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Equity and Development

Part II Introduction

Chapter 4 Equity and well-being

This is a near-final draft of the WDR 2006. The views expressed are those of the authors and should not be attributed to the World Bank or any affiliated organizations. The final report will be published in September.

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Please see www.worldbank.org/wdr2006 for more information on the report.

Part II: Introduction

P2.1 In the first part of this report, we summarized some of the evidence on inequalities in several dimensions. In addition to affecting well-being directly, such dimensions as health, education, income, voice, and access to services shape the opportunities people face for future progress and achievement. We emphasized the interconnections between these various dimensions. Not only is there inequality in the distributions of income, health status, and educational attainment, but—even more important—these indicators tend to be correlated. The rich tend to be both healthier and better educated than others. The poorest of the poor tend to have the lowest attainment in years of schooling and some of the worst health indicators. These correlations generally also extend to public services, with the poor gaining access to infrastructure, electricity, water, sanitation, and garbage disposal much later than others, if at all.

P2.2 Because education and wealth help a person gain influence in society, voice and political power are also generally thought to be correlated with economic well-being. The interaction between these mutually reinforcing economic, social, and political inequalities perpetuates them across generations. Chapter 2 discussed evidence indicating that a 10 percent difference in economic status between two families in one generation tends to imply, on average, a 4 percent to 7 percent difference in the next generation, depending on the country and measurement details. Opportunities clearly are not independent from social and family background, or from group identity.

P2.3 Do such disparities matter? Are people concerned with the large observed differences in access to education and health, and in economic opportunities, or merely with the fact that some people have low absolute levels of income, years of schooling, and access to services? Should policymakers worry about the unequal opportunities that arise from discrimination, unequal access to justice or other unfair processes? Should an institution like the World Bank, whose primary objective is to assist its client countries in eradicating extreme poverty, care about inequalities—in opportunities, outcomes, and processes—at all?

P2.4 Opinions on these questions are wide-ranging. Support for equal opportunities has long been a theme in domestic policy in the United States, for instance. Franklin D. Roosevelt once said that "We know that equality of individual ability has never existed and never will, but we do insist that equality of opportunity still must be sought." [1] Some participants in the consultations for this report were even offended that the question "Does inequality matter?" was asked at all, because they considered its answer to be

[1] In his second inaugural address, Roosevelt also suggested that avoiding deprivation in outcomes was a legitimate policy aim. As he put it, "The test of our progress is not whether we add more to the abundance of those who have much; it is whether we provide enough for those who have too little" (Washington, DC, January 20, 1937). There tends to be less agreement on the importance of inequality in specific outcome spaces. Writing about income inequality, Feldstein (1998) argues that increases in inequality caused by larger incomes at the very top warrant no policy attention, and represent "pure Pareto improvements," to which only "spiteful egalitarians" would object.

"Obviously, yes." One participant felt that the very question indicated that "we are suffering [from] a terrible tolerance to horror."[2]

P2.5 The next three chapters in this report address the following question: should good development policy be concerned with equity? Equity, as discussed in chapter 1, is understood here as the pursuit of equal opportunities and the avoidance of severe deprivation. Equity is *not* the same as equality in incomes, or in health status, or in any other specific outcome. It is the quest for a situation in which personal effort, preferences, and initiative—rather than family background, caste, race, or gender—account for the differences among people's economic achievements. A situation in which all institutions are color-blind and nonmarket institutions are equally responsive to the rich and the poor. In which personal and property rights are enforced equally for all. And in which all have access to the public services and the infrastructure to leverage their productivity and their chances of success in the markets.

P2.6 The evidence we review here has been assembled in disciplines ranging from economics and history to sociology and anthropology. On balance, this evidence suggests that the pursuit of sustainable, long-term prosperity is inseparable from a broadening of economic opportunities and political voice to most or all of society. One set of reasons for this arises from failures in capital, land, and labor markets. Those failures imply that productive opportunities are not necessarily seized by those with the highest potential returns on their talents or ideas, but instead by those with greater wealth, better connections, or larger land parcels. This would not happen if markets worked perfectly, as resources would flow to those with the most productive investment projects. But given that markets are not perfect, scope arises for efficient redistribution schemes.

P2.7 Informational asymmetries and contract enforcement problems cause some of these markets to function less than perfectly, leading to inefficiency. Chapter 5 documents cases in which aggregate efficiency could be improved by redistributing wealth or power toward poorer or marginal groups. Sometimes, the evidence of inefficiency is seen in differences in marginal products of capital across firms. We know that smaller entrepreneurs pay interest rates much higher than the marginal product of capital accruing to other firms. We know that some farmers allocate effort between plots in a way that is not socially efficient, because they own one plot and sharecrop in another. We have experimental evidence suggesting that groups discriminated against perform below their own capacity, either because they internalize the stereotype or because they expect to be treated unfairly. Each of these pieces of carefully researched empirical evidence, and others discussed in chapter 5, provide reasons why more equitable economies would, in most cases, also be more efficient.[3]

P2.8 Chapter 6 complements this picture by looking at historical evidence, suggesting that large inequalities in political rights and power give rise to exclusionary institutions

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[2] Michel Ferry, online consultation message, dated October 26, 2004, 10:56 a.m.

[3] As chapter 1 also indicated, this is *not* equivalent to saying that implementing redistributions is free of tradeoffs, particularly in the short run, or that terrible inefficiencies cannot arise if redistributions are implemented in ways that pay no heed to incentives. We return to these difficult policy issues in chapters 7, 8, and 9.

that generally impair development processes. Greater political equality, by contrast, establishes limits on predation by the most powerful in each society. This tends to lead to institutions that level the playing field and provide opportunities for advancement and mobility to those from underprivileged backgrounds.

P2.9 Such institutions seem to be associated with more sustained growth. One example comes from contrasting the exploitative labor practices of the Spanish *conquistadores* in the mining centers of their Andean colonies from the sixteenth to the eighteenth century, with the greater freedom and opportunity afforded to early settlers in North America. Another example of inequitable treatment of citizens by the state, which was also enormously costly for efficiency, was the very high taxation of poor African farmers by state-owned or parastatal agricultural marketing boards in Ghana, Nigeria, and Zambia, which prevailed a few decades ago.

P2.10 Equity and fairness matter not only because they are complementary to long-term prosperity. It is evident that many people—if not most—care about equity for its own sake. Some see equal opportunities and fair processes as matters of social justice and thus as an intrinsic part of the objective of development. In chapter 4, we briefly review arguments and evidence suggesting that most societies exhibit a pervasive and long-standing concern for equity.

Chapter 4: Equity and well-being

4.1 People from many cultures seem to share a concern for equity that is reflected in religious and philosophical traditions, as well as in legal institutions, both national and international. Religions from Islam to Buddhism and secular philosophical traditions from Plato to Sen have shown both a concern for equity and an aversion to absolute deprivation. In modern legal institutions, equity remains a fundamental tenet of theory and practice.

4.2 That a concern with equity is so pervasive across cultures, religions, and philosophical traditions suggests that a fundamental preference for fairness is deeply rooted in human beings. We review experimental evidence showing that many people place a monetary value on "fairness" and are prepared to give up real money if they feel that a process they are involved in is unfair. Complementing this evidence are data from opinion surveys, and surveys on subjective well-being, suggesting that higher inequality in incomes is, on average, associated with lower aggregate levels of subjective well-being.

4.3 An empirical link between income inequality and poverty reduction reinforces the conceptual link between the aversion to inequality and the quest to avoid absolute deprivation. We highlight the obvious fact that, if inequality falls during a growth spell, poverty generally falls by more than if inequality had not changed. We also document the less obvious fact that higher-income inequality reduces the effectiveness of future economic growth in reducing absolute income poverty.

