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This paper was presented as part of a September 2011 Festschrift Conference in honor of Thomas Weisskopf.
PREFACE

This working paper is one of a collection of papers, most of which were prepared for and presented at a festschrift conference to honor the life’s work of Professor Thomas Weisskopf of the University of Michigan, Ann Arbor. The conference took place on September 30 - October 1, 2011 at the Political Economy Research Institute, University of Massachusetts, Amherst. The full collection of papers will be published by Elgar Edward Publishing in February 2013 as a festschrift volume titled, *Capitalism on Trial: Explorations in the Tradition of Thomas E. Weisskopf*. The volume’s editors are Jeannette Wicks-Lim and Robert Pollin of PERI.

Since the early 1970s, Tom Weisskopf has been challenging the foundations of mainstream economics and, still more fundamentally, the nature and logic of capitalism. That is, Weisskopf began putting capitalism on trial over 40 years ago. He rapidly established himself as a major contributor within the newly emerging field of radical economics and has remained a giant in the field ever since. The hallmarks of his work are his powerful commitments to both egalitarianism as a moral imperative and rigorous research standards as a means.

We chose the themes and contributors for this working paper series, and the upcoming festschrift, to reflect the main areas of work on which Tom Weisskopf has focused, with the aim of extending research in these areas in productive new directions. The series is divided into eight sections, including closing reflections by our honoree himself, Professor Weisskopf. Each section except for the last includes comments by discussants as well as the papers themselves.

The eight sections are as follows:

1. Reflections on Thomas Weisskopf’s Contributions to Political Economy
2. Issues in Developing Economies
3. Power Dynamics in Capitalism
4. Trends in U.S. Labor Markets
5. Discrimination and the Role of Affirmative Action Policies
6. Macroeconomic Issues in the United States
7. Applications of Marxist Economic Theory
8. Reflections by Thomas Weisskopf

This working paper is 3 of 4 included in Section 2.

-Jeannette Wicks-Lim and Robert Pollin

Mark Weisbrot

The vast majority of developing countries experienced a sharp slowdown in economic growth from 1980-2000, which received very little attention among economists, policy makers, and in the press. The slowdown coincided with the widespread introduction of neoliberal reforms during the 1980s and 1990s, with some of the reforms beginning in the mid to late 1970s. The possible connection between these policy reforms and the growth slowdown has also not been explored. These reforms included: increasing independence of central banks and tighter monetary policy; tighter and sometimes pro-cyclical fiscal policies; privatization of state-owned enterprises; financial deregulation and opening up to international trade and capital flows, sometimes in an indiscriminate manner; increased protectionism in intellectual property; and the abandonment of state-directed and state-led industrial policies and development strategies.

These policies were implemented differently in different countries, and to varying degrees; and they could have different effects in different cases. In some cases trade opening can contribute to growth, for example if imports increase efficiency and do not cause too much damage to domestic production. Privatization of state-owned enterprises that are grossly inefficient and cannot be reformed can also bring significant efficiency gains. In countries where the fiscal and monetary authorities have pursued policies that led to balance of payments crises and/or hyperinflation, a move toward more fiscal and monetary discipline may be in order. However, it is also possible for such reforms to have considerable disruptive effects and lead to outcomes that reduce growth, especially if they are implemented without regard to their impact on growth and development. For example, tighter monetary policy will generally slow growth, either directly through the effect of high interest rates on investment, or – often more importantly in developing countries -- by increasing the exchange rate. Tighter fiscal policy will also slow growth, and both tight fiscal and monetary policy can be especially damaging if they are used pro-cyclically, i.e. when the economy is weak or in recession. It is also difficult for most developing countries to move to higher value-added areas of production without an industrial policy or development strategy. So it should not be surprising to find a sharp slowdown in GDP growth from 1980-2000, for the vast majority of low and middle-income countries. This will be examined below. As would be expected, there was also a decline in progress on major social indicators such as life expectancy and infant and child mortality during this period.

In the last decade there was a rebound of economic growth to levels of the 1960-1980 period, in spite of the serious global economic crisis and recession of 2008-2009. Since the two-decade slowdown in growth received relatively little attention, the rebound has also gone largely unnoticed. This is also examined below, with possible explanations for the rebound.

