Economic globalization and inequality: Exploring the linkages

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This paper contributes to the theorization of inequality in economic globalization as well as in development studies. It addresses the empirical, conceptual and theoretical challenges of exploring the intersection of complex economic inequalities. The study adopts the dependency theory and econometric methodology. It investigates and advances knowledge on economic globalization with analysis of the implications of the intersecting inequality through the revaluation of both actual flows, foreign direct investment and global fiscal transactions in line with economic performance and shows that policy advice that is based on linking equality to economic globalization is critical.

Key words: Economic globalization, trade flows, inequality, underdevelopment.

INTRODUCTION

Since the end of the Cold War, ongoing trends in global economic interactions tend to point out that global inequality remains a neglected theme in both economic policies and development studies. Developed countries have been playing a dominant role in the process of economic globalization. Economic globalization in the post-World War II era has been spurred by the successive rounds of trade liberalization under the auspices of the General Agreement on Tariffs and Trade (GATT), the forerunner to the World Trade Organization (Dreher et al., 2008).

Despite its robust offshoot, many studies on globalization particularly in economic contexts depend on a seemingly less lucid model which often do not provide a clear understanding of patterns of inequality arising from economic globalization. This is partly because of the complexities and contradictions surrounding globalization (Rosenau, 1996). This blurs fuller comprehension of the corresponding character of globalization and makes the entire aspects of globalization a homogenized whole either technological, cultural, political, social and economic.

Dominant perspectives on globalization within financial flows often proceed from two perspectives namely; the pro-economic globalization perspective which argues that the disappearance of boundaries results in economic growth through access to income (Oahme, 1995). The argument is that initial inequality could be dispelled as a country eventually transits to industrialization. This formed the basis of the Kuznets hypothesis.

The pessimistic debate is informed by the logic that globalization could result in improved income but the central challenge remains unequal benefits among countries. This forms part of the resurgent debates on widening gaps between the rich and poor societies (Birdsall, 2006; Amadi et al., 2015). This has created both empirical and theoretical difficulties in the study of globalization and gives rise to various analytical difficulties particularly, where technological, economic, cultural and political domains intersect.

To address the relationships between the strands of globalization have been difficult. This is partly because of the interwoven contexts globalization operates. For instance, the global multinational corporations and their activities have both technological, economic and ecological implications. Again, the increasing change in lifestyles and consumption patterns arising from globalization results in
complexities- market changes, long distance flows of goods, services, capital as well as information. In both social and technological contexts, there is the emergence of social media, the network states, electronic hypertext and online alliances(Castells,2000).

Political globalization, had emerged with divergent trajectories including the open government initiative, e-administration, e-governance, articulation and diffusion of governmental and quasi-governmental policies (Amadi and Igwe, 2018). Similar complexities are associated with cultural globalization, arising from homogenization of cultural identity, ideas, social orientations, lifestyles, information and images. The underlying assumptions of cultural globalization is homogenization of culture and related socio-cultural realities. Thus, there are various spheres of globalization which require specific attention. Scholarly debates and analysis must take into account the overlapping nature or complexities of the globalization phenomenon.

Against this background, this paper focuses on economic globalization. Economic globalization refers to the increasing interdependence of world economies arising from growing scale of cross-border trade of commodities and services, flow of international capital worldwide and rapid spread of technologies(Shangquan, 2000). Specifically, economic globalization describes a set of processes whereby production and consumption activities shift from the local or national scale to the global scale(O’Brien and Leichenko,2000).

This work attempts to provide linkages between economic globalization and inequality. The paper offers a rethinking of some of the foundational questions of economic globalization, particularly the issue of inequality which forms part of contending perspectives on globalization. It makes a new contribution on dynamics of inequality with an exploration of the dependency theory and draws on deep knowledge of economic globalization. It contrasts mainstream debates that globalization is akin to equitable economic growth. Alternatively, argues that economic globalization has furthered the division of the world along economic lines of affluent and poor societies, including the changing economic realities intensifying poverty in the global South.

In particular, the paper demonstrates that economic globalization has significant negative effects both at the individual, national and global levels. Importantly, in global contexts such negative effects impact the poor countries unequally integrated into the international capitalist system. Such inequalities could have complex institutional effects which may result in poverty and underdevelopment.

**Theoretical Framework**

Dependency remains at the center of scholarly debates on economic inequality. Dependency theory sought to effect transformative social change in economic inequality by unmasking the ways in which capitalist mode of production and exploitation results in "development of underdevelopment". Dependency theory arose in Latin America as a critique of the modernization theory and a response to the bankruptcy of the program of the United Nations Economic Commission for Latin America (ECLA) (Amadi, 2012). The failure of the ECLA accompanied by the decline of the modernization school, culminated to the rise in the Neo-Marxist Dependency Theories (Keet, 2002; Amadi, 2012).

