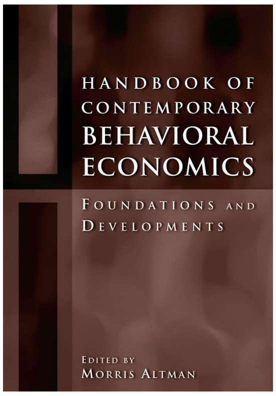


Handbook of Contemporary Behavioral Economics
Foundations and Developments
Morris Altman

Economic Development, Equality, Income Distribution, and Ethics

Publication details
https://test.routledgehandbooks.com/doi/10.4324/9781315703879.ch32
Erik Thorbecke
Published online on: 15 Jul 2006

PART 9

DEVELOPMENT, BEHAVIORAL LAW, AND MONEY

Page Intentionally Left Blank

CHAPTER 32

ECONOMIC DEVELOPMENT, EQUALITY, INCOME DISTRIBUTION, AND ETHICS

ERIK THORBECKE

The essence and major objective of socioeconomic development is raising the standard of living of all individuals and particularly that of the poor.[1] It has become almost universally accepted that in the setting of low-income third world countries economic growth is a necessary condition for poverty reduction. A crucial issue in this context is whether a relatively unequal income distribution is also a precondition for growth to occur. This was the prevailing view under the classical framework, based on the argument that the rich (the capitalists) save a larger proportion of their income than the poor (the workers). Hence, for a given level of total income a more unequal income distribution would generate a larger flow of aggregate savings that could be channeled into investment to yield a higher growth rate of GDP.

In this sense the desirability of an unequal income distribution could be rationalized on economic grounds while clashing with the ethical concern for more equality, equity, and egalitarianism. More poverty today was a precondition to more economic growth and less poverty in the future. As the Cambridge school boldly put it, impoverishment of the masses is necessary for the accumulation of a surplus over present consumption.

In contrast, the modern approach to the political economy of development provides support for the contention that relative equality is consistent with growth—as demonstrated, for example, by the phenomenal growth performance of East Asia in the last half century. If indeed equality is conducive to growth, then it becomes a *means* toward economic development and future poverty alleviation, and the conflict between the ethical objective (norm) of egalitarianism and the economic conditions required for growth disappears. While it is clear that the relationship between inequality and growth is a very complex one, likely to be characterized by nonlinearities and threshold effects and strongly influenced by political economy factors and the prevailing institutional framework, a case can be made that under the proper conditions equality can be conducive to growth.

The essence of this paper is that if equality is a means to economic development, it converges with the ethical norm of egalitarianism. One important implication of this convergence is that policies and reforms targeted toward greater equality may become much more attractive and palatable to policy makers as the presumed trade-off between equity and efficiency tends to vanish.

It is important to clarify, at the outset, that by equality is meant here *relative* equality and that any reference to this concept should be interpreted in a relative sense. Even if one subscribes to the thesis that equality is consistent with future growth and development, it is clear that in a free-enterprise market economy incentives play a crucial role. Entrepreneurs are risk takers and expect to be rewarded for the creative destruction they perform.

Views regarding the optimal degree of equality (inequality) considered desirable in a given society to achieve the twin objectives of a fair (and just) society and the incentives and rewards required for growth differ significantly. At one extreme is Margaret Thatcher's belief (shared by her followers among the right wing) that "it is our job to glory in inequality and see that talent and abilities are given vent and expression for the benefit of all" (quoted in George 1997). At the other extreme would be the welfare state model long adopted by governments in Scandinavian countries and among developing countries by Sri Lanka, for example.

The determination of the optimal societal degree of equality (inequality) depends crucially on the specific norms prevailing in a specific society and the value it places on (1) present versus future equality and (2) the degree of inequality required to provide the necessary incentives to entrepreneurs. In principle one could derive the optimal degree of inequality consistent with those constraints through a computable general equilibrium model—an exercise that would go far beyond the scope of this paper.

EQUALITY AS AN ETHICAL END OR MEANS?

Over the ages the principle of equality was adopted by many cultures as an ethical end worthy of pursuing. Most religions advocate equality and poverty reduction—in one form or another—as desirable norms. Christianity emphasizes loving one's neighbors as oneself, which at the limit implies a high degree of altruism and equality, as individuals are expected to treat others as they treat themselves. This implies that interpersonal effects are given a high weight in each individual welfare (utility) function.

In advocating equality the key question is equality of what? The most likely candidate is the relative equality of human welfare—a highly multidimensional concept. It includes, among other components, the satisfaction of basic needs (particularly for food), as well as adequate education and health status. In addition, human welfare is enhanced in a society in which justice and fairness prevail. Equality of opportunity and "procedural justice" (Nozick) as opposed to "distributive justice" (Rawls) would be favored as alternative candidates by many people. However, equality of opportunity and procedural justice are greatly influenced by the prevailing distribution of income, wealth, and other, more intangible factors such as the distribution of power, knowledge, and information—all of which can be subsumed under the heading of human welfare.