Finally, at this writing the global economy is facing a significant risk from the financial crisis in the eurozone. This paper will also look at this crisis as another example of the policy failures that slowed global economic growth in the 1980-2000 period. In many ways it is similar to the past experience of developing countries,
complete with IMF agreements, pro-cyclical macroeconomic policies, debt and financial crises – the difference being that this is now the experience of a group of high-income countries. It remains to be seen how much damage this will do to global economic growth in the current decade.

THE DIFFERENCE THAT ECONOMIC POLICY CAN MAKE

As an illustration of how much difference economic policy can make over the long-term, it is useful to compare the development experiences of Brazil and South Korea, which both started out as low-income countries in 1960. This is shown in Figure 1. Brazil was much poorer than South Korea, with less than 60 percent of South Korea’s per capita income. They both grew at about the same pace over the next 20 years, so that the gap widened in absolute terms but Brazil picked up a bit in relative terms. Both countries made large gains during this period, with Brazil more than tripling its per capita GDP.

FIGURE 6.1. Brazil and South Korea: Per Capita GDP

But in 1980, the two countries took different paths. Both were hit by the world recession of 1980-1982, but South Korea recovered and resumed rapid growth. Brazil, which adopted a whole different set of macroeconomic and then development policies in the 80s and 90s, stagnated for the next 20 years, with almost no per capital income growth at all. Growth finally picked up after 2004, although it did not return to pre-1980 rates. However, South Korea, by contrast, grew 259 percent in per capita terms from 1980-2000. The result was that by 2010, South Korea became a high income country, with income per capita of more than $28,000; Brazil remained a middle-income country with income per capita of less than $11,000.
Social indicators also demonstrate starkly the difference between the two countries today, as a result of different economic policies. Brazil still has about 42 million people, or 22.3 percent of the population living on three dollars a day – despite considerable progress under the left government of the past decade; 12.7 percent live on less than $2 per day.³ South Korea is listed as having less than 2 percent of the population living below the $2 per day poverty line; the actual percentage is probably well below 2 percent.⁴ South Korea is ranked 12 among all countries on the UN Human Development Index, while Brazil is ranked 73.⁵ The average number of years of schooling in South Korea is 12; in Brazil it is 7.⁶ Infant mortality in Brazil is four times that of South Korea (17.3 vs. 4.2 per 1000 live births).⁷

Brazil’s story is to a large extent representative of what happened in Latin America over the last half century. Figure 2 shows the region’s growth in per capita GDP.⁸ As can be seen from the graph, there was a drastic fall-off in per capita income growth from a reasonable 3.3 percent for the 1960-1980 period, to just 0.3 percent in 1980-2000. In cumulative terms, this is a difference between 91.5 percent and just 5.7 percent across the two 20-year periods. Growth then rebounded over the past decade to 1.9 percent per capita – a major improvement but still well below the performance of pre-neoliberal era.

**FIGURE 6.2. Latin America and the Caribbean: Average Annual Per Capita GDP Growth**

![Bar chart showing average annual per capita GDP growth](chart.png)


Note: See Appendix for methodology.

The growth slowdown in Latin America of the 1980-2000 period – it actually extended into the first few years of the 2000s – was the worst long-term growth failure for at least a century. It led to unprecedented political changes from 1998-2011 – the vast majority of people elected left and left-of-center governments, including in Venezuela, Brazil, Argentina, Bolivia, Ecuador, Uruguay, Paraguay, El Salvador, Nicaragua, Honduras, Haiti, and El Salvador. Most of these governments did not make a sharp break with the neoliberal policies of their predecessors, and did not embark on development or industrial strategies that were comparable with those of the past. However, there have been some significant movements away from neoliberal policy – for
example the macroeconomic policies of Argentina and, to a lesser extent, Brazil, Ecuador, and Venezuela -- and a greater attention to reducing poverty and increasing access to health care and education. But the growth slowdown was almost completely ignored as a possible cause of these enormous and widely-discussed political changes.

