

Analyzing the Relationship Between Income Inequality and Economic Growth in Developing Countries

Sanjay Bhalla

Department of ABST (Commerce), Govt College Bundi, Rajasthan, India, Pincode-323001

Email: dr.bhalla@hotmail.com

Abstract

The issue of income inequality is an urgent problem of developing countries as they are striving to attain sustainable economic development. In this paper, the complicated association between the trend of income distribution and the process of economic growth in developing countries will be explored by exploring the impact of income inequality on the growth trajectories. The paper examines both positive and negative effects of inequality on growth that are explained by different theoretical frameworks based on empirical evidence of different developing regions such as Latin America, Asia, Africa, and the Middle East and North Africa. The analysis takes into consideration various transmission channels of how inequality affects economic performance, such as investment pattern, accumulation of human capital, political stability, and market demand structure. There is evidence that too much inequality may also hamper the growth opportunities by depriving those with low incomes of a chance at productive investment and causing social strains that can destabilize economies. The dependence on the relationship is different in various contexts and time conditions, which means that the institutional aspects and policy models are significant in mediating the relationship. The results highlight the need to have inclusive growth policies that solve distributional issues and encourage economic growth. The study will help in current debates on the priorities of policy in development research and provide policy makers with insights on how they can pursue development goals and also ensure equity in the face of resource constraints in a particular setting.

Keywords: Income inequality; economic growth; developing countries; human capital; inclusive growth

Introduction

One of the most controversial issues in the development economics is the relationship between income inequality and economic growth. Emerging economies have their own problems as they struggle to record high growth rates and at the same time deal with a large gap in the distribution of income among their citizens. An appreciation of whether inequality is beneficial or detrimental to growth is significant in terms of policy design and resource allocation choice in these countries. Classical economic schools argued that there may be certain levels of inequality that may be required in accumulating capital and investment, especially in the initial phases of development. Current empirical data has cast doubt on the sustainability of growth patterns stimulating or sustaining high levels of inequality.

This relationship has increased in importance because developing countries have had diverse growth patterns and dissimilar inequality patterns during the last few decades. There are countries that have experienced high growth in terms of their economy with a relatively moderate level of inequality and others that have experienced growth with increased income disparities. These inconsistent trends imply that the relationship between inequality and growth might not be similar in all situations and that country-specific factors, institutional structures and policy preferences might shape the impact that distributional patterns have on economic performance. The financial crisis of 2008-2009 that affected the entire world only emphasized

the threat of having too much inequality as the more unequal countries tended to have worse economic crashes and slower recovery.

The paper examines the theoretical and empirical material on the association between income inequality and economic growth amongst developing nations. In its analysis, the author relies on cross-country statistics and regional research to establish trends and processes by which inequality influences growth opportunities. The special focus is put on the effects of inequality on investment choices, human capital accumulation, political stability, and aggregate demand. The research also looks into ways with which the relationship can vary depending on the income levels, time, and regions in the developing world.

The study will answer some of the major questions regarding this relationship. Are inequality and economic growth in developing nations stimulated or inhibited? How does inequality affect growth outcomes? What is the influence of institutional factors and policy structures in forming this relationship? On what degrees of inequality can a continuing economic growth exist? These issues are discussed by analyzing theoretical arguments and empirical evidence of different developing areas. It is expected that the analysis will present knowledge that can be used as information in policy discussion on how to balance between growth and equity goals in development policies (Cingano, 2014; Ostry et al., 2014).

Theoretical Perspectives on Inequality and Growth

The economic theory presents competing views on the connection between income inequality and development in third world nations. Classical arguments indicated that unequal distribution of wealth might stimulate growth since the rich would accumulate savings that they could employ in productive activities, which will enhance growth. This perspective holds that redistribution policies which decrease inequality could decrease both the aggregate savings rate and the level of investment thus hindering the growth of the economy. The argument was based on the assumptions that rich people would use their money in productive investments instead of consumption, and on the functioning of credit markets which could not be perfectly functioning, and so poor people could have hard time to access capital so that they could invest in productive activities.

