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February 16, 2000

Why Inequality Matters: The Developing and Transitional Economies

Nancy Birdsall*

Prepared for conference on The World Economy in the 21st Century:
Challenges and Opportunities

Mt. Holyoke College, South Hadley, Massachusetts
February 18-19, 2000

*Senior Associate, Carnegie Endowment for International Peace, Washington
D.C. (nbirdsall@ceip.org)

High and growing inequality is the case not only in some industrialized countries, but in many of the world's developing countries and transitional, post-Communist economies. This paper is about why inequality matters in the developing and transitional economies – which will by the middle of this century make up almost 95 percent of the world's population.

Whether and why inequality matters is an old issue – going back to Marx and Condorcet.¹ Why raise it anew? What's different now? At least three things, all interrelated. First, with the close of the 20th century, developing and transitional economies turned to markets as the apparently ideal economic system, and increasingly to democracy as well as the least-bad political system. Yet despite – some would say because of – increasing reliance on markets and on open political systems, the level of inequality between and within countries does not seem to be falling and may even be rising. Are these transitions at the heart of the problem? Does inequality matter for the progress of these two transitions and their interaction? Second, there is globalization. Will the increased integration of markets broaden opportunities and mitigate inequality, or will increased market pressures exacerbate inequality and undermine societies' ability to soften its effects? On what does the difference depend? Third, there is the information revolution. Is the premium on skills it seems to favor the reason for the increasing wage gap in the U.S. and other nations in its vanguard? Will an analogous divide between the skilled and unskilled emerge in transitional and developing economies? Or will the information revolution eventually ensure an expanded information age middle class in the developing world, just as the industrial revolution did in today's advanced economies?

Oddly enough, whether and why inequality matters has not been much of an issue in development economics. Development economists for most of the postwar period have concerned themselves primarily with growth. Though poverty has been a concern and is the focus of ever-increasing research effort,² until the last few years inequality was of sporadic interest at best – and was considered primarily as an unfortunate but immutable (and thus not policy relevant) outcome of growth (Kuznets, 1955, Chenery and Syrquin, 1975). In the postwar period, mainstream development economists were no doubt influenced by a Cold War environment in which talk of inequality invoked concerns about Communism, statism or at least fiscally imprudent populism. Only in the 1990s did there emerge new thinking on inequality as a possible cause of low growth – and thus a phenomenon that mattered, for understanding growth at least.

Even with the reawakened concern about the consequences of inequality for growth, inequality as distinct from poverty remains on the back burner of development policy. In this paper I argue that inequality – along with but also independent of the extent of poverty defined in absolute terms – matters in developing countries; the

¹ For a lengthy and impassioned statement in the early part of the 20th century, see Tawney, 1952 (first published in 1931).

² The next World Development Report of the World Bank will focus on poverty. A “consultation draft” is available (www.worldbank.org/poverty/wdrpoverty/draft100.htm) and provides extensive documentation of poverty levels and trends and a much broader view of what poverty is, its causes and consequences, than previous World Bank reports. The draft touches only briefly on inequality, in relation to poverty.

implication is that the issue of inequality should at least in some cases be brought forward on the development policy agenda. I outline three reasons:

- Inequality inhibits growth and slows poverty reduction in developing countries;
- Inequality undermines good social policy and may trigger bad economic policies – with ill effects on growth, human development and poverty reduction;
- Inequality of income may undermine equality in civic, social and political life; it may also generate its own self-justifying political tolerance, suggesting a self-perpetuating high inequality equilibrium.

I begin with definitions and a summary of the facts about inequality and its association with poverty and with economic growth. I then turn to the heart of the matter – why inequality matters. I close with brief reflections on the implications for the future and thus for policy on the part of developing countries and the donor community.

I concentrate throughout on inequality within developing countries and not between them and the advanced industrialized countries. Inequality across countries does appear to be rising, and to be the major contributor to various estimates of inequality across people independent of their country (Schultz, 1998; Milanovic, 1999; Summers and Heston, 1999). However any future reduction in inequality between developed and developing countries will be fundamentally a function of future growth rates within the latter group. A full discussion of the determinants of growth in developing countries would take this paper far afield indeed. However, since one argument for why inequality matters in developing countries is that under certain conditions it constrains growth in those countries, understanding the implications of within-country inequality in the developing world is one input to a fuller discussion of inequality across countries.

Poverty, Equity and Inequality: Definitions

It is useful to clarify first the distinction between inequality and poverty, and the definition of the closely related term, equity.

Inequality is of course a relative concept. This paper is about “money” inequality, i.e. inequality in income or in consumption (expenditures) per person. Money inequality is not necessarily a bad (or a good) thing, as I discuss below. Other forms of inequality – for example inequality of education or health – are more often viewed as a bad thing. Most societies aim for equal outcomes of these, both because they are important indicators of well being in themselves, and because they are human capital inputs to raising individual and economy-wide productivity.

In contrast to inequality, poverty is an absolute concept, referring to the condition of people who are poor in absolute terms. The simplest and most widely used standard below which a person is defined as poor is a minimum money income or command over consumption; the World Bank uses the standard of \$1 a day (in 1985 dollars). More complete measures go beyond money-defined poverty to include below-minimum access to health care and education, decent housing and so forth and the lack of capacity to use these resources (Sen, 1999a). But there is no widely accepted absolute minimum of these basic needs analogous to the \$1 a day standard.³ Recently attention has gone to even broader measures, to include for example as poor those who lack resources to participate in civic or political affairs and to protect their own legal or other rights (World Bank, 2000) – though again the absolute minimum is hard to define across societies. In any event, poverty as I use it here refers to an absolute level of welfare. In a normative sense, less poverty i.e. fewer poor people is unambiguously a good thing.

The term equity, or social equity, refers to the idea of justice or fairness in the processes that lead to outcomes such as income, as opposed to “equal” outcomes or income per se. A society with relatively high income inequality might be an equitable society if the observed inequality was the outcome of an entirely fair process – in which all individuals enjoyed the same opportunities, but some worked harder or took more economic risks with resultant greater economic gains than others.⁴ An equitable society might have many poor people, if resources are limited but fairly shared – many pre-industrialized societies were in this sense equitable. Equity may be a more satisfactory concept than equality from a normative point of view, in the sense that more of it is unambiguously a good thing. However, equity is harder to measure. I argue below that money inequality can complicate a developing country’s efforts to achieve desired outcomes such as participation in political and civic life which some might associate with a society’s degree of equity.

In this paper I focus on why inequality of money income matters. Of course income (and consumption) are not the only measures of well being. Good health and education, political rights, and the blessings of family and community also matter.⁵ Even economists, often unfairly maligned for an apparent concern solely with these money measures, generally assume that the value of income to people diminishes as the amounts increase. I discuss money inequality not because it is the ideal measure of anything, which it is not, but because it does have relevance in itself to people’s well-being (poor people when asked tend to name a good job and steady income as their highest priority⁶; because it is associated, if imperfectly, with other indicators of well-being; and more generally because it may be a symptom, a cause and a consequence of other phenomena relevant to people’s welfare, to the broader concept of social equity, and to the understanding of development processes and problems.

³ The Human Development Index of the UNDP represents an effort to assess poverty more broadly, but there is no particular level of the index broadly accepted as a poverty line comparable to the \$1 a day.

⁴ This implies that a meritocratic system is fair. Some would go farther and say that a meritocracy in itself does not guarantee a just or fair society, and that public policy should compensate for differences in talent. Sen (1999b) discusses social welfare functions.

⁵ Sen (1999a) emphasizes a broad definition of development.

⁶ Narayan, *Voices of the Poor*, 1999.

Inequality in the Developing World: Levels and Trends

Before proceeding to the facts, a warning about data and inequality measures is necessary. The difficult fact is that all measures of income inequality are only as good as the data on income (or consumption) on which they are based. Most of the inequality data used here come from household surveys that are reasonably comparable.⁷ However other evidence suggests that income may be understated at the low end of the distribution, where much income comes from informal work and subsistence agriculture, and in absolute terms even more understates at the high end of the distribution, where respondents have incentives to underreport income from work and may underreport or fail altogether to consider income from wealth.⁸ Finally, income inequality measures are different from inequality of wealth, which is everywhere more concentrated; to the extent that inequality matters for policy, as I suggest below, inequality of wealth may be as or more important than inequality of income or consumption. Among the many measures of income distribution, the Gini coefficient is most sensitive to income differences in the middle of the distribution. Other measures, more sensitive to the bottom and the top of distributions, raise other troubling questions about the effects of inequality. In addition to the Gini and the ratio of the fifth to first quintile, I refer briefly to several other measures in the next section.

Table 1 provides information on inequality and poverty in developing and transitional economies using the most recent available estimates. Figures 1A and 1B are scatterplots showing the relationship between the poverty headcount ratio based on \$1 a day and the two inequality measures shown in the table: the Gini coefficient and the ratio of income of the top to the bottom quintile of households classified by household income per capita.⁹ The Gini coefficient is more closely correlated with the poverty measure but as the scatterplots make clear, the relationship between poverty and inequality is by no means straightforward.¹⁰ If inequality matters in itself, understanding and reducing poverty may not be sufficient to understanding and reducing inequality.

Figure 2 summarizes information over time on inequality across regions, including the advanced industrial economies, using the Gini coefficient. Income inequality by this measure tends to be higher in the developing world (though not higher in the formerly socialist economies), and it is obviously more painful since average

⁷ These were compiled by and are discussed in Deininger and Squire, 1996a.

⁸ Szekely and Hilger, 1999, report that the reported incomes of the top 10 households in surveys for countries of Latin America are often in the range only of middle-level managers in those countries!

⁹ The figures are based on household surveys. Where they refer to consumption per capita instead of income per capita, we have followed Deininger and Squire's recommendation of adding 6.6 points to the Gini coefficient of consumption survey-based results. Using household survey data, inequality of income will be measured as greater than inequality of expenditures since the latter reflect saving or dissaving and are probably closer to a measure of permanent income; because different measures are used it is not always possible to compare inequality measures across countries. In this paper I use the expression inequality of income often to include inequality of expenditures but make the distinction in text and tables whenever it is relevant to interpretation.

¹⁰ For this group of countries, the bivariate correlation of the \$1 poverty measure to the Gini is .45 and to the ratio of the top to bottom quintile is .33.

income levels are lower and the poor are therefore much poorer. In Europe, the United States and Japan the richest 20 percent of households are between 5 and 10 times as rich as the poorest 20 percent (not shown). Using the measure of the richest to poorest quintile (Table 1), Latin America stands out as the most unequal region. But in the Philippines, Thailand and Malaysia, and nine of the 18 countries of Africa for which this ratio is available, the richest households are more than 10 times poorer than the poorest. In Brazil and South Africa, the two countries with the highest measured inequality in the world, the richest households are more than 25 times richer than the poorest. In South Asia and China, inequality is lower but the poor are much poorer.

Why should income inequality be higher in many developing countries compared to developed countries? Kuznets famously proposed that the process of growth might itself generate inequality, as people move from low productivity, low-income agriculture to higher productivity urban activities. He was describing a long process, that would take place over several decades or more. With the completion or near-completion of that process in industrialized countries, overall income inequality should decline (and reflect primarily only the inequality within the urban sector).

Inequality is and since the 1960s (Figure 2) has been low in low-income South Asia, with about 65 percent of the labor force in agriculture, thus broadly consistent with Kuznets' theory, and is and has been high in middle-income Latin America, with less than 25 percent in agriculture, again broadly consistent with the theory. But inequality is relatively high in parts of low-income sub-Saharan Africa and is low in middle-income East Asia. In the cross-section, using GDP per capita as a proxy for where a country is in the stages of growth Kuznets described, Africa and East Asia seem anomalous. The picture is even less satisfactory when it is disaggregated to the country level; Figure 3 illustrates the relationship between GDP per capita at the country level for the 1970s, 1980s and 1990s.