The growth slowdown in the rest of the world can be seen in Figure 3. This compares annual growth in per capita GDP for countries for which data is available, over three periods: 1960-1980; 1980-2000; and 2000-2010. This is a fair comparison because the first period is a reasonable benchmark. While the 1960s were a period of very good economic growth, the 1970s suffered from two major oil shocks that led to world recessions – first in 1974-1975, and then at the end of the decade.

FIGURE 3. Average Annual Per Capita GDP Growth, by Quintile

Note: Countries are divided into quintiles based on per-capita GDP at the beginning of each time period, in 2005 USD. See Appendix for methodology.

In Figure 3, the countries are divided into quintiles, with the poorest countries on the left. For example, the second quintile contains countries that started each period with an income between $1438 and $3103 in 2005 US dollars. Countries that started out in the second quintile in 1960 included Cote d’Ivoire, Haiti, Morocco, Nigeria, and South Korea; at the upper end were Brazil, Ecuador, Bolivia, and Turkey. The Dominican Republic, Honduras, Panama, and Malaysia were towards the middle of the quintile.

This methodology here avoids the problem of diminishing returns. In other words, we would expect economies that have already reached a high income level to grow more slowly than developing countries starting out at a lower level. So instead of comparing the same countries over time, as in Figure 2, we are comparing all of the countries that begin each period (e.g. 1960) at the same level of GDP. This means that we can compare countries that started out in 1980 with the same level of income that other countries had in 1960. So there is no problem of diminishing returns; there is no reason to believe that a country with real per capita
income of $6000 in 1980 should grow any more slowly than one that starts out at the same level in 1960. If anything, it should be able to do better, since the world store of knowledge and technology has increased.

In fact, it is striking that so very few countries have caught up with the living standards of Europe, the United States, or the countries that were the first to industrialize. For example, only three small countries out of 51 – Botswana, the Maldives, and Cape Verde – have moved up from the group of Least Developed Countries since the category was created by the United Nations four decades ago.\textsuperscript{10} These long-term patterns by themselves suggest that there are barriers and obstacles that have their origin in international relations, rather than simply within countries.

It is also worth pointing out that the unit of analysis in this method is the country. Therefore a small country such as Iceland, with 300,000 people, has the same weight in the averages shown here as does China, with 1.4 billion people and the world’s second largest economy. The reason for this method is that economic decision-making is done at the level of the individual government, and this analysis aims to compare the results of such decision-making across countries.

As can be seen in the graph, there was a sharp slowdown in growth in all of the quintiles: from 2 percent annual per capita GDP growth from 1960 to 1980 to 1.1 percent for the second period (1980-2000) in the poorest quintile; from 2.4 percent to just 0.7 percent growth in the second quintile, 3.1 to 1.5 percent in the third quintile; 3.2 to 1.1 percent for the fourth quintile; and 2.4 percent to 1.1 percent for the highest quintile. Since this is not the result of diminishing returns, and the falloff in growth is so large and takes place over such a long period of time – two decades – this is something that merits investigation. The fact that it coincides with a set of policy changes, described above, does not of prove that the whole package of neoliberal reforms were a failure. It does, however, make for a strong \textit{prima facie} case that some kind of major policy failure took place in this period.

Figure 3 also shows a rebound of economic growth over the last decade, despite the financial crisis and world recession of 2008-2009. In the all but the highest quintile, growth rebounds to its rate of the first period or somewhat higher. (The top quintile contains both middle and high-income countries). How are we to account for this turnaround? And can we expect it to last?

There are a number of changes that may have contributed to the rebound in economic growth over the past decade. Probably the most important is the rise of China, and its imports from developing countries. China’s economy has multiplied more than 17 times over the past three decades, to become the world’s second largest economy. Its imports from developing countries have grown enormously over the past decade, from just 0.5 percent of the GDP of non-OECD countries in 1995 to three percent in 2010. This surge in demand from China has undoubtedly contributed very significantly to the growth of many low and middle-income countries.\textsuperscript{11} Africa, for example, had GDP growth (not per capita) of 5.7 percent annually over the last decade, as compared to 2.4 percent over the preceding 20 years.\textsuperscript{12}

