Effects of Global Economic Integration

Economic Growth and Income Inequality

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11/20/2009
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I. Introduction

For economists, globalization is hardly a new phenomenon. The important features of economic globalization is deeper integration in products, capital and labor markets (WTO, 2008) through international trade, direct and short-term investment and human migration; and to some, also the diffusion of technology (Bhagwati, 2004). In other words, it is the realization of factor mobility across countries, beyond the mobility within a country assumed by classical theorists. Some assert that it begun centuries ago (Bernanke, 2006; CEPR, 2002) though conceded that the current development is an unparalleled one in terms of growth and the total trade volume.¹

As mentioned by Bernanke (2006), the process of integration may lead to what he coined as “social resistance”; which is basically opposition by those, directly or indirectly, affected by the changes of production pattern. The debate whether gains outweigh losses has been increasingly fierce following the growth of globalization. Some have argued that the increasing liberalization in trade and capital market, including the growing FDI in developing nations are parts of IMF’s Structural Adjustment Programs and unbridled implementation may have worsen the situation in some of these nations (Goldstein, 2007).

Opposite to this perspective, some have observed a new developing phenomenon: the core-periphery effects (WTO, 2008). The old conventional wisdom in the 1970s is that the developed nations, i.e. Core, gained from globalization at the expense of the developing nations, i.e. Periphery; this traditional view is coined as “uneven development” (Krugman & Venables, 1995). Interestingly, this phenomenon is thought by some to be reversed (Deardorff, 2003).

¹ According to WTO (2008) the global economic growth declined from 3.4 per cent to 3.7 per cent in 2007 in light of recent recession
Consequently, it has been the core of the current debate around issues such as: whether trade with developing nations, which in general are unskilled-labor-abundant, cause inequality of income between skilled and unskilled-labors in developed nations (Saint-Paul, 2007) or high unemployment rate particularly in European countries (Baker & Schmitt, 2003; Nickell & et.al., 2005).

This paper attempts analyze these two different views by illustrating the economical impacts of globalization using empirical works and data.

II. Global Economic Integration

Generally the argument for globalization and its implications, namely market expansion and factor mobility, is that it will increase the welfare of nations involved. The proponents of classical theory suggested that the gains will outweigh the losses. However, in reality there are winners and losers; terms that refer to countries which can adapt relatively better to the structural changes in global economy as the consequence of globalization (WTO, 2008) and those who cannot, respectively.

Numerous literatures and empirical works have focused on the impacts of global economic integration. Generally the discontents of globalization critics can be grouped into four: (1) economical impacts with two main subgroups which are inequality and financial market volatility (Masson, 2001), (2) social impacts such as unemployment (Ukpere & Slabbert, 2009), labor standards (Brown, 2007; Goldstein, 2007) and cultural convergence (Olivier, Thoenig, & Verdier, 2008), (3) environmental impacts (Fung & Maechler, 2007; Dreher, Gaston, & Martens, 2008) and (4) political impacts, mainly focusing on the declining national sovereignty in asserting its policies (Goldstein, 2007).

Limited by the scope of this paper, the subsequent analysis will focus on the effects of globalization on economic growth and income distribution inequality.
II.1. Globalization and Economic Growth

The main proposition of classical economists is that a country gains if it can trade at any price ratio, i.e. terms of trade, other than its domestic prices; which is basically the static effect of trade and somehow limited by the specific-factors model (Appleyard, Jr., & Cobb, 2008). It has also been proposed that imports allow the economy to operate more efficiently (Appleyard, Jr., & Cobb, 2008), i.e. increases productivity through specialization. The more important impact however, is the dynamic effects of trade namely economies of scale which can only be achieved through output expansion.

The question remains, how exactly these effects combined with other facets of economic globalization stimulating economic growth. In general, there are three perspectives in economic development. A neoclassical perspective (Lucas Jr, 2000) predicted a convergence of international income inequality contributed by the process of economic catch-up by developing countries and a growing “convergence club” i.e. the declining income inequality within rich economies.

Another perspective is the new economic geography, which view that the transportation and other trade costs, and the subsequent patterns of trade are the factors that influence the selected economies to benefit from the global economy (Henderson, Shalizi, & Venables, 2001; WTO, 2008). This perspective appears to be consistent with the reversal of “uneven phenomenon” mentioned previously.