Ethical and philosophical approaches to equity

4.4 Perhaps the oldest manifestations of concern with equity and the avoidance of deprivation come from religion. Several major world religions endorse the notions of social justice and a duty toward the poor. Buddhists see a duty to care for the poor. Christians are to "love their neighbor as themselves." The Hebrew word for "charity" is the same as the one for "justice." One of Islam's five pillars of faith is *zakat*, providing for the poor and needy. The World Faiths Development Dialogue (1999) states that "all religions would see the extreme material poverty in the world today as a moral indictment to contemporary humanity and a breach of trust within the human family." And religious views on equity are not restricted to poverty. Despite varying interpretations, and a wealth of differences in perspective, a belief in the fundamental dignity of human beings is a theological tenet in most major religions. While there are important differences in how this belief manifests itself across faiths, and even among different groups within the main religions, some analysts see a growing emphasis on this principle of equality within various faiths.[4]

4.5 Equity is also a key theme in secular philosophical traditions. Western political and ethical philosophy, for instance, has long been concerned with distribution. In ancient Greece, Plato argued that "if a state is to avoid… civil disintegration… extreme

[4] See Pinglé (2005).

poverty and wealth must not be allowed to rise in any section of the citizen-body, because both lead to disasters."[5] Roman law, while discriminating against slaves, as in all ancient empires, also laid the foundations for some of the principles of equality that underlie modern legal principles in many countries. Those principles applied only to Roman citizens who were free, but in modern nations they have become all-inclusive.

4.6 In the modern era, western thinking about social justice was greatly influenced by utilitarianism—the idea, originally from Bentham (1789), that the social goal should be to achieve "the greatest happiness for the greatest number." Although utilitarians were essentially unconcerned with the distribution of happiness, enjoining societies simply to maximize the sum of utilities across all individuals, the approach has earned the somewhat misbegotten reputation (at least among economists) of having egalitarian implications.[6]

4.7 Modern theories of distributive justice have largely moved beyond utilitarianism, in part because of its fundamental lack of concern with the distribution of welfare. Since the early 1970s, a number of influential thinkers, including John Rawls, Amartya Sen, Ronald Dworkin, and John Roemer, have made separate and important contributions to the way we think about equity. Although the theories of justice and social choice proposed by each of them are different in important respects, they share much in common.

4.8 All four reject final welfare (or utility) as the appropriate space in which to judge the fairness of a given allocation or system. All acknowledge the importance of individual responsibility in moving from resources to final outcomes, including welfare. All prefer to see some combination of the set of liberties and resources available to individuals as the right space to form a social judgment. All seem to appeal, at some stage, to the "veil of ignorance" argument, from Harsanyi (1955), that a fair allocation of resources should be one that all "prospective members of society" would agree on, before they knew which position they would occupy. They used this thought experiment to argue that justice implies equality in the allocation to all people of some fundamental concept, such as primary goods.

4.9 What Rawls, Sen, Dworkin, and Roemer disagree on is what exactly this concept should be. Rawls (1971) argued that social justice required that two basic principles should hold. The first "demands the most extensive liberty for each, consistent with similar liberty for others."[7] The second requires that opportunities—which he related to the concept of "primary goods"—should be open to all members of society. Under the

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[5] Plato, *The Laws*, 745, quoted in Cowell (1995), 21.

[6] The reason for this reputation is the combination of a utilitarian objective with a set of (rather restrictive) assumptions about individual utilities: (i) individual preferences can be represented by a utility function; (ii) cardinal utility levels are meaningful indicators of the individual's well-being; (iii) utilities can be compared across different people; (iv) the utility functions are increasing but concave (that is, increase at a declining rate) in incomes; and (v) all individuals have identical utility functions. If they all hold, then for a fixed level of aggregate income, the greatest sum of utilities is achieved by an equal division of incomes across all individuals.

[7] Sen (2000), 69.

Difference Principle, he proposes that the chosen allocation should be one that maximizes the opportunities of the least privileged group. (The Difference Principle is also known as Rawls's "maximin" principle).

4.10 Sen (1985) thought that different people might have different "conversion factors" from resources to actions and welfare. He argued that all goods, including Rawls' "primary goods," are inputs to a person's functionings—the set of actions a person performs and of states the person values or enjoys. For Sen, the concept to be equalized across people is the set of possible functionings from which a person might be able to choose (which he called a "capability set").

4.11 Dworkin (1981b) and Dworkin (1981a) argued that justice required that individuals should be compensated for aspects of their circumstances over which they had no control, or for which they could not be held responsible. He argued for a distribution of resources that compensated people for innate differences that they could not have helped, including differences in talent.

4.12 Roemer (1998) argued that equity demanded an "equal opportunity policy." He acknowledged that individuals bear some responsibility for their own welfare, but also that circumstances over which they have no control affect both how much effort they invest and the level of welfare they eventually attain. He argued that public action should therefore aim to equalize "advantages" among people with different circumstances at every point along the distribution of efforts.

4.13 Despite important (but subtle) differences, all four thinkers have contributed to shifting the focus of social justice from outcomes to opportunities. We also take a leaf from Nozick (1974), who is usually regarded as an anti-egalitarian. He argued that theories of justice generally placed an excessive emphasis on outcomes, such as welfare, utility, or even capabilities. Nozick reminded us of the (obvious) fact that outcomes are the result of processes and argued that the correct focus for a theory of justice should be on the fairness of processes. If a particular allocation departs from a fair initial state, and is arrived at through a fair process, it should be judged to be fair—even if it is unequal.

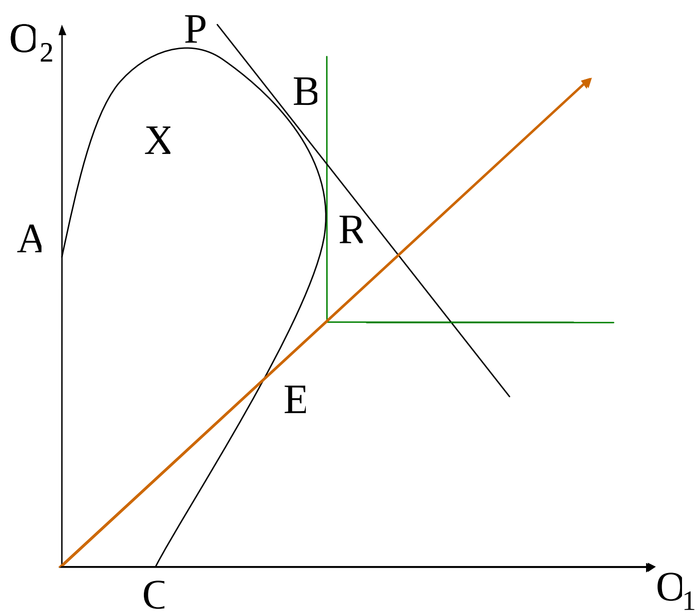
4.14 The concept of equity we adopt in this report draws on the contribution of these four thinkers by focusing on opportunities, rather than on welfare, utilities, or some other corresponding individual outcome. We do not dwell on the fine distinctions between Sen's capabilities and Roemer's opportunities. As in both frameworks, we acknowledge the central role of individual responsibility and effort in determining outcomes. We focus on eliminating disadvantage from circumstances that lie largely beyond the control of the individual but that powerfully shape both the outcomes and the actions in pursuit of those outcomes.

4.15 These different perspectives on what a social optimum should be can shed light on an important point for this report—one previously mentioned in chapter 1. It is not for us to advise countries on what exactly constitutes an equitable distribution in their societies. Instead, our role is to point out the inequities we can observe and to note that reducing them may be perfectly consistent with—perhaps even necessary for—greater efficiency and prosperity in the long run. Box 4.1 draws on a classic public economics discussion of these philosophical perspectives to illustrate this point.

Box 4.1 A simple representation of different concepts of equity

Box figure 1 (adapted from figure 11-1 in Atkinson and Stiglitz (1980),* can help summarize what this report hopes to achieve—and what it does not. Suppose that a society consists of only two groups of people (1 and 2) and let the axes of the diagram depict the opportunity levels of each group. Opportunity sets are obviously multidimensional, but imagine for simplicity that the various dimensions can be meaningfully conflated onto an "opportunity index," O_1 for type 1s, and O_2 for type 2s. Now let the curved frontier AC represent the "opportunity possibility frontier" for this society.** It reflects the maximum opportunity indexes that types 1 and 2 can obtain, given the available resources and technology. The fact that it does not monotonically decline from A to C incorporates the fact that when type 1 individuals have very limited opportunities, type 2 people can also benefit from an expansion in type 1 opportunity sets, and vice versa. Over some ranges, improvements in the opportunity sets of the "poorest" types can be Pareto-improving—that is, can benefit everyone. Put another way, there is scope for efficient, growth-promoting redistribution.