China is by far the least neo-liberal of all of the major economies in the world. Even after more than three decades of reform, it is very much a state-led economy. China’s success cannot be attributed to the reforms that most countries adopted in the post-1980 period. Although both foreign direct investment and exports contributed substantially to China’s growth, both were heavily managed and handled quite differently than in other developing countries. The government has played a major role in shaping investments that would fit in
with the country’s development goals. These include such priorities as producing for export markets, an increasing level of technology (with the goal of transferring technology from foreign enterprises to the domestic economy), hiring local residents for managerial and technical jobs, and not allowing foreign investments to compete with certain domestic industries. China’s policy toward foreign investment has therefore been directly opposed to the major worldwide reforms of recent decades, including the rules of the World Trade Organization (WTO); the same is also true in the important area of intellectual property.\textsuperscript{13}

About 44 percent of the assets of major industrial enterprises belong to state-owned enterprises.\textsuperscript{14} The financial system is state-controlled, with the government owning the four largest banks. The Chinese government’s control over the most important and strategic sectors of the economy, especially finance, proved crucial in maintaining rapid economic growth during the world recession. In 2009, China’s net exports had a negative 3.7 percentage point contribution to the economy’s GDP growth; but growth was maintained at 9.1 percent, due partly to a nearly 20 percent surge in capital formation.\textsuperscript{15} It is difficult to imagine this having happened without the government’s control over bank lending and state-owned enterprises generally.

It is important to emphasize what happened here because it runs so contrary to conventional wisdom. Starting in the late 1970s and 1980s, and continuing into the 1990s, a whole set of neoliberal reforms were adopted in almost all low-and-middle-income countries. This coincided with a prolonged economic growth failure from 1980-2000 in the vast majority of the countries that adopted these reforms. However, the one large economy whose development policy was state-led, and did not adopt the neoliberal reforms, grew faster than any economy in world history, to the point where it became the second largest economy in the world. This economy then pulled up the growth rate of dozens of other economies through its imports.

There were also policy changes in the low-and-middle income countries, and changes in the international financial system, that contributed to the turn-around. In some cases failed policies were abandoned – for example the fixed, overvalued exchange rates in Russia, Argentina, and Brazil that contributed to the severe crises and resulting output losses of the late 1990s. In India, which was – along with China – one of the few sizeable economies that grew faster in the second period (1980-2000) than in the first, there is evidence that reversals of neo-liberal policies contributed to the rapid growth acceleration that took place after 2003. These included, most importantly, a loosening of monetary policy by India’s Central Bank, and a large depreciation of the country’s overvalued exchange rate.\textsuperscript{16}

In other cases, disastrous neoliberal policy failures of the 1990s – most importantly in Eastern Europe and the former Soviet Union – ran their course, and the economies were re-established on a more stable footing. The former Soviet states that make up the Commonwealth of Independent States saw their economies shrink by an enormous 2.8 percent annually in the 1990s, but rebounded with 5.4 percent annual growth over the past decade. The economic collapse in these countries was one of the biggest and most obvious neoliberal policy failures of that era. The fact that this was policy failure, and not merely an inevitable cost of transition from a planned economy, can be seen by comparison with the transition of China, which also manage a transition from a planned economy during the same period, but did so gradually and in a very different manner – as noted above, with economic growth breaking world-historical records.

Another major change that took place during the past decade was the collapse of the IMF’s power to influence policy in many developing countries. Prior to the past decade, the IMF headed up a “creditors’ cartel” whereby countries that did not agree to its conditions did not get funds from the much larger World Bank,
regional development banks and other official lenders, and sometimes even the private sector. This was the major avenue of influence of the U.S. government in low-and-middle income countries, and was used to promote neoliberal policy changes in many countries. This began to break down when the countries that were hit hard by both the Asian economic crisis of 1997-1999 and the IMF intervention there began to pile up reserves so that they would never have to borrow from the Fund. A series of other events let to a remarkable loss of IMF influence in middle income countries. These included Argentina’s successful battle with the IMF, in 2002-2005, after its record sovereign debt default, and remarkable economic success after defying the Fund; and the increasing availability of alternative sources of foreign exchange, for example in Latin America, from Venezuela and China. The IMF’s loss of influence was one of the biggest changes in the international financial system since the breakdown of the Bretton woods system in 1973. (The poorest countries, especially in Africa, are still subject to IMF/World Bank policy prescriptions, but even that is beginning to erode as China becomes an alternative source of funding in Africa).