Any attempt at measuring welfare is confronted with two major and intractable problems, first, how to make interpersonal welfare comparisons and, second, how to weigh each of the myriad of dimensions constituting welfare. However imperfect, the best proxy for human welfare is a person's income or wealth:

> A person's income may be a good proxy for his level of functioning, resource control, and opportunities: we do not claim it is the best one can do, but it is certainly one of the easiest characteristics of a person to measure, among those that might be appropriate for egalitarian concerns. (Putterman, Roemer, and Silvestre 1998, 866)

In this essay it is assumed that the distribution of income is an acceptable proxy for the distribution of human welfare and, in a more general sense, for equality as such. A more equal income distribution connotes a more equal distribution of human welfare and vice versa. One important qualification is that ideally one should focus on the secondary income distribution, that is, the primary income distribution after taxes corrected for the imputed value of public services (such as educational and health benefits) received by individuals.

How did equality evolve into and become a moral principle embraced by so many cultures and societies? Human beings are born with different genetic characteristics and intellectual potentials. They are also born in different settings and subject to a myriad of different environments as they grow up. Human beings seem to perceive from a very early age on how they differ from others physically, psychologically, and anthropologically.[2]

Traditional societies have tended to be organized on the basis of physical and moral differences among groups and individuals (e.g., serfs and lords, slaves and masters, castes, racial and ethnic groups). The segmentation into groups was internalized within societies. Could it be that at some stage the striving for equality was triggered by a reaction to the inequalities caused by segmenting individuals into ironclad categories that ruled out any intergroup mobility?

The perception of inequality among individuals does not appear to have prevailed in totally hierarchical societies such as that of the Incas and the feudal system in medieval Europe. In such hierarchical societies individuals accepted without questioning their predetermined socioeconomic status. The search for more equality would appear to come into play only after a society has reached a stage where a minimum degree of individualism and universalism prevails. As the rigid societal ordering starts to weaken, the demand for equality among the more deprived groups starts to express itself. Perhaps the prime historical example is the French Revolution, which called for "liberty, equality, and fraternity." This would suggest that the concept of equality is not innate but rather adopted to improve the functioning of a society. In this context one can hypothesize that those societies that embraced this norm functioned and survived better than those that did not. Cooperative behavior, in contrast with equality, would appear to be innate.

Whereas cooperative behavior brings with it a relatively more equal income distribution, if it goes too far it could conflict with the incentives needed for growth. In contrast, competitive behavior is typically associated with a more uneven income distribution that is called for to elicit innovations and investment, leading to growth. Too much equality and cooperative behavior can lead to stagnation, while too much inequality, fed by an overly competitive pattern of behavior, can lead to the breakdown of the social order.

So far the concept of equality has been considered and discussed as an end in itself. But, as pointed out in the first section, the modern approach to the political economy of development argues that an initial relatively equal income distribution is consistent with economic development. If this doctrine is correct, it implies that equality is also a *means* toward socioeconomic development, and the conflict vanishes between the desirability of egalitarianism on moral and ethical grounds and the (no longer valid) classical contention that the masses have to be impoverished in order to generate the flow of investment needed for growth. Furthermore, as is discussed in some detail in the next section, greater equality of the income distribution has beneficial effects on education, health, and political and social stability, and is a deterrent to crime. If equality is both an end and a means, we have a virtuous convergence.

INTERRELATIONSHIP BETWEEN EQUALITY (INEQUALITY) AND SOCIOECONOMIC VARIABLES

Inequality and Growth

The rejection of the Kuznets hypothesis of the inverted U-shaped relationship between growth and inequality (as per capita income increases) by a number of empirical studies provided much impetus to the new political economy literature that postulates that high initial inequality is detrimental to economic growth. The proponents of this approach, while rejecting the immutability of the Kuznets curve, would argue that growth patterns yielding more inequality in the income distribution would, in turn, engender lower future growth paths. Although country-specific evidence is quite limited and might not be generalizable to other settings, a recent study of the dynamics of inequality and growth in rural China based on the growth experience of villages found a robust statistically significant relationship between inequality and lower growth (Benjamin, Brandt, and Giles 2004). The authors suggested that the mechanism by which inequality exerts its negative effect was through its tilting of village economic activity away from higher-growth nonagricultural development and toward agriculture. It thereby impeded the structural transformation into nonagricultural activities.

