

INEQUALITY AND ECONOMIC GROWTH: AN OVERVIEW

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Abstract

In this paper the relationship between inequality and economic growth has been explored in theoretical form. Results of different studies by different economists have been reviewed. Classical and new-classical approach of inequality has also been given. The relationship between inequality and economic growth with reference to gender, credit market, trade openness and fiscal policy has been explored in this study.

Keywords: Inequality; Economic Growth; Trade Openness; Credit Market; Fiscal Policy

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Introduction

Economic growth is an issue that has been explored in many empirical studies over the last decade. These studies found a negative coefficient on inequality suggested that countries with a more equal income distribution (that is a lower Gini index) tend to have higher levels of income (Galor and Zeira, 1993; Banerjee and Newman, 1993; Aghion and Bolton, 1997; Person and Tabellini, 1994; King and Levine, 1993)

Traditionally there are two main arguments as to why income redistribution, to achieve a more equal distribution of income, will reduce the rate of economic growth. The first is that redistribution is typically accompanied by a progressive income tax structure, which has an adverse effect on incentives. This in turn is likely to reduce investment and lead to a reduced work effort. The second argument is that as those on high incomes tend to have a higher savings rate than those on low incomes, redistribution will reduce the rate of savings, and hence investment and growth (Knowles, 2001).

The Classical and the Neoclassical Approach

Classical approach advanced the hypothesis that inequality is beneficial for economic development in the post-industrialization period (Keynes, 1920, and Kaldor, 1957). It suggested that since the marginal propensity to save increases with wealth, inequality channels resources towards individuals whose marginal propensity to save is higher, increasing aggregate savings, capital accumulation, and economic growth.

The classical hypothesis, however, was implicitly dismissed by the representative agent paradigm that had dominated the field of macroeconomics. The influential neoclassical approach rejected the relevance of heterogeneity, and thus the distribution of income, for macroeconomic analysis, interpreting implicitly the observed relationship between inequality and economic growth as capturing the effect of the growth process on the distribution of income (Stiglitz, 1969).

The Origins of the Modern Perspective

The Neoclassical viewpoint has been challenged in the past two decades, as both theories and subsequent empirical evidence have demonstrated that income distribution has a significant impact on the growth process. The origin of the modern perspective can be traced to Galor and Zeira (1988, 1993). In contrast to the representative agent approach that dominated the field of macroeconomics for several decades, Galor and Zeira analyzed the role of heterogeneity in the determination of macroeconomic activity. They advanced the novel viewpoint that heterogeneity, and thus income distribution, plays an important role in the determination of aggregate economic activity and economic growth. Their research demonstrated that under plausible conditions (i.e., credit market imperfections and fixed costs in the acquisition of human capital), income distribution has a long lasting effect on investment in human capital, aggregate income, and economic development (Galor and Moar, 2004).

Moreover, in contrast to the Classical hypothesis, which underscored the virtues of inequality for economic growth, this research advanced the hypothesis that inequality, in the presence of credit market imperfections, may be detrimental for human capital formation and economic development. The modern perspective about the relationship between inequality and economic development has subsequently evolved, resulting in hundreds of research papers that have highlighted the adverse effect of inequality on the process of development (Laory, 1981). The initial research on the subject has been widely classified into two broad approaches for the examination of the relationship between inequality and growth: the credit market imperfection approach and the political economy approach (Foellmi and Zweimuller, 2006).

Inequality in Social, Political & Economic Transitions

Inequality and its association with socio-political instability have been identified as an additional adverse force in the process of development. In particular, the effect of inequality on social conflict and on political and educational reforms was examined by Alesina and Perotti (1996), Acemoglu and Robinson (2000), and Verdier (2000), as well as Gradstein (2007). These studies suggest that reforms and redistribution from the elite to the masses diminish the tendency for sociopolitical instability and may therefore stimulate investment and economic growth.

In particular, Acemoglu and Robinson (2000) argue that the extension of the franchise during the 19th century can be viewed as a commitment device to ensure future income redistribution from the elite to the masses. In contrast, Galor and Moav (2006) have argued that the transformation in class structure and inequality can be viewed as a byproduct of a productive cooperation between capitalists and workers, rather than an outcome of a divisive class struggle. In accordance with the unified approach for the study of inequality and economic development, this line of research suggests that capital accumulation in the process of industrialization gradually intensified the relative scarcity of skilled labor and generated an incentive for human capital accumulation.

