends to be more productive (lower costs per unit 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 the opposite effect 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 left-wing critics agree that openness to the international economy constrains governments from intervening in the domestic economy. Although economists tend to view smaller government as a virtue, the Left decries it for undermining the historical ability of government to alter market allocations of wealth and risk in favor of the less fortunate. But both sides share the view that international competition reduces government interventions in the economy (generous unemployment insurance or restrictions on the ability of firms to fire workers, for example). Moreover, capital mobility allows investors to vote with their feet, leaving countries whose policies are unfavorable to business. But are these standard suppositions about inequality and the scope of government borne out in reality? The answer 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 have been made that run directly counter to the conventional wisdom.

We organize the remainder of this review around these issues. The first section discusses the different ways globalization can be measured. The second section assesses the impact of globalization on differences in per capita incomes across nations. The third section examines the relationship between international economic integration and inequality within countries. The fourth section analyzes the impact of globalization on the government’s ability to intervene in the economy to redistribute wealth and risk. The final section summarizes our conclusions about the state of the field and future directions for study.
MEASURING GLOBALIZATION

International Economic Flows

Figure 1 presents basic facts about globalization in the 1980s and 1990s, normalized so that 1980 = 100. International trade (exports and imports) grew more than four times as quickly as global Gross Domestic Product (GDP), increasing about 280% during the two decades to reach more than $16 trillion (in 1995 dollars)—half of world GDP. Capital flows across national borders—inflows and outflows of both foreign direct investment (FDI) and portfolio investment—grew by almost 600% to roughly $10 trillion per year, or 30% of global GDP.

The simplest way to examine the causal impact of globalization is to correlate 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. This critique holds equally true even if one uses more sophisticated indicators of international economic integration. For example, following the seminal work of Feldstein & 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 causal impact of globalization on economic outcomes.

2This category includes shorter term investments and bank lending, but excludes foreign exchange transactions that are estimated at almost two trillion dollars a day.
of capital mobility 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.

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.

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<th>Table 1</th>
<th>Cross-national differences in trade and capital flows</th>
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<td><strong>Trade</strong> (% GDP)</td>
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<td><strong>Top ten countries</strong></td>
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<td>Hong Kong</td>
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The rankings were quite different, however, with respect to changes in international economic flows during the 1980s and 1990s. With respect to changes in trade, several countries in the top ten—China, Mexico, Thailand, and Turkey—are probably no surprise to close observers of the international economy. But very few would have guessed that Ghana, Laos, Nicaragua, or Nigeria would appear on the list, nor that the top ten would fail to include a single industrialized democracy. The bottom ten (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 list of countries in which international capital flows increased the most is eclectic; the bottom ten 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 argue that political economic dynamics are very different in Singapore than in the United States, even though trade has grown more quickly in recent years in the United States. But this argument can be reversed: Globalization is a process, not a steady-state phenomenon. From this perspective, open economies such as those of 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 they 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 geography, some argue that residuals in such gravity models 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, that is, the difference between interest rates in one country and those in an offshore benchmark (typically, the eurodollar), controlling for forward exchange rate expectations. Frankel suggests 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 debate about globalization holds governments at least partially accountable for the effects of changing tariffs and non-tariff barriers to trade and current and capital account policies. Figure 2 presents global averages
Figure 2  Global policy changes: tariffs and financial openness, 1980–2000. The financial openness index (FOI) is based on an index of 0–9. The tariffs measure is reported as a share of GDP. Tariffs data from World Bank (2004); financial openness index data from Brune (2004).

for tariffs and a new financial openness index (FOI) (Brune 2004). Higher tariffs represent less openness; higher FOI scores indicate more openness. These global trends in economic policy changes are very similar to trends in international economic flows, indicating that openness has increased dramatically in recent years.

Table 2 reports the top and bottom ten countries in terms of both levels and changes in tariffs and the FOI. Comparing the columns provides 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 and Switzerland, where governments have actively pursued international economic integration. The list of 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, 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 ten 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 ten lists, and several actually increased tariffs as well as restrictions on the current and capital accounts during the 1990s.