The Channels Through Which Inequality Affects Growth

The new political economy theories linking greater inequality to reduced growth operate through a number of channels shown on Figure 32.1 (adapted from Thorbecke and Charumilind 2002). These channels are (1) unproductive rent-seeking activities that reduce the security of property; (2) the diffusion of political and social instability, leading to greater uncertainty and lower investment; (3) redistributive policies encouraged by income inequality that impose disincentives on the rich to invest and accumulate resources; (4) imperfect credit markets resulting in underinvestment by the poor—particularly in human capital; and (5) the strong positive effect of fertility of a relatively small income share accruing to the middle class (implying greater inequality), with, in turn, a significant and negative impact on growth.[3]

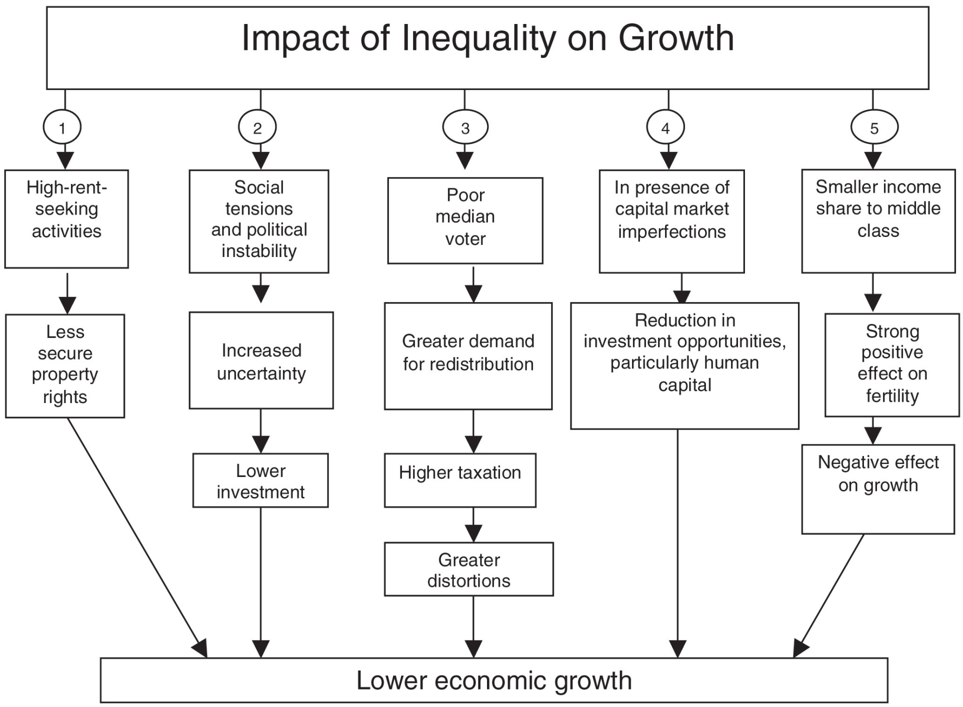
The nature of technological change is still another conduit through which inequality can affect growth. Changes in agricultural technology provide a good example of this link. The Green Revolution technology was developed in the public domain by international research institutions (e.g., the International Rice Research Institute and the International Maize and Wheat Research Institute). Foreign aid donors and foundations provided the funding for the public goods emanating from these institutions. Since the latter were not bound by the profit motive and property rights, they were able to develop high-yielding varieties that were scale-neutral and benefited small farmers as well as large farmers. In a sense, it could be argued that the secondary (as compared to the primary) world income distribution was made somewhat less unequal by the Green Revolution. The spread and diffusion of this technology was facilitated by being in the public domain and has led to a spectacular acceleration of food production in developing countries and a massive reduction in food crop prices and world hunger.

In contrast, the present biotechnology revolution is very much in the private domain. Issues of property rights and royalty payments present obstacles to the diffusion of this technology to small and poor farmers in the developing world, with the concomitant risk that the limited growth pattern that will result from adoption of that technology will be unevenly spread.

In addition to the above channels, some indirect paths (and more circuitous routes) are likely to exist through which inequality affects ultimately growth. Wide income and wealth disparities can impact on education, health, and crime through such manifestations as underinvestment in human capital, malnutrition leading to low worker productivity, and stress and anxiety, respectively. In turn, these manifestations may contribute to lower long-term growth. Both the above channels and additional indirect paths linking inequality to growth are discussed next in more detail.

We start by describing the causal mechanisms underlying the first two channels in Figure 32.1, since they are interrelated. The first argument is that a highly unequal distribution of income and wealth causes social tension and increases political instability (channel 2 in Figure 32.1). Greater instability creates more uncertainty, which discourages investment. The political instability, in turn, raises the risk of the government repudiating contracts and threatening the security of property rights, thereby discouraging capital accumulation still further. Moreover, when the gap be-

Figure 32.1 **Impact of Inequality on Growth**



tween rich and poor widens, the latter presumably have a greater temptation to engage in rent-seeking or predatory activities at the expense of the former (channel 1). This increases the number of people who engage in illegal activities that pose a threat to property rights, thereby lowering economic growth (Benhabib and Rustichini 1991; Fay 1993). Poor countries may therefore fall into a vicious cycle of lower investment and reduced growth because they are more likely to be politically unstable (Alesina and Perotti 1996). Conversely, political stability, which is enhanced by the presence of a wealthy middle class, has a positive effect on growth.

