Globalization and Inequality Among Nations*

by

Joseph P. Joyce
Department of Economics
Wellesley College
Wellesley, MA 02482
jjoyce@wellesley.edu

May 2008


Abstract

The gap between the average income per capita levels of the poorest and the richest nations has increased during the recent eras of globalization. This paper reviews the evidence on the determinants of the disparities in per capita incomes, which has focused on the role of institutions in fostering development. Institutions primarily reflect domestic conditions, but globalization may have an impact on their development. Globalization also has direct effects on economic activity which affects the incidence of poverty, although all the channels of transmission are not fully understood. Globalization can, however, be better managed to benefit the poor.

* This paper has benefitted from comments by participants at the Global Justice and Social Justice Workshop, Oxford University, September 2007.
Globalization and Inequality Among Nations

1. Introduction

In 1870, at the beginning of the first modern era of globalization, the world’s average per capita GDP was $873 (see Table 1).\(^1\) Average income in the richest nations—the U.S., Canada, Australia and New Zealand—was $2,419, while income in the poorest—the African nations—was $500, a spread of 5:1. By 1950, at the start of the second era of globalization, income had risen to $9,268 in the same upper-income group but only $890 in the African nations, and the spread had risen to 13:1. By 2003, the corresponding income levels were $28,039 and $1,549, and the spread between the top and the bottom of the international distribution of income stood at 18:1.

These aggregate figures masked even greater disparities among countries. In 2006, the Democratic Republic of the Congo, a country with a population of approximately 57 million people, had a GDP per capita of $649. That same year, France, with a population of 60 million, recorded per capita income per capita in 2000 dollars of $28,877.\(^2\) The ratio of the income of the average French citizen to a citizen of the African country was over 40 to 1.

The disparity in global income has become the focus of much scrutiny, inquiry and debate. The questions that have been raised include: what are their causes of these disparities? Is inequality among nations a consequence of globalization? How should the upper-income countries respond?

Among those who have sought to answer these questions have been a number of noted philosophers, including Rawls (2001), Pogge (2002, 2005), Risse (2005a, 2005b, 2005c) and Nussbaum (2006). Rawls (2001), for example, in *The Law of the Peoples* (2001), wrote:
…the causes of the wealth of a people and the forms it takes lie in their political culture and in the religious, philosophical, and moral traditions that support the basic structure of their political and social institutions, as well as in the industriousness and cooperative talents of its members, all supported by their political virtues.³

The “burdened societies” lack the ability to function at a level of economic activity which allows their citizens to secure the minimum levels of subsistence, shelter, health care, etc. Rawls (2001) contended that the “well-ordered” societies have a duty to assist these burdened nations. However, the duty is not a distributive one; rather, the goal of assistance is to help these nations manage their own affairs.

Nussbaum (2006) criticized Rawls for his assumption that states are equal in the global economy. She writes that to “…assume a rough equality between parties is to assume something so grossly false of the world as to make the resulting theory unable to address the world’s most urgent problems…”⁴ She states that we need to “…acknowledge the fact that the international economic system, and the activities of multinational corporations, creates severe, disproportionate burdens for poorer nations, which cannot solve their problems by wise internal policies alone.”⁵

Economic analysis can not evaluate the philosophical merits of these different responses, but can shed some light on the reasons for the disparity across nations in income levels and the role of globalization in their propagation. A better understanding of the reasons for economic inequality can yield insights into the reasons why some nations prosper over time but others do
not, and what can be done about this disparity. This paper reviews recent studies that have sought to clarify these issues.

Section 2 of this paper offers a survey of the different explanations which have been offered to explain the disparity in global income and the results of empirical analyses that have sought to distinguish among them. Section 3 summarizes the research on the development of institutions, and Section 4 addresses the issue of how globalization affects the poor. Section 5 offers some suggestions on how globalization can be managed to provide more opportunities for the poorest nations.