The third perspective is called the new institutional economic history (Crafts, 2004) which places importance on government and institutions to support a nation’s growth. According to Goldstein (2007) this perspective can be grouped into two: endogenous growth such as argument for infant-industry (Krugman & Obstfeld, 2009) and strategic trade theory.
Corroborating these 3 different theories of economic development is beyond the purpose of this paper. Therefore, the empirical data presented will resolve on illustrating the trend of world growth and globalization. According to Dicken (2007), the measures of interconnectedness within the global economy are the changes of merchandise trade and foreign direct investment (FDI). Below is the overview of the trend in world’s output growth and its interconnectedness:

![Chart showing world's growth and interconnectedness](image)

**Figure 1: World’s Growth and Interconnectedness (Author’s Calculation, based on: (World Bank, 2009))**

From this figure, it is clear that the world output has continuously increased, more than quadrupled in the last 28 years (author’s calculation, based on (World Bank, 2009)). The preference of focusing the analysis from 1980 onward is consistent with the beginning of neo-liberalism which,

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2 The statistic used to measure economic growth is GDP ($PPP) based on World Bank World Development Indicators (online resource)
according to Goldstein (2007), is the foundation of globalization policies. The increase of world output is almost parallel to that of world merchandise trade, which is consistent with the finding of Freund & Bolaky (2008). Significant from this figure are the speed of growth and the volatility of world FDI Net Inflows.

To have a better perspective how each regions contributed to this growth, the following figures illustrate the shares of each region on world GDP, merchandise trade and FDI Net Inflows:

*Figure 2: Shares of GDP (SPPP) 1980-2008 (Author’s Calculation, based on: (World Bank, 2009))*

Even though the world output continues to increase, the growth and GDP share of each region is mixed to say the least. East Asia & Pacific shows the fastest growth and increasing share of world GDP. High-Income OECD countries’ shares of world output are still over 50% in 2008 even though this is a
decline of approximately 10% from their shares in 1980 (author’s calculation, based on (World Bank, 2009)).

It is also important to note that the growth of countries in Sub-Sahara Africa seems to be flatter; in fact, the average annual growth of this region in the period 1981-2008 is only one-third of that in 1961-1980 (author’s calculation, based on (World Bank, 2009)) which appears to be agreeable to Goldstein view regarding unchecked implementation of economic globalization.

Figure 3: Shares of Merchandise Trade 1980-2008 (Author’s Calculation, based on: (World Bank, 2009))

Interestingly, the trend of each region share of merchandise trade is parallel to the trend of its share of world GDP. East Asia & Pacific shows increasing share of world’s merchandise trade, almost five folds in 28 years (author’s calculation, based on: (World Bank, 2009)); while High-Income OECD countries show a declining trend of 12% in the same period of time. East Asia & Pacific also shows a
significant increase of its trade relative to GDP; by 2008, merchandise trade contributed to 68.45% of its GDP compared to 13.29% in 1960 and 35.41% in 1980 (author’s calculation, based on: (World Bank, 2009)).

Figure 4: Shares of FDI Net Inflows 1980-2008 (own calculation, based on: (World Bank, 2009))

The share of each region on world FDI Net Inflow is relatively volatile. High-income OECD countries consistently take around half of world FDI Net Inflows with the highest inflows in 2000 of more than 70% (author’s calculation, based on (World Bank, 2009)). A conclusive deduction in terms of regions shares of FDI Net Inflows cannot be generated with this simple illustration.

See Appendix 2
II.2. Globalization and Inequality

The flows of goods, services and resources between firms and household imply that the factor markets ultimately determine an economy’s income distribution (Krugman & Wells, 2009). In other words, globalization and consequently the expansion of markets will also affect income distribution. Heckscher-Ohlin theory described that trade may result in inequality of income distribution within an economy, i.e. between its abundant and scarce factors (Krugman & Obstfeld, 2009). However, another implication of this theory is that there is also a tendency of factor price convergence between trading countries, as the relatively abundant factor in one country is relatively scarce in the other country (Marrewijk, 2002).