Investment in human capital, however, has been sub-optimal due to credit market imperfections, and public investment in education has been therefore growth-enhancing, as per Galor and Zeira (1993). Due to the complementarity between physical and human capital in production, the capitalists were among the prime beneficiaries of the accumulation of human capital by the masses. They therefore had the incentive to support the provision of public education that improved their economic well-being and contributed significantly to the demise of the capitalists-workers class structure and to changes in the nature of inequality in society that were conducive to economic development.

Gender Inequality and Economic Development

As suggested by the unified approach, the replacement of physical capital accumulation by human capital accumulation as the prime engine of economic growth has changed the qualitative impact of inequality on the process of development. In early stages of industrialization, as physical capital accumulation is a prime source of economic growth, inequality enhances the process of development by channeling resources towards individuals whose marginal propensity to save is higher. In later stages of development, however, as physical capital accumulates and the demand for human capital increases, due to capital-skill complementarity, human capital becomes the prime engine of economic growth and a more egalitarian distribution of income stimulates investment in human capital and promotes economic growth.

The decline in gender inequality that was brought about by the rise in the demand for human capital in the process of development reinforced the positive association between a more egalitarian distribution of income and economic growth. The decline in gender inequality contributed to the onset of the demographic transition as well as to the rise in female labor force participation, fostering the growth process as a whole. The decline in the gender wage gap has affected household fertility decisions, female labor force participation and thus the growth process. As suggested by Galor and Weil (1996, 1999), technological progress and capital accumulation complemented mentally-intensive tasks and substituted for physically-intensive tasks in industrial production.

In light of the comparative physiological advantage of men in physically-intensive tasks and of women in mentally-intensive tasks, the demand for women's labor input gradually increased, inducing a decline in fertility rates, a significant increase in labor force participation, and a transition from stagnation to growth. Moreover, the decline in the overall level of inequality that was associated the emergence of human capital has been linked theoretically, empirically, and quantitatively to the reduction in fertility and therefore lower levels of investment in human capital and income (Galor and Zhang, 1997, Dahan and Tsiddon, 1998, Kremer and Chen, 2002, De la Croix and Doepke, 2003, and Moav, 2005).

Inequality and Credit Market Imperfections

Credit market imperfection might be the possible reason of positive relationship between inequality and economic growth in short time period. The credit-market imperfections typically reflected asymmetric information and limitations of legal institutions. For example, creditors might have difficulty in collecting on defaulted loans because law enforcement was imperfect. A bankruptcy law that protected the assets of debtors might also hamper collection. With limited access to credit, the exploitation of investment opportunities depended, to some extent, on individuals' levels of assets and incomes. Specifically, poor households tended to forego human-capital investments that offered relatively high rates of return (Barro, 2000).

Barro (2000) using data of 84 countries from Deininger and Squire (1996) data set, found that the empirical results are sensitive to the specific choice of sample of countries. In the case of transition economies, there is clear evidence that inequality has a negative and significant effect

on growth. The results are surprisingly strong to the use of alternative inequality data sources, different specifications, and estimation methods. The author used 3SLS, claiming that the use of fixed effects eliminated the main (cross sectional) source of variation in the data. With random effects, no significant relationship between inequality and growth is found for the whole sample. Yet, when the sample is divided into sub-samples of poor and rich countries, the growth inequality relationship is negative in the sample of poor countries but positive in the sample of rich countries. These results suggest that the inequality-growth relationship is likely to vary across samples.

Galor and Zeira (1993), Banerjee and Newman (1993) and Aghion and Bolton (1997) found that inequality lead to lower economic growth because of credit market imperfections. They argued that in the short run the relationship might be positive but in the long run, more income inequality hampered economic growth. In the situation of credit market imperfections, the poor people do not borrow due to lack of enough collateral. Thus, poor people do not have the same chances in life as rich people so they cannot provide a good education to their children, however talented they may be, or because they can't get loans to start up a business. Countries with a high poverty or with unequal distribution of wealth thus underutilize their productive and growth potential to a greater degree than countries with fewer poor people or with a more equitable distribution.