Box figure 1 An illustration of choices between the opportunities of two types of people



Eventually, however, tradeoffs set in. Between points P and R, if society is on the opportunity possibility frontier, any improvement in type 1 sets must imply a reduction in type 2 sets, and vice-versa. Points B, R, and E are translations to this "opportunity space" of the welfare concepts associated with Bentham, Rawls, and full egalitarianism, respectively.

- If this society wished to maximize the sum of total opportunity indexes, it should aim for point B.
- If, instead, it wanted to maximize the opportunity set of the "poorest" group, it should aim for point R.
- If it insisted on absolute equality of opportunities, it must lie along the 45-degree ray through the origin, and would aim for point E.

What this report will not attempt to do is to advise countries on which of these criteria of social justice, or indeed any other, an individual society should aim for. Each of these three points can be defended by logical arguments, under different degrees of aversion to inequalities in opportunity.

What the report will try to do is as follows:

- Describe the inequalities in opportunity actually observed in society (at a point such as X).
- Investigate whether some of those disparities (which in this diagram greatly favor type 2) might actually be preventing the society from enjoying higher aggregate opportunities (and welfare, on another space).
- Suggest possible policy and institutional approaches that might help move from points such as X to whichever point society considers equitable, on the opportunity possibility frontier.

*Atkinson and Stiglitz (1980) refer, in turn, to a figure 1 in Buchanan (1976).
**In Atkinson and Stiglitz (1980), utilities are used instead of opportunities. While that distinction is fundamental in almost every respect, it is not for the point being made here, namely that different social justice criteria imply different optimal allocations.

Equity and legal institutions

4.16 The concerns with equity that feature in moral, religious, and ethical debates around the world are reflected in real-world institutions, through which people have sought to promote justice throughout history. Chief among them are legal institutions, where "equity" has a distinct—and specific—interpretation as a set of principles intended to guide and correct the application of the law. According to Kritzer (2000), how these principles merge with the written, codified law varies across legal traditions, but the overarching concept of "fairness" is a cross-cultural reality. And in practice, definitions often refer directly to shared values within a particular community[8] as well as to the belief that people should not suffer before the law as a result of having unequal bargaining power.[9]

4.17 In western philosophy, Aristotle is regarded as the first author to distinguish between justice and equity.[10] He found that courts enact justice according to law—that is, by applying general rules that give an equitable solution in the majority of cases. In some cases, however, the results are inequitable. Equity then rectifies law in so far as the law is defective on account of its generality.[11] The Romans operationalized this concept of equity by distinguishing between *ius strictum* (strict law) and *ius aequum* (equity), with the latter used to interpret the law and to complement it. Equity prevailed in instances of conflict between the two.

4.18 In modern legal traditions, equity remains a fundamental tenet of legal theory and practice. In common law systems, equity was historically a separate branch of law

[8] For example, within German Courts, the standard of what is equitable is based on "the opinion of all those people who think in equitable and just terms"(Palandt (2004), article 242).
[9] For example, within common law jurisdictions, key principles that guide the application of equity include the principles of "unconscionability," "undue influence," "duress," and "unjust enrichment." A transaction has been deemed unconscionable where "one party to a transaction is at a special disadvantage in dealing with the other party because illness, ignorance, inexperience, impaired faculties, financial need, or other circumstances affect his ability to conserve his own interests, and the other party unconscientiously takes advantage of the opportunity thus placed in his hands" (High Court of Australia, *Blomley v. Ryan* 1956, 99 CLR 362 at p. 415, per Kitto J.).
[10] Aristotle, *The Nicomachean Ethics*, book 5, chapter 10, 350 BC.
[11] Kritzer (2000), p. 495. For a more detailed discussion of the philosophical evolution of the concept, see Alland and Rials (2003).

administered by Chancery Courts.[12] The Judicature Act of 1873 in the United Kingdom "fused" the courts of law and equity, doing away with a bifurcated system of courts, while establishing the supremacy of equity in cases of conflict between equity and common law. Equitable principles, based on conscience and fairness, have continued to develop and be applied in common law jurisdictions around the world to mitigate harsh and unfair results produced by the application of formal legal rules in specific cases.[13]

4.19 In general, the use of equity as a source of law in the civil law traditions of the European continent is more limited than in the common law tradition. Civil legal codes, which have their origins in the Enlightenment era, aim at integrating equity into formal law—that is, by designing laws aimed at producing equitable results. Equity is seen as part of law and, therefore, should be achieved by applying the formal rules. Provisions in the codes that refer explicitly to equity, however, are used to correct inequitable results of the application of other formal provisions, in a way which is similar to common law systems.

4.20 Both the common law and the codified systems from the continental European tradition have spread to countries around the globe, and equity is now a global legal concept. The legal systems of Latin American countries, such as Argentina, Brazil, and Mexico, have approaches to equity similar to those in continental Europe, while Bangladesh, India, and Nigeria follow the common law tradition. Importantly, equity is not a purely western concept—it can be found in legal systems around the world, including those that do not share European origins.[14] For example, the distinction between justice and equity is also found in Islamic law, in which the former is referred to as *adala*, the latter as *insaf*, and in Jewish law, with the distinction between *din* and *tsedek*.[15]

4.21 In today's more integrated world, legal understanding of equity has also influenced international law—serving as the basis for individualized justice, creating specific principles of fairness and reasonableness, or being identified with international equitable standards for sharing resources and redistributing wealth. Perhaps the foremost example of the development of international principles of equity is the international human rights regime. International human rights law is rooted in a commitment to protect the "equal and inalienable rights of all members of the human family," which itself is considered to be the "foundation of freedom, justice and peace in the world."[16]

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[12] The Chancellory Courts have their origin in the residual discretionary power of the King, generally exercised by the Chancellor, to correct or overturn cases in which justice could not be obtained by a common law court.

[13] In the common law tradition, equitable jurisdiction is also associated with a number of well-established principles, sometimes called the "maxims of equity." Examples of these include: *He who seeks equity must do equity*—that is, a claimant who seeks equitable relief must be prepared to act fairly toward the defendant (future conduct); *He who comes to equity must come with clean hands*—similar to the previous principle, but related to the claimant's past conduct; *Equity looks at intent rather than form*—equity is more concerned with substance than form.

[14] Cadiet (2004), 425.

[15] See Arnaud (1993) and Draï (1991).

[16] Preamble to the Universal Declaration of Human Rights (1948).

4.22 The UN Charter laid the foundation for contemporary international human rights law. The preamble to the Charter states that the UN community "reaffirms faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small."[17] The Universal Declaration of Human Rights, adopted by the General Assembly of the United Nations on December 10, 1948, is viewed as the "source of inspiration and … the basis for the UN in making advances in standard setting as contained in the existing human rights instruments."[18] It has become a highly visible and widely recognized statement of moral, ethical, and political standards at the international level.[19]

4.23 The contemporary international human rights regime comprises a broad array of legal instruments,[20] many operating under the aegis of the United Nations. There also exist regional human rights regimes in Europe (European Convention on Human Rights and Fundamental Freedoms), the Americas (Inter-American Convention on Human Rights), and Africa (African Charter on Human and Peoples' Rights). In addition, the laws of some other international entities, such as the European Union, incorporate human rights norms (Treaty of Nice, Charter of Fundamental Rights of the European Union). Together, these different legal instruments are aimed at protecting people against a variety of harms, including potential harm by their governments, and at committing to the fundamental principles of equality and nondiscrimination.

People prefer fairness

4.24 Different cultures and religions around the world may differ in important respects, but they all share a concern with equity and fairness. This suggests something quite fundamental about the value human beings place on them. A fairly recent body of literature in economics sheds some light on these shared human preferences. It has

[17] Note also Article 1(3)—purposes of Charter—"promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language or religion" Article 2(1) —"sovereign equality of all members"—indicates balance between the principles of sovereignty and noninterference and of respect for human rights; Article 55—"universal respect for, and observance of human rights." Other references to human rights include Articles 13(b)(1), 62(2), and 68.

[18] Vienna Declaration and Programme of Action Vienna Declaration (UNGA) (A/CONF. 157/23), July 12, 1993. This was issued by the UN World Conference on Human Rights, Vienna, Austria, June 14–25, 1993.

[19] Rights identified in the UDHR include the right "without any discrimination to equal protection before the law" (Article 7), the right to "take part in the government of his country, directly or through freely chosen representatives" (Article 21), and the right to education (Article 26).

