

Economic Growth and Income Convergence in Ethiopia: A Critique

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Abstract

In its review of Ethiopia's economy, the International Monetary Fund (IMF) has indicated that Ethiopia has been attaining economic growth for the past seven years. In addition, the IMF highlights that the lifestyle of the Ethiopian people has been getting better for the last two decades. In his recent statement, the Prime Minister of Ethiopia has stated that Ethiopia has not only registered rapid economic growth but the income from economic growth has been redistributed equitably. Over the last twenty years, Ethiopia has gone through various structural changes. However, unless the Ethiopian population is experiencing extreme poverty that is undetected, or the economy is completely controlled and managed by the state inducing minimal differences in wages and salaries, or instituting poverty-reducing public programs, though inconclusive, the economic literature does not seem to support Ethiopia's Gini coefficient of 0.29 which is far below the Gini coefficient of newly industrialized countries. Therefore, the policy implication of this study is that the study that gave the entire world an impression that Ethiopia's Gini coefficient is 0.29 needs to be replicated by other sound methodologies in order to confirm or invalidate the study.

Introduction

In its review of Ethiopia's economy, the International Monetary Fund (IMF) has indicated that Ethiopia has been attaining economic growth for the past seven years. In addition, the IMF highlights that the lifestyle of the Ethiopian people has been getting better for the last two decades. In the same vein, the *Economist* indicated that Ethiopia has become the fifth fastest growing economy in the world (for a review see, Destaa, 2010). The International Food Policy Research Institute (IFPRI) also states that Ethiopia has shown significant improvements on the Global Hunger Index. The Global Hunger Index is based on the proportion of people in a country who are malnourished, the proportion of children under five who are underweight, and the child mortality rate (see Aiga Forum, 2010). Going one step further, in his presentation at Columbia University on September 22, 2010, Ethiopia's Prime Minister Meles Zenawi brought to the attention of the audience that the Gini coefficient of inequality of Ethiopia is about 0.29. In simple words, according to Prime Minister Meles Zenawi's statement, in recent years Ethiopia has not only registered rapid economic growth but the income from economic growth has been redistributed equitably. Briefly stated, the Gini coefficient of inequality was crudely formulated by an Italian statistician, Corrado Gini, in 1912. It was refined in the 1970's to provide a useful figure that reveals the degree of income inequality in any given country.

Family percentages are recorded on the horizontal axis and the percentage of income is recorded on the vertical axis. The theoretical possibility of a completely equal distribution of income is represented by the diagonal line known as the 45-degree line or reference line. The farther the Lorenz bends away from the 45-degree line, the greater the inequality of income distribution. As a gauge for measuring income distribution, the Gini coefficient lies between 0, which indicates that everyone has exactly the same income, and 1 corresponds to absolute inequality. Thus the Gini-coefficients are always greater than 0 and less than 1. At times the Gini coefficient is expressed in percentage terms, and is equal to the Gini coefficient multiplied by 100 (Dixon, 1987, and see Word iQ, 2010). The Gini-coefficient satisfies *anonymity* (does not matter who the high and low earners are); *scale interdependence* (does not consider the size of the economy); *population interdependence* (does not matter how large the population of the country under consideration is); *transfer principle* (if we take 1 percent of the total income from the richest group and give it to the lowest group, it would raise the income of the poor, but the decrease in the Gini coefficient could be insignificant). The Gini coefficient can be used to indicate how the distribution of income has changed within a country over a period of time. Comparing income distributions among different countries may be difficult because some countries give benefits in the form of money, food stamps etc, which may not be counted in the Gini coefficient. Also, the Gini coefficient may be unreliable because the data collected for a country could be affected by systematic and random errors.