The third channel linking inequality to lower economic growth is fiscal in nature and based on the work of Persson and Tabellini (1994), who construct a median-voter model where the political process and economic growth are endogenized. This channel is based on the effects of inequality on the demand for fiscal redistribution (Alesina and Rodrik 1994; Bertola 1993; Persson and Tabellini 1994), implying an inverse relation between inequality and investment in physical capital. An unequal income distribution implies that the median voter would tend to be poor. In turn, this would tend to cause a demand for fiscal redistribution financed by taxation. The taxes would be more distortionary in more unequal societies because the level of government expenditure and taxation results from a voting process in which income is the main determinant of a voter's preferences. In particular, in an unequal society, the poor see large gains from high taxation on the rich. Therefore, the poorer the median voter in relation to the voter with average income, the higher the equilibrium tax rate. This in turn leads to an inefficient tax system, distorts economic decisions, and discourages investment and therefore growth.

The fourth channel shown in Figure 32.1 reflects the tendency toward an underinvestment in education in the presence of imperfect credit markets. In the setting of a developing country, the poor, possessing little or no collateral, are practically sealed off from the formal credit market. Poor households are constrained for cash, and as they are unable to borrow, they have a hard time sending their children to school or keeping them there. These stylized conditions lead to a vicious cycle where initial inequality and poverty result in underinvestment in education among the poor, which further exacerbates inequality. Thus, a more equal income distribution not only would provide collateral to relatively low-income households but also tend to reduce credit market imperfections. Parents would have stronger incentives to send their children to school, and thus have a greater demand for more and higher-quality education. Their ability and willingness to pay for their children's education would rise, thereby resulting in a higher level of educational attainment in the population.

It has been argued that in a setting characterized by inequality and imperfect capital markets, low-income individuals would tend to underinvest in general, not just with respect to education. Though the poor and the rich are assumed to possess identical preferences, their savings and investment behavior may differ because they face different institutional constraints and, in particular, credit markets. Redistribution from rich to poor would stimulate growth (Aghion and Bolton 1997; Aghion and Howitt 1998) for the following reasons: (1) large sunk costs preclude the poor from investing in education and entrepreneurial projects, and (2) moral hazard occurs because the more the poor must borrow to undertake investment projects, the more they must share their returns with creditors. Incentives to supply the necessary effort to ensure a high return from the investment are therefore low. In this framework, redistribution toward borrowers would result in a favorable incentive effect and consequently a positive effect on growth.

The final and fifth channel depicted in Figure 32.1 is based on and reflects a demographic phenomenon (Perotti 1996). Lower-income households tend to have more children than higher-income households. Fertility rates are typically inversely related to household income. Hence, a society characterized by an uneven income distribution would tend to face a higher rate of growth of population than one marked by a more even income distribution. Expressed differently, it means that the smaller the income share accruing to the middle class, the greater its positive impact on fertility and negative impact on economic growth—resulting in a lower average per capita income.[4]

There is at least one more general channel through which inequality affects growth negatively. Since inequality is supposed to affect future growth and the future growth path, it also influences poverty. Cornia (2000) concludes that the widespread increase in inequality has been detrimental to the objective of poverty reduction, because large rises in inequality have stifled growth, and because, for any given growth rate of GDP, poverty falls less rapidly in the case of a more unequal distribution than in the case of a more equitable one. The obvious policy implication that follows from the above causal sequence is that successful poverty alleviation depends not only on favorable changes in average GDP per capita growth but also on favorable changes in income inequality. In short, the study reasserts the contention that the *pattern and structure* of economic growth and development, rather than the rate of growth per se, has significant effects on a country's future income distribution and poverty profile.[5]

IMPACT OF INEQUALITY ON EDUCATION, HEALTH, AND CRIME

Inequality can entail adverse effects on such socioeconomic variables as education, health, and crime and thus indirectly on growth and development. In addition to the previously discussed impact of inequality on underinvestment in human capital, there are other effects that deserve to be mentioned. The relationship between education and income equality is linked to the economic returns associated with education. Consider the present situation where the nature of technological change and the globalization trend are manifested by a rapidly increasing relative demand for technologically skilled workers. If the demand for unskilled labor is contracting, or growing at a slower rate than the demand for skilled labor, then wage inequalities will increase. The gap between rich and poor will start to widen. Income inequality will continue to grow until the supply of new college graduates depresses the return on schooling. Moreover, if there is a large disparity in the educational opportunities between the rich and the poor, the benefits of economic growth will be mainly captured by educated workers. This, in turn, would exacerbate income inequality.