The IMF’s total outstanding loans fell from $105 billion in 2003 to less than $20 billion in 2007. Although the IMF dramatically increased its resources to record levels as the world financial crisis and recession unfolded – from $250 billion to $750 billion, it never regained influence in the middle income countries of Asia, in Latin America, Russia, and other countries that it lost in the last decade. The Fund did play a role in the implementation of pro-cyclical policies in many countries during the world economic downturn – a look at 41 agreements at the end of 2009 showed that 31 contained pro-cyclical macroeconomic policies. In these cases, IMF agreements provided for budget tightening, monetary tightening or both while the economy was experiencing a significant growth slowdown or already in recession. But the Fund’s role in this crisis was considerably more moderated than in the past – for example, in comparison to the crisis of the 1990s. In some countries pro-cyclical policies were reversed as the downturn worsened. And the IMF also had some positive impact: the Fund’s lending that did not have pro-cyclical or other harmful conditions attached, which was significant in the last few years, made a positive contribution. For example, the countries that were able to borrow from the Fund during the financial crisis, without pro-cyclical conditions attached -- including low income countries such as Tanzania, Mozambique, and Zambia – were in a better position to pursue expansionary policies and avoid foreign exchange or balance of payments crises. It is difficult to measure the overall net impact of the Fund since the beginning of the world recession, but clearly it did not have anything approaching the negative impact that it had from 1980 to 2000. Also, there was a coordinated intervention by central banks in response to the financial crisis, and expansionary monetary and fiscal policy in many countries, especially in high-income and some middle-income countries, in response to the downturn. All of these changes in the international financial system had an impact on allowing for higher growth in the past decade, as compared to the 20 years prior.

LOOKING AHEAD: POLICY CRISIS IN THE EUROZONE AND GLOBAL GROWTH PROSPECTS

Looking forward at the time of this writing, there do not seem to be any obvious obstacles within the low-and-middle-income countries themselves to their continued growth at the pace of the last decade. That is, the long period of sharply reduced growth, which appears to be associated with neoliberal policy changes, seems to have come to an end. There have not been any significant reversals of the changes that have taken place over the past decade or so, that have allowed for this renewed growth. Most significantly, the Chinese gov-
ernment is still committed to economic growth. The IMF has not regained its influence over policy in the middle-income countries that it lost in the last decade. There are no large projects of liberalization of trade or capital flows on the horizon; this is of course still part of the WTO agenda, but that agenda has been stalled for more than a decade and is unlikely to make a rapid, destructive comeback in the near future.

The biggest threat to economic growth in developing countries right now comes from neoliberal macroeconomic policies in the Eurozone. In fact, this is perhaps the clearest example in the past twenty years of neoliberal policies directly imperiling the health of the global economy, although neoliberal policies also contributed to the Great Recession. While the Great Recession in the United States was caused primarily by the bursting of a real estate bubble, its effects, especially worldwide, were amplified by neoliberal policies, including the years of financial de-regulation that allowed for very high levels of leverage in the banking system; regulatory failures such as the widespread lack of oversight in mortgage markets; and neoliberal dismantling of capital controls during the 1970s to 1990s, which led to vastly larger international capital flows that helped the financial crisis spread to many countries.

Much of the analysis of the current problem has treated the Eurozone crisis as a debt crisis, but this is not really true, with the possible exception of Greece. The weaker Eurozone economies mostly reduced their public debt-to-GDP ratios during the expansion that preceded the financial crisis and world recession in 2008-2009. Even in the case of Greece, the country had a debt-to-GDP ratio of 115 percent at the beginning of 2010, which would have been manageable had the European authorities kept its borrowing costs down and recovered normal growth. Instead, Greece negotiated an agreement with the IMF in May 2010 and the European authorities (European Commission and European Central Bank [ECB]) that set in motion a downward spiral that increased its debt burden to 162 percent of GDP by November 2011. Unemployment passed 17 percent of GDP and the IMF continually lowered its growth projections for the Greek economy, with a forecast by November of negative 5.5 percent for 2011.