Another neoclassical theorist Samuelson elaborated that the convergence of relative prices of goods will lead to this factor price equalization (Grimwide, 2000). Therefore analysis of globalization and its impact on factor price, such as wage inequalities, requires data on relative prices of goods although some theoretical models have tried to explain this impact (Wood, 2002). Due to unavailability of complete data, analysis is focused on the trend of income distribution within and across nations since the beginning of neo-liberalism indicated earlier.

To illustrate how world income distribution has evolved over time, it is important to note that there are two general views on globalization impacts on inequality: convergence and divergence. In his impressive work estimating the world and selected countries income distribution Sala-i-Martin concluded that world income inequality has decreased from the 1980s; a phenomenon he coined as “the emergence of world middle class” (2002). Extending his estimation to year 2000, he illustrated the changes of world and selected countries income distribution as follows:
Figure 5: World and Selected Countries Income Distribution in 1970 (Source: (Sala-i-Martin, 2006))

Figure 6: World and Selected Countries Income Distribution in 2000 (Source: (Sala-i-Martin, 2006))
However, Edwards (2006) attributed this emergence of global middle-class into the substantial growth of China and by excluding China, concluded that the inequality tends to increase especially in the lower middle and low income countries.

On the other hand, Sutcliffe performed several measurement using different approaches (2004) and there appears to be mixed trends. Using ratio of average GDP per capita of 10 richest to 10 poorest countries, he concluded that there seems to be a slow convergence of inequality from 1950-1985 and rapid divergence thereafter. However, by measuring the Gini coefficient, the global inequality tends to converge from 1980-2005 (Sutcliffe, 2004; Sutcliffe, 2007). Finally, using the ratio of total income above and below the indicated position in the distribution (Sutcliffe, 2007), the global inequality is illustrated to be most striking between the richest and poorest 1 per cent of global population as can be seen on Figure 7 below:

Figure 7: Gross National Income ($PPP) Per Capita by Deciles (Source: (Sutcliffe, 2007))
Therefore it is challenging to conclude whether global economic integration worsens or improves inequality. If we based our analysis on the decline of Gini coefficient according to Sutcliffe estimation, the declining trend after 1985 seems to suggest that by employing more open market policy, the world as a whole has been better off. Using the same approach, Milanovic and Yitzhaki (2001) concluded that the income inequality between-countries, based on Gini Coefficient calculated for different countries, is more pronounced in Asia continent, where growth are notable and attributable to some of the countries more open policies. Meanwhile inequalities in the other four continents (Africa, Latin America, Europe and North America) are influenced by mostly within-country inequalities.

However, referring to Sala-i-Martin works on world income distribution, the world economy as a whole appears to have succeeded in reducing poverty which can be seen by the reduction of area under the $1/day poverty line and in improving welfare of many which can be concluded from the shift in the distribution’s median.

III. Conclusion

Establishing correlation among globalization, economic development and inequality involves extensive data collection and selection of appropriate methodology. The empirical works available so far cannot reach a sound conclusion whether there is a convergence or a divergence in income distribution. However, we can conclude that the world has seen tremendous growth, at least in terms of its GDP, while simultaneously adopting more open policy in trade and capital market in terms of FDI; although the relatively flat growth of Sub-Saharan Africa region command further research.

Another important issue requiring further study is the core-periphery relationship. Krugman and Venables (1995) developed a model of region differentiation and suggested that the reverse of “uneven development” is observed as transport costs continue to decline, i.e. further integration. The declining
shares of High-Income OECD countries, which mostly are those in Western Europe and North America, of world GDP and merchandise trade and the reverse tendency in East Asia & Pacific and South Asia seem to suggest the existence of core-periphery effect. However it is not sufficient to conclude that the increase of these peripheries output is at the expense of those in the core countries.

Finally, other factors that might be affected by the globalization mentioned earlier should be addressed; mostly the environmental impact of globalization, which is necessary for sustainable world growth and development, and the capital liberalization and its effect on economic volatility in light of the recent recession.
Bibliography


Sutcliffe, B. (2007). *Postscript to the Article "World Inequality and Globalization"*.


World Bank.

Appendix 1. Regional Share of World GDP ($PPP), Merchandise Trade and FDI

Net Inflows 1980-2008

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Authors Calculation, based on (World Bank, 2009)

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*(Author’s Calculation, based on (World Bank, 2009))*
## Appendix 2. Regional and World Merchandise Trade as Percentage of GDP

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*Source: (World Bank, 2009)*