Furthermore, as Birdsall points out:

> When the distribution of income is highly unequal, provision of subsidized basic education to a large segment of the school age population implies a relatively large tax burden on the rich. High-income families are likely to resist. One result can be the under-funding of education—and the decline in quality described above. A second result can be the channeling of public subsidies to higher-education institutions where the children of wealthier families are more likely to be the beneficiaries. (Birdsall 1999, 20)

There is a two-way interrelationship between inequality and health. Low income leads to malnutrition, low energy levels, low wages, and back to low income. This vicious circle dominates poor developing countries. There is overwhelming empirical evidence that poverty drives mortality. Income has a much bigger effect on health at lower rather than higher levels of income. As Deaton (2001) points out, "income inequality may make it more difficult for people to agree on the provision of public goods, such as health, water supply, waste disposal, education, and police." A highly skewed income distribution may reduce the provision of public goods and therefore worsen health.

Moreover, differential access to resources and services and unequal treatment between the rich and the poor may result in less effective preventive health care (e.g., childhood vaccinations) and more costly disease control (e.g., tuberculosis treatments). Wilkinson (2000) argues that psychosocial stress (level of depression, isolation, insecurity, and anxiety) is another pathway through which inequality affects health. For all the above reasons a reduction in deprivation (through, e.g., land ownership, democratic rights, women's agency) might therefore also lead to improved health in the population.

Next the impact of inequality on crime is explored. Conventional wisdom maintains that income inequality contributes to crime. However, the effects of income inequality on property crime should be distinguished from those on violent crime. The relationship between income inequality and crime can be described by three branches of theories: (1) Becker's (1968) economic theory of crime, (2) Merton's (1938) strain theory, and (3) Shaw and McKay's (1942) social disorganization theory. Property crime is well explained by Becker's economic theory of crime, while violent crime is explained more effectively by strain and social disorganization theories.

Becker's (1968) model was developed further by Ehrlich (1973); the latter argued that payoffs to crime, especially property crime, depend primarily on the "opportunities provided by potential victims of crime" (Ehrlich 1973, 538), as measured by the median income of families in a given community. In other words, the lower the level of legal income expected by an individual compared to the income level of potential victims, the higher the incentive to commit crimes, particularly crimes against property. Thus, for a given median income, income inequality can be an indication of the differential between the payoffs of legal and illegal activities.

Since incarceration entails loss of income, individuals with low earnings potential have a greater incentive to take the risk of committing burglary, a lower opportunity cost if caught, and a higher utility if successful (Chiu and Madden 1998). The net benefit of contemplated crime for an individual against another person can be modeled as proportional to the income difference between them (Deaton 2001). Moreover, this same model shows how low-income individuals' incentives to commit crime increase if the gap between the rich and the poor is greater.

Income inequality also reduces social capital, that is, the degree of trust and mutual support among individuals. In a poor developing country social capital is a crucial element in the functioning of a group and community. The community network constituted by friends (neighbors) and families provides a form of insurance against idiosyncratic shocks (e.g., illness, deaths, crop failure) that otherwise could be devastating to the affected households.

Finally, two sociological theories linking inequality to human welfare are worth mentioning: (1) relative deprivation and (2) role models. Relative deprivation theory holds that high levels of inequality make the poor feel worse off, increasing their alienation and stress (Jencks and Mayer 1990). One version of this hypothesis is that children feel deprived when they cannot have the same material possessions as other children in their school or neighborhood. Another version is that relative deprivation makes poorer parents feel stressed and alienated, lowering their expectations for their children or reducing the quality of their parenting (McLloyd 1990). The role model hypothesis holds that children model their behavior on the behavior of those around them. Inequality tends to exacerbate the impact of negative role models.

In summary, the various channels linking inequality to a worsening in human welfare discussed in some detail in this section of the paper imply strongly that a move toward greater equality would be conducive not only to an improvement in welfare today but also to socioeconomic growth and economic development in the future.