An analysis of economic globalization within the lens of dependency is found in the interaction between the market, the international capitalist system and labor in production of surplus value (Amadi, 2012). Global markets work as institutional frameworks to meet the economic needs of the economically advanced societies through the exploitation of the economically weak societies. This increases the reward to more productive assets as economic globalization results in mass production disproportionately owned and controlled by the economically advanced societies. This results in global division of labour along affluent North and poor South, perpetuates development of underdevelopment as dependency ensues. Thus, economic globalization creates unequal economic policies that governs the rules of the global economy to the economic disadvantage of the poor societies.

Economic globalization and integration of the world’s economies is based on a number of factors which have taken various forms including imperialism and the expansion of capitalist exploitation, the rise in global multinational corporations, the rapid expansion of technology and information, the emergence of market economy system. There is equally the spread of homogenization of economic production, accessibility and affordability of commodities and intensification of commodity exchange at various levels.

Again, the emergence of the networking-based economy which has inevitably resulted in the resurgence of series of shadow enterprises, such as illicit flows etc intensify economic inequality.

Dependency theory is linked with dynamics and patterns of these inequities. It assumes following Piketty and Saez (2003); Birdsell (2005) and (2007), that globalization impacts the poor and that economic globalization is a function of Western capitalist interest (Skir, 2006). In this particular context, Leslie Sklar’s "capitalist globalization" debate is apt as it strengthens the understanding of inequality indicators linked to economic globalization. This inequality which is linked to economic globalization is important to this study.

**Literature Review**

There is need for analytical and conceptual capacity to account for the interrelatedness and overlapping nature of many of the practices and processes of globalization. A number of studies have discussed aspects of globalization (Douglas and Wind, 1987; Hirst and Thompson, 1997; Giddens, 1999; Rugman and Moore, 2001; Held and
McGrew, 2007). Branco Millonovic (2012) argued that both 'globalization' and 'inequality' are useful 'short hands' for the processes or issues that we 'recognize when we see them' although we might have a hard time defining them rigorously. Both terms are far from being scientifically clear and unambiguous. Robin Lynch (2006) described globalization as a "range of changes in the way the international economy works".

There are several debates on economic globalization (Shangquan, 2000; O'Brien and Leichenk, 2000; Hirst and Thompson, 2003). Issues of concern in economic globalization include international flows from trade, information and communication including technology, foreign direct investment (FDI) and activities of multinational corporations.

The impacts of economic globalization on inequality have been given attention (Bourguignon and Morrisson, 2002; Ravallion, 2003; Sutcliffe, 2004; Cornia et al., 2004; Birdsall, 2006; Lynch, 2006; Piketty and Saez, 2006; Milanovic, 2006; Jaumotte et al., 2013). This increasingly supports the perspectives held by some scholars that globalization is linked to decline and inequity in economic growth (Weisbrot et al., 2000).

Proponents contend that economic globalization results in economic efficiency, removal of trade barriers, liberalized investment policies and economic liberalization as boundaries disappear (Levitt, 1983; Ohmae, 1995). On the contrary, opposing points hold that economic globalization may not be inclusive as it favors a few to the exclusion of many countries of the world (Bourguignon and Morrisson, 2002; Brandolini and Smeeding, 2006; Birdsall, 2007). In a related account, Hardt and Negri (2000) point out that modern globalization can be distinguished from its earlier incarnations by its explicit foundation on capitalism rather than international trading.

A common cause of all these issues according to Lynch (2006) is the growing tendency by economic actors to ignore barriers once imposed by national or supranational boundaries. This has been evident at the rise of the network states. The network economy has given rise to a large group of shadow enterprises, making the concept of national boundaries and conduct of certain economic activities highly technological (O’ahme, 1995; Castells, 2000). Infrastructural and a wide range of economic and social developments have reduced barriers and distances and created a regional and globally overarching system of production and consumption. In this context, most poor societies are integrated in an unequal manner. Thus, inequality which has taken various dimensions ensued.

Nancy Birdsall (2006) argued that inequality inhibits growth—in developing countries, where markets and governments are weak. In 1996, the total volume of exports of developed countries was US$ 4,057 billion, accounting for 81.7% of the world’s total value of international trade. In 1995, the foreign direct investment by 10 major developed countries including the G7, Switzerland, Sweden and the Netherlands took up 85.1% of the total value of foreign direct investment in the whole world (Shangquan, 2000).

In the case of Africa, right or wrong, Agnew and Grant (1997) argue that it is the lack of globalization that is considered to be significant. Relative to many other areas of the world, most of the African continent remains ‘left out of globalization processes (O’Brien and Leichenko, 2000). Africa’s share of world trade represents only 1.8% of the total, and has been falling steadily in recent years (Dohlm, and Halvorson-Quevedo, 1997; O’Brien and Leichenko, 2000).

While foreign direct investments are contributing to growth and prosperity in some regions of the world, Africa is notable for its small share of FDI. The exclusion or marginalization of Africa in terms of globalization processes suggests that it is a loser relative to other regions. Noam Chomsky (2003) recounts that the term "globalization" has been appropriated by the powerful to refer to a specific form of international economic integration, one based on investor rights while the interests of the people is less significant.

