

3



Drivers and Strategies for Poverty Reduction

■ *Economic growth, income distribution, and population growth proximately determine poverty, but deep drivers and policy levers more fundamentally shape it.* ■

The previous chapters presented poverty reduction as an overarching global imperative of current times. In this chapter, we discuss factors that drive poverty, both at a proximal and at a deeper level. We also survey some promising strategies that have been proposed to reduce poverty.

We first discuss the **proximate drivers** of income poverty—economic growth, inequality, and population and its growth—with which we can calculate poverty measures. We next identify and survey the **deep drivers** of poverty, the factors that drive one or more of the proximate drivers. Different types of capital (physical, human, social, and knowledge capital), labor, and fertility are examples of such drivers. Without an understanding of these deep drivers, it will not be possible to have a meaningful discussion of the mechanisms through which various strategies tackle poverty.

We then survey **policy levers**, the policies and interventions that have been proposed to reduce poverty. Decreasing import duties,

increasing public expenditure on health and education, and increasing the foreign aid flowing from developed to developing countries are examples of policy levers that could move one or more of the deep drivers, which in turn drive the proximate drivers of growth and inequality.

It is useful conceptually to separate the action-oriented policy levers from the theoretical, model-driven deep factors that drive poverty. Doing so allows us to address policies that tackle multiple drivers at once, as well as multiple policies that could affect a given driver. For instance, human capital is one of the deep drivers of economic growth. Education subsidy is a policy lever that influences the accumulation of human capital. But it could also influence social capital, another driver of economic growth, by imparting knowledge of institutions to students, inculcating civic behavior in them, and allowing the formation of social networks. Such a subsidy could also affect inequality, another proximate

driver, by improving the access of the poor to productive opportunities. Similarly, multiple policies can address a given deep driver. For instance, in addition to education subsidy, greater openness to trade, which increases the influx of new technologies, can raise the return on acquisition of human capital.

A given policy is rarely implemented in isolation but is usually part of a larger **strategic package**, a combination of individual policies. Although IFs can be used to study the effects of individual interventions, it can be better used to study the outcomes of implementing strategic packages; this is the approach we pursue in Chapter 7. There are several reasons for studying policies bundled into such packages.

- As Ravi Kanbur and Lyn Squire (1999: 2) note, “poverty reducing strategies must recognize the interactions among the policies—the impact of appropriately designed combinations will be greater than the sum of the individual parts.” For example, they point out that improved health increases earning potential, increased education leads to better health, and increased provision of safety nets for the poor allows them to undertake riskier, high-return activities that can increase their own and their countries’ income. One cannot simply add up the effects of individual interventions to assess a strategic package.
- On a related note, resource constraints and other trade-offs that arise when multiple policies are implemented should be taken into account when one studies the effect of a combination of policies. As the World Bank (1980: 83) states, “In the past the severity of the trade-off between poverty reduction and growth has sometimes been exaggerated. ... It would be wrong, however, to suggest there are no trade-offs.” For example, increases in spending in one facet of poverty reduction, say health, necessarily come at the expense of another, say R&D subsidies to increase growth.
- Strategic packages of policies can capture conceptual and philosophical orientations toward poverty reduction. Field experience, progress in research, and global change lead to ever-evolving conceptualizations of poverty reduction strategies. Prior to the

1980s, the World Bank focused primarily on economic growth. Then, the *World Development Report 1980* (World Bank 1980) extensively discussed “human development” as an important strategic orientation. The Bank solidified this stance in the *World Development Report 1990*, asserting that the challenge of development is to improve the quality of life. These and other conceptualizations, such as “pro-poor” and “external orientation,” represent the evolution of the policy community’s approach to tackling poverty.

The Proximate Drivers of Poverty

In this section, we discuss how growth, inequality, and population are the proximate drivers of poverty. We devote very limited attention to population, because growth and inequality determine the rate of poverty; population then determines the number in poverty.