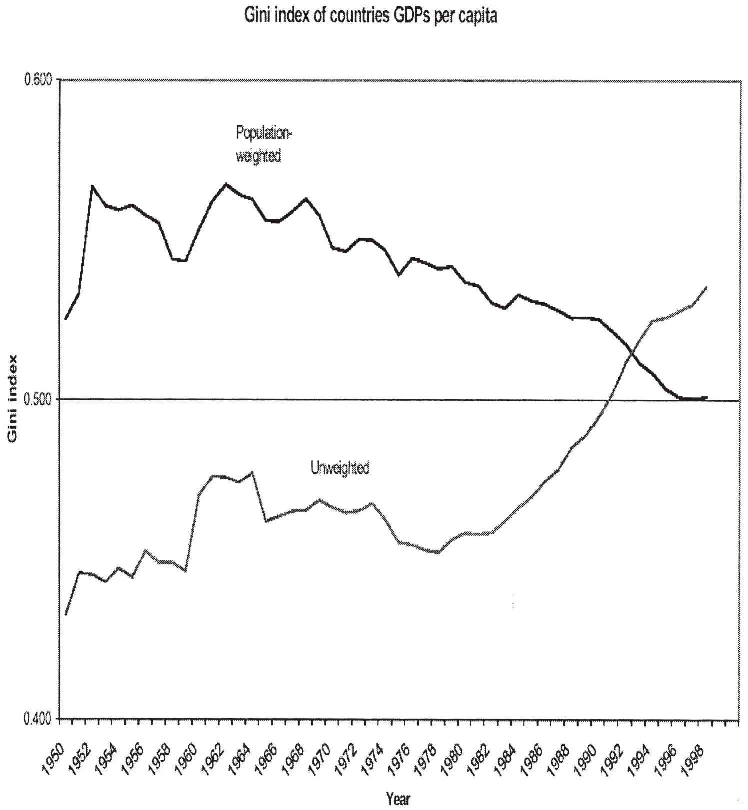
HOW UNEQUAL ARE GLOBAL AND NATIONAL INCOME DISTRIBUTIONS?

If inequality beyond a certain point worsens human welfare and if, as argued in the preceding section, welfare and economic development can be enhanced through greater equality, a key issue is to determine the actual degree of unevenness in the distribution of welfare. It is clear that welfare is a highly multidimensional concept and, as such, very difficult to measure. Hence income is used as an imperfect proxy for welfare. It will be seen that income is very unevenly distributed worldwide as well as within many countries.

At least three different concepts (types) of income inequality can be identified.[6] The first concept measures differences in mean incomes between countries (or regions). There is no population weighting, and every country counts the same. This concept is useful in determining the extent of convergence or divergence among countries or regions. The second concept takes mean national (or regional) incomes but weights them by countries' (or regions') populations. In this case the resulting income distributions will be strongly affected by large countries (e.g., China and India) and regions. The third concept measures interpersonal inequality at the global, national, or regional level. At the global level, this concept yields the world's income distribution.

A crucial question is whether the worldwide income distribution has become more or less even during the recent globalization era. According to concept 1 (national GDPs per capita with each country weighed equally), there has been an almost continuous and sharply rising divergence

Figure 32.2 **International Inequality: Unweighted (Concept 1) and Population-Weighted (Concept 2)**



Source: Milosevic 2002b.

over the last half century, with the Gini coefficient rising from around .43 in 1950 to .53 in 2000. On the other hand, based on concept 2 (with each country's mean income weighed by population size), worldwide income distribution has become significantly more even, with the qualification that this trend is totally driven by China. The bottom graph in Figure 32.2 tracks the evolution of concept 1 since 1950, while the top panel captures the changes in concept 2. Figure 32.2 reveals clearly that estimates of between-countries inequality vary widely, depending on whether estimation is made on the basis of use of country weights (concept 1) or population weights (concept 2).[7] Note that both of these concepts ignore entirely the distribution of income within countries, and any change over time in those intracountry distributions.

The third concept captures the inequality across individuals of the world as it includes the within-country distributions derived from national income and expenditures surveys. In this sense, it is the best measure of world income inequality and its evolution over time. The various attempts to measure it are in general agreement that worldwide inequality is very high (according to Milanovic 2002, the global Gini coefficient amounted to 0.65 at the end of the nineties). It rose slightly up to the early nineties before falling marginally. The extent of inequality can be grasped when it is realized that the richest 1 percent of people in the world receive as much as the bottom

57 percent. Alternatively, the top 10 percent of the U.S. population enjoys an aggregate income equal to the total income of the poorest 43 percent in the world. Expressed differently, the total income of the richest 25 million Americans is equal to the total income of almost 2 billion poor (Milanovic 1999).

Next we explore inequality within countries. The degree of income inequality varies significantly from one country to another. Gini coefficients of intracountry income distributions range between 0.2 and 0.63 (World Bank 2001). The Slovak Republic, Belarus, Austria, and the Scandinavian countries have the most equal income distributions, with Gini coefficients ranging between 0.20 and 0.25. At the opposite end, Sierra Leone, South Africa, Brazil, Guatemala, and Paraguay display the highest Gini coefficients, between 0.60 and 0.65. The U.S. income distribution is relatively less even than in most Western European nations, with a Gini coefficient of 0.41.

In summary, the empirical evidence presented above suggests strongly that both the global income distribution and the within-country income distribution of many countries are very unequal and might thus be an obstacle to achieving the twin objectives of more equality on ethical grounds simultaneously with high growth rates of income. The bulk of world inequality is caused by between-countries inequality (about 70 percent of total global income inequality), with the share of within-country inequality amounting to the remaining 30 percent of the total. High and rising global inequality of income is likely to worsen intercountry conflicts and could affect global growth.