Globalization processes are also uneven among regions within countries (Hirst and Thompson, 1997). As a result, globalization exacerbates uneven development. In the advanced countries such as the United States, the impacts of globalization have been highly uneven. This is replicated in the US international trade involvement (Markusen et al., 1991; Hayward and Erickson, 1995; Noponen et al., 1997; O’Brien and Leichenko, 2000). This variation for instance is particularly made manifest through the North American Free Trade Agreement (NAFTA) which provides varying economic results between the United States and other countries in the agreement (Conroy and Glasmeier, 1993; O’Brien and Leichenko, 2000). Similar institutional driving forces for integration of markets include the GATT and WTO, where many countries gradually cut down their tariff and non-tariff barriers, more and more countries open up their current accounts and capital accounts (Shangquan, 2000:2).

Economic globalization equally manifests in the removal of economic barriers to trade and investment, economic integration of global financial markets, integration of production activities across international borders, development of global communication systems, and homogenization of demand for consumer goods across countries. Economic globalization indicators are often determined through the growth in international trade and foreign direct investment.

The spread of Multinational Corporations (MNCs) have intensified economic globalization. Shangquan (2000:2) argues that in 1996, in all, there were not more than 44,000 MNCs in the whole world, which had 280,000 overseas subsidiaries and branch offices. That in 1997, the volume of the trade of only the top 100 MNCs already came up to 1/3 of the world’s total and that between their parent companies and their subsidiaries took up another 1/3. In the US$ 3,000 billion balance of foreign direct investment at the end of 1996, MNCs owned over 80%. Furthermore, about 70% of international technological transfers were...
conducted among MNCs (Shangquan, 2000). This type of cross-border economic activities within same enterprises has posed a challenge for international trade and investment theories.

Globalization of the financial sector has become the most rapidly developing aspect of economic globalization. Dreher, (2006) has provided the evidence of impact of globalization on economic growth. In a similar line of thought, Shangquan (2000) suggests that globalization impacts the financial market through cross border flow. Since 1970’s, cross-border flow of capital has been rapidly expanding. In 1980, the total volume of cross-border transactions of stocks and bonds of major developed countries was still less than 10% of their GDP. However, this figure had far surpassed 100% in 1995 (Shangquan, 2000).

There are illicit financial flows linked to globalization (Kar and Cartwright-Smith, 2008). This increasingly accounts for financial inequality among the developed and developing economies. This includes “Illegal flight capital” which according to Kar and Cartwright-Smith (2008) is intended to disappear from any record in the country of origin, and earnings on the stock of illegal flight capital outside of a country do not normally return to the country of origin.

Against the background of the reviewed literature, globalization and inequality have been typically contentious as there appears to be absence of consensus on indicators pointing out inequality arising from economic globalization. This creates various analytical difficulties. Thus, the literature on globalization provides divergent exploration of various dimensions of inequality. However there is research paucity on attempts to remedy this deficiency in various ways. This gap suggests the basis for conceptual clarity and urgent need to distinguish between “economic globalization” and “inequality”, and to provide a way of understanding how both may be interrelated and in a distinct manner how global inequality could be redressed.

Since the end of the Cold War, concerns on global inequality have gained some attention. Birdsell (2007) re-emphasized that inequality matters. Similarly, there have been a number of studies discussing aspects of economic globalization (Kar and Cartwright-Smith, 2008; O’Brien and Leichenko, 2000). For instance, O’Brien and Leichenko (2000) identified linkages between economic globalization and climate change. This underscores the relationship between economic and natural resource interactions within the society, in a way this puts the domain of natural environment central. In particular, this orientation has formed part of the debates pointing out that economic globalization may not result in economic growth of the poor societies (Weisbrodt et al., 2000; Sutcliffe, 2004; Branko, 2006). This has given rise to a number of scholarships on inclusive economic growth, including the changing nature economic globalization (Wood, 1994; OECD, 1997a; Cook and Kirkpatrick, 1997) and its effects on the economy (Mittelman, 1994; Branko, 2006).

Despite the volume of writings, the literature linking economic globalization to inequality has been scant. Although there are a number of debates discussing aspects of inequality and globalization (Shangquan, 2000; Piketty and Saez, 2003; Birdsell, 2005). The discussions on economic interactions at the national, regional and global levels as well as unequal implications of such relationships on the grand scale have been less topical. Such paucity of research does not account for the changing realities of inequality in connection with economic globalization. Mshana (2002) argues that our national economies are now global economy not based on a just and sustainable economic model which the ecumenical movement dreams to have. Our economies are rather based on greed today even excessive greed. In this context economic globalization represents a number of trends in social and economic interactions. Dominant works in this field suggest that economic globalization results in inequality (Mittelman, 1994; Cook and Kirkpatrick, 1997; OECD, 1997a; Piketty and Saez, 2003). A number of relevant literature have recently emerged in the field of economic globalization, reflecting on its divergent focus. Hirst and Thompson (1997) question the idea of a genuinely global economy. Giddens (1999) contends that “Globalization is political, technological and cultural, as well as economic.” Reviewing key trends in its agenda, the hyperglobalists argue that the present world is a borderless world that the notion of “national” is hardly plausible (Dicken, 1998). This notion is reinforced in studies which identify the emerging 'global mind set'. Gupta and Govindarajan (2002) conceptualized the idea of a “global mindset” to describe globalization trajectories.