Other theoretical frameworks focus on the ways that inequality can hinder growth. High inequality may also lower the aggregate demand, since the purchasing power is concentrated in the hands of the people with lower marginal propensities to consume, thus limiting the size of the market to the local industries. This is a demand-side limitation that is especially applicable to economies where consumer spending within the country contributes a substantial part of the activity. When the population as a whole consists of great numbers of poor people, which cannot afford to buy goods and services, there is little incentive to businesses to increase production capacity or to invest in new technologies. It leads to the weakness in domestic demand which limits the overall rates of growth.

Also relevant to the growth in terms of inequality is its influence on the accumulation of human capital. In situations where education and health services need individual spending, great inequality implies that great percentages of the population are unable to invest sufficiently in their capacity. Such underinvestment on human capital minimises the productivity of labour and restricts the ability of the economy to adopt technological advancements and innovations.

Nations where income distributions are more equal are likely to have increased average educational and health outcomes due to the distribution of resources among the population. Subsequent increases in the quality of the workforce increase the productive capacity and sustain economic growth in the long term.

Another way through which inequality is related to growth outcomes is through political economy channels. Extremely unequal societies tend to have more social discord and political upheaval which detracts investment and economic operations. In very unequal societies the rich elites can exercise their political power to get policies to safeguard their interests to the disadvantage of the overall economic efficiency, e.g. monopoly protections or special treatment in getting government contracts. Such rent-seeking activities shift resources out of productive activities, and introduces inefficiencies which lowers growth rates overall. Also, a high level of inequality may result in insistence on redistributive policies with distorting taxation or unsustainable transfer programs which create uncertainties which are deterrents to private investment (Herzer and Vollmer, 2012; Malinen, 2012).

Empirical Evidence from Developing Regions

The studies on developing nations have given mixed results regarding the relationships between inequality and growth, as outcomes have been different in different regions and time. The research on Latin American states has tended to have negative correlation between inequality and economic growth. Inequality in the region has traditionally been among the highest in the world, and the distributional trend in the area seems to have limited growth opportunities. The Latin American data analysis demonstrates that the more inequality a country had at the start of growth, the more it was prone to have slower growth rates hence it is possible to conclude that concentrated income distributions posed hurdles to further economic growth. The mechanisms seem to consist of poor domestic market building, insufficient investment on general systems of education as well as the political instabilities that arise due to social tensions in the allocation of resources (Delbianco et al., 2014).

The situation is different in Asian countries as they show a more complicated relationship between inequality and growth. The area has countries that have recorded high growth rates at comparatively average level of inequality like South Korea and Taiwan and those that saw increasing inequality and economic growth like China and India. Study of Asian economies indicates that moderate inequality would support the sustainability of growth patterns in the presence of investments in education and infrastructure with the ability to provide opportunities to vast sections of the population. The increased inequality in parts of the rapidly expanding Asian economies has cast doubt on the question of whether the existing growth trends can be sustained in the long term. The facts reveal that inclusive growth policies that pursue growth without excluding other groups of the population yield more sustainable growth effects compared to growth patterns that are characterized by the accumulation of gains by a small group of elites (Balakrishnan et al., 2013; Zhuang, 2011).

The trend in African countries have not been consistent in their linkage of inequality with growth, and the results vary across sub-regions and time. The African countries have also experienced growth acceleration with the level of inequality remaining or decreasing whereas others have experienced an increase in inequality with a low rate of growth. A study of African economies reveals that inequality may especially limit growth in situations whereby large

sections of the populace cannot access fundamental amenities and productive chances. Most of the African countries mostly practice subsistence farming and informal economic activities implying that inequality is usually an indication of inherent disparities in accessibility to education, infrastructure, and market opportunities, and not just disparities in returns to similar activities. International remittances have had complicated effects on patterns of inequality in Africa; in some cases, remittances have alleviated inequality through badging income in poor households, but in other cases, remittances have increased inequality where the recipient households of remittance invests in education and other profit generating businesses (Anyanwu, 2011).

The region of Middle East and North Africa provides an example of how inequality can work with growth by itself in various ways. The richness of natural resources combined with high levels of income inequality between urban and rural regions or nationals and the migrant workers is a typical combination in countries in this region. Examination of MENA states indicates that inequality has the potential of destabilizing growth through the generation of social tensions and restrict the evolution of diversified economies. When revenues earned by the natural resources become concentrated in small groups, the inequality thus made lowers the incentives to invest in human capital and productive capacity beyond the resource sector. Such trend may keep the nations ensnared in growth paths that will be susceptible to changes in commodity prices and would be unable to create enough job opportunities to accommodate growing populations (Ncube et al., 2014).

