

# EQUITY, GROWTH, AND HUMAN DEVELOPMENT

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## Summary

In the past, theories of development have given a prominent role to inequality but have lacked the empirical data to assess their relevance. They have also focused on a narrow view of development in terms of increases in income or economic growth. Data are now available to expose these theories to more rigorous empirical testing. And views about development have advanced to the point where aspects of human development are given as much if not more weight than income. Two broad conclusions emerge. First, the data now available lend little support to the simple mechanistic links between inequality and growth that are central to some of the grand theories of development. As might be expected, the relationship is much more subtle and subject to many different influences. And second, inequality of income is closely associated with inequality of human development, with high correlations between poverty and, for example, higher infant mortality and fewer years of education. Thus, the poor are doubly disadvantaged. The East Asian tigers are among the only countries to have successfully grown rapidly while avoiding increases in inequality and fostering a healthier and better educated population; thus they have dramatically reduced poverty and closed much of the gap between themselves and developed economies. Their success (and recent difficulties) provides excellent guidance for other developing countries.

## 1. Introduction

There have been many grand theories of development. Several have raised the issue of an unequal distribution of assets or income as a major player in the story of development. Simon Kuznets theorized that development from an agrarian to an

industrial society would first increase, then decrease, inequality. Nicholas Kaldor looked at the dynamics from another perspective and determined that inequality of income would lead to growth—and was indeed necessary for growth. In sharp contrast, current researchers have posited that the remarkable growth performance of the East Asian tigers resulted in large part from an initially relatively equal distribution.

The debates surrounding these theories have relied on relatively sparse empirical evidence and have focused on a relatively narrow concept of “development,” that much-used but little-defined word. Today, we have access to more and better data. And we recognize that development means much more than increases in income or economic wealth; it means something about the quality of life—for example, living long and well and having a mind unfettered by ignorance, as the recent Nobel laureate in Economics Amartya Sen has articulated. This confluence of better data and new ideas allows us to both test the empirical regularities implied by earlier theories and explore what the data tell us about more comprehensive measures of development.

## **2. Equity and Growth: Exposing the Grand Theories to Data**

In 1955, Simon Kuznets called attention to the interaction between economic growth and income inequality, describing it as central to much of economic analysis and thinking. He examined the question with about 5 percent empirical information and 95 percent speculation, by his own account, suggesting explanations for—and theoretical arguments against—his scant data. (Most of his figures are from the United States, United Kingdom, and Germany, with some references to India, Prussia, Ceylon, and Puerto Rico.) What is now known as the Kuznets’ curve or Inverted U Hypothesis comes from a hypothetical numerical exercise. The idea is that primarily agricultural economies start out with an initially equitable distribution with a low average, but that as they develop, portions of the population migrate to other sectors with greater inequality but higher averages. Initially, this causes inequality to worsen. But, as countries continue to progress, more of the rural sector moves out of agriculture and inequality eventually decreases. This picture was largely based on Lewis’s dual economy theory. In his numerical example, Kuznets observed that the share of the lowest portion of the population fell in all cases (but no such pattern was found in his data).

Around the same time the British economist Nicholas Kaldor posited a growth mechanism that depended on the share of income going to profits and wages, respectively. He assumed that “capitalists” save more of their income than “workers,” and thus that a larger share of income going to “capitalists” leads to more savings, more investment, and hence more growth. Although Kaldor did not draw out the implications of this reasoning in his papers, since then many have assumed that an unequal distribution of income toward profit-earners rather than wage earners would help an economy grow faster, while the opposite distribution would slow growth. Similar arguments have been made based on an assumed negative relationship between wealth and aversion to risk.