Contrary views in the literature suggest that national forces remain highly relevant despite the idea on disappearance of boundaries and end to nationalist identity (Appadurai, 1996; Giddens, 1999; Rugman, 2000; Ferguson, 2006). Rugman (2000) guards against possibility of “a pure globalization strategy” where high economic integration and low national responsiveness will not always work in the 21st century. He rather emphasizes ‘a regional rather than a global focus’. The corresponding effect is the rise in transnational capitalist class arising from economic integration. Sklar (2006) reinforces this notion and identifies “a new transnational capitalist class” that favors a freer market over state intervention and democracy over the alternatives. Sklar (2006) concludes that globalization is not a Western term but a “globalizing capitalist ideology,” and suggests the need to check rising class polarization within capitalism.

Ruigrok and van Tulder (1995) re-engage with the question of globalization within the ideological contexts and argue that “Globalization seems to be as much an overstatement as it is an ideology and an analytical concept.” Both Ohmae (1995) and Levitt (1983) deploy the concept of standardization- the idea that as societies move up the economic ladder, they become increasingly similar in terms of social preference and tastes. Their thesis aims to justify the basis for globalization. Levitt (1983) suggests a paradigm shift from customized items to globally
standardized products, low priced and advanced conceived as global models to pursue.

Piketty and Saez(2003) recount that such inequities have taken various dimensions since the end of World war II. That the question of the relation of income inequality among the affluent and poor societies have not been adequately resolved. This accounts for economic disparities and underdevelopment. They situated their argument within income and related indicators . Future research trajectories should aim to understand the inherent contradictions of inequality within various contexts.

While endorsing the general orientation of economic globalization in the context of economic transformation, proponents argue that economic globalization far from being anti-developmental results in economic and technological advancement through connectivity(Oahme, 1995; Tomlinson, 1999). Debates on economic globalization appear to have been overly influenced by capitalist exploitation. This has consequences for economic liberalization and particularly suggests the ways in which economic globalization has favored the industrialized societies. Joseph Stiglitz (2003) argues that globalization, the dynamics of market system results in unfavorable terms of trade which undermines economic development of the poor societies. He locates this within the “discontents of globalization” and argues that this must change, new sets of market structures beyond the dominant Western market fundamentalism should change. This presents an understanding of the fact that market liberalization and privatization creates economic gaps between the rich and poor.

In this context, economic globalization and linkages with inequality provide useful insights that could strengthen the theoretical basis of equality, and provide for a clearer understanding of the divergent turns globalization had taken. On this premise, economic globalization is argued as fostering unequal development. The aim primarily is to construct a new conceptual whole that deepens our understanding of the notion and dynamics of economic globalization in order to provide alternatives to the dominant notion. Tomlison (1999) defined globalization as an embodiment of complex connectivity and argued that globalization refers to the rapidly developing and ever-densening network of interconnections and interdependencies that characterize modern social life.

The “interconnectedness” thesis or the ‘network’ and ‘flows’ debate contend that globalization is an interconnection of divergent trends(Lash and Urry, 1994; Castells, 1996; Tomlinson, 1999). Held et al. (1999 ) contend that globalization is the ‘intensification of global interconnectedness’ and stresses the multiplicity of linkages. The interconnectedness include , goods, capital, people, knowledge, images, crime, pollutants, drugs, fashions and beliefs which flow across territorial boundaries. The homogenization or proximity literature provides the understanding of globalization as a homogenization of ideas or social ideals such as cultural practices(Gidens, 1999; Tomlinson,1999).

Lash and Urry (1994: 252) reinforce the notion of modern society characterized with new forms of long distance transportation and travel. This makes the society less distant or united within the unicity argument. Tomlinson(1999)elaborated on the term 'unicity' to identify the unified nature of cities in a globalizing order. This denotes ‘uniformity’ or ‘unity’. This points out 'the compression of the world into a "single place"' (Robertson,1992: 6).

Ohmae (1995) popularized the trans nationalization of the economy. He identifies the increasing disappearance of the nation state pointing out a borderless world and the rise of regional economies where markets flourish. He argues that the nation-state is becoming irrelevant seen from the point of view of the capitalist market and claims that 'traditional nation states have become unnatural, even impossible and constitute business units in a global economy.'