The financial crisis in the eurozone accelerated in July of 2011 because the ECB initially refused to intervene in Italian and Spanish bond markets in order to put a ceiling on these interest rates. The IMF lowered its projections for Italy’s growth from its Spring to Fall World Economic Outlook because of the government’s agreement to a 75 billion austerity package. Fear returned in force to European financial markets in November, as the prospect of Italy repeating the downward spiral of Greece became visible. As fiscal tightening reduces growth, government revenue falls, and it becomes more difficult to meet the promised target of fiscal tightening. The government then tightens further, and further reduces growth. At the same time, borrowing costs increase as the value of the country’s sovereign bonds fall. The rise in Italy’s borrowing costs over the last year have added about one more percentage point of fiscal tightening that the government has agreed to do. Meanwhile, the loss in value of Italian, Spanish, and other bonds held in the hundreds of millions of euros by European bank has threatened the financial system and raised the specter of a Lehman-Brothers-style collapse. The Italian debt – much more than that of Greece, Portugal, Ireland, and even Spain combined – is more than can be handled by the European Financial Stability Facility (EFSF). And attempts to expand the capacity of the EFSF have so far been too slow to deal with the current crisis.

The crux of the current crisis is the refusal of the ECB to act as a lender of last resort for the sovereign bond market. It could purchase Spanish and Italian bonds and put an end to the crisis by lowering these interest rates. But the ECB has been for more neoliberal than the Federal Reserve in the United States, which has
recognized the potential severity of the crisis and has created more than $2 trillion since the U.S. recession began; and has also kept short-term rates at or near zero since December of 2008. As of this writing, the European authorities – with the IMF as a subordinate partner – have gone along with this ECB and are insisting that the solution will come from more fiscal tightening in the Eurozone.

It remains to be seen if the European authorities, including the ECB, will reverse course in time to avoid a severe financial crisis. My own view is that they probably will do so, eventually. However if they do not avoid a severe crisis, the contagion effects are potentially serious. The European banking system is considerably larger than that of the U.S., and is linked to it. The United States economy is recovering slowly and is vulnerable to contagion effects as well as some slowdown through trade. Europe and the United States together are about half of the global economy, and also China’s two largest trading partners. The eurozone crisis is already slowing global economic growth; the question is how much farther the European authorities will push these failed macroeconomic policies, and how much of a financial crisis and contagion will result. This is currently the biggest threat to the world economy, and to the continued growth of the low-and-middle-income countries.

CONCLUSION

There was a sharp rebound in economic growth for developing countries over the past decade. Despite the world financial crisis and recession, low-and-middle-income countries experienced their best decade-long growth since the 1960-1980 period, before the prolonged slowdown of the 1980s and 1990s, which extended into the first years of the twentieth century.

This paper has argued that certain neoliberal policy changes that were adopted in most developing countries worldwide very likely contributed to the long period of economic failure that preceded the past decade. Although most of these policy reforms were not reversed, it appears that China – one of the few countries that did not adopt a neoliberal approach to macroeconomic policy and development – contributed greatly to growth rebound in many developing countries during the past decade. China is now one of the world’s largest economies, and developing Asia – now including a much faster-growing India – seems likely to grow rapidly into the foreseeable future. For this reason, much of the trend of the last decade seems likely to continue.

The biggest threat to global economic growth now comes from the rich countries, especially the eurozone. It is here that a rigid adherence to neoliberal macroeconomic policies, complete with IMF agreements that previously were only applied to low-and-middle income countries, has brought the regional economy to its second recession in less than three years, and threatened a potentially more damaging financial crisis. But regardless of how these problems are resolved, the trend of a much faster-growing developing world – as compared to the prior two decades – and slower, below-potential growth in the high-income countries is likely to continue in the foreseeable future.
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APPENDIX: CALCULATING GDP GROWTH

To calculate per capita GDP growth, we use the following method:

1. For 1960 to 2007, we use the Penn World Table’s (PWT) real per capita GDP (purchasing power parity converted) variable, chained, in 2005 international dollars: rgdpch.