[20] There exist several different characterizations of the "core human rights treaties." One is the "International Bill of Rights," which comprises the Universal Declaration on Human Rights, the International Covenant on Civil and Political Rights, and the International Covenant on Economic, Social and Cultural Rights. Another conceptualization is that there are six major human rights treaties: the ICCPR (1966), the ICESCR (1966), the Convention on the Elimination of All forms of Racial Discrimination (ICERD) (1964), the Convention on the Elimination of All forms Discrimination Against Women (CEDAW) (1989), the Convention Against Torture (CAT) (1984) and the Convention on the Rights of the Child (CRC) (1989). None of these characterizations should be taken as exhaustive or exclusive; there are several other extremely important human rights treaties beyond these, both within the UN system and outside it in regional systems. The OHCHR lists "seven core international human rights instruments": the six above, plus the International Convention on the Protection of the Rights of Migrant Workers and the Members of their Families (1990). In addition to this, mention should also be made of the Genocide Convention (1948).

amassed convincing evidence on individuals' preferences for fairness, based on controlled laboratory experiments. In these experiments, individuals interact through behavioral games and play with real money under tightly controlled conditions. Results from such experiments over the last 10 or so years reject the hypothesis in standard economic models that all individuals are exclusively concerned with their material self-interest. This new body of literature is large and rich, but its main findings can be summarized under three main points.

4.25 *First, some people behave in ways clearly inconsistent with the rational self-interest hypothesis*. According to Fehr and Fischbacher (2003), such people regularly display a willingness to engage in two specific forms of behavior: "*altruistic rewarding*, a propensity to reward others for cooperative, norm-abiding behavior, and *altruistic punishment*, a propensity to impose sanctions on others for norm violations" (785). These behaviors are observed in contexts in which it is possible to rule out individual motivation by a desire for reciprocity or a concern with reputation. While reciprocity and reputation are important additional determinants of cooperation in many settings, the experimental evidence suggests that they are not the only factors that influence cooperative behavior.

4.26 A classic example is the Ultimatum Game, in which a player (the Proposer) is asked to suggest a one-time division of a certain sum of money (say, $100) between himself or herself and another player. The second player (the Responder) has the power to simply accept or reject the offer. Acceptance leads to the implementation of the offer, whereas rejection leads to a zero payoff for both players. Monetary stakes are for keeps, and neither player knows the real identity of the other player. Both players are told that they will never play with each other again.

4.27 In such circumstances, standard game theory predicts a unique equilibrium: the Proposer should offer the smallest possible amount, and the Responder should accept (since a penny is higher than zero). But time and again, across hundreds of experiments in highly heterogeneous cultural circumstances and with amounts ranging from one hour's to one week's local wages, observed offers are substantially higher and, even so, rejections are often observed.[21] In many experiments, the modal (most frequent) offer is actually at 50 percent. Figure 4.1 depicts the actual distribution of observed offers in two sets of Ultimatum Games, one with lower monetary stakes (bar on the left) and one with higher (bar on the right).

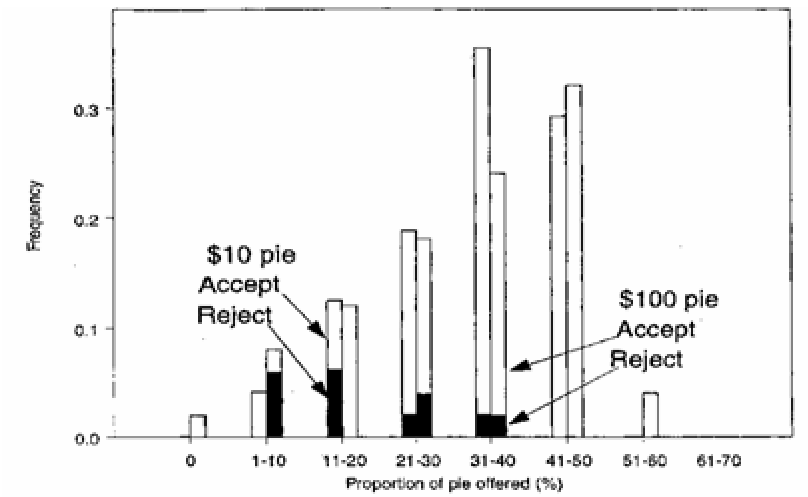
4.28 *Second, people are heterogeneous*. A sizable fraction of people in most experiments (20 to 50 percent) engage in altruistic giving or altruistic punishment—expending real resources in a way that is unambiguously costly to them, without any hope of eliciting personal gain if the other person is rationally self-interested. But the behavior of others (a majority) is consistent with rational self-interest. This is brought out quite starkly in the Dictator Game, a variant of the Ultimatum Game in which the

[21] Henrich and others (2004) report on Ultimatum Games played in 15 small-scale societies around the world. In an Indonesian experiment, Cameron (1999) found that high offers persisted in games played with (locally) very high monetary stakes.

responder is purely passive. The second player is simply a Receiver, with no right to reject the offer. Positive offers in the Dictator Game are observed, but they are both rarer and smaller on average than under the Ultimatum Game, in which the Responder may—always at a cost—punish the Proposer. These results point to the importance of investigating more precisely the conditions under which people exhibit self-interested and other-regarding behavior.

Figure 4.1 The distribution of observed offers in Ultimatum Games

Offers and rejections in high- and low-stakes ultimatum games



Source: Based on data from Hoffman, McCabe, and Smith (1996).

4.29 *Third, fair-minded people can behave selfishly, and self-interested people can behave fairly*. Behaviors depend on the rules of the game. In games where competitive pressures are introduced, mimicking a competitive market, players tend to quickly converge toward actions consistent with self-interested behavior. An example is an Ultimatum Game with Multiple Proposers. If the Responder can choose among various offers from different Proposers, with all nonchosen Proposers receiving zero, observed behavior quickly tends to the Nash equilibrium. In the Nash equilibrium, all Proposers offer the full amount—or very close to it—despite this giving rise to a very unequal distribution, in which the Responder captures the entire surplus, and all Proposers get zero. In other settings, however—such as the Repeated Public Good Game with Punishment in Fehr and Gachter (2000)—even a small number of altruistic players can sustain a cooperative equilibrium.

4.30 These findings have been interpreted to suggest that a sizable fraction of human beings in most societies care not only about their own individual opportunities and outcomes but also about “fairness.” There is also broad agreement that fairness consists of a concern for others, although some authors suggest that it is other people’s intentions toward us that attract reward or punishment, while others think it is their outcomes or opportunities.[22] These studies do not usually distinguish explicitly between outcomes or opportunities. But it is possible to speculate that the aversion to very unequal payoff distributions in the Ultimatum Game arises from the arbitrary and unequal nature of the endowments (or power) implicit in the initial allocation of the roles of Proposer and Responder.

4.31 The experiments also show that people's views of fairness are complex and do not depend entirely on outcomes. Some players are prepared to punish noncooperators until they receive less than other people, because of what they perceive to be the unfairness of their actions in the process of the game. This is consistent with our emphasis that observed distributions of certain outcomes—such as incomes—are the product of complex processes, and that the primary interest for those concerned with equity is *not* the outcome, but the fairness of the processes they participate in over their lifetimes. An income distribution in which some people are much richer than others because, given similar chances, they have worked much harder, may be regarded as fair. But the same income distribution may be regarded as unfair if it was generated by the richer group having access to much better schools or jobs, solely because of the wealth or connections of their parents.

4.32 A separate but related point is made by the social identity literature in social psychology (see Haslam (2001)) and epidemiology (see Marmot (2004)), which suggests that individual behavior and performance are heavily conditioned by group identity (for example, caste, gender, occupation); by whether those groups are seen as subordinate to others (for example, doctors and patients, the status accorded minority ethnic communities); and by whether the boundaries among groups are regarded as permeable (for example, the rules shaping whether and how employees get promotions, immigrants become citizens, and so on). Civil servants with low status and few upward mobility prospects suffer from higher mortality.[23] Employees of low-status firms undergoing a merger more readily accept the new organizational structure because it benefits them individually, while members of the higher-status firm are more likely to resist change and act collectively in terms of their premerger identity.[24]

4.33 The experimental and subjective well-being literature in economics and social psychology remind us that there is something deep and fundamental about our taste for fairness and equity. Such "human altruism," argue Fehr and Fischbacher (2003) in *Nature*, may be what accounts for the much greater complexity of cooperative patterns in human societies compared with those of other animals (box 4.2). Equity, it seems, matters intrinsically and fundamentally for human beings.