Hirst and Thompson(1997) provide a critique of the ‘disappearance of national borders thesis” and argue on the contrary that economic globalization is a function of the economics and upheld the basis for a national economy. Thus, while globalization proponents such as Ohame (1995) argue that globalization and the flow of goods across borders provide goods and services in real time, this could be typically conceptualized as a distinct sphere from the traditional notion of national boundaries. Similarly, the market system comprise flows of goods and services, transfers and FDIs , thus all of these practices are linked one way or the other to the globalization and networks or connectivity. There is the liberalization of market or free market mechanism.

There are clearly difficulties with various approaches to globalization as the literature reviewed suggests. Beyond the relevance of these spate of debates, Birdsall (2006) argues that inequality has been a central issue in line with globalization. She demonstrates this with a set of data suggesting an increasingly divided world. The present study engages directly with the question of social realities associated with inequality and economic globalization. And in a distinct manner, provides new research agenda to engage with the question of challenges associated with capitalist inequality.

Against this background, the strand which links economic globalization to inequality has been scant and forms the dominant gap this paper seeks to fill. Essentially, the economic sphere provides palpable insights on inequality. The alternative formulation which views inequality arising from economic globalization as a product of capitalism tends in practice towards economic exploitation, as it conceives capitalism as an economic system riddled with inequality(Muller, 2013) .Beyond this, there is need to distinctly provide evidence linked to economic globalization as a causal factor. This points to the importance of policy response to redress the growing global inequality. The search for alternative modalities to bridge the inequality gap is central to this paper.
**METHODOLOGY**

**The Empirical Model**

Empirical studies and related analysis on the relationship between economic globalization and inequality fall into two categories: microeconomic and macroeconomic. The former examines the linkages between economic globalization and inequality at the household or individual level. It primarily documents the effects and burden of inequality on households.

While macroeconomic studies assess the influence of economic globalization and inequality on national income in cross-country comparisons. This appears better than microeconomic studies as they attempt to reflect the wide-ranging and dynamic implications of inequality. This study focuses on the macroeconomic component.

There are several empirical models and measurements of globalization and inequality such as the Maastricht Globalization Index (MGI) (Martens and Raza, 2009; Figge and Martens, 2014) , the globalization indices: G-Index by World Markets Research Centre, Globalization Index by the Centre for Study of Globalization and Regionalization at Warwick University (Lockwood and Redoano, 2005). Other measures include the Gini index, the mean logarithmic deviation of income etc (Lall et al., 2008).

Lall et al., 2008, adopted the Gini index model given below;

\[
\ln(GINI) = \alpha_1 + \alpha_2 \ln\left(\frac{X + M}{Y}\right) + \alpha_3 (100 - \text{TARIFF}) \\
+ \alpha_4 \ln\left(\frac{A + L}{Y}\right) + \alpha_5 \text{KAOPEN} \\
+ \alpha_6 \ln\left(\frac{K_{ICT}}{K}\right) + \alpha_7 \ln\left(\frac{\text{CREDIT}}{Y}\right) \\
+ \alpha_8 \text{POPSH} + \alpha_9 \ln H + \alpha_{10} \ln\left(\frac{E_{AGR}}{E}\right) \\
+ \alpha_{11} \ln\left(\frac{E_{IND}}{E}\right) + \varepsilon,
\]

where \(X\) and \(M\) are non-oil exports and imports, \(Y\) is GDP, \(\text{TARIFF}\) is the average tariff rate, \(A\) and \(L\) are cross-border financial assets and liabilities, \(\text{KAOPEN}\) is the capital account openness index, \(K_{ICT}\) is ICT capital, \(K\) is capital, \(\text{CREDIT}\) is credit to the private sector by deposit money banks and other financial institutions, \(\text{POPSH}\) is the share of population ages 15 and older with secondary or higher education, \(H\) is average years of education in the population ages 15 and older, \(E_{AGR}\) and \(E_{IND}\) are employment in agriculture and industry, and \(E\) is total employment (Lall et al., 2008). This summary model is a composite model that combines both micro and macro indicators and unsuitable for this study.

Based on the focus of this study which is largely on macroeconomic indices, the econometric model for this study builds on the KOF index (Konjunkturforschungsstelle) the word means business cycle research institute (Dreher, 2006; Dreher et al., 2008). The KOF Index of Globalization was introduced in 2002 (Dreher, 2006) and is periodically updated. KOF defined globalization as “the process of creating networks of connections among actors at multi-continental distances, mediated through a variety of flows including people, information and ideas, capital and goods (Dreher et al., 2008). Globalization is further conceptualized as a process that erodes national boundaries, integrates national economies, cultures, technologies and governance, and produces complex relations of mutual interdependence (Dreher et al., 2008). It provides index to measure globalization.

The overall index covers the economic, social and political dimensions of globalization. More specifically, the three dimensions of the KOF index are defined as: economic globalization, characterized as long distance flows of goods, capital and services as well as information and perceptions that accompany market exchanges; political globalization, characterized by a diffusion of government policies; and social globalization, expressed as the spread of ideas, information, images and people.