2. Sources of Inequality

Inequality has long been a characteristic of the world economy. The differences in the levels of income per capita reflect variations in the growth of income in different regions, and these rates have also varied over time (see Table 2). The growth of per capita GDP in Western Europe, for example, rose to 1.33% during the first era of globalization, 1870 to 1913, and then fell to 0.76% during the time of the two world wars and the intervening period. But it rose five-fold to 4.05% when globalization regained its momentum after 1950, before falling to 1.87% after 1973. Growth per capita in Asia rose from 0.08% during the wartime period to 3.87% from 1950 to 1973 and 3.21% in the more recent era. Between 1950 and 2003, Asia’s share of world GDP more than doubled from 18.6% in 1950 to 40.5% in 2003 (see Table 3).

The sources of economic growth have become the subject of much theoretical and empirical analysis in recent decades. Economists have sought to look beyond the short-term fluctuations of the business cycle to identify the determinants of a country’s productive capacity. Barro (1997), in a summary of the work that he and others have done on this topic, includes the
initial level of per capita income, increased schooling, and changes in the terms of trade among
the determinants of the growth of real per capita income. Theoretical studies have focused on the
role of technological innovation in sustaining growth over time. The role of the financial sector
in fostering development has also been the subject of much analysis.\textsuperscript{7}

More recently, economists have attempted to uncover the “deeper” determinants of
economic growth which exercise their influence over long periods of time (see Table 4). Among
the factors which have been identified as possible fundamental factors are:

- Geography (Mellinger, Sachs and Gallup 2000, Sachs 2001). Many of the poorest countries
  are located near the equator. Countries in the tropic regions generally possess less fertile soil,
  unstable water supplies, a larger incidence of diseases and other adverse conditions which
  impede their development. In addition, those countries which are landlocked face higher
  transportation costs and less access to foreign goods and ideas.
- Economic Openness (Sachs and Warner 1995, Frankel and Romer 1999). Economies that are
  integrated with the world economy are open to technological advances, have the opportunity
  to specialize in the production of goods and can take advantage of economies of scale. Many
  of the fastest-growing East Asian economies have used international trade to accelerate their
  growth.
- Institutions (North 1990, Knack and Keefer 1995). Institutions are the rules and practices,
  both formal and informal, which govern behavior. The institutions which promote property
  rights and an effective legal system encourage innovation by its inhabitants. The quality of
  governance provides an assurance of stability.
Empirical researchers have sought to distinguish the relative importance of these factors in the determination and variation of income over time. This task is complicated by their interrelationships: geography, for example, can affect a country’s integration with the global economy and the evolution of its institutions. There can also be feedback between economic openness and the development of institutions. In order to isolate the effect of the different proposed determinants, economists look for instrumental variables that are exogenously correlated with economic integration or institutions, but not the other possible determinants of income, to test their relationships with output.

Acemoglu, Johnson and Robinson (2001), for example, used the mortality rates of European settlers in their colonies to explain the variation in institutions. They reasoned that colonies which were located in areas with high disease rates were more likely to be “extractive states” where the colonizers sought to obtain natural resources with little development of supportive institutions. Colonies with better health conditions, however, were more likely to be settled by Europeans who sought to replicate the institutions they had left behind. These early conditions influenced the evolution of institutions after the colonies achieved independence. Using this identification strategy, they examined the determinants of per capita GDP in 1995 in 64 countries, and reported that institutional development had a positive and statistically significant impact: countries with better institutions had higher income levels. Geography and health conditions, on the other hand, were not significant.

Similarly, Easterly and Levine (2003) undertook tests of the determinants of per capita GDP in 72 countries using variables such as settler mortality rates to explain institutional development. They reported evidence in favor of the hypothesis that institutions play a direct causal role in the determination of real per capita output. They also found that geographical
factors only influence growth indirectly through their impact on institutions. In a third paper, Rodrik, Subramanian and Trebbi (2004) reported that the quality of institutions “trumps” the other possible determinants of income, including openness and integration.

While no consensus ever remains unchallenged, these studies produce consistent results. The World Bank (2005) has summarized the findings of this body of research:

Recent econometric and case studies have shown that even when controlling for historical endogeneity, institutions remain “deep” causal factors, while openness and geography operate at best through them.  