Box 4.2 Capuchin monkeys don't like inequity either…

Research is under way on the roots of human altruism and the aversion to inequity, whether cultural or genetic. But there is some evidence that aversion to unfairness is not just human. In a recent article in

[22] See, for instance, Fehr and Schmidt (1999) on a theory of "inequity aversion," and Rabin (1993) on a model of behavior that takes other people's intentions directly into account.
[23] Ibid.
[24] Terry, Carey, and Callan (2001).

Nature, "Monkeys Reject Unequal Pay," Brosnan and De Waal (2003) report the results of exchange experiments with brown capuchin monkeys (*Cebus apella*). The animals were given a token that they could immediately redeem for food by returning it to the experimenter. They were placed in adjoining compartments with visual and vocal contact.

In the baseline treatment (the equality test), both specimens received a quarter of a cucumber slice for each token exchanged.

In one treatment of interest (the "inequality test"), the first monkey received a grape, while the second was given the usual slice of cucumber. That capuchin monkeys prefer grapes to cucumber slices had apparently been amply established by previous research. The results were striking. Monkeys failed to exchange their tokens for food around 5 percent of the time under the equality test, but this rate rose to more than 50 percent under the inequality test.

The refusal rate rose even further (to more than 80 percent) under an alternative treatment, known as "effort control." In this treatment, the first monkey received a grape with no effort—with no need to pick up a token and exchange it for food. Although few monkeys were used, these differences were all statistically significant.

In both treatments, refusal rates increased over time, as the experiment was repeated (never more than once a day) many times. Interestingly, only female monkeys completed these tests, as earlier experiments suggested that male capuchins are much less sensitive to the distribution of rewards.

The authors concluded that "tolerant species with well-developed food sharing and cooperation, such as capuchins […] may hold emotionally charged expectations about reward distribution and social exchange that lead them to dislike inequity" (Brosnan and De Waal (2003), 299).

Source: Brosnan and De Waal (2003).

4.34 Whatever the exact form of the true motives of individuals, the main implication for this report from this large body of experimental evidence is that a good proportion of people in most societies appear to dislike unfair outcomes and behaviors, so much so that they are prepared to pay to punish those responsible for them. If people are prepared to pay real money to reduce inequalities that appear unfair to them in a laboratory, it is plausible that large inequalities in real life also reduce their well-being (particularly if the inequalities are not seen to reflect only differences in effort or merit). This provides support for the statistical association that the subjective well-being literature finds between income inequality and self-reported happiness—a subject we now turn to.

Income inequality and subjective well-being

4.35 To what extent do the concerns with equity shown in tightly controlled lab experiments also manifest themselves in the attitudes, feelings, and opinions of "regular people"? A recent study of labor strife in the United States suggests that worker perceptions of whether they have been treated fairly or unfairly can affect their efforts, and thus product quality, in important ways (box 4.3).

Box 4.3 Worker perceptions of unfairness, product quality, and consumer safety

Do people change their behavior because they feel they are being treated unfairly, when they are outside laboratories? And if so, is this likely to have any serious consequence? A study of industrial relations in Illinois, United States, suggests that the answer to both questions is yes.

Since the 1940s, Firestone tire plants had adhered to the industrywide bargain with labor unions. But when negotiations for a new contract began in 1994, Bridgestone/Firestone proposed deviating from the industrywide bargain in a way that worsened the terms for labor at a time when company profits were increasing. The company proposed moving from an 8- to a 12-hour shift that would rotate between days and nights. It also proposed cutting pay for new hires by 30 percent. The union at the plant in Decatur, Illinois, called a strike and, shortly after the strike, the company hired replacement workers.

Labor strife at the Decatur plant closely coincided with lower product quality and defective tires. In August 2000, Firestone announced the recall of 14 million ATX and AT tires, most of them on the Ford Explorer. The U.S. government reported that Firestone tires under investigation were related to 271 deaths and more than 800 injuries. The most common source of failure of the recalled tires was tread separation, a sudden detachment of the rubber tread from the steel belts that caused the tire to blow out.

Krueger and Mas (2004) compare the number of claims of defective tires in the Decatur plant with those from the two other North American plants where Firestone ATX tires were produced: Joliette, Quebec, and Wilson, North Carolina. Neither of these two plants experienced labor strife in the relevant period. Tires produced during the labor dispute (1994–96) at Decatur had a much higher failure rate than those produced at Joliette or Wilson, although before and after the dispute period the rate of claims was similar for tires manufactured in Decatur and in the other plants. The pattern suggests that changes in technology cannot explain the rise in complaints against Decatur tires, because no such rise occurred in Joliette or Wilson.

Nor does it appear that the lack of experience of replacement workers is to blame. There was a spike in claims in the first half of 1994, around the time concessions were demanded and the old contract expired, which occurred before replacement workers were hired. Through early 1995, when many replacement workers were making tires, there were no excess claims in the Decatur plant. It was not until the end of 1995, when many returning strikers were working side by side with replacement workers, that the excess number of claims became high. On the basis of this and a much broader analysis, it appears likely that the chemistry between the recalled strikers and the replacement workers, or the cumulative impact of labor strife in general, created the conditions that led to the production of many defective tires.

The authors of the study "recommend that the reader exercise caution in extending our results to other settings; our paper provides a detailed case study of only one firm in one unique period of its history" (Krueger and Mas (2004), 257). At least in that instance, it appears that perceptions of unfair treatment influenced worker attitudes—and product quality and the safety of consumers.

Source: Krueger and Mas (2004).

4.36 Other studies investigate the associations between the narrower concept of income inequality and measures of subjective well-being. One recent study of European nations and the United States relies on individual answers to the following question: "Taken all together, how would you say things are these days—would you say that you are very happy, pretty happy, or not too happy?"[25] Based on the variation in answers to this question, across European countries and U.S. states, and on objective income-inequality measures, Alesina, Di Tella, and MacCulloch (2004) find that "individuals have a lower tendency to report themselves happy when inequality is high, even after controlling for individual income, a large set of personal characteristics, and year and country [...] dummies" (2009).[26]

4.37 One reason that inequality might make people less happy, even when controlling for absolute income levels, is that it violates their sense of fairness. It may be that (at least some) people feel that a very unequal income distribution reflects unfair processes and unequal distributions of opportunity. A 2001 study of Latin American countries by Latinobarometro, a reputable Chile-based opinion survey company, asked respondents the following question: "Do you think that the income distribution in your country is very fair, fair, unfair, or very unfair?" On average, 89 percent of respondents regarded the distribution in their countries to be either unfair or very unfair. In 17 of the 18 countries surveyed, fewer than 20 percent of respondents answered fair or very fair.[27]

4.38 Such results may be particularly strong in Latin America, which is one of most unequal regions in the world, but they are not exclusive to that region. A recent analysis of several OECD countries (which are less unequal than most developing countries) was based on data from the International Social Survey Program. To construct a proxy measure of cross-national attitudes toward income inequality, Osberg and Smeeding (2004) ask what a number of different professions[28] "should earn" and what they "do earn." They find that citizens of most high-income countries[29] appear on average to have similar attitudes toward inequality, generally thinking that less well-paid professions should be paid more and that better-paid professions should be paid less.

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[25] This is the question in the United States General Social Survey, which was fielded every year between 1972 and 1997. A similar question is included in the Euro-Barometer surveys, which are also used in the study.

[26] Subjective well-being—or "happiness"—surveys have also been used to test the relative income hypothesis in a number of different settings. Following on original work by Easterlin (1974), which suggested that, despite sustained economic growth, people in some rich countries were not growing any happier, a number of recent studies have found that reported well-being rises with personal income, but declines with the income of other people in a person's reference group. This is usually interpreted to mean that well-being is driven at least in part by relative incomes, rather than purely by their absolute levels. See Graham and Felton (2005) for Latin America, Ravallion and Lokshin (2002) for the Russian Federation, and Luttmer (2004) for the United States. The relative income literature is of tangential interest for this report, because it provides additional backing for the idea that one's position in society in relation to others matters, both for individual behavior and for welfare.