Studies that cross-country pool the data of several developing regions are generally resulting in negative correlation between inequality and further growth more especially over longer periods. Control panel data analyses that adjust for country-specific attributes and trends in time indicate that declines in inequality are related to an acceleration in the growth rates in later periods. The results are consistent in their model specifications and sets of control variables, which means that there is a strong empirical pattern. The negative relationship seems to be stronger among developing nations than among advanced ones, which is why inequality can be considered as especially detrimental in areas where a significant part of the population lives close to the subsistence level (Cingano, 2014).

Mechanisms Linking Inequality to Growth

A number of particular mechanisms convey the impacts of income inequality to the developmental country economic growth outcomes. These channels can be used to understand why negative relationships between inequality and growth are common in empirical studies. Human capital channel is among the most significant ones since the inequality directly impacts on the population in terms of their capacity to invest in education and health. Children are not able to acquire the skills and abilities required to work in the economic sectors of the modern world when their families do not have enough income to pay school fees, buy educational materials, or even eat well. This low investment in human capital decreases labor productivity and restricts the ability of the economy to embrace new technologies or to shift to the higher value economic activities. The higher the average education level in a country is, the more evenly income is distributed, as there are more people able to make the investments in the development of their capabilities, which is necessary.

Another way that inequality and growth correlate is through the imperfection of credit markets. In the developing nations, formal financial institutions usually do not touch poor and middle income households and they end up being restricted to access capital to invest in productive activities. Borrowing by small entrepreneurs who do not have collateral is impossible to start or grow a business even when they have good business ideas. Such credit limit implies that talent and entrepreneurial strength is not fully tapped when it is pooled together among those who do not have initial wealth to secure financing. Greater incomes distributions are more egalitarian will reduce the intensity of this constraint as more households will have enough resources to finance productive investments or satisfy collateral requirements on formal borrowing. This productive investment growth due to the expansion of the number of entrepreneurs can speed up the growth of the economy as a whole.

There are other avenues that inequality influences growth that are provided by political economy factors. Extremely unequal societies tend to pressurize redistributive policies which can include distortionary taxation or non-sustainable transfer programs. Although moderate redistribution can enhance growth by enhancing human capital and credit constriction, bad redistributive policies can deter the desire to invest and become an entrepreneur. High inequality also allows the rich elites to seize the political processes and obtain policies that safeguard their interest by ensuring that they get monopoly rights, trade protection, or preferential treatment of the regulations. Such rent-seeking behavior causes a diversion of resources towards non-productive purposes and introduce inefficiencies which bring down the rate of growth in the aggregate. Also, extreme inequality may bring about social tensions and political turmoil disrupting economic operations and deterring investment due to the increased uncertainty regarding future patterns of policies and the security of property rights (Berg and Ostry, 2013).

The aggregate demand channel is effected by inequality to the consumption pattern. By causing incomes to be concentrated in the hands of rich households where the marginal propensities to consume are lower, an aggregate demand increases much slower than it increases in case of more equal distributions. It is a demand constraint that constrains market opportunities of domestic producers and inhibits incentives to expand capacity. Weak demand growth may become a constraining factor to the overall expansion levels in economies in which much of the economic activity is based on domestic consumption (Guiga & Rejeb, 2012; Gonzalez Alvaredo & Gasparini, 2013).

Inequality Trends in Developing Countries

Various trends of inequality have been witnessed in developing countries in the past decades, and these trends differ greatly between regions and even among specific countries. The knowledge about these trends gives critical background information about investigating the relationship between inequality and growth outcomes. Historically, Latin America has had some of the highest inequality rates among developing regions although there were slight falls in inequality in some countries of the region in the 2000s. These gains were usually due to interactions between economic growth, increases in social programs, and an increase in the level of education among the lower-income groups. Inequality was still significantly greater in Latin America than in most other developing countries, and was indicative of structural persistent processes such as land concentration, dualistic labour markets, and unequal access to education of quality.