This study focused only on economic globalization. This is because the KOF index identified economic globalization as more complex and provides robust evidence of inequality. For instance, the 2013 KOF index cumulates 23 variables to an overall index and three sub-indices covering the economic, social and political dimensions of globalization consisting of sample of high and low income countries for which all variables used in the regressions were available (Dreher et al., 2010).

The study compared the estimation from a linear model and that of the KOF index. Economic globalization index which the study followed is measured by two variable groups: (i) actual flows (trade, foreign direct investment, portfolio investment, and income payments to foreign nationals) and (ii) restrictions (hidden import barriers, mean tariff rate, taxes on international trade and capital account restrictions).

The analysis of the sub KOF index such as economic index is based on a principal component analysis. The principal component analysis uses all available data and computes the variance of the variables used. The linear model can be modified to take into account a number of effects of the relationship between economic globalization and inequality. The study expresses the following model linked to the KOF index.

\[
L_{it} = F\left(Y_{it}, K_{it}, A_{it}\right)
\]

Where \(L\) is economic globalization, \(F\) is actual flows of trade
Y represents foreign direct investment
K represents portfolio investment
A is restriction to the flows

Empirically, we express economic globalization and inequality function in the log-linear form as follows

$$\ln L_{it} = \alpha_0 + \alpha_1 \ln Y_{it} + \alpha_2 \ln K_{it} + \alpha_3 \ln A_{it} + \varepsilon_{it}$$ (2)

We hypothesize that economic access is determined by the disappearance of boundaries resulting in unequal economic flows. For example foreign direct investment (FDI), illicit flows, loans, markets and transactions are informed by capitalist economic choices which results in unequal exchange (Piketty and Saez, 2003), we consider the level of inequality arising from these transactions:

$$A_{it} = e^{\delta_0 + \delta_1 (X / Y)_{it} + \delta_2 (G / Y)_{it}}$$ (3)

Following this development, equation 2 then becomes

$$\ln L_{it} = \theta_0 + \theta_1 \ln Y_{it} + \theta_2 \ln K_{it} + \theta_3 (X / Y)_{it} + \theta_4 (G / Y)_{it} + \eta_{it}$$ (4)

The model can be linked to inequality and economic globalization

$$\ln L_{it} = \delta_0 + \delta_1 \ln X_{it} + \delta_2 \ln Y_{it} + \delta_3 \ln K_{it} + \delta_4 (X / Y)_{it} + \delta_5 (G / Y)_{it} + \eta_{it}$$ (5)

Where,

\(i = 1, \ldots, N\) and \(t = 1, \ldots, T\) are the individual and institutional dimensions of the impact of inequality arising from economic globalization, \(Y_{it}\) is the GDP measure of income rate, \(K_{it}\) is the capital stock, \((X / Y)_{it}\) is the inequality ratio

$$\ln L_{it} = \delta_0 + \delta_1 \ln X_{it} + \delta_2 \ln Y_{it} + \delta_3 \ln K_{it} + \delta_4 \ln X_{it} + \delta_5 \ln Y_{it} + \delta_6 (X / Y)_{it} + \eta_{it}$$ (6)

This linear model can be modified using the economic model of the KOF index to take into account long distance flows of goods, capital and services as well as information and perceptions that accompany market exchanges in exploring the relationship between economic globalization and inequality (Pikety and Saez, 2003; Birdsall, 2007; Dreher et al., 2010). This model can be generalized for further economic globalization and inequality studies.

RESULTS AND DISCUSSION

Based on the economic globalization index, low income countries have been at the margins in economic development. This is evident in the revaluation of both actual flows, foreign direct investment and global fiscal transactions with economic performance of both high and low income countries. A number of institutional factors linked to economic globalization have been identified. The economic model of the KOF which include actual flows of trade suggest that the net actual capital flows skew to the interest of the economically advanced societies. The World Bank residual model measures a country’s source of funds (loans or exports of capital) against its recorded use (outflows and/or expenditures of capital). Source of funds includes increases in net external indebtedness of the public sector and the net inflow of foreign direct investment (Kar and Cartwright-Smith, 2008). OECD (2005) argued that economic flows reflect the creation, transformation, exchange, transfer or extinction of economic value; they involve changes in the volume, composition, or value of an institutional unit’s assets and liabilities. One of the dominant challenges linked to globalization as this study tends to suggest is illicit flow. Kar and Cartwright-Smith (2008) have argued in this direction as they provide a vortex of effects of illicit flow from the poor to the affluent societies. This increasingly affects actual flows - trade, foreign direct investment, portfolio investment, and income payments to foreign nationals as the present analysis suggests.

According to IMF data, the value of short-term bank loans flowing at and through international financial markets and other financial and capital markets in 1997 at least amounted to US$7,200 billion, which was about equal to 1/4 of the total output of the world (Shangquan, 2002; Kar and Cartwright-Smith, 2008). According to an estimation by the US Federal Reserve Board, the daily total value of transactions of foreign exchanges in New York, Tokyo and London alone in 1997 was about equal to US$620, 18% of which was used for foreign trade and investment, and the rest 82% were used for speculation at international financial markets (Shangquan, 2002; Kar and Cartwright-Smith, 2008). This huge amount of floating international capitals may lead up to bubble economies and disorderly fluctuation of foreign exchange rates. They may also weaken the monetary sovereignty of a country and bring along a dysfunction of its monetary policy (Kar and Cartwright-Smith, 2008).