Kuznets in any event was referring not to differences across countries at a point in time, as shown in Figure 3, but to change over long stretches of time within countries, closer to that shown for regions in Figure 2. The pattern of income distribution by per capita income across countries in Figure 3 may not represent the past pattern relating change in income and in distribution in the now-developed countries. Most developing countries have had substantial income growth if we look at the entire postwar period (though performance has been disappointing since the late 1970s for much of Africa and Latin America). As it turns out, however, their growth has not been associated with any particular trend in inequality, either increasing in low-income countries or declining in countries closer to the end of a Kuznetzian transition (as Figure 2 also suggests at least aggregating countries at the regional level). Studies based on household surveys (of income or of expenditure) indicate surprising constancy of income distribution measures at the country level for most of the postwar period. For 45 countries with the necessary data for four survey years or more from the 1960s to the early 1990s, Bruno, Ravallion and Squire (1997) report finding no trend at all, upward or downward, for 28 countries; a downward trend (of declining inequality), mostly of limited amount, for 9 countries

(including Japan and several Western European economies); and an upward trend, also mostly limited, for the remaining 8.¹¹

In contrast, growth has been associated, though far from perfectly, with reduction of poverty. Figure 4A summarizes information on changes in the number of people living in poverty over the last decade across developing regions. What stands out is the success of East Asia, including China, the developing region with by far the fastest rates of growth over the last four decades. Other regions have seen modest declines in the poverty headcount ratio (Figure 4B), but continued increases in the absolute number of people below the \$1 day poverty line.

Meanwhile, more recent evidence exploiting data from household surveys covering a few more years of the 1990s hints at a troubling new trend of increasing inequality in at least some countries. Kanbur and Lustig (1999) provide information on changes in inequality between the 1980s and the 1990s (Table 2), using decadal averages of Gini coefficients that were estimated from reasonably reliable household survey data. In many developing countries, inequality is stable or even declining. However in others it is rising, and by not insubstantial amounts. The increases are largest in the formerly socialist economies of Eastern Europe and Russia, but inequality seems also to have risen substantially (e.g. by 3 points of the Gini or more) in Brazil, China, Ethiopia, Hong Kong, Panama and Thailand. These and the socialist economies are all at different income levels and have had differing growth rates in the 1990s. However except for Ethiopia all are countries engaged in deepening market reform and increasing integration into the global economy.

In summary, looking across countries and regions and over time:

- Growth has reduced poverty but not inequality; indeed over the five decades of the latter half of the 20th century, inequality in developing countries has been surprisingly impervious to the growth process (Figure 5). The success of East Asia in growth and poverty reduction, the region that started the postwar development era with relative equality of income, raises the question of whether the main causation is the other way round.
- In the 1990s inequality in a variety of country settings has risen – including in countries that as the Cold War ended embraced or extended market-friendly economic reforms; some of these countries have in the 1990s enjoyed income growth; others (especially in Eastern Europe) have faltered. The recent experience naturally raises the question whether the turn to the market and the globalization which has inspired and reinforced that turn are implicated in the increases in inequality, and whether if so these recent increases in inequality are a short-run aberration or will take some countries to a new higher inequality equilibrium.

¹¹ See Li, Squire and Zou, 1997, for a convincing analysis of data across countries on this point, and of the underlying determinants of the continuity they describe.

In the rest of this paper I focus primarily on the issues raised by the first fact above, i.e. the possibility that inequality is a cause of other development dynamics and for this reason matters. But of course inequality levels and trends are also a consequence of various dynamics, as the second fact suggests. On this huge topic I confine myself to a few reflections in the final section.

Why Inequality Matters

Money inequality matters if people (and nations, in the case of inequality across countries) care about their relative income status.¹² Reducing inequality may therefore be an end in itself in some societies. However there are also instrumental reasons for why inequality matters – reasons that should concern us even if we do not care about relative income status or feel that relative status is not a fundamental objective of development.¹³ In this section I suggest four instrumental reasons why inequality matters in developing countries:

- Inequality matters because it is a constraint on growth and on reduction of absolute poverty; this is especially but not solely true of inequality of assets (as opposed to inequality of income per se). Inequality's negative effect on growth operates because of and through market and government failures that are almost by definition prevalent and problematic in developing countries. Since growth is a necessary (though not sufficient) condition for reducing poverty, the negative effect of inequality on growth means inequality can be a barrier to poverty reduction. The market failures which trigger inequality's growth-reducing effects are most likely to affect the poor and thus to reduce their income growth disproportionately.
- Inequality matters because it is likely to prevent or undermine the public policies that would diminish it – including good social policy and other pro-poor policy. The endogeneity of policy to inequality – i.e. the possibility that money inequality affects policy design and implementation -- is one possible explanation for the paucity or weakness of “no-brainer” programs and policies, such as in education, that would reduce inequality and simultaneously encourage growth. In addition, for the very reason that at least some people care about their relative status (even if the development economist or other omniscient observer does not), income inequality may generate perverse policy responses – of protectionism, populism, in general a backlash against the market and “globalization”. This can make inequality worse while also inhibiting growth.

¹² Across countries, inequality also matters if it discourages the kind of cooperation that helps ensure security and stability.

¹³ Sen (see footnote 5) provides a discussion of social welfare functions and of development broadly defined.

- Money inequality matters because it may undermine what Kaus (1992) calls “social equality”, that is equality achieved when the sphere of common civic life (parks and parades, schools, the military draft) in which all share equally is sufficiently important relative to the sphere of private consumption.

As will become obvious, the arguments are interrelated and thus overlap with each other.

1. Inequality inhibits growth and poverty reduction

The textbook argument: the market works and inequality may even be a good thing. The assumption of textbook economics is of a tradeoff between augmenting growth and reducing inequality. Kuznets and others explored causality in one direction -- that growth in the early stages of development might cause inequality. The assumption about the other direction of causality – that inequality would enhance growth – is grounded in two simple observations. The first, following Kaldor (1978) is that a high level of savings and resulting investment is a prerequisite of rapid growth, so that income must be concentrated in the hands of the rich whose marginal propensity to save is relatively high compared to the poor. A related point is that investments in infrastructure and industry that are critical to development are large and lumpy; in the absence of a deep and well-functioning capital market, wealth and income need to be concentrated for anyone to have the necessary minimum resources. With this in mind, many developing countries embraced the need for the state to assume the commanding heights of the economy and to use tax resources for state-financed industrial investments.

The second observation is that inequality provides an incentive for individual effort – for hard work, innovation, and productive risk-taking – which ultimately ensures higher output and increasing productivity and thus higher average income and rates of growth. Okun (1975) makes this point and Welch explicitly defends it in his 1999 (Richard T. Ely) address to the American Economics Association entitled “In Defense of Inequality.” This “constructive” inequality is the backbone of the moral hazard argument against tax-financed transfers to the poor – that such transfers undermine individual responsibility and the work ethic.

A related argument is that the objective should not be equality of income anyway but equal opportunity for all, since the latter is what most people and societies really care about. With equal opportunity, any observed inequality of an outcome like income would reflect only the constructive element of inequality, i.e. differences in effort or merit. This is an intuitively appealing point. But empirically is it true that much of measured inequality of the outcome of income is due to “constructive inequality” based on differences in effort or talent?

In a series of papers John Roemer uses differences between persons of different types (e.g. by race) at the same centile of their own distribution for example of wages, to derive estimates of the costs of ensuring equal opportunities (not equal outcomes). He

estimates that for blacks to earn at wage levels equal to whites in the U.S. would require educational spending six to ten times more on blacks than on whites, given the differences in the wage levels by education between blacks and whites matched by their centile rank in their own distributions.¹⁴ This result implies some element of discrimination and thus of what might be called “destructive” inequality – i.e. that portion of inequality of outcome (in this case wages) that is associated with lack of opportunities for those already poor and thus with persistence of poverty from one generation to the next within families.

Another observation, also appealing, is that inequality of income measured at the country level in a cross-section may not reflect underlying opportunities that would be better revealed if we had information on lifetime or intergenerational mobility, i.e. the extent to which a person during her lifetime will change places in the overall income distribution of her reference group (in this case, the country) or the extent to which children’s place in the distribution of lifetime income is independent of their parents’ place. Inequality of income would matter less, and is more acceptable, if economic or political change is generating more opportunities and thus more mobility, including mobility that is downward. This might be the explanation for voters’ continued endorsement of market reforms in Latin America and Eastern Europe (even as inequality remains high in the former and has risen substantially in the latter) -- that the reforms are creating new opportunities in more meritocratic systems, and that market signals are perceived to reward hard work, innovation and talent more fairly than more centralized and statist economic systems do (Birdsall and Graham, 2000).¹⁵

The limited evidence that exists, however, suggests that in fact social mobility, defined in terms of changes in the position of persons or households relative to each other, has not been a major factor offsetting measured inequality. The common view of the U.S. as a highly mobile society compared to Western Europe is the result of the higher average income growth in the U.S., which has lifted all boats, but not on a greater amount of switching of the positions of individuals or their children in the overall income distribution (Sawhill, 1999 and citations therein). Panel data on incomes of workers in the U.S. indicate that in the 1980s, when wage inequality was increasing, those initially at the bottom were more likely to be moving downward over five-year periods than those in the middle or at the top (Fields, 2000). In Latin America, though educational opportunities are increasing and in Brazil during the high growth years of the 1970s there were substantial income gains for all income groups and thus considerable social mobility by one definition (Pastore and Zylberstajn, 1996), it is still the case that the amount of education children receive in virtually every country is greater the higher the income and education of their parents (see Table 3). If we assume that children’s educational achievement is a good predictor of their future position in the ranking of lifetime income, then we have to conclude that intergenerational social mobility is relatively limited.

¹⁴ Betts and Roemer, 1998.

¹⁵ Essays in Birdsall and Graham (2000) by Fields and by Behrman provide discussion of various definitions of mobility and approaches to measurement of mobility.

Because equality of opportunity is difficult to measure, it is difficult to distinguish between the constructive inequality of the textbook story and destructive inequality. Analysis of the Table 3 data indicates that the magnitude and strength of the relation between parents' characteristics and children's education is not the same across countries. It varies, depending among other things on macroeconomic conditions and on countries' education policy (Behrman, Birdsall and Szekely, 1999). This in turn suggests that country differences in market conditions and social policy affect the extent of what might be viewed as destructive inequality. Similarly, Roemer's numbers and Sawhill's analysis suggest that in the case of the United States, some portion of existing inequality of wages between blacks and whites, an outcome, is due to destructive inequality -- the absence of a level playing field.¹⁶ High levels of income inequality also seem to have some association with ethnic or racial heterogeneity (South Africa and Brazil with high inequality¹⁷ compared to Ghana and Korea). But the relation is not simple or systematic, as the counter examples of Malaysia with relatively low inequality despite ethnic heterogeneity, and Costa Rica with relatively high inequality despite ethnic homogeneity suggest (though compared to other countries of Latin America, Costa Rica is on the low side.)

So under certain conditions, some portion of money inequality may be constructive, reflecting and reinforcing what economists would call efficiency in a competitive market system. But of course another portion of inequality may be destructive, reflecting inefficiencies in the market that inhibit growth. Though analysis of social mobility and of inequality in opportunities for education provide insights into the weight of destructive inequality within and across societies, in the end it is difficult to decompose measured money inequality into these two components. In a roundabout way, examining the effects of inequality on growth within and across countries can provide information on the degree to which money inequality in different settings is destructive, i.e. growth-inhibiting, and why; this brings us to the next issue.

Less sanguine economics: the market is imperfect and inequality may inhibit growth. Rapid growth combined with low levels of inequality in the so-called miracle economies of East Asia (World Bank, 1993) raised the question of whether the conventional textbook tradeoff between efficiency or growth on the one hand, and equality on the other, made sense, especially in developing countries. At least for middle-income developing countries, what seemed to need explanation was the contrast between fast-growing East Asia, with its low inequality, and slow-growing Latin America, with its high inequality (Figure 6).

Cross-country analyses of growth during the postwar period done in the early and mid-1990s, many exploiting newly available data on income distribution changes over time of reasonably good quality (Deininger and Squire, 1996), tended to confirm an

¹⁶ This is likely due to some combination of current discrimination in the labor market or in schooling, and past discrimination affecting children through its effects on their parents' and their communities' ability or willingness to provide the home inputs that complement schooling itself.

¹⁷ Birdsall and O'Connell, 1999 and Lam, 1999, provide evidence suggesting wage discrimination in South Africa and Brazil.

association of high income inequality with lower growth. Initial theorizing put the explanation in the political sphere – the median voter in a more unequal society is relatively poorer and favors a higher (and thus more inefficient) tax burden (Alesina and Rodrik, 1994; Persson and Tabellini, 1994). In this model, inequality reduces growth because it encourages inefficient redistribution. There are two problems with the theory, however, as it applies in developing countries. One is that it is not clear that policies are primarily shaped by the representative median-income voter, as opposed to special interests with the resources and connections to influence policy. This is no less and is probably more true in developing country democracies compared to the more mature democracies of the most advanced economies. I return to the question of how inequality affects policy-making below. The second is that other empirical evidence suggests that redistributive policies, measured in terms of the marginal tax rate, are associated with higher not lower growth (Easterly and Rebelo, 1993). And the case of East Asia as well as other developing economies seems to be one where redistribution in the form of land reform and mass education supported growth (Birdsall, Ross and Sabot, 1995).