[27] See De Ferranti and others (2004) for an earlier discussion of this data.

[28] The professions included skilled factory worker, doctor in private practice, chairman of a large national company, lawyer, shop assistant, federal cabinet minister, judge of the nation's highest court, owner/manager of a large factory, and unskilled worker. Respondents were also asked about their own income.

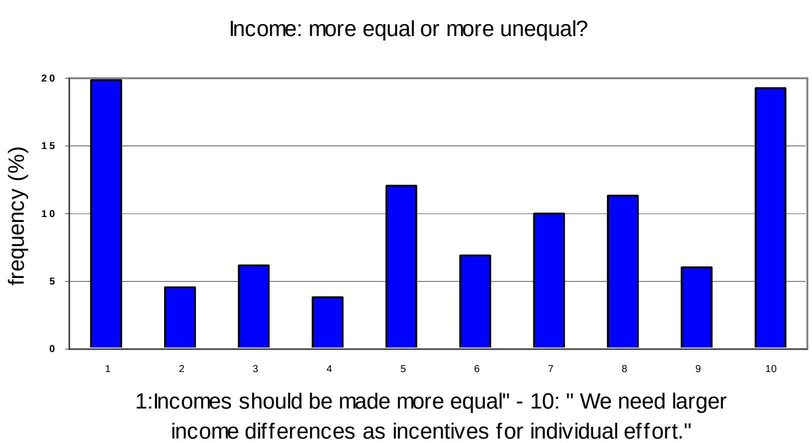
[29] Countries in the ISSP sample include the following: Austria, Australia, Canada, France, Germany, Italy, Israel, Japan, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

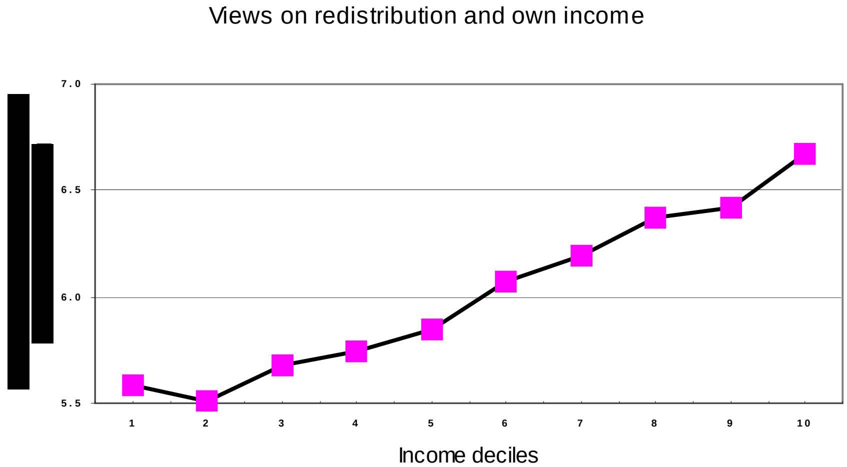
4.39 Osberg and Smeeding (2004) findings reinforce the view that the normative preferences people have over distributions are based not exclusively on actual incomes, but also on processes, and that some differences in outcomes may be fair (for example, because of differences in effort), while others are not (for example, because of differences in opportunities). People are clearly aware that income differentials can provide incentives for work and investment, including in education, if they are coupled with opportunities for reward to those actions. This comes across very clearly from the answers to one question in the latest wave of the World Value Survey, which split respondents around the world more or less evenly into those who felt that income inequality was too high and those who felt it was too low.

Income inequality and incentives: what do people say?

4.40 The World Value Survey is a multicountry survey of individuals designed and sponsored by the Inter-university Consortium for Political and Social Research, based at the University of Michigan. The survey aims to "enable a cross-national comparison of values and norms on a wide variety of topics." Four main waves have been fielded since the early 1980s. In the latest wave, Inglehart and others (2004)) asked representative samples of people in 69 countries to place their views on a scale from 1 to 10, where 1 implied agreement with the statement that "Incomes should be made more equal," and 10 implied agreement with the statement that "We need larger income differences as incentives for individual effort."

Figure 4.2 Views on Inequality from the World Values Survey





Source: "Human Beliefs and Values" Inglehart and others (2004).

Note: Author's calculations are based on data for the years 1999–2000.

4.41 Figure 4.2a suggests considerable polarization on views about inequality. The median answer is 6, suggesting no strong agreement with the two polar statements. Yet almost 20 percent of all respondents were in strong agreement with each of the two extreme views, represented by scores of 1 and 10. Figure 4.2b shows a positive correlation between the score (which is negatively correlated with inequality aversion) and a respondent's own income. This is consistent with the evidence on the importance of relative incomes for welfare: if you are richer, you are less inclined to favor a reduction in income inequalities than if you are poorer.

4.42 The World Values Survey results caution against any preconceived notion that income inequality is viewed everywhere as inherently undesirable. When asked about income differences explicitly "as incentives for individual effort," (many) people seem quite happy to have them and, indeed, to want more of them (although this tendency was less pronounced in countries with either very low or very high levels of inequality). The fact that this view is positively associated with a respondent's own income is consistent with the relative income hypothesis but also, perhaps, with a desire to see one's own position as a reflection of past effort and merit.

4.43 The balance of the survey evidence suggests that, although inequality in incomes seems to be associated with lower aggregate levels of subjective well-being, there is considerable heterogeneity in opinions about whether it should be reduced or not. Poorer people, and people in countries at very high or very low inequality levels, seem likelier to favor a reduction in inequality. People recognize that some inequality is important to generate incentives for investment and effort; however, when asked about relative pay scales across professions, they would on average prefer smaller differentials. While in Latin America, for instance, a majority judges the income distribution to be unfair, there is no worldwide agreement that income disparities should be reduced everywhere. This is generally consistent with a view that what matters for ethical judgment is not income, but fair processes and opportunities.

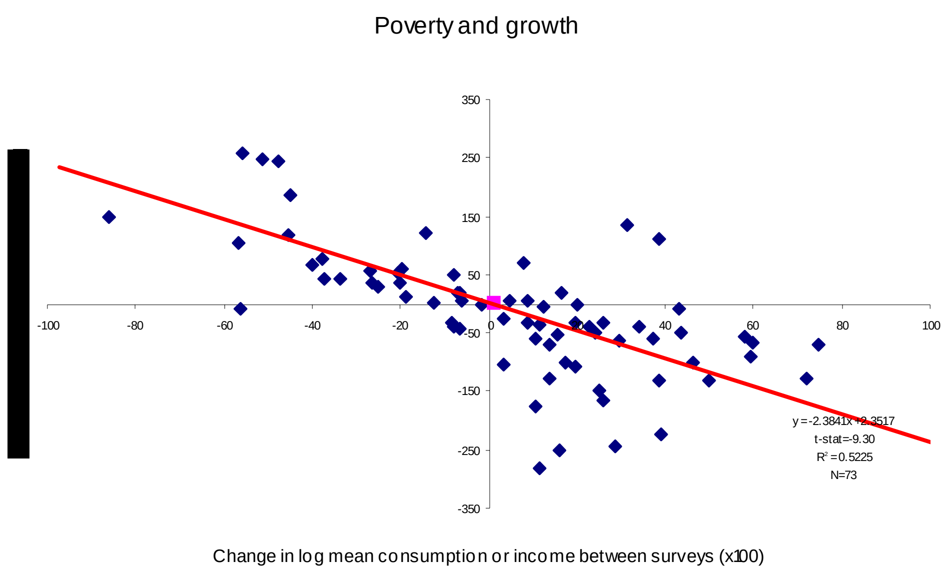
Income inequality and poverty reduction

4.44 To the philosophical and legal arguments for equity, and to the survey-based and experimental evidence that fairness matters intrinsically to people, we add a final argument: high levels of inequality make it more difficult to reduce poverty. First, we highlight the fact that if inequality falls during a growth spell, poverty generally falls by more than it would have if growth had been distribution-neutral. Second, we document the finding that the effectiveness of future economic growth in reducing absolute income poverty declines with initial income inequality.