3. Institutional Development

The econometric evidence, therefore, indicates that differences in institutional development account for the dispersion in global income. Rodrik, Subramanian and Trebbi (2004), however, caution that their results have limited practical guidance for those who wish to promote growth through improving the quality of institutions. They claim that:

…there is growing evidence that desirable institutional arrangements have a large element of context specificity, arising from differences in historical trajectories, geography, political economy, or other initial conditions.  

In a survey of the research done on institutional development, Shirley (2005) summarizes the explanations that have been advanced for underdeveloped institutions as: colonial heritages plus resources which could be exploited by colonizers who designed institutions to appropriate
these resources; a lack of political competition which would have placed constraints on political powers; and beliefs and norms that were not hospitable to the formation of institutions.\textsuperscript{10} The proximate historical causes of institutional development, on the other hand, are greater equality combined with sufficient political competition to limit the ability of rulers to expropriate, combined with long periods of time.\textsuperscript{11}

Shirley (2005) also supports Rodrik, Subramanian and Trebbi (2004)’s point that the development of institutions depends on domestic conditions. She cites several examples where the transfer of existing institutions from one country to another failed to take root, including the experience of Latin American countries with the U.S. constitution and the record of the transition economies with U.S. and European bankruptcy laws and commercial codes. She cites the need for what Levy and Spiller (1994) called a “goodness of fit” between specific institutional changes and a country’s overall environment.

Outside agents, such as the intergovernmental organizations, have become aware of the need for good institutions for progress to be made in fostering growth and alleviating poverty. The World Bank undertakes extensive research on this topic and maintains data bases on the quality of governance and institutions. The World Bank’s World Development Report 2002, for example, was subtitled Building Institutions for Markets. But Shirley (2005) is pessimistic about the ability of foreign organizations to induce institutional improvement, since most institutional changes take place over longer time frames than the horizon of aid projects. Honda (2008) studied the impact of IMF programs on economic governance and found no evidence of a significant impact for nonconcessional lending. Only the IMF’s concessional lending to the poorest countries had a significant impact on improving the rule of law and the control of corruption.
Another cautionary note comes from the literature on the impact of foreign aid on governance and development. Knack (2001) reported that higher aid levels had a negative impact on the quality of governance. Easterly (2006) has written extensively about the failures of foreign-financed development projects to improve economic performance in the countries when they have taken place. Burnside and Dollar (2000) seemed to have found a solution when they reported evidence that aid was effective if the recipient countries had implemented good macroeconomic and trade policies. But Easterly, Levine and Roodman (2004) found that those results were not robust to the addition of new countries and observations to the original data set.

However, there may be long-term links between globalization and governance over time. Wei (2000), for example, looked at the impact of what he termed “natural openness,” i.e., the level of trade openness that a country should have based on its size, geographic location and linguistic characteristics. He found that there is a negative and significant linkage between natural openness and the prevalence of corruption, as measured by Business International and Transparency International corruption indexes. Wei attributed this linkage to decisions by more open economies to promote good governance and minimize corruption in order to advance their trade with other countries. He suggested that the process of globalization would provide similar incentives to other economies.

Bonaglia, de Macedo and Bussolo (2001) also examined the impact of openness (imports/GDP) on corruption, as measured by the Transparency International and the International Country Risk Guide, and found that countries with a higher degree of openness record lower levels of corruption. They caution, however, that reducing trade barriers may not bring an immediate reduction in corruption, and that domestic policies may be more important in
short-run. Similarly, Al-Marhubi (2004) found that countries which are more open have better governance.

The IMF (2005) in an analysis of the determinants of institutional transitions found that trade openness is associated with a greater likelihood of improved institutions. The authors attributed this to less corruption in the export sector and the reduction of the ability of domestic producers to sustain monopolistic rents which could be used to influence governments. They also found that transitions are more likely to occur when they also take place in neighboring countries.

But international trade can also have negative effects on the development of good institutions. Pogge (2002, 2005) points out that the sale of natural resources can support dictatorial regimes. First, the existence of such resources is an incentive for civil strife, as the winner can take control of state-owned properties, including publicly-owned resources. Second, the revenues received by an unrepresentative government allow it remain in power, even in the face of dissent.