More recent economic models take into account the likelihood that in the presence of various market and government failures, inequality will exacerbate the effect of those failures on growth. Among capital market failures, a weak or incomplete capital market is the most obvious shortcoming behind the growth-reducing effect of inequality.¹⁸ If creditworthy borrowers cannot borrow because they are too poor, without collateral to comfort lenders (given imperfect information, another “failure” in the competitive model) then the resulting liquidity constraint will limit investment. Of obvious importance is investment in the human capital of children. The inability of their parents to borrow to send children to school (compensating for lost work income of children as well as to finance direct costs) may condemn the children of the poor to limited education and low future income, generating a self-perpetuating “poverty trap.” (Hoff, 1996) Behrman, Birdsall and Szekely (1999) report, consistent with this theory, that deeper financial markets are associated with a less strong association between parents’ income and education and that of their children across countries of Latin America. Similarly, poor insurance markets may trap the poor in inefficient informal systems of risk-sharing such as low-interest savings clubs. In developing countries, government failure – for example the lack of adequate public spending on basic education, and repressed interest rates and directed credit programs that end up limiting access to borrowing except to privileged insiders – can reinforce the negative effect of market failures on growth in the presence of inequality.

Other studies focus on inequality of assets as the key impediment to growth in developing countries. Deininger and Olinto (1999) provide careful estimates showing that across countries initial land ownership inequality is associated with low growth; they argue that inequality of land is linked to rural poverty that in turn limits human capital

¹⁸ Benabou (1996) summarizes other literature relevant to developing countries. See also Bowles and Gintis (1995); a series of papers by them deals with the efficiency costs of inequality under different circumstances; as they are implicitly addressing the issue for in the context of the advanced economies, they tend to describe the effects of market failures in a steady state independent of the level of development of institutions and markets.

accumulation and thus growth. Carter (1999) shows that concentration of land ownership is associated over long subsequent periods with concentration of income, even in countries where the economic relevance of agriculture has diminished. This suggests that the inequality of assets like land affects over time the evolution of all kinds of political and social institutions that end up limiting growth. In a similar vein, Birdsall and Londono (1998) show that along with inequality of land, inequality in the distribution of education – a good proxy for the asset human capital – reduces growth, and that once inequality of land and education are accounted for, inequality of income washes out as a factor affecting growth.¹⁹ They argue that initial inequality of education generates inequality of income, and that in a vicious circle inequality of income induces a new round of unequal education. This is consistent with the idea, discussed below, that initial inequality of assets sets the tone for policy and for the evolution of institutions (rules, social norms, and the role of the state) that can lock in inequality.

These arguments for the effect of inequality of income and of assets on growth indirectly put substantial blame not only or primarily on inequality per se but on high rates of poverty and weak markets. They provide compelling arguments for reducing poverty in the interests of growth, and for concentrating on improved capital and insurance markets as a sensible route to reduced poverty. With better markets, even the initial distribution of land and of education would not lock the poor out of the growth process. In that sense they bring us back to the fundamentals of market-driven development: get markets working better and poverty and inequality will not in themselves inhibit growth. Is that all there is to the story?

No, not necessarily. Even without recourse to politics or to the evolution of institutions and quite independently of poverty levels, there are other arguments for why inequality itself inhibits growth. Aghion et al (1999) set out a model in which given diminishing returns to capital (and given some degree of imperfection in capital markets, which is reasonable as capital markets are not perfect anywhere), inequality implies that different agents will face different investment returns, reducing the aggregate returns to investment in an economy and thus reducing growth. This could apply in advanced industrialized economies as well as in poorer economies. They assume an essentially static shelf of investment opportunities. But their approach is consistent with an approach that explains growth in settings such as East Asia in terms of the appearance of new, higher-return investments (because of a new agricultural technology, or because a school has been put into a village – as in the model of Birdsall, Pinckney and Sabot, 1999b). The new investment possibilities available generate for a given rate of time preference a sufficient return to induce a new round of savings and self-financed investment (including by lower-income households who cannot easily borrow) thus raising average growth. The underlying point holds across all economies; the richly endowed (with capital, including human capital) are likely to be investing in projects with lower returns while the poor pass up higher-return investments. Diminishing returns to a limited circle of investors is one explanation for how so-called cronyism in the form of close relations among business, banking and government in Asia contributed to the recent

¹⁹ See also Thomas and Wang, 1999, on the effect of inequality of education.

financial crisis. The implication is that redistribution would increase the number of investors and average investment returns.²⁰

Finally high inequality may make it difficult for an economy to manage external shocks. An example comes from Latin America, where income inequality is positively associated with economic volatility, and volatility is associated with lower growth.²¹

The bottom line is not complicated. Cross-country studies provide increasing evidence that at least among developing countries, high levels of inequality inhibit growth. Theorists have provided various stories to explain the link. Some but not all of the stories in fact reflect the negative effects of poverty – in the face of various capital market and government failures, the poor have difficulty acquiring and using productive assets and thus cannot easily get on the growth train, and their resulting low productivity inhibits overall growth. Some rely less on low-end inequality reflected in poverty, given some markets are missing or incomplete even at advanced stages of development. The capital market failures and government failures are compounded when countries are vulnerable to internal and external shocks of various kinds. Both market and government failures are more likely and more prevalent in developing countries – where institutions are weak and resources are more scarce. In short, one reason inequality matters is that in the real world, where perfect competitive markets do not exist, inequality is implicated in the low growth of some developing countries.

2. Inequality undermines good public policy – endogenous government failure

In an accounting sense, it is obvious that the existing distribution of income affects the extent to which growth reduces poverty. Countries with a more equal distribution of income will reduce poverty more for any given growth rate.²² In most developing countries, agricultural growth would be associated with a reduction in poverty because the poor tend to be concentrated in agriculture and in rural areas. However, in Latin America with its highly unequal distribution of land and of income, agricultural growth was associated with increasing inequality and increasing poverty in the 1970s and

²⁰ Aghion et al also propose that greater inequality reduces the aggregate incentives to accumulate wealth, because borrowers with limited wealth have less incentive to exert effort to ensure a project succeeds. The theory is less relevant where those with limited wealth cannot borrow in the first place; it is relevant where insider privileges encourage borrowing by those able to hide their own wealth or send it abroad to escape creditors. They also discuss macroeconomic volatility as a channel through which inequality might affect economic growth; in a model in which only some investors have access to high-yield projects, and in which those who save and those who invest are different individuals, a boom generates new net wealth among investors in the high-yield technology, driving down returns, leading to investments in the lower-yield technology, a reduction in the marginal product of capital, and a slump.

²¹ Hausmann and Gavin (1996); they measure volatility by the standard deviation of the annual GDP growth rate. Rodrik (1999) shows that ethnic fragmentation combined with weak institutions undermines the ability of governments to manage external shocks. Aghion et al (the preceding footnote) propose another model explaining how inequality may generate growth-reducing volatility.

²² Ravallion, 1997, provides estimates. A country like Brazil or South Africa, with a Gini coefficient of about .60, would see for every 10 percent increase in growth a 1.8 percent decline in the poverty headcount ratio (proportion of poor). A country like Sri Lanka or Sweden with a Gini coefficient of about .30 would see a decline of poverty closer to 3 percent.

1980s.²³ One reason may be that rich landowners did not create consumer demand for the small-scale labor-intensive products that would have generated jobs and raised incomes of the poor (an example of how high-end inequality or concentration of income at the top may undermine the growth process).²⁴

Behind these data and behind the evidence that inequality inhibits growth is the likelihood that concentration of income and assets at the top is not conducive to good public policy. The rich may favor public policy that preserves privileges even at the cost of growth. If this is so, inequality not only inhibits growth given government failure, but contributes itself to government failure. Public choice models (Buchanan, 1991) attribute poor public policy to government regimes in which bureaucrats and insiders face no real checks on the pursuit of their own interests. Income inequality – particularly in the form of concentration at the top combined with substantial poverty at the bottom and thus the absence of a middle class that demands accountability – could well be conducive to this kind of policy failure.

Social and pro-poor policy. To illustrate consider the effect of inequality on good social policy and on the extent of what has been called pro-poor policy. Spending on education and health is often cited as win-win, i.e. as spending that improves efficiency by raising productivity while at the same time improving equity. Yet studies suggest that public spending in these areas does not reap the efficiency and equity returns it might (e.g. Pritchett, Where has all the education gone?) and tends to reflect the interests of the rich even where more spending in the interests of the poor would be more efficient overall (Birdsall and James, 1993). Table 4 summarizes the results of cross-country ordinary least squares regressions of various indicators of education policy on income per capita and income inequality variables. The results are suggestive. Inequality of income in the 1980s is associated with inequality of education in the 1990s (cols. 2 and 4). (Results for other dependent variables are not statistically significant.)

What lies behind the possible unfortunate association of money inequality with inadequate social policy? First consider the supply side, that is the supply by the public sector of in this case basic education. When the distribution of income is highly unequal, providing subsidized basic education (and health) to all households implies a relatively large tax burden on the rich. High-income households in many developing countries have succeeded in resisting that burden, in part because they see limited benefits to themselves. (For many reasons, overall government revenues and public social expenditures as a percent of GDP are much lower in developing than in advanced economies.) The most notable case may be Guatemala, where income is highly concentrated at the top, and government revenues as a percent of GDP remain among the lowest in the world at about 10 percent; the current government has been unable to comply with its commitment in the context of the peace agreements of several years ago to raise tax revenues. In addition, the rich may succeed in channeling public sector

²³ De Janvry and Sadoulet, 1999, report this result based on analysis of poverty reduction in 11 countries. This is consistent with the model set out by Carter, 1999.

²⁴ Mellor (1999) makes this point. Birdsall, Ross and Sabot (1995) note that only in a world of trade without any friction would the lack of an internal consumer market for small-scale goods be irrelevant.

spending to those programs from which they are most likely to benefit. In Latin America and in francophone Africa, a high share of public spending on education is allocated to higher education – from which the rich benefit most because the less rich are so much less likely to complete secondary school. Venezuela is an extreme; in the early 1990s Venezuela allocated 35 percent of its public education budget to higher education, compared to 8 percent in Korea. Public expenditure on education as a percentage of GNP was actually higher in Venezuela (5.1 percent) than in Korea (4.5 percent). However after subtracting the share going to higher education, public expenditure available for basic education as a percentage of GNP was considerably higher in Korea (3.6) than in Venezuela (1.3).

Compounding the problem on the supply side is the fact that it generally costs more to reach the poor in the first place – because the poor live in rural areas and because poor parents are usually less productive in “producing” at home the human capital that complements public expenditures. Thus good social policy requires that the public sector “swim against the tide”²⁵ and spend more for the same outcome on the poor. This is a politically difficult challenge anyway, and the more so if political influence and power are correlated with income and income is highly concentrated.

Income inequality also complicates social policy because it affects household demand for education (and health). For any average income in a developing country, higher inequality implies more households that are poor and thus liquidity constrained, unable to borrow and thus less likely to have the resources to keep their children in school. In 1989 Brazil and Malaysia had similar levels of per capita income. But the poorest quintile in Brazil had only about one-half the absolute income level of the poorest quintile in Malaysia. Given an income elasticity of demand for secondary education of 0.50 (a conservative figure), if the distribution of income had been as equal in Brazil and Malaysia, secondary enrollment among poor Brazilian children would have been more than 40 percent higher.²⁶

The demand for education will also be a function of expected returns in the labor market. Indeed education is probably treated primarily as an investment by poorer households while for the rich it may also have consumption value. Low public spending on primary and secondary education has implied low-quality public schooling in many developing countries, reducing the return to basic education and further discouraging demand among households most concerned with the economic benefits of schooling and most dependent on public schools. This may help explain the high dropout rates in some countries (again especially in Latin America), even in the face of high returns on average to those who manage to complete secondary school.²⁷ Racial or ethnic discrimination in labor markets also implies lower average returns to education for some groups; thus to the extent that income inequality reflects discrimination, there can result a vicious circle of low education and persistent inequality, even as the discrimination itself recedes.