If inequality falls, poverty falls more during spells of growth

4.45 By raising the incomes and consumption of people across the distribution of income, economic growth is the main driver of poverty reduction in the developing world. The negative association between the average annual rate of change in poverty and the average annual rate of growth in mean incomes is immediately clear from figure 4.3, suggesting that countries experiencing higher rates of economic growth can be expected to reduce poverty much faster than those that grow more slowly.[30] The slope of the simple regression line, –2.4, is the average total elasticity of poverty with respect to economic growth. It implies that, without controlling for any characteristics of the country, 1 percentage point growth in a country's mean income can be expected to reduce the incidence of poverty in that country by about 2.4 percentage points.

Figure 4.3 Growth is the key to poverty reduction…



Source: Authors' calculations.

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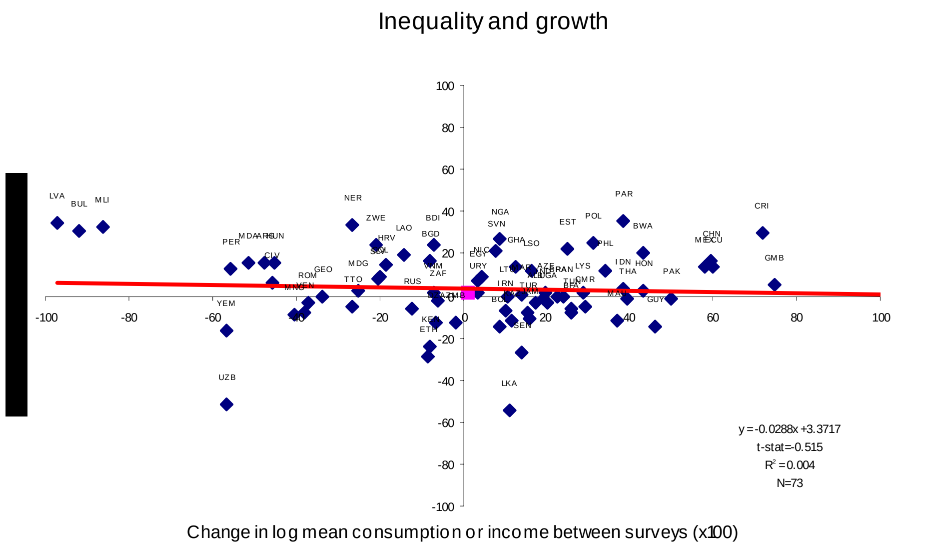
[30] This figure is an update, based on more recent data, of an original figure that appeared in Ravallion and Chen (1997).

4.46 This powerful association between economic growth and poverty reduction is one of the central stylized facts of development economics. Its qualitative nature has long been understood, and it has recently been quantified by Ravallion and Chen (1997), Dollar and Kraay (2002), and others. Indeed, the growth-poverty relationship is probably more powerful than surprising: it merely reflects the fact that, on average, the growth in the incomes of the poor is similar to the growth of mean incomes (figure 4.4). Put differently: aggregate economic growth is, on average, distribution-neutral.[31]

Figure 4.4 …and, on average, growth is distribution-neutral



Source: Authors' calculations.

4.47 There is, however, considerable variation around those averages. About half the total variation in poverty reduction is accounted for by economic growth (see the explanatory power of the underlying regression for figure 4.5).[32] The other half must reflect changes in the underlying distribution of relative incomes. This happens because the incidence of economic growth (its distributional pattern) can vary dramatically across countries. Two countries with similar rates of growth in mean incomes can have very different growth profiles across the population. As one would expect, reductions in inequality at a given growth rate add a "redistribution component" to the "growth component," leading to faster overall poverty reduction.

4.48 The contribution of inequality reduction alongside growth is illustrated by a comparison of the growth incidence curves (GIC) for Tunisia (1980–2000) and Senegal (1994–2001) (figure 4.3). In both countries, the average annual growth rate in the mean incomes from the household survey was close to 2.5 percent. In Tunisia, where the distribution of this growth was relatively more beneficial to the poor, the headcount index

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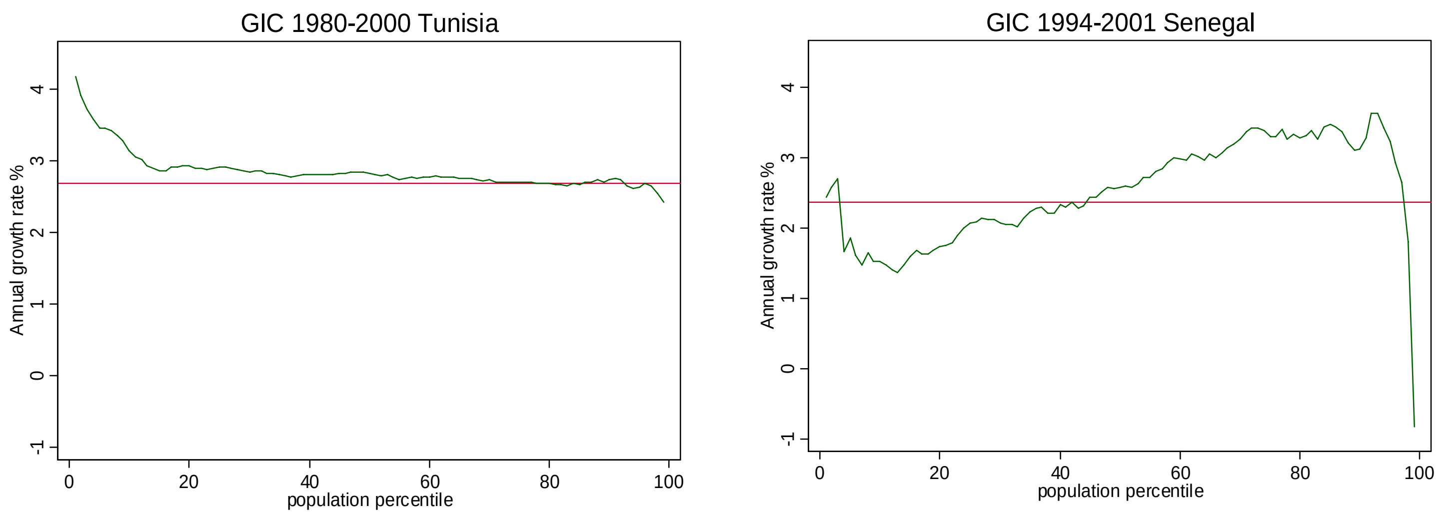
[31] See, once again, Ravallion and Chen (1997) and Bourguignon (2003).

[32] Using a slightly different dataset, and a decomposition technique that also accounts for the differential sensitivity of different poverty measures to changes in mean incomes, Kraay (forthcoming) finds that the growth share in this variance is closer to 70 percent. In a sample of long spells only, that share rises to 94 percent.

of poverty fell by 67 percent (from 30 percent to 10 percent). This corresponds to an annual rate of decline in poverty of 5.4 percent. In Senegal, where growth was less pronounced for the bottom half than for the upper half of the distribution, poverty fell by only 15 percent (from 68 percent to 57 percent), corresponding to an annual rate of poverty reduction of 2.3 percent. Although some of this difference is due to the fact that the actual growth rate was marginally higher in Tunisia (2.7 percent versus 2.3 percent in Senegal), much of it is clearly due to the different patterns in the incidence of growth, which is evident in figure 4.5.

Figure 4.5 The national growth incidence curves for Tunisia 1980–1995 and Senegal 1994–2001



Sources: Ayadi and others (2004) for Tunisia and Azam and others (2005) for Senegal. These are two of 14 country case studies from the World Bank's "Operationalizing Pro-Poor Growth" Study.

4.49 This contribution of declines in inequality to poverty reduction holds more generally. According to Datt and Ravallion (1992), a decomposition of changes in poverty into growth and inequality components has been widely applied. Redistribution components are usually smaller than growth components and, because inequality often rises, they often have the "wrong" sign. But when inequality falls, this helps reduce poverty.

4.50 A second and separate point is that the power of growth to reduce poverty declines with higher initial income inequality. A reduction in inequality today therefore also tends to have a *future* impact on the effectiveness of (even distribution-neutral) growth in reducing poverty. This occurs because the shape of most income distributions means that the growth elasticity of poverty reduction tends to be smaller in more unequal countries. Put another way, because the initial distributions of income are different, the rate of poverty reduction in two countries with the same distribution-neutral growth rate may well be different.