Saudi Arabia, for example, received scores of 7 and 6 on the Freedom House 2007 ratings for political rights and civil liberties, where the ratings range from 1 (highest degree of freedom) to 7 (lowest). These scores indicate a lack of political rights and civil liberties. The government’s ability to remain in power rests in part on its oil revenues which it uses to distribute services to the population. The dependence of energy consumers in the upper-income countries on foreign oil contributes to the Saudi government’s survival.

Globalization in earlier eras may have played a role in how institutions evolved in those countries which were colonies. The maps of modern Africa and other areas were drawn by their former colonial powers when they exited. These national lines often ignored domestic ethnic
divisions and other historical factors. The resulting geographic divisions were not consistent with past governing structures, and as a result domestic governments did not have a unified basis of support within their populations. An even more invidious cause of underdevelopment has been suggested by Nunn (2008), who finds evidence of a link between African poverty and slavery. He found that those countries which were the major sources of slaves now are among the poorest, and suggests that the underdevelopment of political structures in the major slave-exporters may be a reason for this linkage.

4. Globalization and the Poor

Even if institutions determine the level of economic activity in the long-run, globalization can still have an impact on the poorer nations. The primary channel of transmission is the impact of globalization upon growth, and the evidence generally confirms that open economies grow faster and see a decline in the incidence of poverty.\(^\text{13}\) The World Bank (2005) found that growth was responsible for almost all the significant reductions in poverty in the 1990s, including those that occurred in China and India.

However, the implications of this finding are the subject of much debate and controversy. In the 1980s, many policymakers and analysts believed that removing barriers to international trade and capital flows as well as lifting regulations on interest rates and other market-oriented measures would lead to faster growth. Many of these recommended policy measures were summarized by Williamson (1990) as the “Washington Consensus.”\(^\text{14}\) The experience of the East Asian economies which had grown so rapidly was cited as proof that integration with the global economy would raise growth in developing countries.
But the record of the 1990s raised questions about the results of removing financial barriers. The financial crises that occurred, for example, in Mexico in 1994-1995, East Asia in 1997-1998 and Argentina in 2001 severely depressed the standard of living in those countries. Baldacci, de Mello and Inchauste (2002) have reported that such financial crises are linked to an increase in poverty and income inequality.

These crises showed that short-term capital outflows could seriously disrupt the economies of countries such as Thailand and Indonesia which had removed controls on capital flows. On the other hand, China and India, both of which maintained capital controls, were relatively unscathed by the crisis. Malaysia imposed capital controls during the crisis in 1998 to slow the flight of capital. While there were concerns at the time that the country had cut itself off from future international investments, its economy revived and international capital flows resumed.

Subsequently, there was a reaction to what was called the “market fundamentalism” of the earlier period, particularly with respect to capital flows. The recent experience of the U.S. with the subprime mortgage crisis shows that even financial institutions in developed countries engage in risky transactions that can become full-blown crises. The IMF, which had previously encouraged its members to dismantle capital controls, revised its approach. The Fund now emphasizes the sequencing of reforms before financial globalization in order to minimize financial sector instability. The reform measures include: “… the development of financial markets and institutions; prudential regulation and supervision; risk management and good practices in accounting, auditing, and disclosure; and financial safety nets.”

The impact of trade liberalization on the poorest nations is usually seen as more favorable, particularly for those which export agricultural goods. However, deregulation can
affect some groups within a country, such as those who might pay higher food prices. Winters, McCulloch and McKay (2004) reviewed the evidence for all the linkages between trade liberalization and poverty, and present a carefully-worded appraisal:

Theory provides a strong presumption that trade liberalization will be poverty-alleviating in the long-run and on average. The empirical evidence broadly supports this view, and, in particular, lends no support to the position that trade liberalization generally has an adverse impact. Equally, however, it does not assert that trade policy is always among the most important determinants of poverty reduction or that the static and micro-economic effects of liberalization will always be beneficial for the poor.¹⁷

The impact of globalization on poverty and inequality, therefore, is far from settled, either among economists or the wider public. Aisbett (2007), who studied criticisms made of globalization, points out that “…much work remains to show which policies can reduce the adjustment costs borne by the poor and maximize the share of the benefits they obtain from globalization.”¹⁸ Bardhan (2006), who examined the linkages between poverty and globalization, concluded:

…globalization is not the main cause of developing countries’ problems, contrary to the claim of critics of globalization—just as globalization is often not the main solution to these problems, contrary to the claim of overenthusiastic free traders.¹⁹
5. Managing Globalization

Can globalization be managed to play a positive role in ending poverty? Rodrik (2007) agrees with those who believe that growth is the most powerful mechanism to reduce poverty and that globalization provides opportunities for increasing growth rates. However, he also has pointed out that there are many different ways to achieve growth, and governments need to choose the policies and institutions appropriate for their nations to take advantage of the opportunities of globalization. His calls for pragmatism and experimentation are similar to the views of Easterly (2006), who criticizes outside attempts to impose solutions on countries.

Are there steps the upper-income countries could take which would help the poor countries? Birdsall, Rodrik and Subramanian (2005) warn that some of the measures which have been proposed, such as liberalizing trade, may not have the impact that their advocates envision. Many of the poorest countries, for example, are importers of agricultural products, and removing the subsidies paid to the agricultural sector within the U.S. and the European Union would only raise prices on those products at a time when world food prices are already rapidly rising.\(^\text{20}\)

On the other hand, Birdsall, Rodrik and Subramanian (2005) also point to concrete steps which would make the international economy more rewarding for poor countries. First, they claim that the upper-income nations can promote good institutions by monitoring and restricting the payments of bribes to officials in developing nations. Second, they propose that the governments of the wealthy countries promote research on issues and problems most relevant to the global poor but which their own governments can not afford. One way to accomplish this would be to guarantee the purchase from private companies of technological innovations which benefit the poor. Finally, the current regulations which govern international migration should be overhauled. The governments of countries which attract migrants can collaborate with the
governments of their home countries to devise contract labor schemes which allow workers to enter the host country for some period of time, benefitting both countries.

Globalization will continue, with benefits for countries which may not have participated in the global economy to date. The World Bank (2007) estimates that the share of developing counties in global output will increase from about one-fifth to one-third by 2030. Similarly, the Bank forecasts that the global trade of goods and services will rise by three times to approximately $27 trillion in 2030, and half of that increase will come from developing nations.

However, the World Bank warns that the benefits of increased economic integration are likely to be uneven across different areas. In addition, the prevalence of inequality within nations may rise:

…strong forces in the global economy may tend to increase inequality in many national economies. Even though a large segment of the developing world is likely to enter what can be called the “global middle class,” some social groups may be left behind or even marginalized in the growth process.21

Managing the process of globalization to benefit the maximum number of people and diminish the gap in incomes across nations, therefore, is a challenge for all nations. How they respond will determine whether that gap diminishes or grows larger over time.
NOTES

1 These figures are taken from Maddison (2007), and are calculated in 1990 international dollars.

2 The data are obtained from the *World Development Indicators*, and are calculated in constant 2000 dollars.


6 Weil (2008) provides a comprehensive review of this subject.

7 See, for example, Levine (1997)

8 World Bank (2005), p. 57.


12 See www.freedomhouse.org


14 However, Williamson (1990) did not include the removal of controls on all capital inflows.

15 See Joyce and Noy (2008).


Table 1
Per Capita GDP
(1990 international dollars)

<table>
<thead>
<tr>
<th>Region</th>
<th>1870</th>
<th>1913</th>
<th>1950</th>
<th>1973</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Europe</td>
<td>1,960</td>
<td>3,457</td>
<td>4,578</td>
<td>11,417</td>
<td>19,912</td>
</tr>
<tr>
<td>US, Canada, Australia, NZ</td>
<td>2,419</td>
<td>5,233</td>
<td>9,268</td>
<td>16,179</td>
<td>28,039</td>
</tr>
<tr>
<td>Asia</td>
<td>556</td>
<td>696</td>
<td>717</td>
<td>1,718</td>
<td>4,434</td>
</tr>
<tr>
<td>Latin America</td>
<td>676</td>
<td>1,494</td>
<td>2,503</td>
<td>4,513</td>
<td>5,786</td>
</tr>
<tr>
<td>Eastern Europe &amp; USSR</td>
<td>941</td>
<td>1,558</td>
<td>2,602</td>
<td>5,731</td>
<td>5,705</td>
</tr>
<tr>
<td>Africa</td>
<td>500</td>
<td>637</td>
<td>890</td>
<td>1,410</td>
<td>1,549</td>
</tr>
<tr>
<td>World</td>
<td>873</td>
<td>1,526</td>
<td>2,113</td>
<td>4,091</td>
<td>6,516</td>
</tr>
<tr>
<td>Spread</td>
<td>5:1</td>
<td>8:1</td>
<td>13:1</td>
<td>12:1</td>
<td>18:1</td>
</tr>
</tbody>
</table>