²⁵ Birdsall and Hecht, 1997.

²⁶ The example is from Birdsall, Ross and Sabot, 1995.

²⁷ Behrman and Birdsall, 1983, make the point that high quality schooling will raise the private return to more schooling.

Some would argue that this is happening in the United States – that demand for education among blacks is lower because of past if not current job discrimination, and is perpetuating current levels of income inequality by reducing average education of blacks compared to whites.

Perverse economic policy, including the role of the middle class

Because people care about inequality, inequality raises the likelihood of perverse policy responses – economic policies that make inequality worse while also inhibiting growth. Put another way, high levels of money inequality may generate not only inadequate social policy but positively perverse economic policies.²⁸ There are many examples. Populist programs designed to attract the political support of the working class hurt workers in the long run – the case in Garcia’s Peru in the 1980s and Peron’s Argentina. When financed by unsustainable fiscal largesse they bring the inflation or high interest rates that exacerbate inequality. (The rich can protect themselves from inflation with indexed financial assets and by placing capital abroad; and from high interest rates by pressing for privileged access to credit.) Price controls imposed on food products consumed by the urban middle class and the poor hurt rural producers, or they lead to the disappearance of products from stores as they are hoarded and resold at higher prices out of reach of the majority. A high minimum wage may make it harder for the unemployed to find work. High interest rates penalize the small business sector. Regulatory privileges, trade protection, and special access to cheap credit and foreign exchange – all bad economic policies – inevitably increase the profits of a wealthy minority.

Three other examples of self-defeating policies are worth noting.

Protectionism is not a surprising reaction to the growing wage gap between the skilled and unskilled. Yet developing countries that have been most open to trade have had the fastest growth; those least integrated into global markets, such as many African economies, have remained among the world’s poorest.²⁹ Increases in trade and economic integration in poor countries, though associated with high wage inequality, may actually reduce inequality of income and consumption. There are two possible reasons. First, as obstacles to imports fall and price competition intensifies, prices drop – a boon for the poor, who use most of their income for consumption. Second, trade liberalization and open markets in general weaken the unfair advantages enjoyed by the rich and connected, undermining the economic privileges and monopolies (reflected in wealth not wage gaps) that otherwise perpetuate high inequality.

Worker entitlements that are legislated by the state rather than negotiated through bargaining between employers and workers are another example. Throughout Africa and Latin America, the injustices associated with high inequality contribute to legislation that protects a few workers, especially those in state-owned enterprises and other protected sectors. Resulting “standards” raise the cost of labor, inducing employers to invest in labor-saving technologies and to avoid formal hiring in favor of short-term job contracts

²⁸ This section draws on Birdsall, 1998.

²⁹ The statement remains somewhat controversial, but see Sachs and Warner, 1997.

without any benefits at all. The loss of new jobs hurts mostly the poor and unskilled whose main asset, after all, is their own labor. The reliance on temporary labor discourages employer investments in training.

Artificially low prices for water, electricity and other public services is another perverse reaction to the problem of inequality and associated political pressures. Prices that are too low undercut the commercial viability and financial sustainability of utilities; that leads to poor or no services at all in poor neighborhoods. The result?: Cheap electricity and water are available to powerful industrial interests, while the poor in slums rely on jerrybuilt connections and buy bottled water at high prices from private trucks.

It would be silly to blame all bad policy on income inequality, but it would also be silly to ignore the potential effect of inequality and the frustrations it produces. Easterlin (1995) has shown that at low income levels, people care most about their absolute income. But as their absolute income increases, relative income status matters more. In developing countries, it is the middle strata that are most likely to care about their relative status, and who are likely to be aware of changes in their income status relative to the rich with changes in economic policies. The situation of the middle strata in Latin America is particularly illustrative of the potential problem. In Latin America, income is heavily concentrated at the top – so much so that virtually all of Latin America’s “excess” inequality can be explained by the difference in income between the tenth and the ninth deciles, i.e. between the rich and the next most richest households. (The richest decile is about three times as rich as the next compared to about 50 percent richer in the United States.³⁰) Households in the middle deciles as a result have much less income compared to the top decile than is the case in the U.S. (and other advanced industrial economies). Table 5 compares the ratio of average income of the “middle class” (defined in this case as the households in the third and fourth quintiles of the distribution of household per capita) to the average income of the “rich” (in this case households in the top quintile of the income distribution) across several developing and developed countries. The ratios range from 1.67 to 4.64, but tend to be lower in developed countries. The ratios are rising (not shown) in some developing countries, particularly in the formerly socialist economies of eastern Europe and in Russia.

Recall that the distribution of assets, including education as an indicator of the asset of human capital, affects the distribution of income. Table 6 shows the average education of 25 year olds in households at the tenth decile in several countries for Latin America and in the two middle deciles (the third quintile) of the income distribution. In Brazil, the average 25-year-old in the middle of the income distribution has about four years of education, compared to almost 11 in the tenth decile. The differences in education between the middle and top of the income distributions in Latin America, combined with the increasing gap between skilled and unskilled workers, suggests that at least some persons in the middle strata are feeling a squeeze.³¹ Changes in economic

³⁰ This understates the case to the extent that inequality of wealth is greater than of income, and given evidence that even incomes are greatly underreported at the top of the distribution (Szekely and Hilgert, 1999)

³¹ Birdsall, Graham and Pettinato, incomplete draft, February 2000.

policy may exacerbate or limit the squeeze; to the extent that market reforms imply, for example, the elimination of public sector or state enterprise jobs on which those in the middle strata once depended, existing gaps between the rich and the middle strata will grow.

Growth itself, even if it benefits proportionately the middle and top strata, may also create frustrations. In Chile, high rates of average growth have been reasonably well shared (among other things, reducing poverty substantially). However in absolute terms the difference between the middle and the top quintiles of the income distribution has grown substantially. Hojman (2000) provides data indicating that between 1987 and 1996 median income (in monthly 1987 pesos) increased from about 50 to 80, a healthy gain of 60 percent, amounting in absolute terms to about 30 pesos. In the meantime, average income of the top decile also increased, from about 340 to about 520, a gain of less than 60 percent, but in absolute terms of 180 pesos. The gap in proportionate terms fell; in this sense inequality declined. But the command over consumption goods of the rich compared to the median household increased substantially.³² If there are any of what Robert Frank (1998?) calls consumption externalities (because the median household wants to keep up with the rich) or if the higher incomes drive up the price of temporarily scarce goods such as housing, the median household may feel worse off, despite its 60 percent income increase.

Insecurity of the middle strata may also generate the political pressures that lead to perverse policy. Evidence from panel studies of income in developing countries indicates that many households in the middle strata of the income distribution, above the poverty line in one period, are likely to be below the poverty line in another period. Pritchett et al (2000), using survey-based information on the variability of expenditures per capita from year to year of Indonesian households, and assuming that 20 percent of households are poor, estimate that another 30 percent of households in Indonesia face a better than even risk of falling into poverty in a three-year period. One way of looking at this is to consider that of all households above the poverty line, more than one-third risk falling below that line in the next three years! Insecurity and vulnerability are different from inequality per se. But along with the effect of income growth on consumption standards suggested above, they could well be tied to the perception among households studied over the period 1985 to 1997 in Peru – especially among the educated who had in fact enjoyed income growth – that they were worse off than they had been.³³

3. Increasing money inequality may erode “social capital” and “social equality” and justify itself politically

Galbraith (1998) noted the possibility that private affluence could coincide with poverty in public life. Kaus (1992) similarly proposes that liberals (in the U.S. political context) advocate policies that would enhance people’s opportunities to participate with

³² Amiel and Cowell, 1999, show that a substantial portion of people do not believe in the conventional assumption of scale independence in comparing different distributions of income, and would thus consider that inequality increased under this example.

³³ Webb, 2000, reports these results from a panel of households. See also Graham and Pettinato, 1999.

others, independent of differences in their income and socioeconomic status, in common spheres of community life. Some of these common spheres are directly dependent on public spending and public policy, such as the draft in the United States, which at one time created a domain in which draftees were equal; public schools to the extent they serve families of different economic status; and mass transit as long as it is clean and safe enough to retain middle class users. (The subway system in Washington D.C. is a good example.) Some such communal domains are less directly dependent on public decisions but are private – the local tavern, the community softball league, commercially successful urban sites such as Inner Harbor in Baltimore. The pleasures of these places and states constitute “social equality.”

Crime and violence clearly undermine the possibilities for such communal life. And money inequality appears to be a critical determinant of crime. Fajnzylor et al (1999) assess the impact of money inequality on homicide rates for a cross-section of 45 developed and developing countries over the period 1965-95.³⁴ Income inequality measured by the Gini coefficient has a significant and positive effect on homicide rates, robust to a variety of specifications. Alternative measures – relative poverty inequality of education, and ethnic polarization – do not affect the measured effect of income inequality. The authors also report that ratios of income of contiguous quintiles starting with the second quintile (i.e. third to second, fourth to third, and fifth to fourth) exacerbate crime, and at an increasing rate. In other words, it is not inequality among the poor that explains crime, but the disparity between the middle strata and the rich. The ratio of income of the fifth to the first quintile has an effect on violent crime that is less than a third of the effect of the ratio of the fifth to the fourth quintiles. These findings provide indirect evidence for the potential problem for policy making set out above, of a middle income group with unrealized expectations and resulting possible frustrations – even as their income grows in absolute terms.

Inequality may increase political tolerance for high inequality. If inequality matters for any of the reasons above, then the possibility that it can persist matters too. What if high or rising inequality justifies itself through the political process, perpetuating or extending its other negative effects?

In a discussion of changes in wage inequality in the OECD countries, Atkinson (1999) makes the point that widening wage dispersion can result not just from shifts in the demand for skill, arising from trade liberalization or from skill-biased technical change, but also from changes in social norms. He quotes Sir John Hicks: “(T)here are important social (and expectational) elements in the ‘free market’ part of wage determination. Even there, wages are not simply determined by supply and demand.”³⁵ Trade union bargaining, statutory wage determination, and elements of convention or fairness may all be important across the society as a whole in determining wages and wage differentials. If individual utility depends in part on reputation and on conformity

³⁴ Working with a pooled sample they use a GMM (generalized method of moments) instrumental variable estimator that controls for both unobserved country-specific effects and the possible endogeneity of the right-side variables in the estimation.

³⁵ The quotation is from the second edition of Hicks’ *The Theory of Wages*. See p. 68 of Atkinson.

with social norms, then loss of reputation is greater the more people believe in the norm. But the norm is undermined the more people cease to observe it (Akerlof, 1980), for example under pressure from an exogenous shift in demand and from an increase in competition with globalization of markets. Then the socially acceptable range of wage differential may widen, and a new high-wage differential equilibrium may emerge. Atkinson may have had in mind his own country, the United Kingdom; he shows that wage dispersion has increased more there than elsewhere in Western Europe.)

This point raises the specter of a potential vicious circle: Are the pressures of globalization (wage dispersion, a decline in the tax burden on so-called footloose capital) shifting norms and expectations, making it more acceptable for governments as well as employers to restrict or even abandon any redistributive role? This would be ironic, given some evidence that in fact redistribution through progressive taxes and public investments in education are associated with higher growth (Easterly and Rebelo, 1993; Barro, 1997).³⁶ Endogenous social norms suggest the disturbing possibility that inequality breeds inequality, and that societies that are already unequal can get stuck in an “unequal equilibrium trap.” An unequal equilibrium trap is especially worrying for developing countries, to the extent that it is associated with destructive inequality – with inequality of opportunity that undermines aggregate growth and sustains high levels of poverty.

* * * * *

So high inequality matters especially in developing countries, and especially if it is primarily “destructive” – in economic terms, inefficient. But even constructive inequality – e.g. reflecting wage gaps due to skill differences – may have political and social costs in the short run, if it undermines good policy and increases tolerance for itself. What does this imply for the future – of inequality itself and of development in the developing and transitional economies?