It is also relevant to note that between-countries inequality has fallen in the last decade because of the excellent growth performance of China and India, which together account for about one-third of the world's population. On the other hand, within-country inequality has increased in many countries—in particular within China and Eastern Europe. It appears that an important consequence of the globalization forces has been to stimulate the growth of the coastal provinces of China without having a significant impact on the inland provinces.

Finally, of all regions of the world Africa is by far the worst off in terms of overall incidence of poverty, extent of inequality, and stagnating growth and development. Of course, poor governance, corruption, geographical factors, and external conditions may be contributing to these three outcomes without necessarily implying any causal connection between inequality and growth. Yet the arguments presented in this essay provide some support for this link.

CONCLUSION

Equality is a fundamental ethical principle embraced by most cultures and religions. As such, it is a desirable norm to achieve and an end in itself. Equality is an all-encompassing concept that presumably can be interpreted as equality of human welfare. In turn, human welfare is multidimensional and very difficult to measure in any objective way. An imperfect yet acceptable and operationally useful proxy for human welfare is income. In this sense equality in terms of the degree of equality in the distribution of human welfare can be approximated by the distribution of income.

In the classical paradigm an unequal income distribution was considered a necessary precondition for growth, economic development, poverty reduction, and a more equitable income distribution in the future on the ground that the rich (capitalists) save a larger proportion of their income than the poor (workers). Hence a more unequal income distribution would generate a larger aggregate flow of savings and investment than a more equal one. This provided a rationale for an initial unequal distribution of income and wealth but created a conflict with the ethical norm of equality as a desirable end.

In contrast, the modern approach to the political economy of development identified many channels and paths through which an initially more equal income distribution is consistent with and contributes to growth and socioeconomic development. This essay discussed in some detail the positive impact of relative income equality on human welfare, in particular on political and social stability, education, health, and the deterrence of crime.

Under this new approach, equality was converted into a means toward development and poverty alleviation, removing the previous conflict between the desirability of egalitarianism on moral and ethical grounds and the classical view that the masses have to be impoverished in order to generate the flow of investment needed for growth. An important implication of the convergence of equality as both an end and a means is that policies and reforms targeted toward improving the education and health of the poor and, in general, reducing large inequities in income and wealth may become politically less difficult to implement.

Underlying a concern for equality is the presumption that income tends to be unequally distributed. The empirical evidence presented here showed how relatively unevenly world income is distributed and how pronounced the degree of inequality is within many countries. Hence a concern for more equality appears justified—particularly if it does not conflict significantly with efficiency. Clearly the striving for equality should not go so far as to act as a deterrent to the entrepreneurial incentives that are crucial to the functioning of a private enterprise system.

NOTES

1. This paper was prepared for an H. E. Babcock workshop on “Ethics, Globalization and Hunger” held at Cornell University on November 17–19, 2004. I owe a debt of gratitude to Alice Sindzingre for extremely useful suggestions in the process of writing of this paper. The paper also benefited from comments by two anonymous referees.
2. John Adams was reputed to have said, “Inequality of mind and body are so established in the constitution of human nature that no art or policy can ever plane them down to a level.”
3. See Thorbecke and Charumilind (2002) for a detailed discussion of those channels. The rest of this section draws on this study.
4. Greater inequality does not necessarily have to imply higher fertility rates. That depends on where the increased dispersion in the income distribution occurs and where and how fast fertility rates change as one moves along the income distribution. For example, if one reduces inequality (but not mean incomes) in a very poor economy and fertility rates remain high until one reaches income levels twice the poverty line—both reasonable conjectures—then fertility would increase with a drop in inequality, not decrease. The basic point made above in the text is of course correct but needs to be qualified. I am grateful to a referee for this qualification.
5. For a more detailed discussion of the crucial importance of an appropriate pattern of growth and structural transformation on income distribution and the future growth path, see Nissanke and Thorbecke 2004.
6. The first three concepts listed here were defined by Milanovic (2004).
7. Estimates with use of country weights take each country as one observation, while those with population weights give people equal weights. The merits and demerits of using either method are discussed in detail in Ravallion 2004. He favors some hybrid weighting scheme as a best way of analyzing between-countries inequality.

REFERENCES

Aghion, Philippe, and Patrick Bolton. 1997. “A Theory of Trickle-Down Growth and Development.” *Review of Economic Studies* 64, 1: 151–72.

Aghion, Philippe, and Peter Howitt. 1998. *Endogenous Growth Theory.* Cambridge, MA: MIT Press.

Alesina, Alberto, and Roberto Perotti. 1996. “Income Distribution, Political Instability, and Investment.” *European Economic Review* 40, 6: 1203–28.