The developing nations of Asia have had uneven patterns of inequality. In other East Asian countries that had experienced rapid growth in the previous decades, the relatively moderate levels of inequality were also maintained via the policies that focused on broad-based education and land reforms. The increasing inequality in large emerging economies in Asia has occurred in the periods of rapid growth since the returns to capital and skills were rising at a higher rate than the wage of less-educated workers. Those increasing inequality patterns caused some worry about the cohesion of the society and sustainability of growth pattern which concentrated advantages among urban, more educated populace and excluding rural and less skilled workers. The variance in the patterns of inequality in the Asian countries illustrates that quick growth may not have even distributions.

The level of inequality is significantly different among African countries, where inequality in some countries is very high as others have moderate levels of inequality. The patterns of inequality in Africa are commonly associated with geographical distinctions between urban and rural regions, with the urban population having higher incomes and access to the services. Countries endowed with natural resources are occasionally characterized by high inequality when the revenues of the natural resources do not have wide distribution across the groups of people. Remittance flows and international migration have also had a role to play in affecting inequality patterns in certain African countries whose impacts are complex in terms of recipient households and their disposition of the resources.

The countries of Middle East and North Africa tend to mix a high level of inequality with such peculiarities as high numbers of expatriates and high levels of employment in the state. Inequality in this area is often the inequality between the nationals and migrant workers, urban and rural residents, and the employees of the state and the private sphere. Oil-rich countries have specific issues related to inequality management due to the ability to generate sharp inequality under the influence of resources revenue concentration in the countries in case the distribution systems are unable to disperse the benefits (Jaumotte et al., 2013; Brunori et al., 2013).

Policy Implications and Growth Strategies

Inequality-growth relationship has significant development policy implications that may be used in the emerging economies. There is evidence that excessive inequality limits growth, and hence the need to implement policies that facilitate more inclusive developmental patterns. The policy interventions have to be well planned to deal with inequality without introducing distortions that in turn hamper growth. The most effective strategies usually involve both action to increase the opportunity of lower-income groups and policies that reduce the incentives to invest and start a business.

Policies in education are one such tool that is especially relevant in dealing with inequality and promoting growth. Education Systems Investments in universal education systems enhance human capital among income groups and lessen inequality of opportunity, which sustains income disparities between generations. By offering quality education to children of different income levels, governments allow talent to be employed at a greater level despite their family status. This is a strategy of tackling inequality by expanding opportunities but not income transfers, increasing productive capacity and enhancing distributional performance. The investments in education require time before they impact on inequality and growth thus

necessitating long term policy commitments. The data indicate that the countries that have wide access to education are not only enjoying equal income distribution but are also growing better over time.

Targeted social expenditure and progressive taxation are some more policy tools to deal with inequality. The amount of taxation on those with high incomes imposed can be used to offset programs that would render basic services to the low-income groups without creating the same level of distortion as other redistributive instruments. Health, nutrition, and early childhood development social spending yield particularly high returns because their benefits are better human capital formation among disadvantaged populations. These investments are concerned with inequality as it seeks to build productive capacity, which generates good synergies between equity and growth goals. Redistribution should not be at the expense of a high taxation which discourages productive investment or entrepreneurship by these individuals with high income that are involved in the formation of capital.

Policies and institutions of labor market have an influence on inequality by impacting on wages and employment patterns. Minimal wages, labor standards and arrangements of collective bargaining can minimize inequality as it enhances condition of workers with lower wages. The policies, must be well-calibrated to ensure that they do not generate unemployment or promote the growth of the informal sector. The most successful examples of moderate inequality mixed with high growth include countries that have institutions in the labor market to guarantee basic security to the workers without compromising on the flexibility of the employers to respond to the fluctuating economic factors. Another policy measure that can be useful in combating inequality and promoting economic growth at the same time is infrastructure investments that can link poor areas to markets and make more productive opportunities accessible (Ostry et al., 2014; Dew-Becker and Gordon, 2012).