Reflections on Implications for the Future and for Policy

I have said little about causes of inequality, except indirectly. Without systematic analysis of causes, it is not possible to do more than speculate about future trends in inequality and the resultant effects on other aspects of development. A pessimistic case can be made that the recent trend of increasing inequality in some countries mirrors that in the United States, the country at the frontier of the information age, and thus will persist. In the absence of explicit policies to deal with distribution, globalization and the increasing salience of new technology in the global economy locks in the forces of the digital divide. These forces favor the skilled over the unskilled, ensuring growing wage gaps in a world where more and more income is based on work and less and less on land or the inheritance of other forms of wealth. The market reform process rewards those

³⁶ The positive effect of education on growth in cross-country analyses is more likely to show up in studies where the distribution as well as the actual level of education are taken into account, e.g. Birdsall and Londono, 1997 and Thomas and Wang, 1999.

who have the human capital asset, and provides them and their children with permanently high returns to that asset. Children's access to that asset is mostly a function of their parents' stock of human capital. Some market reforms moreover, because they are not done in ideal textbook fashion, exacerbate the problem – in Russia the privatization process is corrupted by insider privileges and locks in those privileges; in Asia, the incomplete opening of the capital account is good for a small minority.

A more optimistic case takes into account the reality that most economic systems are at least in part self-correcting. Rising wage returns to education increase household demand for schooling for children, and the competitive pressures of more open economies increase demand from the business sector for public education systems that are more efficient and more effective in producing a flexible and skilled labor force. This is why inequality of education continues to decline, though slowly (Figure 7). Open markets, a seemingly ineluctable trend, help expose and undo the corruption that thrives on protectionism and insider rents. Some self-correction comes through the political process, as more democratic systems ensure that one-person one-vote will correct in part for the reality that political power is partly a function of economic power. Meanwhile technology and the globalization process itself, including the dramatic decline in the cost of information and communication with the Internet, increase the influence of informal civil society and other democratizing social forces; the digital divide disappears.

The reality lies somewhere, of course, in between. A base case is that as in the past, inequality will change slowly if at all in the absence of explicit policy efforts to combat it. For currently high inequality countries, that implies ongoing risks of the costs of inequality, and of the policy traps I have outlined. For other developing countries where inequality is lower, it implies new risks to the extent that other economic and political reforms and growth and technology change tend to increase inequality. Much then depends on the nature and implementation of other reforms and on more aggressive and explicit efforts at redistribution.

What might those be? History suggests that certain kinds of apparently redistributive policies can go awry; redistributive policies have long been feared on the assumption that higher taxes and transfer programs would increase distortions and undermine incentives, compounding the political and economic difficulties of achieving the equitable growth that would inequality. This is clearly so in the case of perfectly competitive markets. It is less clearly so in the real world of imperfect markets. Market failures moreover are often compounded by government failures – i.e. missing policies or bad policies – and those very government failures may be particularly acute where income inequality is high and elite interests have more influence than the representative median voter. This is not the setting to set out in detail the potential for efficiency or growth-enhancing distributive and redistributive policies.³⁷ More and more effective public spending on education and health programs are obvious mechanisms to build human capital and to improve via the flow the overall distribution of assets, considering

³⁷ For Latin America, the possibilities are set out in essays on macroeconomic policy, financial sector, public utilities pricing, education and health, and institutional development in Birdsall and Graham, eds., 1998.

human capital as an asset. Public expenditures on social insurance and social safety nets can help households retain productive assets during economic downturns. There may be limits to redistribution on the expenditure side, but then more progressive tax systems are also a potential vehicle for some redistribution – in some circumstances the resulting efficiency gains may outweigh distortionary effects. Land titling and land reform are mechanisms to distribute assets. The distributive effects of market reforms are worth more scrutiny – not only at the country level but by the donor community that supports such reforms.³⁸

During a long transition from agriculture to industry, changes in production and in the structure of employment caused wrenching inequality. Much inequality today may be the result of what is an analogous transition from an industrial to an information age. The issue is whether the transition will be slowed or speeded by decisions made in the political and policy sphere, and whether those decisions can minimize the risks and reduce the costs that citizens of the earlier transition bore.

³⁸ These issues are discussed in Birdsall, 1999 (Current History)

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Table 1. Inequality and Poverty, LDCs (latest available figures)

	Gini Coefficient ^a	Q5/Q1 Income Shares ^b	Poverty Headcount Ratio, National line ^c	Poverty Headcount Ratio, (<1\$/day) ^c
East Asia and Pacific	43.2	8.4	29.7	15.3
China	41.5	6.9	6.5	22.2
Indonesia	36.5	4.7	15.1	7.7
Lao PDR	36.5	4.2	46.1	n/a
Malaysia	48.4	11.7	15.5	4.3
Mongolia	39.3	n/a	36.3	n/a
Philippines	49.0	10.1	54.0	26.9
Thailand	52.3	15.8	13.1	<2
Vietnam	41.8	5.5	50.9	n/a
Europe and Central Asia	33.7	4.9	27.3	8.8
Bulgaria	30.8	6.0	n/a	2.6
Czech Republic	26.6	3.8	n/a	3.1
Estonia	35.4	6.3	8.9	6.0
Hungary	27.9	3.9	25.3	n/a
Kyrgyz Rep.	35.3	6.3	40.0	18.9
Moldova	34.4	6.0	n/a	6.8
Poland	33.3	6.3	23.8	6.8
Romania	28.2	4.3	21.5	17.7
Russian Federation	54.1	5.1	39.9	<2
Slovak Republic	19.5	3.0	n/a	12.8
Slovenia	29.2	3.8	n/a	<2
Turkmenistan	35.8	n/a	n/a	4.9
Ukraine	47.3	3.7	31.7	<2
Latin America, Carib.	53.7	16.1	31.6	24.3
Brazil	60.1	26.3	17.4	23.6
Chile	56.5	17.3	20.5	15.0
Colombia	57.2	15.1	17.7	7.4
Costa Rica	47.0	12.8	n/a	18.9
Dominican Republic	50.5	14.0	20.6	19.9
Ecuador	52.7	9.8	35.0	30.4
El Salvador	49.9	10.6	48.3	n/a
Guatemala	59.6	31.5	n/a	53.3
Honduras	53.7	14.7	50.0	46.9
Jamaica	47.2	6.6	34.2	4.3
Mexico	53.7	13.4	10.1	14.9
Nicaragua	56.4	13.1	50.3	43.8
Panama	57.1	30.0	n/a	25.6
Paraguay	59.1	n/a	21.8	n/a
Peru	52.3	10.3	54.0	n/a
Venezuela	46.8	16.2	31.3	11.8
Middle East, N. Africa	44.4	6.8	16.8	4.7
Algeria	41.4	6.8	22.6	n/a
Egypt	38.1	4.6	n/a	7.6
Jordan	49.5	7.4	15.0	2.5
Morocco	45.3	7.1	13.1	<2
Tunisia	46.3	7.9	14.1	3.9
Yemen, Rep.	45.6	n/a	19.1	n/a

<i>(Table 1 cont'd)</i>	Gini Coefficient ^a	Q5/Q1 Income Shares ^b	Poverty Headcount Ratio, National line ^c	Poverty Headcount Ratio, (<1\$/day) ^d
South Asia	37.3	4.4	36.4	28.2
Bangladesh	34.4	4.1	35.6	n/a
India	35.8	4.7	35.0	47.0
Nepal	42.8	4.3	42.0	50.3
Pakistan	37.3	4.7	34.0	11.6
Sri Lanka	36.2	4.4	35.3	4.0
Sub-Saharan Africa	52.0	13.7	49.7	48.5
Botswana	n/a	14.8	n/a	33.0
Cote d'Ivoire	36.9	6.3	n/a	17.7
Ethiopia	46.1	n/a	n/a	46.0
Gambia, The	53.9	n/a	64.0	n/a
Ghana	38.8	5.3	31.4	n/a
Guinea	46.4	n/a	n/a	26.3
Guinea-Bissau	62.3	28.6	48.8	88.2
Kenya	50.6	18.2	42.0	50.2
Lesotho	62.1	20.9	49.2	48.8
Madagascar	52.1	8.3	n/a	72.3
Mauritania	45.0	13.1	57.0	31.4
Niger	56.6	6.3	n/a	61.5
Nigeria	51.1	12.4	34.1	31.1
Rwanda	35.0	4.0	51.2	45.7
Senegal	59.9	14.8	n/a	54.0
Sierra Leone	69.0	22.5	51.2	n/a
South Africa	65.4	32.5	n/a	23.7
Tanzania	44.3	6.6	51.1	n/a
Uganda	45.3	7.1	55.0	69.3
Zambia	55.9	8.9	86.0	84.6
Zimbabwe	62.9	15.7	25.5	41.0

Sources: author's calculations based on data from World Development Indicators (1999), Deininger and Squire (1996), Lustig and Kanbur (1999)

a/ Income based and income-adjusted values

b/ Ratio of share of total income of top quintile to bottom quintile

c/ Percentage of population below the national poverty line

d/ Percentage of population below the international poverty line of \$1 per day

Table 2. Gini Coefficient in Developing and Transitional Economies, 1980s-1990s

Developing Countries	1980s	1990s	Difference
<i>Increasing Inequality</i>			
Brazil	57.64	60.9	3.26
Chile	55.55	56.49	0.94
China	30.41	35.03	4.62
Colombia	48.3	49.25	0.95
Dominican Republic	46.88	49	2.12
Ethiopia	41	44.5	3.5
Hong Kong	41.49	45	3.51
Jordan	38.45	40.66	2.21
Lesotho	56.02	57	0.98
Mexico	44.93	47.6	2.67
Nigeria	37.02	39.31	2.29
Panama	52.1	57.4	5.3
Peru	42.75	44.87	2.12
Taiwan	29.05	30.54	1.49
Thailand	47.27	51.78	4.51
<i>Stable or Falling Inequality</i>			
Bahamas	44.42	42.99	-1.43
Bangladesh	36.86	34.87	-1.99
Costa Rica	46.26	46.83	0.57
Ghana	36.32	33.94	-2.38
Honduras	59.9	55.53	-4.37
India	31.45	31.41	-0.04
Indonesia	33.44	32.39	-1.05
Israel	30.9	30.5	-0.4
Jamaica	43.35	39.83	-3.52
Mauritius	39.37	36.69	-2.68
Morocco	39.19	39.2	0.01
Philippines	46.08	45	-1.08
Tunisia	43	40.24	-2.76
Venezuela	46.02	46.33	0.31
Transitional Economies			
<i>Increasing Inequality</i>			
Belarus	23	28	5
Bulgaria	23	24	1
Czech Republic	19	27	8
Czechoslovakia	21.13	24.56	3.43
Estonia	23	25	2
Hungary	21	23	2
Kazakhstan	26	33	7
Kyrgyz Republic	26	55	29
Latvia	23	31	8
Lithuania	23	27	4
Moldova	24	36	12
Poland	24.59	28.26	3.67
Romania	23	29	6
Russia	24	48	24
Slovenia	22	25	3
Turkmenistan	26	36	10
Ukraine	23	47	24
Uzbekistan	28	33	5
<i>Stable or Falling Inequality</i>			
Slovak Republic	20	19	-1

Source: Lustig and Kanbur

Table 3. Schooling Gaps as percentage of Expected Schooling Conditional on Age for ages 10-21 Overall and Schooling Gaps in Years Overall and by Parental Schooling Quintiles^a

Country	Year	Average Schooling Gap		Schooling Gaps in Years by Parental Schooling Quintiles				
		Years	% of Expected Schooling for Age	1	2	3	4	5
Argentina (Buenos Aires)	1980	2.0	19.2	3.4	2.2	2.1	1.5	0.6
	1996	2.5	27.2	3.1	2.2	1.9	1.2	1.4
Bolivia (Urban)	1986	1.6	16.3	2.4	1.4	1.5	1.5	1.2
	1995	1.4	15.8	2.2	1.7	1.3	1.0	1.0
Brazil	1981	5.5	57.5	7.7	6.3	5.6	4.6	3.2
	1995	4.6	48.0	6.9	5.6	4.4	3.7	2.6
Chile	1987	1.7	17.4	2.9	2.0	1.4	1.3	0.9
	1994	1.5	14.7	2.3	1.9	1.3	1.1	0.8
Colombia	1995	3.3	36.8	4.7	3.5	2.9	2.6	2.7
Costa Rica	1981	3.2	30.2	4.6	3.7	3.0	2.6	1.9
	1995	3.1	30.6	4.6	3.6	3.2	2.6	1.7
Ecuador	1995	2.7	26.5	4.3	3.5	2.4	2.0	1.2
El Salvador	1995	4.1	43.1	6.0	5.4	4.1	3.1	1.7
Honduras	1989	5.2	50.9	6.8	5.8	4.9	4.6	3.6
	1996	4.7	45.2	6.3	5.4	4.7	3.9	3.0
Mexico	1984	3.4	37.5	4.7	3.7	3.3	3.1	2.3
	1989	3.1	33.7	4.8	3.3	2.7	2.4	2.2
	1992	2.9	32.7	4.6	3.5	2.5	2.3	1.6
	1994	2.9	32.9	4.6	3.5	2.7	2.0	1.9
Nicaragua	1993	4.6	44.9	5.7	5.2	4.6	4.2	3.5
Panama	1995	2.1	20.5	3.7	2.4	1.7	1.4	1.0
Paraguay	1995	3.5	36.3	5.0	4.2	3.3	2.7	2.2
Peru	1985	2.7	28.1	4.7	3.1	2.1	1.9	1.5
	1996	2.6	31.8	4.0	3.0	2.6	1.8	1.3
Uruguay (urban)	1981	2.3	23.4	3.6	2.9	2.3	1.7	1.2
	1995	2.0	18.9	3.2	2.5	2.0	1.5	1.0
Venezuela	1981	3.6	35.5	5.1	4.1	3.4	3.0	2.4
	1995	2.7	26.9	4.0	2.6	2.6	2.5	2.0
Average ^b		3.0	31.5	4.5	3.5	2.9	2.4	1.8

Source: Behrman, Birdsall and Szekely, 2000. Household surveys for Bolivia and Uruguay are urban only and for Argentina are for Gran Buenos Aires only. ^a Schooling gap defined to be schooling that would have attained at age when surveyed if had began schooling at age six and progressed one grade every subsequent year minus actual number of completed grades (i.e., "expected schooling"). ^b Equally weighted country averages (not population weighted).