Table 3 presents the correlations among 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 levels of trade and capital flows in the late 1990s. For the remainder, 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 2  Cross-national differences in average tariffs and financial openness

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<td><strong>Top ten countries</strong></td>
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<td>Switzerland</td>
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<td>Estonia</td>
<td>0</td>
<td>9</td>
<td>Bangladesh</td>
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<td>Liberia</td>
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<td><strong>Bottom ten countries</strong></td>
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<td>Bangladesh</td>
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<td>Afghanistan</td>
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<td>China</td>
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<td>India</td>
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<td>Iraq</td>
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<td>Cambodia</td>
<td>35</td>
<td>Sub-Saharan Africa</td>
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<td>Pakistan</td>
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<td>Post-Communist countries</td>
<td>Zimbabwe</td>
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Scholars have used different combinations of measures to answer similar questions about the effects of globalization. Milanovic (2003) assumed that globalization—however measured—has been increasing over time and has affected changes in the global inequality and growth he observed. Dollar & Kraay (2001b) and the related World Bank *World Development Report* (2003) based their work on growth and poverty on levels and (to a lesser extent) changes in trade. Rodrik (1998b) also used trade levels to measure globalization and its effect on the public economy, although he subsequently criticized Dollar & Kraay for doing the same (Rodrik 2000 & 2001). Garrett (2001) and Garrett & Mitchell (2001) used
changes in trade and capital mobility to reassess Rodrik’s work on the public economy. Birdsall & Hamoudi (2002) argue that policy-based measures are better indicators of globalization, as Garrett (1998a), 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, studies on the consequences of globalization have been significantly influenced by how scholars have measured the phenomenon.

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 measured among countries or within them?
2. Should inequality be measured globally or disaggregated 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 be counted equally or weighted by national population?

This section concentrates on the latter three questions with respect to differences in incomes between countries; the next section explores inequality within countries.
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 using rates that are adjusted according to purchasing power parity (PPP, determined by adjusting per capita incomes according to the prices of the same 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. 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' *Human Development Report 2002* used traded exchange rates to show that inequality between countries has risen, as did Schultz (1998) and Dowrick & Akmal (2003). However, using PPP-adjusted rates, Sala-i-Martin (2002) found little recent change in inequality between countries.

A bigger estimation issue concerns the appropriate weightings to use for countries of different sizes (see Firebaugh 1999 for a thorough consideration of the effects of country size on estimates of international inequality). Studies that treat countries as equal units of analysis tend to find evidence of increasing divergence in per capita incomes across countries in recent years (Sheehey 1996). In contrast, weighting countries according to their population results in estimates of decreasing international inequality (Boltho & Toniolo 1999, Firebaugh 1999, Schultz 1998).

Figure 3 demonstrates the impact of population-weighted versus “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 the last two decades 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 proportion of the world’s population (one-third) they represent, global inter-country inequality declined by about 8% during the 1980s and 1990s, from a Gini of approximately 0.54 in 1980 to one of 0.50 in 2000. However, if one were to count them only as two countries (i.e., the unweighted average in Figure 3), the inter-country Gini coefficient would have increased by about the same amount during the same twenty-year period.

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) notes, one cannot simply combine intra- and inter-country Ginis because the former refer to individuals (or households), whereas the latter refer to
countries. Nonetheless, several scholars have calculated global (i.e., comparing all people on earth) indices of inequality (Bourguignon & Morrison 1999, Dikhanov & Ward 2003, Dowrick & 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 & Morrison 2002, Goesling 2001, Kozeniewicz & Moran 1997, Li et al. 1998).

**Differences in National Growth Rates**

Even if one were confident that a single measure (such as a global Gini) could capture the amount of inter-country inequality in the world, problems of causal inference with respect to the impact of globalization on that inequality would still abound. The simplest analytic move would be to note first that the world has globalized in recent decades and then to assume that this has caused the observed changes in inter-country inequality, all the while disregarding the influences of democratization, privatization, and deregulation that have also swept around the world in the recent past. More important, the extent to which different countries are integrated into global markets varies 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 globalized countries experienced faster rates of per capita economic growth than non-globalized countries? Have the

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**Figure 3** Between-country inequality: weighted and unweighted, 1980–2000. Data from Milanovic (2005).
benefits of globalizing been greater in developing countries than in developed ones? Economic theory suggests that the answer to both questions is 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 relationship to search for instruments for trade that cannot be caused by growth, such as a country's size and geographic location (Frankel & Romer 1999).