Trade Openness, Economic Growth and Income Inequality

The idea that trade liberalization has an impact on the country's growth is not new and goes back at least to Adam Smith. New classical model based on constant and decreasing returns to scale as in Solow (1956) and Swan (1956) predicted that a country would have static gains from lowering its trade barriers. Most of the recent studies including Dollar and David (1992), Edwards (1993), Sachs and Warner (1995) and Dollar and Kraay (2001) have found a positive association between trade liberalization and growth. There are number of channels through which trade promotes growth rates by allocating the resources more efficiently. Trade promotes growth by encouraging economies to specialize and produce in areas where they have relative cost advantage over other economies. Overtime, this helps economies to employ more of their human,

physical and capital resources in sectors where they get returns in open international markets, boosting productivity and returns to workers.

Trade also expands the markets that local producers can access, allowing them to produce at most efficient scale to keep down the costs. Trade disperses new technologies and ideas, increasing the productivity of local workers and managers. Technology transfers through trade are also more valuable for developing countries, which employ less advanced technologies and have little capacity to develop new technologies themselves. Removing trade barriers e.g. tariff on imports gives consumers access to cheaper products, increasing their Purchasing power and living standard. It also provides producers an access to cheap inputs, reducing costs and boosting their competitiveness.

Tullock in 1967 noted that the welfare costs of protectionism may actually be a much larger once the costs of monopoly power, tariffs, rent-seeking activities or other pre existing distortions are all taken into account. Thus, removal of such distortions could significantly boost income. Grossman and Helpman (1991) argued that there could be a host of other dynamic gains to be had from trade and the introduction of competition in terms of scale economies, technological innovations, learning-by-doing effects, etc. which in turn lead to sustained rates of growth (not just one-off increases in income levels).

Frankel and Romer (1999) in his study including 100 countries during the period since 1960 found that openness in general does have a statistically and economically significant effect on Growth. Hiranya and Abdullah (2004) in his study Trade Liberalization, Growth and inequality in Bangladesh found some evidence of trade liberalization accelerating growth in Bangladesh and also found little evidence affecting income distribution or of income distribution affecting growth or investment. Data on income inequality used in study is of poor quality.

Dollar and Kraay (2001) using data on trade liberalization as a share of GDP in constant prices for 101 countries including 73 developing countries between 1975-79 and 1995-97 found that trade openness leads to declining inequality between countries, and declining poverty within countries. The poor countries that have reduced trade barriers and participated more in

international trade over the past twenty years have seen their growth rates accelerate. In the 1990s they grew far more rapidly than the rich countries, and hence reduced the gap between themselves and the developed world. At the same time the developing countries that are not participating in globalization are falling further and further behind. Within the globalizing developing countries there has been no general trend in inequality. Thus, rapid growth has translated into dramatic declines in absolute poverty in countries such as China, India, Thailand, and Vietnam.

Fiscal Policy, Inequality and Economic Growth

The macroeconomic effects of fiscal policies on economic activity have been widely examined with contrasted views. Numerous works have used time series models, especially vector autoregressive models, to estimate the effects of different fiscal policy shocks on economic activity, but the issue of the sign and magnitude of these effects across different countries is very much an open question (Kamps, 2005 and Perotti, 2005).

Other studies used a cross country approach to examine the impact of aggregate measures of fiscal policies on economic growth for an extensive sample of countries. However, in this approach, inspired by Easterly and Rebelo (1993), who used a panel data model adding fiscal variables in an ad-hoc manner to an empirical growth equation, the results are not particularly robust, showing that the impact and significance of the fiscal variables depend on the set of control variables included and also on the initial conditions of the economy. Overall, no matter the approach, there is little consensus among economists as to the magnitude or even the sign of the effects of fiscal policies on economic growth (Gallo and Sagales, 2011).

Even though inequality is not the goal of fiscal decentralization, the policies set by subnational governments under fiscal decentralization do have relation with income redistribution, which eventually leads to income inequality. The expenditure and taxation goals of subnational governments frequently have distributive consequences, even where the decisions are based on efficiency criteria (Ahmad and Craig 1997). Subnational governments' roles in facilitating, catalyzing, and coordinating implementation of pro-poor policies are indeed reducing inequality

in practice, and have become an unavoidable concern of subnational governments (Sepulveda and Martinez-Vazquez 2010).

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