Table 4. Regression Analysis of Education Inequality (t-stats below coefficient)

Dependent Variable	Education Gini, 90s				Education coefficient of variation				Primary completion shortfall (Poorest)				Dependent Variable
	1	2	3	4	1	2	3	4	1	2	3	4	
GDPpc	-8.78E-06	-1.00E-06	9.47E-06	-7.63E-06	-8.75E-05	-7.80E-05	-2.71E-04	-2.28E-04	0.0044	0.0107	0.00437	0.0107	GDPpc
	-3.539	-4.031	1.061	-0.82	-7.862	-7.888	-8.729	-8.063	5.223	3.762	5.423	3.768	
GDPpc2			-9.53E-10	-1.22E-10			1.12E-08	9.01E-09		-1.01E-06		-1.01E-06	GDPpc2
			-2.121	-0.283			6.260	5.625		-2.311		-2.316	
Avge. Gini 90s	0.0023		0.0017		0.0063		0.0046		-0.1029	-0.0402			Avge. Gini 90s
	1.264		0.993		1.208		0.491		-0.757	-0.306			
Avge. Gini 80s		0.0035		0.0035		-0.0039		-0.0047			-0.1132	-0.0506	Avge. Gini 80s
		2.049		2.008		-0.792		-1.032			-0.763	-0.354	
Constant	0.3533	0.3343	0.3388	0.3270	1.275	1.5474	1.694	1.921	46.737	37.66	47.175	38.08	Constant
	3.895	3.821	3.882	3.550	5.325	7.215	7.354	9.045		5.706	7.737	5.458	
R-squared	44%	57%	50%	57%	27%	22%	38%	31%	43%	51%	43%	51%	R-squared
Number obs.	43	42	43	42	215	238	215	238	40	40	40	40	Number obs.

Source: author's calculations based on Deininger and Squire (1996), World Development Indicators (1999), Filmer and Pritchett (1999), Barro & Lee (1997)

Table 5. The Middle Class Stress* (end 1980s, 1990s)

<u>High Income OECD</u>	<u>1.89</u>	<u>Latin America and Caribbean</u>	<u>3.21</u>
Australia	2.30	Bahamas	2.10
Belgium	1.63	Bolivia	2.59
Canada	1.55	Brazil	4.81
Denmark	1.73	Chile	4.21
Finland	1.55	Colombia	3.27
Italy	1.80	Costa Rica	2.83
Netherlands	1.67	Ecuador	3.21
New Zealand	2.25	Guyana	2.61
Norway	2.00	Honduras	3.50
Portugal	2.00	Jamaica	2.54
Sweden	1.83	Mexico	3.33
United Kingdom	2.10	Nicaragua	3.33
United States	2.15	Peru	2.86
		Venezuela	3.74
<u>South Asia</u>	<u>2.08</u>	<u>East Asia, Pacific</u>	<u>2.49</u>
Bangladesh	1.95	China	1.87
India	2.16	Hong Kong, China	2.80
Pakistan	2.05	Indonesia	2.21
Sri Lanka	2.00	Lao PDR	2.16
		Thailand	3.57
<u>Middle East, North Africa</u>	<u>2.46</u>	Vietnam	2.32
Egypt	2.22		
Jordan	2.67	<u>Europe and Central Asia</u>	<u>1.92</u>
Morocco	2.49	Bulgaria	1.89
Tunisia	2.49	Czech Rep	1.85
		Estonia	2.38
<u>Sub-Saharan Africa</u>	<u>3.14</u>	Hungary	1.93
Ghana	2.21	Kazakhstan	2.00
Kenya	4.43	Kyrgyz Rep.	2.15
Madagascar	2.94	Latvia	1.85
Mauritius	2.21	Lithuania	2.27
Niger	2.44	Moldova	2.10
Nigeria	2.74	Poland	1.79
Senegal	3.81	Romania	1.76
South Africa	4.64	Russian Federation	1.81
Tanzania	2.43	Slovak Republic	1.58
Uganda	2.82	Slovenia	1.87
Zambia	2.86	Ukraine	1.71
Zimbabwe	4.59		

*Defined as the ratio of the average percapita income of the top quintile to that of the 3rd and 4th middle quintiles
Source: *Brisdsall, Graham, and Pettinato (2000), in process.*

The measure of Middle Class Stress is calculated by comparing the average per capita income of the top income quintile to that of the middle 3rd and 4th quintiles. This measure summarizes the level of tension between those who are at the top of the income distribution and the average-income earners. A high level (over 2 percentage points) indicates not only inequality of income, but also possible stress within the electorate, with possible difficulties in the obtainment of political consensus and of reform sustainability.

The data show Latin America as the region with the largest gap between the income of the richest and that of the middle class. In Brazil and Chile, in particular, the average per capita income of the wealthiest 20 percent of the population is over 4 times that of the middle-income population--despite the twice larger size of the latter group. Not surprisingly, the regions that present the lowest degree of middle class stress are OECD countries and the transition economies. However, from our data we are seeing how in the latter group the middle class stress has been increasing rapidly in the 1990s, mainly as a consequence of the transformation toward the market that these economies have been through in the last decade.

Table 6. Average years of education for 25 year olds by income level. Latin America, 1990s.

country	income deciles			10th/5th
	5th	6th	10th	
Argentina	8.52	8.82	13.57	1.59
Bolivia	7.58	8.32	13.12	1.73
Brazil	3.66	4.40	10.53	2.88
Chile	7.69	8.16	12.83	1.67
Costa Rica	5.91	6.31	11.53	1.95
Ecuador	5.64	6.85	11.83	2.10
El Salvador	3.27	3.99	10.27	3.14
Honduras	3.59	3.90	9.58	2.67
Mexico	4.78	5.66	12.13	2.54
Nicaragua	4.11	4.55	8.49	2.07
Panama	7.53	8.16	13.57	1.80
Paraguay	4.81	5.46	10.72	2.23
Peru	6.60	7.05	10.80	1.64
Uruguay	6.79	7.34	11.87	1.75
Venezuela	6.23	6.68	10.81	1.74

Source: Author's calculation from data in IDB, IPES, 1998 (appendix to the first chapter)

Inequality and Poverty, LDCs (late 1980s, 1990s)

<i>Bivariate Correlation Coefficients</i>	1	2	<i>Mean</i>	<i>StdDev</i>	<i>Min</i>	<i>Max</i>	<i>N</i>
1 Inequality Ratio (Q5/Q1)	1.000		10.6	7.4	3.0	32.5	62
2 Income Gini coefficient	0.747	1.000	46.1	10.6	19.5	69.0	68
3 Poverty H-count ratio (<1\$/day)	0.332	0.451	25.7	22.9	1.5	88.2	55

Source: Table 1

Figure 1a.

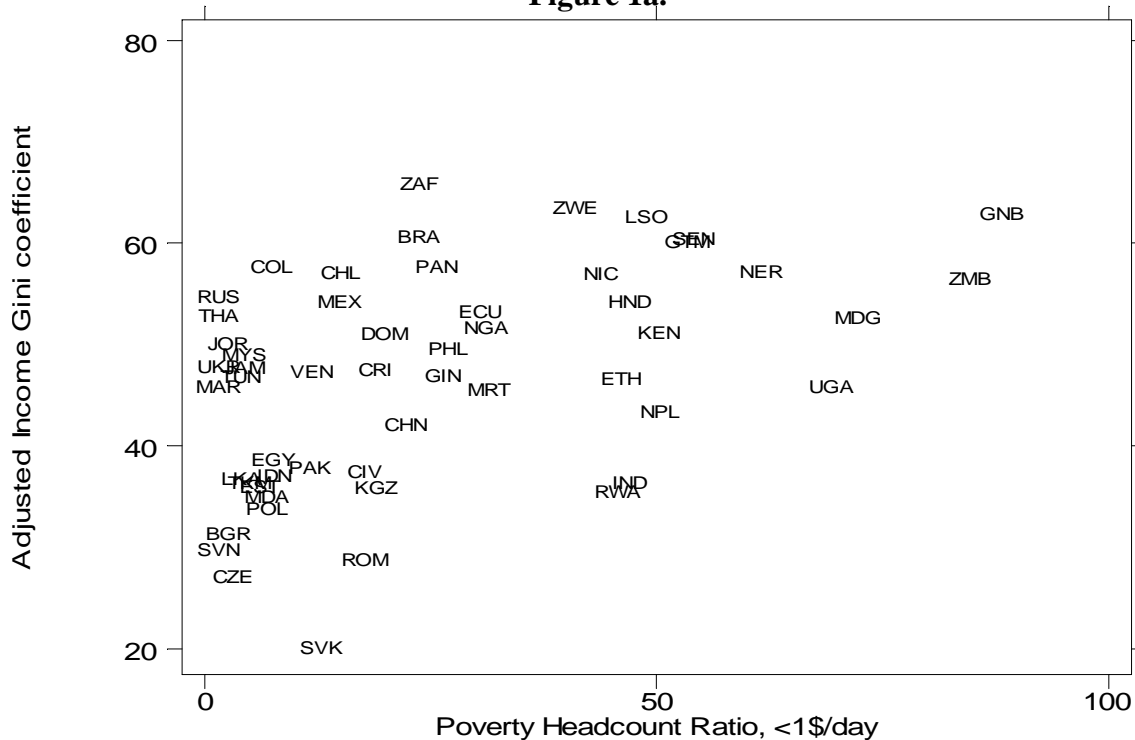


Figure 1b.