Even if the data collected does not suffer from questionable validity and a lack of reliability, it has to be understood that the Gini coefficient is much more sensitive to changes in income of the middle classes but is less sensitive to changes in incomes of the lower and upper classes (WORDiQ, 2010). Poor countries with low per-capita GDP have coefficients that span the whole range from low (0.25) to high (0.71), while rich countries have generally intermediate Gini coefficients (under 0.40). The lowest Gini-coefficients can be found in Scandinavian countries and in the recently ex-socialist countries of Eastern Europe and in Japan. The Gini-coefficient of Sub-Saharan countries is generally 0.50, indicating that the Sub-Saharan countries have greater inequality in income distribution. In reality, neither perfect equality, nor perfect inequality is possible. Excessive equality in income distribution can be bad for economic efficiency. For example, in the former socialist countries of Eastern Europe and North Korea, deliberately instituted low inequality with minimal differences in wages and salaries, deprived people of the incentives needed for dynamic activities and vigorous entrepreneurship. Excessive inequality can affect people's quality of life and may result in political instability (World Bank Group, 2010). In the early part of the 1990s, in Taiwan, Yugoslavia, Korea, Israel, and Singapore, economic growth has been rapid and fairly equitably distributed (Ahluwalia et al. 1977).

However, the policies underlying this successful performance vary between the countries, from reliance on market forces in Taiwan, Korea, and Singapore to substantial income transfers and other forms of government intervention programs or poverty-reducing public expenditures in Yugoslavia and Israel (Meier, G, 1989). As stated by Prime Minister Zenawi, while the Gini-coefficient of Ethiopia is 0.29, the Gini coefficient of South Africa, Singapore, China, Mauritius, South Korea is 0.65, 0.63, 0.48, 0.42, and 0.39 respectively (CIA-The World Factbook; see also, Wikipedia and Love.iciba.com, 2010). As pointed out by the World Bank however, the Gini coefficient is not strictly comparable between countries because the underlying household surveys differ in terms of methods and type of data collected. Also, while an increase in the Gini coefficient implies the rising of income disparity, it does not necessarily indicate worsening of poverty, because the absolute income of the rich and the poor may increase simultaneously (United Nations, 2010). Ethiopia's Gini coefficient of 0.29 as reported by Prime Minister Meles Zenawi at Columbia University, New York, appears to negate the accepted underlying theories that have been established in economic literature. For instance, it was pointed out by Chenery et al, in its early stages economic growth in developing countries generally increases rather than reduces poverty, nor does it bring about income equality (1974).

Similarly, it has been argued by Frank and Webb that the middle-income and upper-income groups rise more rapidly than those of the poor in early stages of growth. They assert that development involves a shift of population from the slow-growing agricultural sector to the higher-income growing modern sector. This process inequality is first accentuated by more rapid population growth in rural areas and ultimately reduced by rising wages produced by more rapid absorption of labor in the modern sector (1977). Todaro states, "disregarding the merits of the methodological debate, few development economists would argue that the Kuznets' sequence of increasing then declining inequality is inevitable" (1994, p.155). Given Barro's (2000) argument that higher inequality tends to obstruct economic growth in poor countries but encourages growth in developed countries, the purpose of this paper is to review briefly the literature and investigate the possibility for a developing country, such as Ethiopia, to register economic growth while achieving income equity at the same time. The research problem of this study focuses on determining if it is universally possible for a developing country to achieve income redistribution with an economic growth-oriented pattern. The key policy question then is: to what extent does economic growth in developing countries contribute to a reduction of income inequality?

Review of the literature

The argument about the relationship between economic growth and per capita Gross National product (GNP) was heavily influenced by the Kuznets inverse -U hypothesis. In his Presidential Address to the American Economic Association, Kuznets argued that changes in inequality are associated with structural change in the economy (Atkinson & Brandolini, 2009). That is, in the early stages of economic growth, the distribution of income tends to worsen and only during later stages of economic growth does equality begin to improve. Kuznets' inverse-U hypothesis was based on five observations from the US, five for the United Kingdom, and two each for Prussia, Saxony, and United Germany. The data was, he admitted, unreliable being mostly from urban areas in developed countries. The implication of Kuznets' hypothesis is that income inequality in Western nations seemed to support Kuznets' inverse-U hypothesis. In simple terms, inequality initially increases, but eventually declines, as per capita income increases (Atkinson and Brandolini, 2009). Also, there was an income gap between the urban and rural areas in developed countries.