Figure 1 below shows the volume of financial flows from all countries between 2002 -2006 in billions of dollars. The data above suggest persistent rise in illicit flows from the developing countries both normalized and non-normalized.

Figure 2 below shows the volume of normalized illicit financial flows from all developing countries in billions of dollars between 2002 to 2006. The chart provides World Bank Residual (CED) (three correct signs and IMF/export FOB > or -10%) and trade mispricing (GER) (three correct signs and IMF/export FOB > or -10%). The data show an increase from $372 in 2002, $508 in 2003, $646 in 2004, $675 in 2005 and $859 in 2006. Similarly, unlike the Kuznets’ inverted U hypothesis, where inequality was supposed at first (at the early stages of development) to increase, and then in advanced
economies to go down, the analysis in this study corroborates Piketty and Saez (2003) who showed that it was rather a U shaped – not the inverted U shaped curve that income inequality charted in advanced economies of Europe and North America during the 20th century. After a long decline that started around World War I in France, earlier in Great Britain, or around the Great Depression in the USA, and lasted until the late 1970s or early 1980s, income inequality shot up almost everywhere in the rich world.

Several seminal studies tend to support this position. Shangquan (2002:5) found that the “difference of income per capita between the richest country and poorest country has enlarged from 30 times in 1960 to the current 70 times”. Shangquan (2002) reports that in 1960, the value of foreign trade of the poorest 46 countries accounted for 1.4% of the world total. Towards the latter half of 1990, this proportion had already reduced to 0.6% and further down to an almost negligible 0.4% in 1995. The average trade deficit of developing countries in 1990’s increased by 3% as compared with that in 1970s. And over 80% of the capital are flowing among US, Western European and East Asian countries. Except for donations and bilateral financial aids, most developing countries could not attract any capital. Much of this has been replicated in the incidence of purchasing power parity (PPP) where the high income countries trade on unequal basis with the low income countries. The gross volume of actual flows of trade adds...
countries. The gross volume of actual flows of trade adds economic value to the stronger economies. Figure 3 above provides graphic analysis of the world trade as a percentage of GDP between 1960 to 2015. The graph shows that world trade experienced rapid increase from 1960 till 2010 when it experienced a decline. This is understandable following the global economic recession of 2008. However at post 2010, world trade experienced a rise which projected towards 2015.

Foreign Direct Investment (FDI) has been at variance with economic equality. Rugman (2000) supports this view as he argues that relatively small set of multinational enterprises (MNEs) accounts for most of the world’s trade and investment. Indeed, the largest 500 MNEs account for over 90% of the world’s stock of foreign direct investment (FDI) and they, themselves, conduct about half the world’s trade.

Figure 4 above shows that FDI net flows are inconsistent, it rises and declines over the years. Between 1970 till...
approximately 1985, there was a decline in net inflows. It rose appreciably between 1990 to 2000 (which was the peak of economic globalization). And declined between 2001 to 2003. It rose to its peak between 2005, 2006 & 2007 when it appreciated to the net inflow of 3,000,000,000,000. It declined sharply to 1,500,000,000,000 in 2010, rose slightly between 2012, 2013 & 2014 & and rose minimally in 2015.

Our econometric data which builds on Dreher et al. (2010) show that in general, advanced societies such as the OECD countries rank well above the world average for the Globalization Index, while high income non-OECD countries are a little above, and low income countries, well below the world average. Dreher et al. (2010) found that economic globalization has been consistently well above the overall Index of Globalization, rising gradually, except for a stalling after the year 2000, at the bursting of the dot.com bubble and the 9/11 terrorist attacks. This is of course reassuring for those who believe that globalization is a powerful driver of economic prosperity. However, global economic recession of the 2008 saw the rise of China, despite this, parts of countries of East and South Asia and Africa are below the world average. East Europe and Central Asia are a bit above the world average, Latin America, the Middle East and North Africa are hovering around the world average, while Sub-Saharan Africa is also way below (Dreher et al., 2010). What this suggests is inequality and variations in global economic growth.

For the overall Index of Globalization, Dreher et al. (2010) report that smaller European countries top the list – Belgium 1st, Austria 2nd, Netherlands 3rd, Switzerland 4th, Sweden 5th, Denmark 6th, Canada 7th, Portugal 8th, Finland 9th, Hungary 10th, Ireland 11th and Czech Republic 12th. Overall, the larger countries are further down the list: France 13th, Germany 18th, United Kingdom 24th, United States 27th, Russia 42nd, Japan 45th, China 63rd, Brazil 75th, and India 111th.