Economists also believe that openness should speed what Robert Barro (1997) terms conditional convergence in cross-national incomes. 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 poor countries 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 benefited from integration into the world economy? Two influential studies, based on trade integration, say that they have. Using a composite openness index, Sachs & Warner (1995) conclude 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 & Rodrik (1999), who caution that the index is almost tautologically connected with economic growth. Using very different measures and methods, Dollar & Kraay (2001b) draw the same conclusion about the benefits of trade as Sachs and Warner. But Rodrik (2000) again charges that many of the methodological choices made by Dollar & Kraay reflected a particular ideology (“trade is good”) rather than sound scientific judgment. Rodrik contends that because Dollar & Kraay relied heavily on increases in trade flows to measure globalization, the alternative interpretation—that countries that have grown quickly, for whatever reason, have become magnets for trade—cannot be rejected.

Garrett (2004), using changes in tariffs rather than changes in trade flows, argues 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 & 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. Dikhanov & 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 the poorest decile. In 1999, Africa contributed 50% of the poorest global decile, whereas in 1970, its share was only 16%. Also, 39% of Africans were found in the lowest global decile in 1999, compared with 17% in 1990.
In contrast, Birdsell (2002) contends 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. Agenor (2003) claims that low-income countries have been hurt not because globalization 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 ensuing from 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 contradictory. Using a binary indicator of capital account openness for a sample of roughly 100 developing and developed countries, Rodrik (1998a) argued that there was no association between the level of capital account openness and growth. In contrast, Quinn (1997) used a more nuanced four-point scale for about 60 nations (and a greater proportion of developed countries), and concludes that countries 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 International Monetary Fund (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 international distribution of income and the effects of globalization on them. Unfortunately, the work is sufficiently diverse in its methods, measures, and conclusions to have given pundits on all sides ample evidence to reinforce their prejudices.

In fact, only two conclusions can be 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 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”—a group of influential Washington-based international financial institutions—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, particularly with respect to the impact of removing protectionist barriers to trade. Economic growth stimulates trade, creating enormous barriers to isolating the independent effects of trade growth on economic activity. Thus, scholars should focus on the vital policy questions of whether, when, and how countries should remove tariff and non-tariff barriers to trade.

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 what 1992 presidential candidate Ross Perot called a “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 would be paid for similar work done in developed countries. As a result of the parallel dynamics, so goes the popular wisdom, workers around the world are losing out from globalization—increasing inequality with countries all around the world.

The very influential HOS perspective supports the first stylized fact, predicting an increase in income inequality in the first world. But it contradicts the second by arguing that less skilled workers newly employed in manufacturing in developing countries should differentially benefit from globalization, 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 distribution, i.e., poverty. But measuring poverty is more art than science. The official poverty line for an individual in the United States, according to the Department of Health and Human Services (2003), was $8980. By this definition, most of the world lives in poverty. But in the development community, the poverty threshold is defined as individuals living on less than “a dollar a day.”3 As Table 4 indicates, although 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. The World Bank’s findings are reflected in other studies such as Sutcliffe (2003) and Dikhanov & Ward (2003) but disputed by Wade (2004), Reddy & Pogge (2003) and Ravallion (2003).