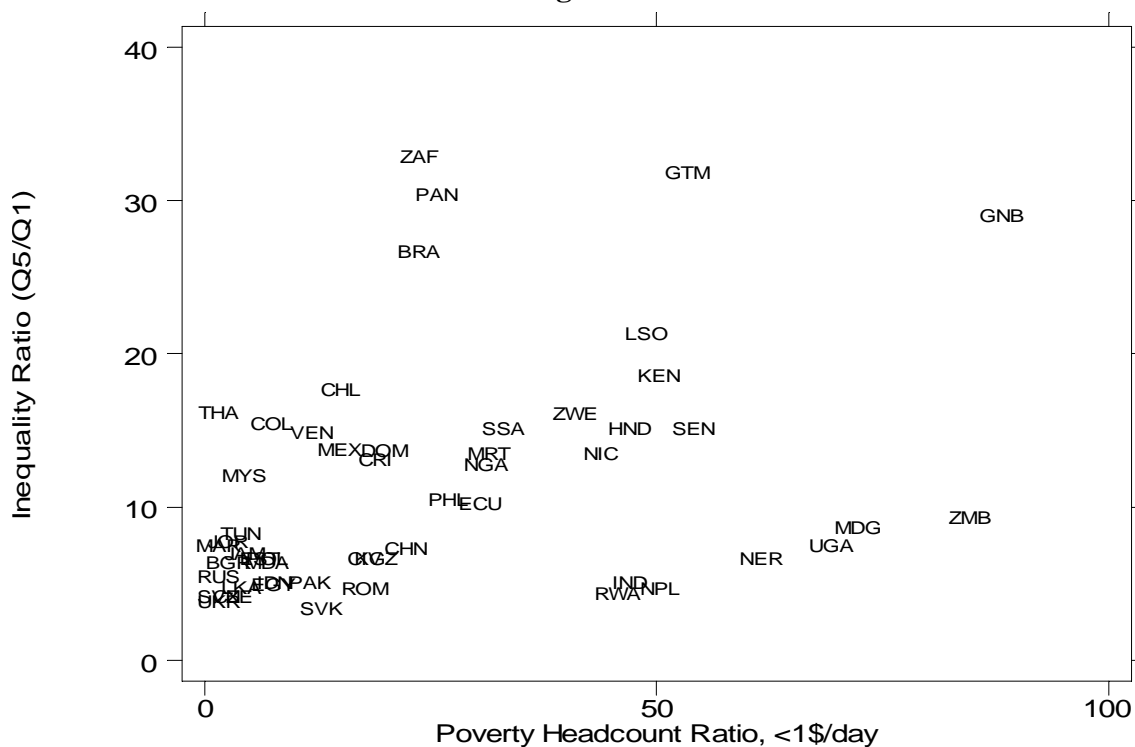
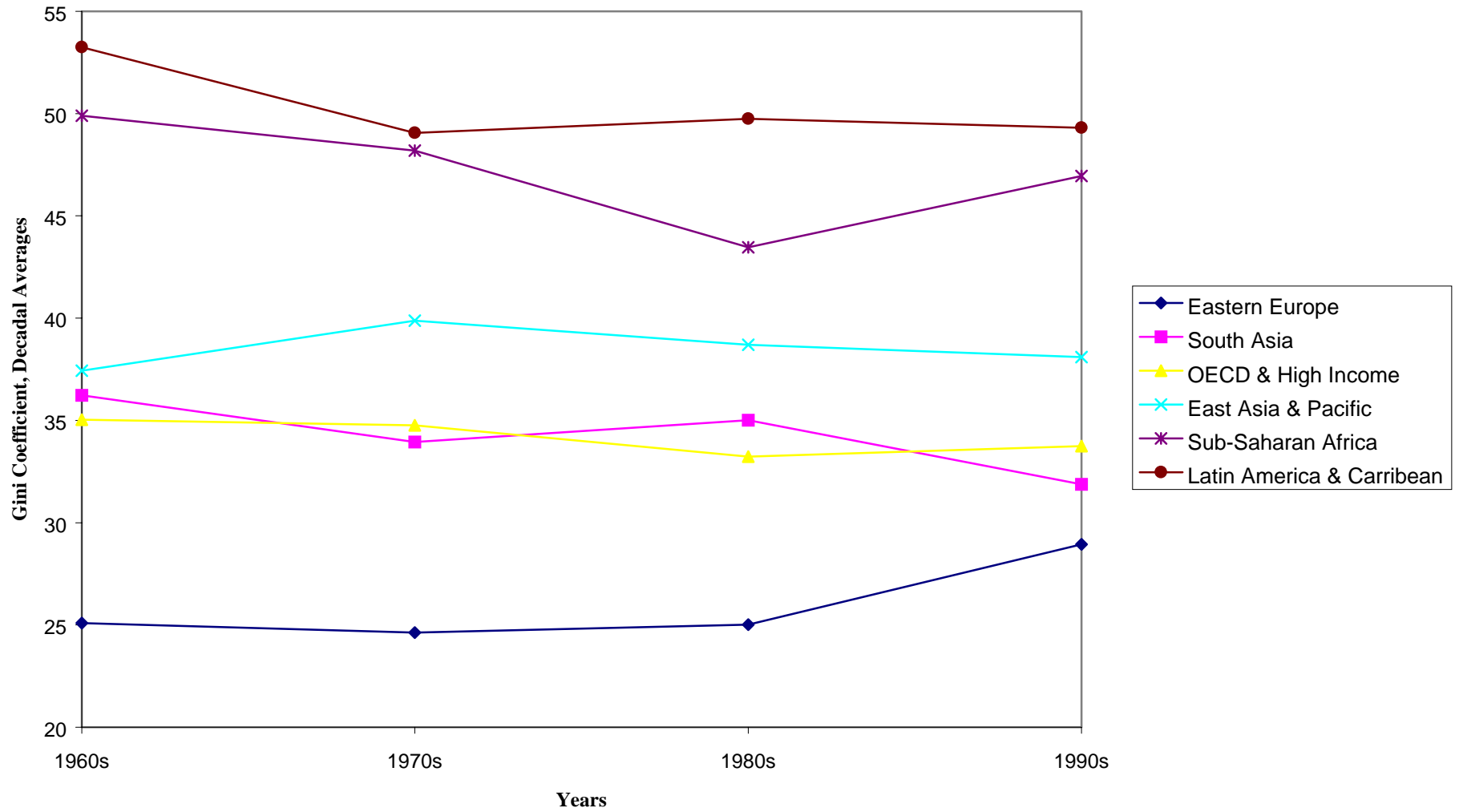


Figure 2: Inequality by Region and Decade



Source: Deininger and Squire, 1996.

Figure 3a.

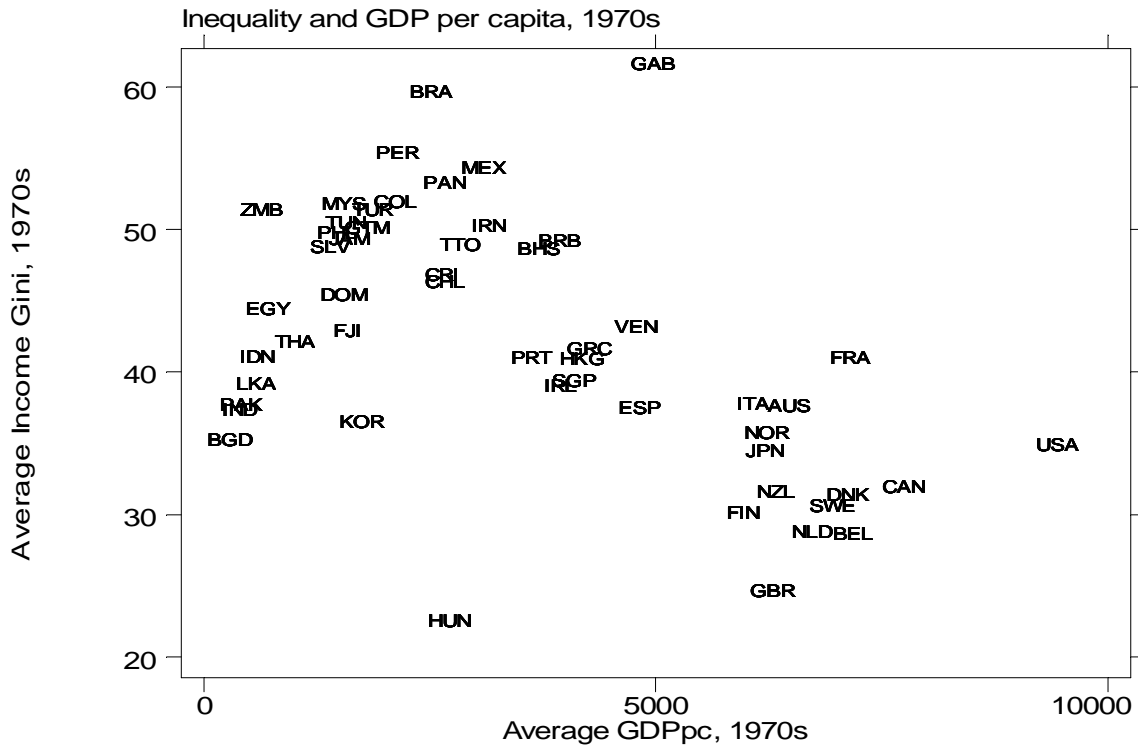


Figure 3b.

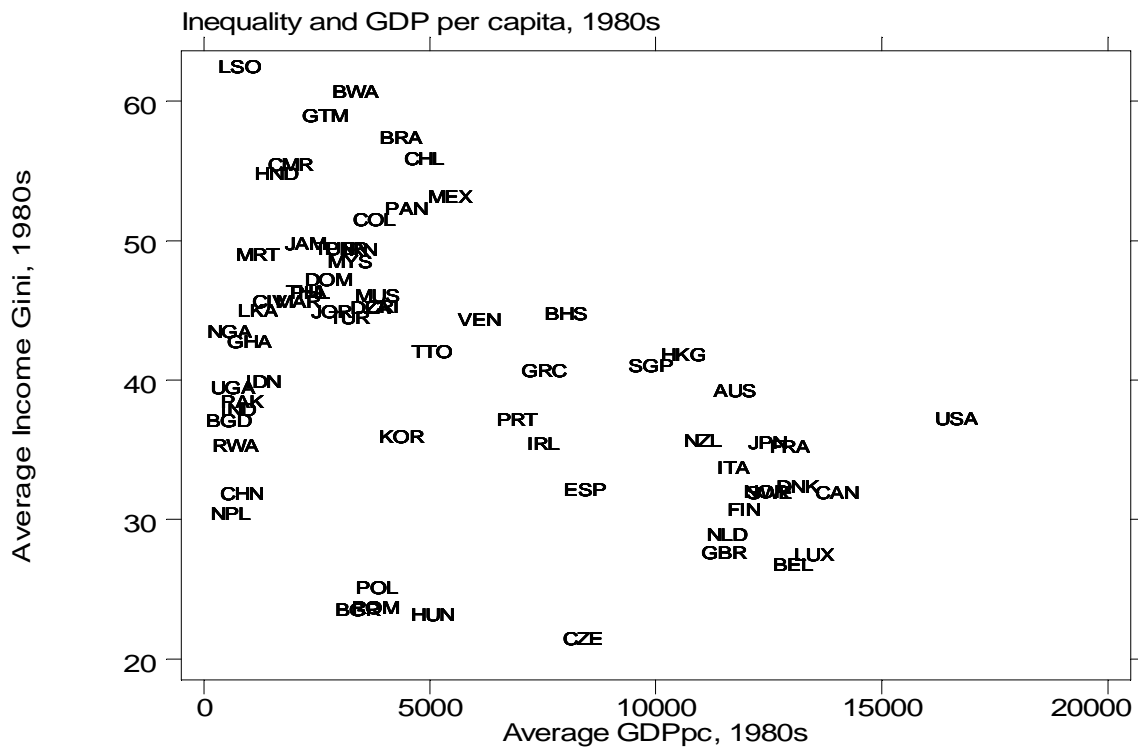
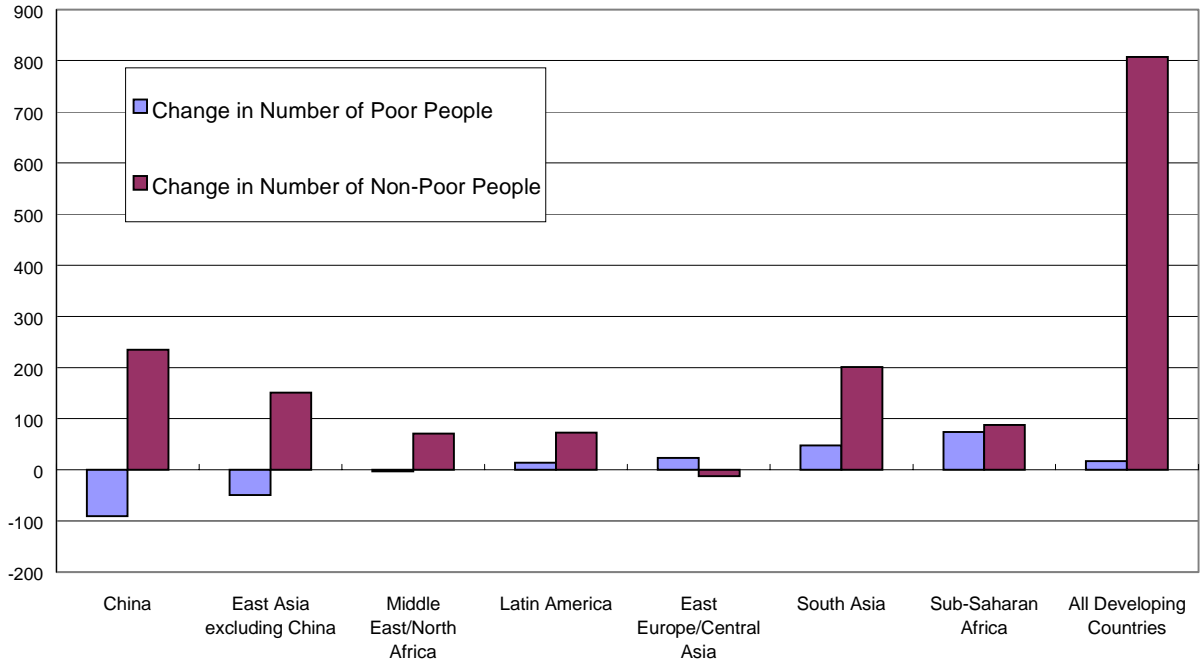
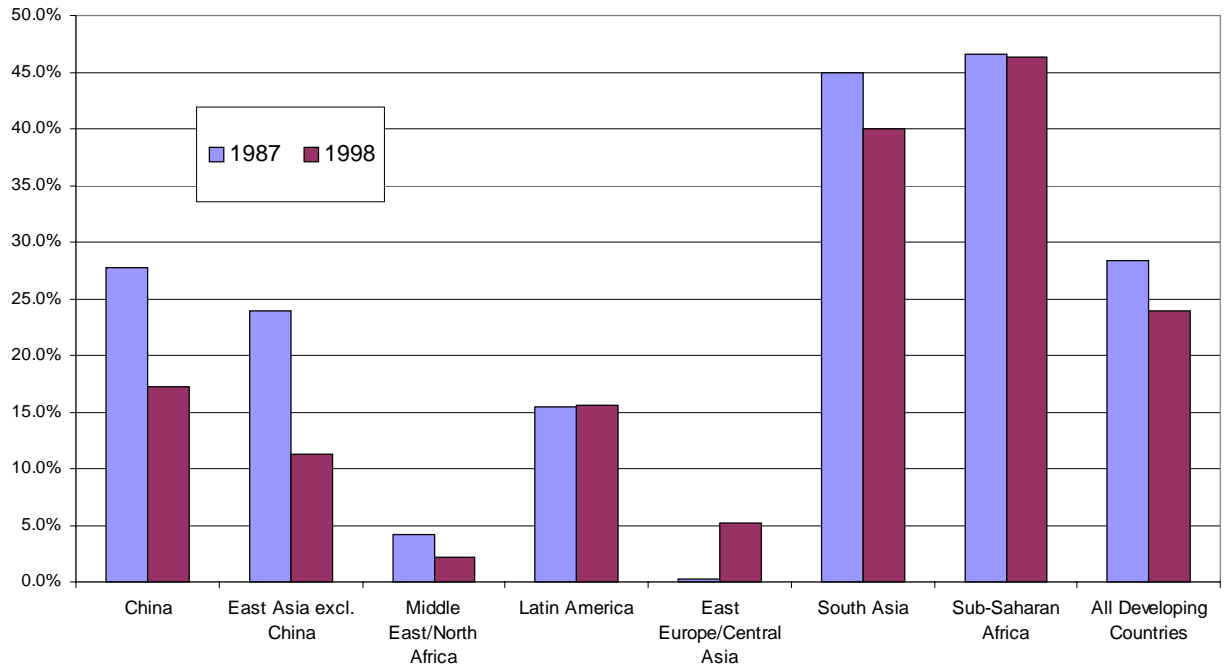