That is inequality in the expanding urban areas was much greater than inequality in the rural sector. As stated by Todaro, output growth in any country is accompanied in the early stages of development by a widening wage differential between skilled and unskilled labor, whereas in a later stage this wage differential declines due to the income convergence theory (1994). The long-run data for Western nations do seem to support the Kuznets inverse-U hypothesis, but studies of the phenomenon in Less Developed Countries (LDCs) produced conflicting results because of methodological problems. Because of the "...absence of time-series information for most LDC, researchers have to test a *longitudinal* phenomenon with *cross-sectional* data. ...Drawing conclusions from cross-sectional data for a time-series phenomenon is fraught with hazards" (Tadaro, 1994, p. 155). Using longitudinal data from 1960 to 1988, Park and Bratt examined the relationship between global inequality and global economic development. The outcome of these studies supported Kuznets' inverted U-hypothesis. Similarly, studies by such authors as Randolph and Lott (1993), Ram (1995), Jha (1996), and Fielding and Torres (2005), examined the relationship for a group of developed and developing countries worldwide and the results conformed to Kuznets' hypothesis.

Chang and Ram (2000) found that high economic growth is associated with low income inequality at all levels of income. Examined in the globalization era, Bhatta's (2002) study examined the relationship of 120 countries by using a time series approach. The result of his empirical study showed that there was a downward trend of global income inequality for the period of 1960 to 1989. On the other hand, Deininger and Squire (1998) have found that unlike the Kuznets hypothesis, they found that there is no significant relationship between growth and changes in income inequality. Factor price equalization (FPE) is an economic theory that originated out of the Heckscher-Ohlin (H-O) model. Simply stated "when the prices of the output goods are equalized between countries as they move to free trade, then the prices of the factors (capital and labor) will also be equalized between countries" (Suranovic, 2006). Therefore, using the factor price equalization theorem, Solow (1956) developed the income convergence model or the inequality-decreasing effects across economies in a perfectly competitive market.

That is, once free trade is allowed to set the prices of factors, capital and labor are likely to be relatively equal between countries that follow free competition. However, Jeong's study of Thailand supports Kuznets' hypothesis that income gaps had divergence then convergence trending over the 1976 to 1996 period (2008). There is a wage differential between unskilled and skilled workers. Wage inequality between workers with higher education and those with primary and secondary education for 18 Latin American countries for the period of 1980 to 1998 shows that there is wide wage inequality in terms of returns to human capital. On the other hand, the privatization of state enterprises and peasant's access to factor endowments such as land and capital narrows wage differentials (see for example, Behrman, 2000, Lu, 2008). The lesson that can be learned from the literature survey is that empirical studies confirm Kuznets' inverted U-curve hypothesis. That is, in the short run with the increase of per capita income, income inequality will diverge. A number of intra-national studies also show that trade is associated with increased income inequality in the industrial sector (see for example Beyer et al. 1999). Contrary to Kuznets' hypothesis, while the results of income convergence is nebulous, on the surface a substantial reform of land ownership, the privatization of state enterprises, and improvement of human capital seem to result in a decrease in income equality.

If the Gini coefficient of countries where there is substantial economic reform such South Africa (0.65), Singapore (0.63), China (0.48), Mauritius (0.42), and South Korea (0.39) respectively, to say with certainty that Ethiopia's Gini coefficient is 0.29 seems to be based on some type of methodological error, even though Ethiopia has shown an increase in economic growth for the last seven years. Over the last twenty years, Ethiopia has gone through various structural changes which included reforms in land redistribution, investment in quantitative educational programs, limited privatization schemes, some types of outward-oriented economic reform, reforms in the composition and compensation of the labor market, etc. The reforms in many sectors have changed the allocation of resources and payment structure which affected income distribution in Ethiopia. For example, as indicated above, over the last decade, absolute poverty in Ethiopia has been reduced. Unless the Ethiopian population is experiencing extreme poverty that is undetected, or the economy is completely controlled and managed by the state inducing minimal differences in wages and salaries, or instituting poverty-reducing public programs, though inconclusive, the economic literature does not seem to support Ethiopia's Gini coefficient of 0.29 which is far below the Gini coefficient of newly industrialized countries. Therefore, the policy implication of this study is that the study that gave the entire world an impression that Ethiopia's Gini coefficient is 0.29 needs to be replicated by other economists in order to confirm or invalidate the study and determine if it was based on sound methodology and reliable data.

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