This headline statistic of poverty reduction, however, belies enormous regional variations. Excluding China from the calculation, for example, halves the estimated amount of poverty reduction. Moreover, as the case of China illustrates,

---

3The 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). Data from World Bank (2000).
### TABLE 4  Global poverty

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>East Asia</td>
<td>29.4%</td>
<td>14.5%</td>
<td>50.7%</td>
</tr>
<tr>
<td></td>
<td>470.1 m</td>
<td>261.4 m</td>
<td></td>
</tr>
<tr>
<td>East Asia, excluding China</td>
<td>24.1%</td>
<td>10.6%</td>
<td>56.0%</td>
</tr>
<tr>
<td></td>
<td>109.5 m</td>
<td>57.0 m</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>31.5%</td>
<td>16.1%</td>
<td>48.9%</td>
</tr>
<tr>
<td></td>
<td>360.6 m</td>
<td>204.4 m</td>
<td></td>
</tr>
<tr>
<td>Eastern Europe &amp; Central Asia</td>
<td>1.4%</td>
<td>4.2%</td>
<td>-200.0%</td>
</tr>
<tr>
<td></td>
<td>6.3 m</td>
<td>19.9 m</td>
<td></td>
</tr>
<tr>
<td>Latin America &amp; the Caribbean</td>
<td>11.0%</td>
<td>10.8%</td>
<td>1.8%</td>
</tr>
<tr>
<td></td>
<td>48.4 m</td>
<td>55.6 m</td>
<td></td>
</tr>
<tr>
<td>Middle East &amp; North Africa</td>
<td>2.1%</td>
<td>2.8%</td>
<td>-33.3%</td>
</tr>
<tr>
<td></td>
<td>5.1 m</td>
<td>8.2 m</td>
<td></td>
</tr>
<tr>
<td>South Asia</td>
<td>41.5%</td>
<td>31.9%</td>
<td>23.1%</td>
</tr>
<tr>
<td></td>
<td>466.5 m</td>
<td>432.1 m</td>
<td></td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>47.4%</td>
<td>49.0%</td>
<td>-3.4%</td>
</tr>
<tr>
<td></td>
<td>241.0 m</td>
<td>322.9 m</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>28.3%</td>
<td>21.6%</td>
<td>23.7%</td>
</tr>
<tr>
<td></td>
<td>1237.3 m</td>
<td>1100.2 m</td>
<td></td>
</tr>
<tr>
<td>Total, excluding China</td>
<td>27.2%</td>
<td>23.3%</td>
<td>14.3%</td>
</tr>
<tr>
<td></td>
<td>876.7 m</td>
<td>895.8 m</td>
<td></td>
</tr>
</tbody>
</table>

aData presented in terms of percentage of population living below the poverty line and levels (in millions of individuals) by region.


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. With respect to inequality within countries, the basic phenomenon that researchers wish to measure is how widely a country’s national income is shared. The standard measure, the Gini, captures the idea that complete equality would be manifest if every person earned the same income, whereas complete inequality would result if a single person held all national income. Although the hypothetical extremes on the Gini coefficient are 0 (complete equality) to 1.00 (complete inequality), the effective range for Ginis measuring national income distributions is between 0.30 and 0.50.

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 Deninger & Squire (1996) at the World Bank. Using the WIID data, Figure 4 shows that within-country inequality for the world
Figure 4 Within-country inequality, WIID, by level of development, 1970–1999. Figure 4 was constructed using WIID data (supplemented by World Bank data), averaged over five years.

(comprising unweighted national averages for all countries with available data) decreased in the 1970s but has subsequently increased, particularly in the developing world. Income inequality increased marginally in high-income countries in recent years, but not by 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 model implies about the effects of globalization.

The WIID data 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 households, others for individuals; some report gross incomes, some net incomes (after taxes and government transfers). The second shortcoming is the WIID’s 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 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 advantage of UTIP is that it comprises many more country-year observations, with much greater representation from the developing world, than does WIID. For example, for the period 1980–1998 for all countries, there are 429 country-year observations in the national WIID dataset and 1741 in the UTIP dataset. The bad news is that not everyone is employed in the manufacturing sector (with services dominant in developed countries and agriculture dominant in developing countries). UTIP deals 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 (see Galbraith & Kum (2002) for a lengthy discussion...
of WIID, UNIDO and UTIP). 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.