Figure 4a. Changes in Numbers of Poor and Non-Poor Persons: 1998 versus 1987, million (less than one dollar a day)



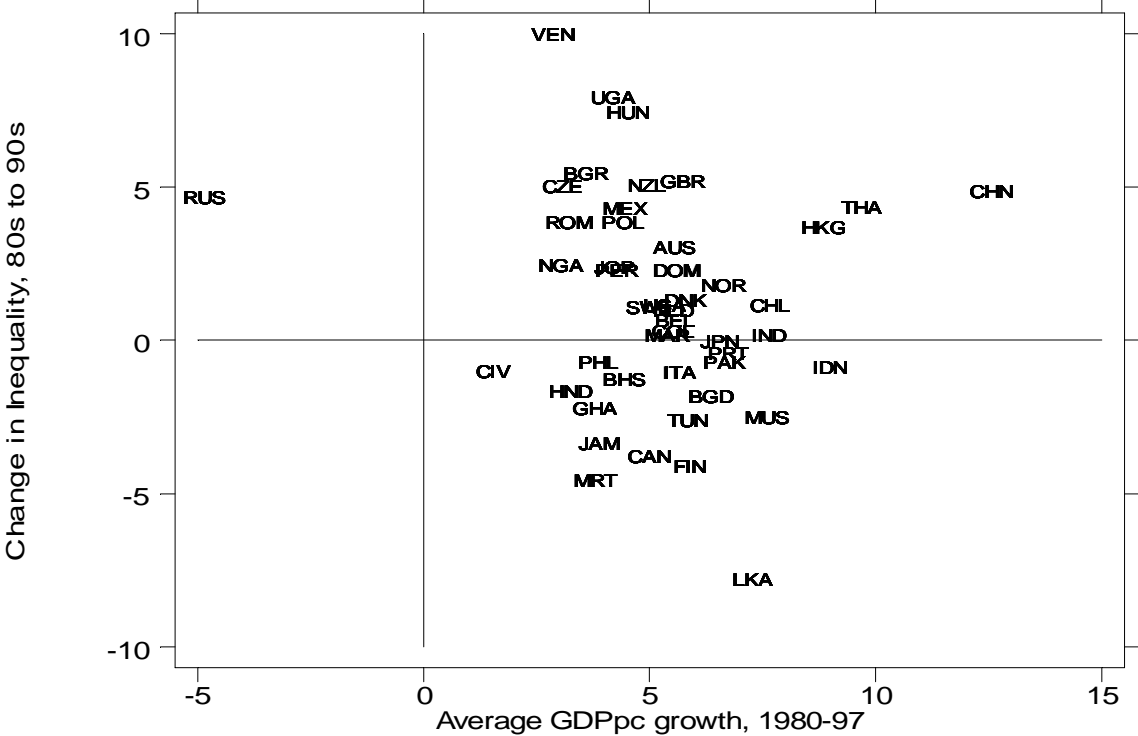
Source: Guy Pfeffermann, 2000 "Private Enterprise in the War on Poverty: A pamphlet" IFC, mimeo.

Figure 4b. Poverty Headcount Ratios, 1987-1998



Source: author's calculations based on World Bank data

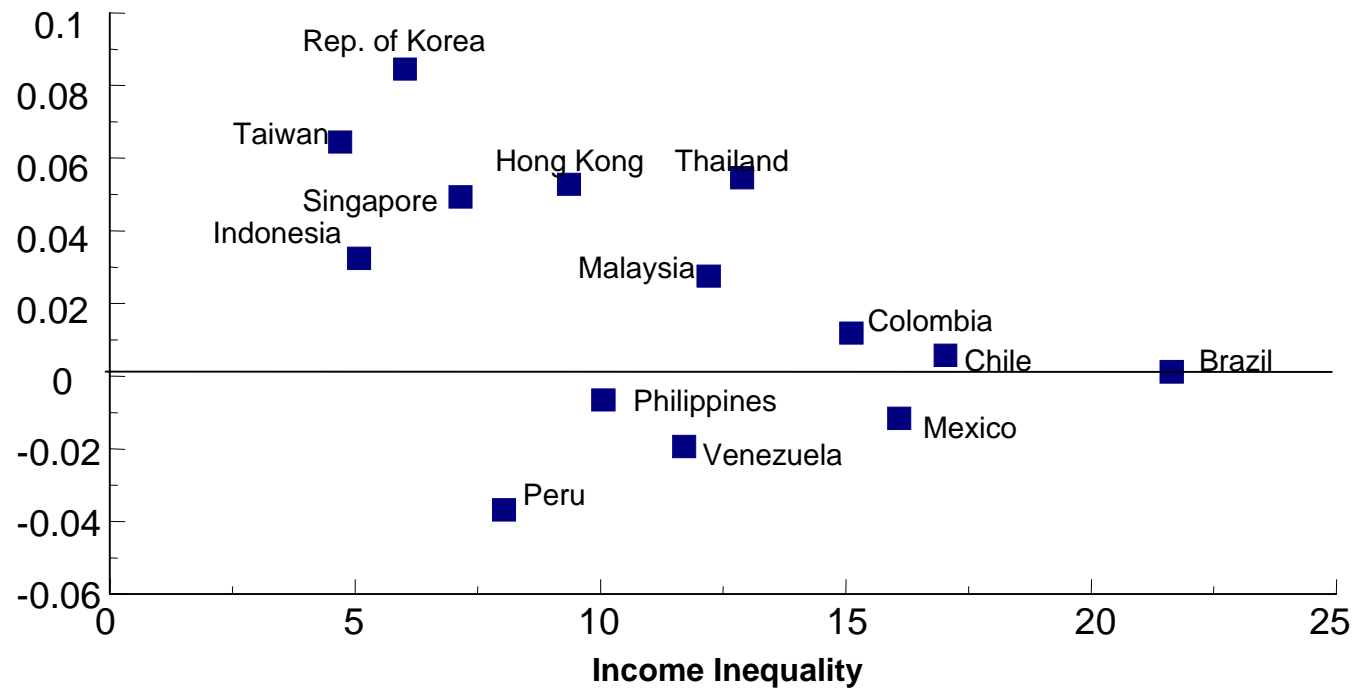
Figure 5. GDPpc growth and Change in Inequality, 1980-1997



Source: author's calculations from data in Deininger and Squire (1996), and World Development Indicators (1999)

Figure 6. East Asia and Latin America. Income Inequality and GDP Per Capita Growth Rate, 1981-90

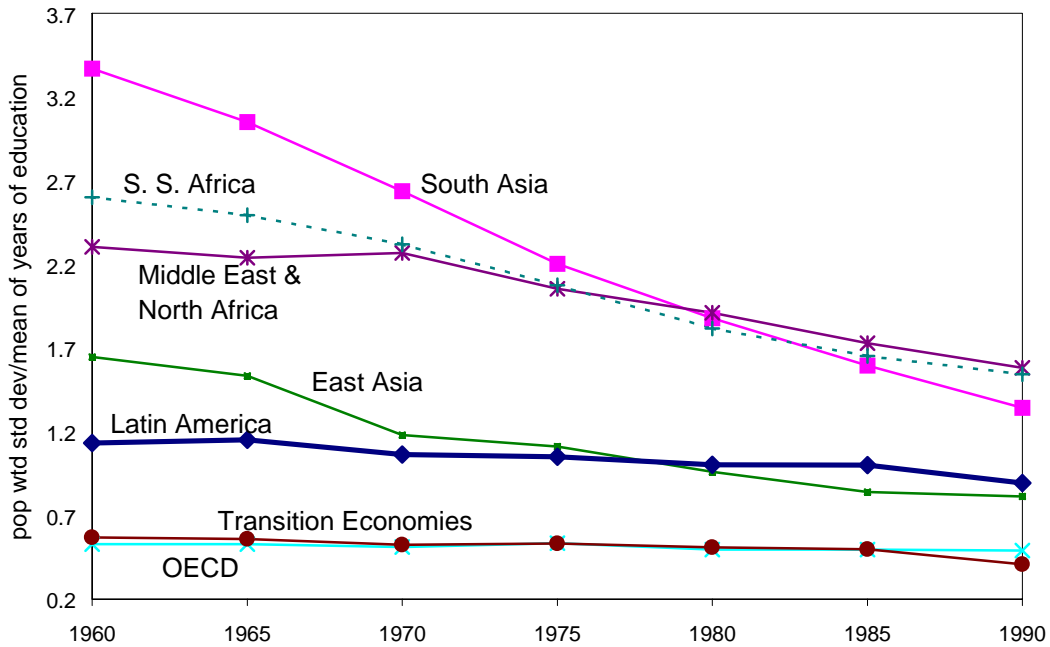
Average Annual
Growth in Per Capita
GDP, 1981-90



Source: Stallings et. al.,

Note: Income inequality is measured as the ratio of the income share of the richest 20% of the population poorest 20%. Observations are an average of high-quality data available over the

Figure 7. Inequality of Education, by regions (1960-90)



Source: author's calculations on background data of Birdsall and Londoño (1998)

On the vertical axis is the coefficient of variation of the years of schooling of the adult population. This was calculated as the population-weighted regional average of the national ratios of standard deviation of years of education to average schooling.