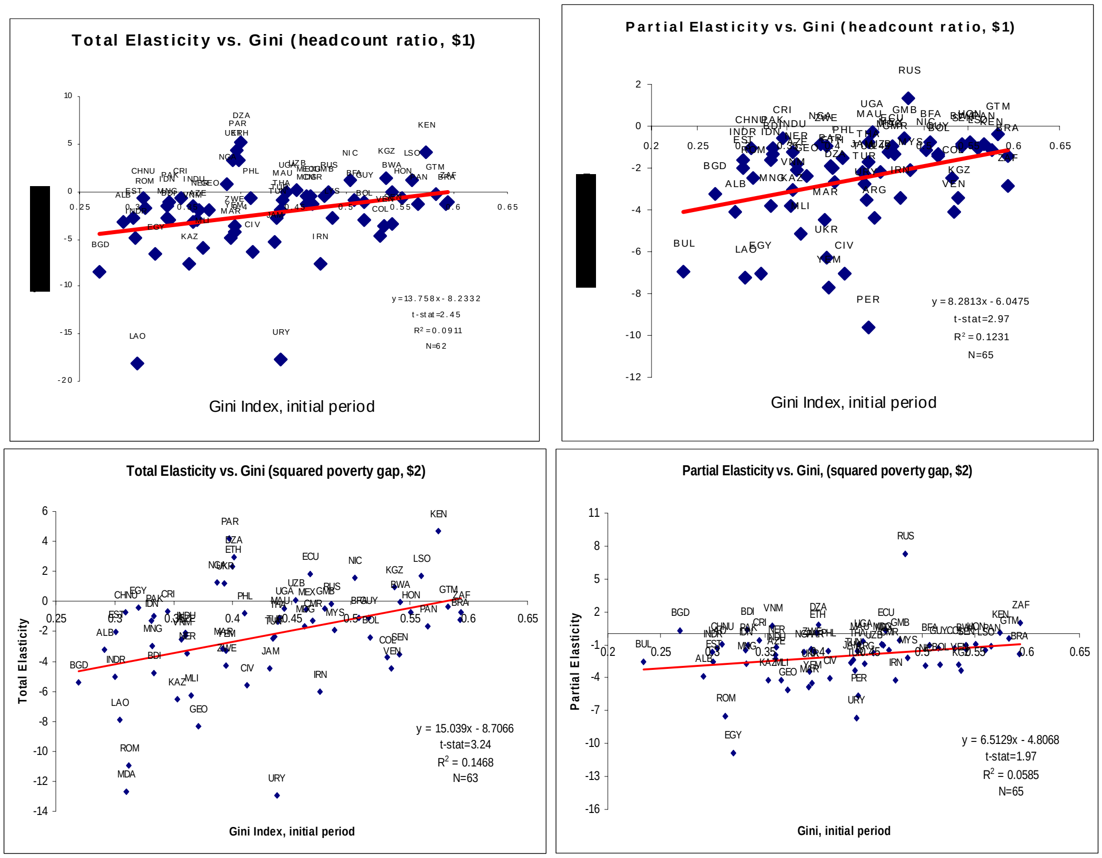
4.51 Perhaps the most flexible way to capture the variation in growth elasticity with inequality across the sample of countries available for these exercises is simply to compute the total and the partial growth elasticity of poverty reduction for each single country (in a single spell per country) and to plot it against the initial Gini coefficient (figure 4.6).[33] A positive relationship is apparent for both partial and total elasticity concepts, for all four poverty line/poverty measure combinations.[34] The absolute value of the growth elasticity of poverty reduction falls as countries become more unequal, both for the total and for the partial concepts. The slope of the line fitted through panel (a) suggests that a 10 percentage point increase in the Gini coefficient is, on average, associated with a decline of 1.4 in the (absolute value) of the elasticity. Given that the average elasticity is 2.53, this is not a small effect.

4.52 The fact that very unequal countries (with a Gini coefficient near 0.6) have a total elasticity near zero in this sample should not be overemphasized. It is caused, in part, by increases in inequality in some of these countries during the recorded growth spells. This is evident from the fact that the partial elasticity (which controls for changes in distribution) does not reach zero for the same sample. Growth still contributes to poverty reduction, even in high-inequality countries. The robust finding relates to the sign of the slope of the line, not its exact intercepts: higher initial inequality means that growth reduces poverty by a lesser amount.

[33] Whereas the total growth elasticity of poverty reduction simply relates total change in poverty to the growth in mean incomes, without controlling for changes in the relative distribution (and is therefore given by $\varepsilon_{\mu}^{T} = \frac{\Delta P}{P}\frac{\mu}{\Delta\mu}$), the partial growth elasticity of poverty reduction controls for changes in inequality. That means that it is calculated for a given Lorenz curve: $\varepsilon_{\mu}^{P} = \frac{\Delta P}{P}\frac{\mu}{\Delta\mu}\bigg|_{Lt} = \frac{P\left(L_t, \frac{\mu_{t+1}}{z}\right) - P\left(L_t, \frac{\mu_t}{z}\right)}{P\left(L_t, \frac{\mu_t}{z}\right)}\frac{\mu}{\Delta\mu}$. This definition, like the decomposition on which it is based, is path-dependent, and the elasticity would be somewhat different if it was calculated on the basis of the final-period Lorenz curve, rather than the initial one. In this report, we always use the initial period relative distribution when computing partial growth elasticities. No regression method is used, so no functional form of any kind is imposed on the relationship.

[34] This finding is qualitatively consistent with alternative estimates of the relationship between partial and total growth elasticities, on the one hand, and income inequality, on the other. See Bourguignon (2003) and Ravallion (2005).

Figure 4.6 Greater inequality reduces the power of growth to reduce poverty



Source: Authors' calculations.

Note: The figure shows the scatter plots of country-level elasticities against initial-year Gini coefficients. Panel (a) shows the total elasticity for the headcount measure of poverty incidence, with a $1 per day poverty line. Panel (b) shows the partial elasticity for the same measure and the same line. Panels (c) and (d) also show the total and partial elasticities respectively, but now for the squared poverty gap index FGT(2) and with respect to a $2 per day line.[35]

4.53 It has been argued that this is a mechanical result in that, given a fixed functional form for the income distribution, greater inequality results in slower poverty reduction even if each individual's income grows at the same rate. Indeed, as indicated here, distributional change is on average uncorrelated with mean growth rates so that, on average, the poor see their incomes grow at the same rate as other people's. That does not, however, follow from any law of nature. Income distributions in individual countries can and do change during spells of growth (see figure 4.5).[36] There is no mechanical rule that states that the incomes of the poor must grow at the same rate as the rest of the population.[37] If on average they do and if, given the shape of the empirical income

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[35] The other four combinations of poverty lines and measures were also computed, and the upward-sloping pattern is qualitatively robust.

[36] See also Bourguignon, Ferreira, and Lustig (2005) for a detailed discussion of seven country studies.

[37] In fact, World Bank (2005a) find that, on average, the poorest 20 percent of the population in each of 14 countries in their study grow 0.7 percent for each 1 percentage point growth in mean incomes.

distributions, the poverty elasticities are lower in countries with higher initial inequality, this is an empirical fact.

4.54 The balance of the evidence does not, therefore, allow much room for doubt that growth elasticities of poverty reduction are stronger in more equal societies. Inequality reduces the effectiveness of economic growth in reducing poverty. This means that, if all else remains the same, a reduction in income inequality today has a double dividend: it is likely to contribute to a contemporaneous reduction in poverty, and it is likely to make future growth reduce poverty faster.

4.55 Evidently, the caveat "if all else remains the same" is of crucial importance. The distribution of incomes is a reflection of the general equilibrium of an economy, based on the social, political, and institutional structures that condition its behavior. Simple-minded attempts to change the way incomes are distributed, without taking into account the effects of policies on the incentives of all agents in the economy, are bound to fail. We return to the issue of appropriate policy design in part III of this report. All that can be said about the results here is that, if policies exist that can lead to a less unequal distribution of resources without major costs to the (static and dynamic) efficiency of resource allocation, such policies are likely to lead to faster poverty reduction in the future, for any amount of growth that the economy generates.

4.56 It turns out, however, that some inequalities—not necessarily those of incomes—are also detrimental to economic growth itself. Such inequalities in power, assets, and access to markets and services are most likely to be the ones on which policy can productively focus. The next chapter turns to a discussion of these "inefficient inequalities."