Furthermore, portfolio investment points to the opposite direction. This is discernible following the rise of capitalist multinational corporations, the low income countries are merely seen as the source of raw materials for the parent company situated in the advanced countries. Wade (2002), demonstrates that the less developed countries are disadvantaged by lack of income, skills, infrastructure, and in terms of standards and rules that are part of the international system. Because of this, Western suppliers have a disproportionate advantage.

Our results point out that the relationship ship between globalization and inequality is non-linear. This is understandable as the various effects of economic globalization on inequality appear rather implicit. There is restriction to the flows. Dreher et al. (2010) report that when it comes to economic globalization, Singapore jumps to the top of the list, followed by a slightly different list of small European countries – Ireland 2nd, Luxembourg 3rd, Netherlands 4th, Malta 5th, Belgium 6th, Estonia 7th, Hungary 8th, Sweden 9th, Austria 10th, Bahrain 11th and Denmark 12th. The larger countries are further down the economic globalization list: UK 32nd, France 34th, Germany 41st, US 57th, Brazil 91st, Russia 92nd, China 97th, Japan 102nd, and India 122nd. Shangquan (2002) reports that economic globalization has expanded rather than reduced the gap between the North and South. According to report published by UN in 1999, the number of developing countries that have benefited from economic globalization is smaller than 20. This few number suggests that majority of the poor societies are missing out on globalization.

**Recommendations**

There are a number of complex challenges associated with inequality. It exacerbates the effect of capital and other market failures on economic growth. Alternative thinking for the advancement of knowledge on economic globalization is important for all stakeholders including the developing and developed societies. This draws attention to policy and research discourse.

The challenge of inequality in a globalizing world has been well documented. This has led to the more reoccurring question of fostering equality in a capitalist order. The processes of capitalist practices and social relations which emerge have created increasing need to re-examine economic globalization. Although both theoretical and empirical issues raised on inequality have been fluid and complex as divergent views are held on how economic globalization accounts for inequality. Despite this notion, this study offers insights on research gaps and policy paucity on strategies and approaches to bridge these perceived development gaps.

Global equality and justice which the study propagates are central in redressing the foundational questions of asymmetry, particularly interrogating the relationship of capitalism to the wider human society and puts equality in the development agenda.

In particular, economic globalization has resulted in the division of the world into the affluent North and poor South. This points out the basis for conscious change of the rules of the game in the international capitalist system. Thus, there is need for reform of the international financial institutions, improved and periodic statistical analysis and similar updates on inequality, for both methodological, theoretical and policy-related reasons.

Regarding the later, developing countries could adopt strategies that could strengthen their macro-economic policies as they have low economic growth rate. The challenge of pressing need for inclusive economic growth has resulted in the difficulties of economic diversification by the low income societies giving rise to economic dependency as they rely on the advanced societies. A growth led economic model is suggested.

Protectionist policies by the advanced societies have been discriminatory and restrictive in advancing economic development of the poor societies. Arguably evidence remains limited and less lucid on the development constraints posed by economic globalization. The study
suggested that there is need to debunk the misconception that globalization is akin to economic development. Alternatively it suggests a critical rethinking of globalization where economic globalization could be equitable, pro poor, transparent and pro-development.

Many developing countries are disadvantaged in international trade. Beyond this, it is apt to adopt development strategies to contain with inequality arising from economic globalization both in the affluent and poor societies.

Given that globalization has come to stay, there is need for a return to equality in every sphere of human endeavor, where inclusive development could thrive. Novel engagement with globalization is important, one that is bottom-up suggesting a reversal of trend in which the low income societies could be made to be on the lead in the process. This institutional reversal of trend which aims to check and reduce the involvement and domination of the advanced societies could reinvent the wheel of economic globalization to a substantive category made up of ethical practices and processes of equitability. Rather than a separate and discriminatory sphere, equal and inclusive globalization could be a departure from the capitalist category of exploitation with imperialistic orientation that blurs accountability, transparency and equality in its drive for capitalist accumulation.

Beyond the focus on economic globalization, the entire line of debate and concerns raised here can apply to other components of globalization. This is open to further research as the field of economic globalization evokes divergent development concerns particular between the rich and poor societies.

Conclusion

The point the study has been making is that economic globalization has given rise to various dimensions of inequality including distortions in actual flows. This encompasses trade, foreign direct investment, portfolio investment, and income payments to foreign nationals etc. The growing studies on the intersections of globalization and inequality caution against assumptions that economic globalization will translate into collective and improved standard of living, socio-economic wellbeing or related economic outcomes. On the contrary such analysis as the study suggests provide varying empirical and theoretical evidence which indicate persistence of inequality.

Recent development decades have seen the rise of such global inequality between the affluent and poor societies. This increasingly points out that economic globalization—and indeed, globalization—is conceived as sets of economic activities, ideas and ploy of imperialism. This includes the preservation of vested economic interests of the advanced societies against the poor societies. At issue remains a common ground for inclusive development.

Conflict of Interests

The authors declare that there is no conflict of interests regarding the publication of the paper.

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