Recently economists, spurred by the extraordinary progress in East Asia compared to, say, the high-inequality countries of Latin America, have returned to the question of the

effect of distribution on growth. A 1993 paper by Oded Galor and Joseph Zeira launched this line of enquiry back into the mainstream, concluding that the distributions of wealth and income are very important from a macroeconomic point of view. The channels through which this may occur are various: for example, government redistribution may be pursued more actively in high-inequality societies and this may result in lower growth; a highly unequal distribution of assets (collateral) may limit the access of lower income groups to credit and result in missed opportunities for profitable investment in physical and human capital; and growth in highly unequal societies may suffer from the drain imposed by social conflict.

Turning from speculation to experience, a simple comparison of two countries for which we have unusually good data on inequality casts doubt on all of these simple theories that linked inequality to growth. Between 1960 and 1990, the two countries in question had remarkably similar degrees of inequality. Using the Gini Index, an aggregate measure of inequality that ranges from one if everybody has the same income (perfect equality) to 100 if one person has all the income (perfect inequality), both countries had relatively low values of about 30 for the index over the entire three decades. Thus, the initial value and the subsequent evolution of inequality in the two countries are virtually the same. Given this, and assuming that there is some systematic relationship between inequality and growth, then both countries should have experienced similar increases in income. In fact, one country (India) saw income per capita barely increase at all, while in the other country (Taiwan) income per capita exploded, increasing fivefold. In this comparison, then, there is no evidence of a Kuznets curve in either country, no evidence that a high degree of inequality is necessary for rapid growth (witness Taiwan's experience), and no evidence that a low level of inequality automatically brings growth (witness India's experience).

Of course, one comparison, suggestive though it may be, does not constitute convincing empirical evidence. More formal investigations confirm the story told in the example. Thus, a study by Klaus Deininger and Lyn Squire of 49 countries finds that there is no statistical relationship between inequality and income in forty cases (more than 80 percent of the sample). Nor does there seem to be a simple relationship between inequality and growth. More recently, Chen and Ravallion looked at 43 spells, a spell being a period for which two household surveys are available at two points in time for the same country, and found that inequality was not correlated with growth in mean consumption (this was excluding Eastern Europe and Central Asia, where consumption has fallen and inequality has risen rather dramatically).

In place of the Kuznets' curve, the recent literature points to a different empirical regularity. As more time series data become available, it appears that aggregate inequality as measured by, say, the Gini Index does not typically change dramatically from year to year. In fact, one study by Li, Squire, and Zou of panel data for 49 countries found that 91.8 percent of the variance in inequality was due to cross-country variance while only 0.85 percent was attributed to variance over time. The same study also showed that few countries exhibited statistically significant trends over time. Thirty-two out of 49 countries revealed no trend, while 10 showed an increasing trend in inequality and 7 a decreasing one. This is not to say that inequality does not change. Obviously it does and in some cases—China, Eastern Europe, and UK—quite rapidly.

Nevertheless, for many countries over long periods of time inequality is surprisingly persistent. And where inequality has changed rapidly, it has increased. We do not have solid evidence of rapid reductions in inequality. For the seven countries where inequality decreased in the Li, Squire, and Zou sample the average rate of decrease was 0.3 Gini points a year. This implies that it would take about 60 years for a country with Latin American levels of inequality to move to the average of all developing countries.

Searching for a mechanical link between inequality and income is not likely to be fruitful. Rather, they should be seen as two separate outcomes of a common process of development. Both growth and inequality are outcomes of economic policies as well as institutional capacity, and are subject to external trends and shocks. Historical evidence shows the value to the poorest members of society of focusing on both outcomes. Data from the early 1960s to the early 1990s show that both Indonesia and Taiwan experienced rapid growth and at least no deterioration in inequality. During this period, the poorest quintile in Indonesia saw their incomes increase at a rate of 4.8 percent a year; in Taiwan the poorest quintile did even better—an annual rate of growth of 5.8 percent. Understanding the policies pursued by these countries should be high on the research agenda.

### **3. Global Trends in Inequality**

We have just seen that, with some notable exceptions, within-country measures of aggregate inequality tend to remain stable. As a result, fast-growing economies such as those of East Asia have successfully raised the incomes of all their citizens. This outcome assumes increased importance when we examine trends in global inequality. Conventional wisdom holds that inequality is increasing worldwide. Conventional wisdom is right, but in a particular sense. As the preceding evidence should have led us to expect, the observed increase in world inequality stems, not from increases within countries, but from increases among countries.