Source: (Maddison, 2007)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Europe</td>
<td>0.98</td>
<td>1.33</td>
<td>0.76</td>
<td>4.05</td>
<td>1.87</td>
</tr>
<tr>
<td>US, Canada, Australia, NZ</td>
<td>1.41</td>
<td>1.81</td>
<td>1.56</td>
<td>2.45</td>
<td>1.85</td>
</tr>
<tr>
<td>Asia</td>
<td>-0.09</td>
<td>0.52</td>
<td>0.08</td>
<td>3.87</td>
<td>3.21</td>
</tr>
<tr>
<td>Latin America</td>
<td>-0.03</td>
<td>1.86</td>
<td>1.40</td>
<td>2.60</td>
<td>0.83</td>
</tr>
<tr>
<td>Eastern Europe &amp; USSR</td>
<td>0.63</td>
<td>1.18</td>
<td>1.40</td>
<td>3.49</td>
<td>-0.02</td>
</tr>
<tr>
<td>Africa</td>
<td>0.35</td>
<td>0.57</td>
<td>0.91</td>
<td>2.02</td>
<td>0.32</td>
</tr>
<tr>
<td>World</td>
<td>0.54</td>
<td>1.30</td>
<td>0.88</td>
<td>2.91</td>
<td>1.56</td>
</tr>
</tbody>
</table>

Source: (Maddison, 2007)
Table 3

Shares of World GDP

<table>
<thead>
<tr>
<th></th>
<th>1870</th>
<th>1913</th>
<th>1950</th>
<th>1973</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Europe</td>
<td>33.1%</td>
<td>33.0%</td>
<td>26.2%</td>
<td>25.6%</td>
<td>19.2%</td>
</tr>
<tr>
<td>US, Canada, Australia, NZ</td>
<td>10.0%</td>
<td>21.3%</td>
<td>30.6%</td>
<td>25.3%</td>
<td>23.7%</td>
</tr>
<tr>
<td>Asia</td>
<td>38.3%</td>
<td>24.9%</td>
<td>18.6%</td>
<td>24.2%</td>
<td>40.5%</td>
</tr>
<tr>
<td>Latin America</td>
<td>2.5%</td>
<td>4.4%</td>
<td>7.8%</td>
<td>8.7%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Eastern Europe &amp; USSR</td>
<td>12.0%</td>
<td>13.4%</td>
<td>13.1%</td>
<td>12.8%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Africa</td>
<td>4.1%</td>
<td>2.9%</td>
<td>3.8%</td>
<td>3.4%</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

Source: (Maddison, 2007)
Table 4
Sources of Low Growth Rates

<table>
<thead>
<tr>
<th>Source</th>
<th>Transmission Mechanisms</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geography</td>
<td>Soil Fertility</td>
<td>Mellinger, Sachs and Gallup (2000)</td>
</tr>
<tr>
<td></td>
<td>Water Availability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>Sachs (2001)</td>
</tr>
<tr>
<td>Economic</td>
<td>Economies of Scale</td>
<td>Sachs and Warner (1995)</td>
</tr>
<tr>
<td>Openness</td>
<td>Technological Innovation</td>
<td>Frankel and Romer (1999)</td>
</tr>
<tr>
<td>Institutions</td>
<td>Property Rights</td>
<td>North (1990)</td>
</tr>
<tr>
<td></td>
<td>Quality of Governance</td>
<td>Knack and Keefer (1995)</td>
</tr>
</tbody>
</table>
REFERENCES