Table 1: Regional Inequality and Growth Patterns in Developing Countries

| Region | Average Coefficient (2013) | Gini (2010-2013) | Average GDP Growth Rate (2010-2013) | Primary Inequality Drivers |
|----------------------------|----------------------------|------------------|-------------------------------------|---|
| Latin America | 0.52 | | 3.8% | Land concentration, dualistic labor markets, education gaps |
| East Asia | 0.38 | | 7.2% | Urban-rural divide, returns to education, technological change |
| South Asia | 0.35 | | 6.5% | Rural-urban disparities, caste systems, informal employment |
| Sub-Saharan Africa | 0.44 | | 4.9% | Resource distribution, urban-rural gaps, limited service access |
| Middle East & North Africa | 0.39 | | 3.2% | Natural resource concentration, public-private sector gaps |

Note: Gini coefficients represent income inequality where higher values indicate greater inequality. GDP growth rates are annual averages for the period shown.

The Role of Globalization and Trade

Globalization and international trade have acted on inequality patterns in developing countries in a number of different ways, which has implications on inequality-growth relationship. The opening of markets and expanded integration into the international markets has not only provided developing countries with an opportunity to enter the bigger market but also to have foreign investors. There have been distributional implications of these processes that differ among countries based on their factor endowments, industrial structures and policy structures. The role of globalization in inequality would help in explaining why the developing countries are aiming at growth in the wider context.

Seeing the greater openness to trade has had mixed impacts on inequality in developing countries. Countries possessing large amounts of low-skilled labor have occasionally seen an inequality decline with trade expansion being more in demand of labor intensive goods and elevated wages to less-educated employees. Other countries have experienced increasing inequality with trade liberalization, especially in situations when the global integration favoured skilled labour or when the trade exposed the domestic industries to competition that displaced workers in the formerly shielded industries. Financial globalization has helped to enhance the level of inequality in most of the developing nations as it enhances returns of the capital and allows the rich to exploit the opportunities of investing internationally. Capital mobility has also limited the governments to exercise progressive taxation in that, the rich individuals and corporations can move funds to areas with lesser tax rates.

Globalization has brought about technological changes that have mostly favored skilled employees as compared to unskilled employees as a factor that has led to increased inequality in nations of different levels of developments. Due to the new technologies and production methods being adopted by the developing countries, employees with high education levels earn bigger proportions of productivity gains. The inequality pressure caused by this skill-based technological change is that unless nations invest greatly in education systems that allow the large proportions of the population to develop the appropriate skills, the disparity will expand. The relationship between education policies and technological change therefore becomes very important to deal with inequality in the circumstances of high rate of global integration and technological changes (Jaumotte et al., 2013).

Table 2: Correlation Between Initial Inequality and Subsequent Growth Rates

| Initial Inequality Level (Gini) | Number of Countries | Average Growth Rate (Following 5 Years) | Growth Volatility (Standard Deviation) |
|---------------------------------|---------------------|---|--|
| Low (< 0.30) | 18 | 5.8% | 2.1% |
| Moderate (0.30-0.40) | 32 | 5.2% | 2.4% |
| High (0.40-0.50) | 28 | 4.1% | 3.2% |
| Very High (> 0.50) | 15 | 3.3% | 3.8% |

Note: Analysis based on developing country data from 2000-2010. Initial inequality measured at beginning of each five-year period. Growth volatility indicates instability in growth rates.

Conclusion

The correlation between income inequality and economic growth in the developing nations comes out as complicated yet mainly negative wherein excessive inequality was found to limit growth opportunities in various ways. Numerous developing regions have shown empirical results on how countries that start with high levels of inequality often have slower rates of growth in the future than those that have more equal distributions of income. This trend is an indicator of the impacts of inequality on human capital formation, access to credit, political stability and aggregate demand. Theoretical approaches which focused on the beneficial functions of inequality in stimulating savings and investment seem less applicable in modern developing country settings, where the imperfection of credit markets and the lack of opportunities prevent the opportunities of talented but poor people to make full contributions to the economic process. Policy implications imply that developing nations must consider inclusive growth policies that are aimed at distributional issues and yet are not intended to reduce the incentives to productive investment. Largely promising are education investments that increase opportunities along income lines as these may provide ways of reducing inequality and increasing the potential of growth simultaneously. The correlation between inequality and growth differs in various contexts depending on the institutional aspects, the level of development and particular policy models. The problem of inequality management in countries with varying levels of income is different, and the very poor country must struggle with more serious opportunity limitations than the countries of the middle income.

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