Alesina, Alberto, and Dani Rodrik. 1994. “Distributive Politics and Economic Growth.” *Quarterly Journal of Economics* 109, 2: 465–90.

Becker, Gary S. 1968. "Crime and Punishment: An Economic Approach." *Journal of Political Economy* 76, 2: 169–217. Reprinted in G.J. Stigler, ed., *Chicago Studies in Political Economy.* Chicago: University of Chicago Press, 1988.

Benhabib, Jess, and Aldo Rustichini. 1991. "Social Conflict, Growth and Income Distribution." Department of Economics, New York University, New York.

Benjamin, Dwayne, Loren Brandt, and John Giles. 2004. "The Dynamics of Inequality and Growth in Rural China: Does Higher Inequality Impede Growth?" Paper presented at the conference "Inequality in China," Cornell University, October 2004.

Bertola, Giuseppe. 1993. "Market Structure and Income Distribution in Endogenous Growth Models." *American Economic Review* 83, 5: 1184–99.

Birdsall, Nancy. 1999. "Education: The People's Asset." Working Paper 5, Center on Social and Economic Dynamics, Washington DC, September 1999.

Chiu, W.H., and Paul Madden. 1998. "Burglary and Income Inequality." *Journal of Public Economics* 69, 1: 123–41.

Cornia, Giovanni Andrea. 2000. "Inequality and Poverty in the Era of Liberalisation and Globalisation." UNU/WIDER Discussion Paper, 2000. Published as chapter 1 in G. A. Cornia, ed., *Inequality, Growth, and Poverty in an Era of Liberalization and Globalization.* Oxford: Oxford University Press, 2004.

Deaton, Angus. 2001. "Health, Inequality, and Economic Development." Working Paper 8318, National Bureau of Economic Research, Cambridge, MA.

Ehrlich, Isaac. 1973. "Participation in Illegitimate Activities: A Theoretical and Empirical Investigation." *Journal of Political Economy* 81, 3: 521–65.

Fay, M. 1993. "Illegal Activities and Income Distribution: a Model of Envy." Department of Economics, Columbia University.

George, S. 1997. "How to Win the War on Ideas: Lessons from the Gramscian Right." *Dissent* 44, 3: 47–53.

Jencks, Christopher, and Susan E. Mayer. 1990. "The Social Consequences of Growing Up in a Poor Neighborhood." In Laurence Lynn and Michael McGeary, eds., *Inner-City Poverty in the United States.* Washington, DC: National Academy Press.

McLloyd, Vonnie. 1990. "The Impact of Economic Hardship on Black Families and Children: Psychological Distress, Parenting and Socio-Emotional Development." *Child Development* 61: 311–46.

Merton, Robert. 1938. "Social Structure and Anomie." *American Sociological Review* 3, 5: 672–82.

Milanovic, Branko. 1999. "True World Income Distribution, 1988 and 1993: First Calculation Based on Household Surveys Alone." Policy Research Working Papers Series No. 2244, November. Washington, DC: World Bank.

———. 2002. "Can We Discern the Effect of Globalisation on Income Distribution? Evidence from Household Budget Surveys." Policy Research Working Paper 2876, April. Washington, DC: World Bank.

———. 2004. "Half a World: Regional Inequality in Five Great Federations." Paper prepared for the World Bank and Carnegie Endowment for International Peace, Washington, DC.

Nissanke, Machiko, and Erik Thorbecke. 2004. "The Impact of Globalization on the World's Poor." Working paper, United Nations—World Institute for Development Economics Research, Helsinki.

Perotti, Roberto. 1996. "Growth, Income Distribution and Democracy: What the Data Say." *Journal of Economic Growth* 1, 2: 149–87.

Persson, Torsten, and Guido Tabellini. 1994. "Is Inequality Harmful for Growth." *American Economic Review* 84, 3: 600–21.

Putterman, Louis, John E. Roemer, and Joaquim Silvestre. 1998. "Does Egalitarianism Have a Future?" *Journal of Economic Literature* 36, 2: 861–902.

Ravallion, Martin. 2004. "Competing Concepts of Inequality in the Globalization Debate." Paper presented at the Brookings Trade Forum "Globalization, Poverty and Inequality," Washington, DC, May 13–14, 2004.

Shaw, Clifford, and Henry McKay. 1942. *Juvenile Delinquency and Urban Areas.* Chicago: University of Chicago Press.

Thorbecke, Erik, and Chutatong Charumilind. 2002. "Economic Inequality and Its Socioeconomic Impact." *World Development* 30, 9: 1477–95.

Wilkinson, Richard G. 2000. *Mind the Gap: Hierarchies, Health, and Human Evolution.* London: Weidenfeld and Nicolson.

World Bank. 2001. *World Development Report*. Washington, DC.