What about the globalization-inequality relationship at the national level? For rich countries, the evidence is mixed. 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 & Kum (2002) using UTIP data, as well as Cornia & 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 is associated with less inequality in the industrial world (Barro 2000, Higgins & Williamson 1999, Lundberg & Squire 2003, and Spilimbergo et al. 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 & Court 2001, Kremer & Maskin 2002), reduced inequality (Barro 2000, Heston & Summers 1991, Higgins & Williamson 1999, Kapstein & Milanovic 2002, Schultz 1998), or has had no impact in less developed nations (Dollar & 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. 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 more across countries than they do over time. In wealthy countries, the strength of organized labor has played a major role in influencing cross-national differences in inequality (Lange & Scruggs 2002, Rueda & 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 & Londono 1997, 1998).

Third, in cases where inequality has increased in recent years, skill-biased technological change (i.e., computerization) has been a far more important cause of that increase than globalization. In the United States, estimates of the proportion of increased income inequality that can be attributed to trade growth vary between 10% and 33% (Feenstra & Hanson 1999, Katz & Autor 1999).

GLOBALIZATION AND GOVERNMENT SPENDING

We now turn to the impact of international economic integration 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 expanded 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 the interventionist government policies that the markets view as inefficient.

Figure 6 presents data on the size of government for general government consumption expenditures and revenues from privatization (both as a share of GDP) in the 1980s and 1990s. 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 (1998b) notes, because 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 reforms, highlighting the decline of state-owned firms, conventionally understood to prop up employment and wages in enterprises that are not subject to market competition. In the past two decades, very little nationalization has taken place, making privatization revenues an easy quantitative indicator of market-oriented microeconomic reform.

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 two decades. Interestingly, the same pattern of slight declines in the 1980s followed by increases in the 1990s holds in both developed and developing countries.

Although government consumption spending remained stable, privatization swept around the world during the 1980s and 1990s. Global privatization revenues have been much smaller than government spending, however. More than one trillion dollars in state-owned assets have been sold off around the world since the mid-1980s (Brune et al. 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 (see Garrett 1998a for a review of the literature). Cameron (1978) first showed that trade and the size of government were positively correlated in the OECD. Twenty years later, Rodrik (1998b) and others (Dion 2004, Rudra & 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

![Figure 6](image)

**Figure 6** The size of government and privatization, 1990–1999. Data on government consumption from World Bank (2004); data on privatization revenues from Brune et al. 2004.
relationship is reversed when changes in trade and spending are considered, that is, faster trade growth has been associated with slower growth (or deeper cuts) in government spending both in the OECD (Garrett & Mitchell 2001, Kapstein 1999, Kapstein & Milanovic 2002) and in the developing world (Garrett 2001, Kaufman & Segura-Ubiergo 2001). Alternatively, this relationship may be reversed when other interactive effects are considered: Rudra (2002) finds that in low-income countries with weak labor power, globalization leads to less social welfare spending.

There is less research on relationship between financial openness and size of government. Rodrik (1997) hypothesized that the positive trade-spending nexus would be reversed for capital mobility—on the reasonable assumption that governments would 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 it has revealed some positive ones, between capital mobility and the size of the public sector among the industrial democracies (Garrett & Mitchell 2001, Quinn 1997, Swank 2002, Swank & 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 stable tax revenues from corporate income. Data 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 government spending into categories such as transfers and expenditures on health and education. According to Kaufman & 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 (1998a) 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 research on the impact of globalization on privatization than there is on spending and taxing. The conventional wisdom, however, is that because 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 et al. (2004) did not find any association between a country’s trade and foreign direct investment patterns and the size of its privatization program. 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.
After reviewing 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 contention concerns changes at the margins in economic integration and in government spending and taxation, but the evidence is far from 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. It is probably also true, however, 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 undersupplied 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 emerged following state divestiture.

CONCLUSION

In this review, we have considered 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 have been 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 inequality and of the difficulties in drawing strong causal inferences among factors that tend strongly to co-vary.

It would be wrong, however, to suggest that we have not made any progress toward 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 causal relationships, particularly with respect to the roles that governments have played 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 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.

There is clearly a long way to go, however, 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 microfoundations 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.

ACKNOWLEDGMENTS

The authors thank 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.

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THE GLOBALIZATION RORSCHACH TEST


Los Angeles Times, July 18, 2001


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