The process of world divergence began in the early nineteenth century, and has been strongly comprised of growing income disparities between industrializing countries and the rest of the world. (World inequality is made up of inequality within and between countries.) The between country component of inequality as measured by the Theil index (an aggregate measure of inequality similar to the Gini Index and highly correlated with it) is estimated to have been 0.06 in 1820; it was above 0.50 in 1992, according to a historical study by Bourguignon and Morrisson. In the shorter run, between 1950 and 1992, inequality ceased to soar as it had in the previous 130 years; but there is no sign that a convergence process has started to take place at the world scale, though, as it did among European countries, and their offshoots in the decades preceding the turn of the century. The relative stabilization since 1950 resulted from the relative slowing down of industrialized country growth, the catching up of Japan and East Asia, and since 1980 the take-off of China. Thus world inequality (among all individuals) is still very much a story of inequality among countries.

If one assumes that there is no inequality within countries—that they are homogenous—then the international inequality would still have a Gini Index in the mid 50s. Within country inequality pushes it up to the mid-60s according to a 1999 study by Branko

Milanovic. Milanovic found that 88 percent of world inequality is due to differences in countries' mean incomes, using adjusted purchasing power incomes (the figure is 95 percent with unadjusted dollar incomes). Not only is it a large component of “static” inequality, but between-country inequality also accounted for 2.7 of the 3.2 Gini point increase in inequality between 1988 and 1993 found by Milanovic.

Thus, what happens to world inequality is determined to a large extent by what happens to inequality between countries. This in turn depends at least to a first approximation on the relationships between mean incomes in China and India (populous poor nations) and several large OECD countries. The interactions, however, are complex and can lead to ambiguous effects: rapid Chinese urban growth, for example, reduced the country's distance from middle income and rich countries, and decreased the world Gini Index, but the widening gap between urban and rural China, and between urban China and rural India increased world inequality.

Recalling our earlier discussion of egalitarian pro-growth policies practiced in the East Asian “Tiger” countries, we should not be surprised that they have constituted the driving force behind what convergence there has been in world incomes. They have carefully opened their economies to the richer West and, with the foundation of a healthy and well-educated labor force, learned how to compete in the global marketplace. Closed and in-egalitarian countries have not fared so well, and on balance world inequality has increased. To put the impact of differential growth rates in perspective, consider these statistics. In 1960, the income per capita of high-income OECD countries was 42 times higher than that of low-income countries excluding China and India, and 60 times higher when those countries were included. The ratio of high-income OECD to Korea was about 8 to 1. Four decades later, the income per capita of high-income OECD countries is over 65 times that of the poorest countries—the gap has increased considerably, as OECD countries have grown steadily and poor countries have not. When China, which has experienced the fastest growth of any country in this period, is included (along with India), the ratio of high-income to low-income is well over 50 to 1. China has reduced the ratio between high-income countries and itself from a staggering 93 times higher to 40 times higher. And Korea, one of the most successful East Asian tigers, reduced the gap so that high-income countries have only two and a half times the per capita of Korea. At this point, Korea is at the level that high-income countries were forty years ago—in spite of the recent crisis. These statistics are an important reminder of the powerful influence even modest differences in growth rates can have on relative incomes if sustained over several decades.

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### **Biographical Sketch**

**Lyn Squire** is Director of the Global Development Network in the Office of the Chief Economist at the World Bank. After gaining his Ph.D. from Cambridge University, Lyn has spent his professional career at the World Bank. Among other positions, Lyn has served as Chief Economist of the Middle East and North Africa Vice Presidency, as Director of the Research Department, and as Director of the 1990 World Development Report on Poverty. He has published extensively on project evaluation, agricultural households models, and poverty. His current research interest is inequality and development.