2. For 1981 to 2010, we use the IMF World Economic Outlook (WEO), which offers a per capita GDP (purchasing power parity converted) variable, but in current international dollars, so this is deflated to 2005 values using the US GDP deflator.

For the overlapping years of the two datasets (1981 to 2007), resulting values do not always match. In order to create a fluid dataset, we use the following method:

1. We calculate the annual growth rates implied by each dataset.

2. Beginning in 1981, we apply an indexed average of the two growth rates, as follows:

\[
\begin{align*}
1981_{\text{GDP}} &= 1980_{\text{GDP}} \times [1 + (1/28 \times \text{WEO rate for 1981}) + (27/28 \times \text{PWT rate for 1981})] \\
1982_{\text{GDP}} &= 1981_{\text{GDP}} \times [1 + (2/28 \times \text{WEO rate for 1982}) + (26/28 \times \text{PWT rate for 1982})] \\
&\quad \vdots \\
2006_{\text{GDP}} &= 2005_{\text{GDP}} \times [1 + (26/28 \times \text{WEO rate for 2006}) + (2/28 \times \text{PWT rate for 2006})] \\
2007_{\text{GDP}} &= 2006_{\text{GDP}} \times [1 + (27/28 \times \text{WEO rate for 2007}) + (1/28 \times \text{PWT rate for 2007})]
\end{align*}
\]

In cases of countries whose records begin after 1980, we used the Penn World Table value of GDP for the first year of records, and then apply the same formula for later years, substituting the correct number of years for the “28” listed above. If those countries appear in the WEO data one (or more) year(s) before they appear in the PWT data, we started with the first year of PWT data using the above steps, and calculated backwards to the first year of WEO data using the WEO annual growth rates.

Finally, in two cases (Serbia and Timor-Leste) the PWT has data for only 2005 while the WEO has data for several years. To match the methodology for other countries, relying more heavily on the PWT than WEO data, we apply the WEO’s growth rate forward and backward to the 2005 PWT data point to generate estimates for the years prior to, and after, 2005.

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1 See e.g., Chang, Ha Joon, 2002, Kicking Away the Ladder: Development Strategy in Historical Perspective, London, Anthem Press

2 For a review of Brazilian macroeconomic policy in the last decade, see Serrano and Summa (2011).

3 World Bank (no date a, b).

4 UNDP (2009). The UN statistics count anything less than 2 percent on this measure as the same.

5 UNDP (2010).
6 Ibid.

7 World Bank (no date b).

8 This is the per capita income for the region as whole, not the average of the countries as will be used below.

9 For more on these changes, see Serrano and Summa (2011), Weisbrot and Ray (2010), Weisbrot and Sandoval (2009), and Weisbrot et al. (2011).

10 UN DESA (2008).

11 Since this analysis is looking at the non-weighted average of all countries in this paper, if China’s imports from poor countries, or countries with small economies, lift their growth rate, this has a large effect on the average growth rate, even though China is not large enough to lift the world economy as a whole by the same amount. Also, even though these countries also increased their imports from China, in many cases the imports would have come from elsewhere, but the market for exports – e.g. of primary products from Latin America and Africa – would not have been there, nor would prices of these products risen so much without the rapid growth of Chinese demand.


13 For more on China’s investment policy, see OECD (2003, 2006, and 2008).

14 World Bank (2010a, 3, Box Figure 2).

15 World Bank (2010a, 11, Table 2; and 2010b, 3).

16 See Bhalla (2010); Rodrik and Subramanian (2004a). It is also likely that some of the liberalizing reforms beginning in 1991 contributed to India’s later growth, including reducing the peak tariff rate from 300 to 110 percent, and the loosening of the monopolies and Restrictive Trade Practices Act, which reduced barriers to entry. For more discussion and references, see Weisbrot and Ray (2011).

17 See Weisbrot (2007).

18 Calculated from IMF (no date a, b).

19 Weisbrot et al. (2009).