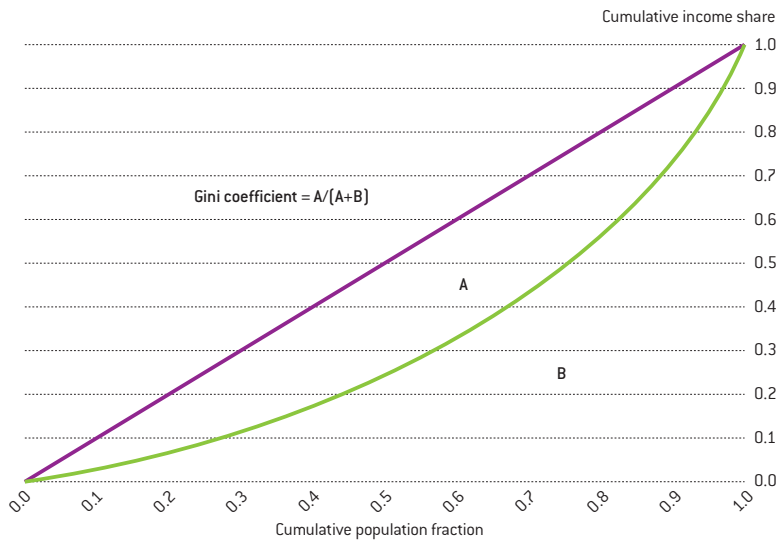
The connections among growth, inequality, and poverty

Inequality (the distribution of income or consumption), growth, and poverty form the three vertices of a “triangle,” arithmetically connected in a fairly straightforward way (Bourguignon 2003). In order to understand this connection, we first discuss the representation and characterization of inequality.

The Lorenz curve is the most widely used method for representing inequality in earnings, income, or wealth (see Figure 3.1). It portrays the *cumulative* share of income (or any other quantity distributed across a population) held by increasingly well-to-do *cumulative* shares of population. The more equally distributed a factor is, the closer the Lorenz curve will be to the hypotenuse of the right triangle, sometimes called the line of equality. The **Gini coefficient** is the “area of inequality” immediately below the hypotenuse (A) divided by the area of the triangle (A+B); thus larger Gini coefficients indicate greater inequality.

The Lorenz curve is “nonparametric” in that it is an empirical distribution that accurately represents survey data on income or consumption for a society. Although the Lorenz curve is useful conceptually to capture the dynamically evolving distribution of income or consumption, it is more convenient

Figure 3.1 The Lorenz curve and the Gini coefficient



Source: Adapted from Raskin et al. (1998: 38).

● **The Lorenz curve and Gini usefully portray income distribution—the lognormal distribution is a bridge to forecasting poverty.** ●

to have an analytic, or “parametric,” representation of the distribution. Moreover, we want a representation from which we can conveniently compute specific deciles or quintiles (thereby reconstructing the Lorenz curve) and also compute key poverty measures like the headcount.

The most widely used parametric representation is the lognormal density. A **density curve** captures the percentage of the population that earns or consumes a given amount (unlike a distribution that captures the cumulative percentage of the

population that earns or consumes up to a given amount). Although income and consumption are not exactly distributed in a lognormal form for every country, it is a very good approximation to observed empirical distributions. As François Bourguignon (2003: 7) notes, a **lognormal distribution** is “a standard approximation of empirical distributions in the applied literature.” A variable is lognormally distributed if the natural logarithm of that variable is normally distributed, as in the well-known bell curve. Figure 3.2 shows a lognormal density curve.

One advantage of using a lognormal density to capture the distribution of income in a society is that it can be fully specified with only two parameters, average income and the standard deviation of it. More useful for our purposes, and as elaborated in Box 3.1, the Gini coefficient can be used in lieu of the standard deviation (Appendix 2 to this volume provides an extended discussion).

Figure 3.2 provides an illustration of how to obtain the poverty headcount from a lognormal density curve. For a specified poverty line—for example, the one corresponding to \$1 per day—the area to the left of the line gives the poverty headcount ratio. The first vertical line in Figure 3.2 shows the poverty line, and hatched lines show the area corresponding to the headcount ratio. The poverty headcount *number* is the headcount *ratio* times population. Box 3.1 shows the formal relationships among income distribution, poverty line, and poverty.

Box 3.1 Distribution, poverty line and poverty: Mathematical relationships

If $f(x)$ denotes the distribution of income or consumption x , then the proportion of the population with income or consumption less than or equal to a given poverty line z , $H(z)$, is

$$H(z) = \int_0^z f(x) dx.$$

If the population is given by n , the headcount ratio can be converted into the poverty headcount using

$$h(z) = nH(z).$$

The distribution of income or consumption is often represented by parameters, in practice using the lognormal distribution, which is completely characterized by its mean, μ_x , and its standard

deviation, σ_x . Given the mean income or consumption μ , and the Gini coefficient, G , gathered from data, the parameters of this lognormal distribution follow

$$\mu_x = \ln(\mu) - \frac{1}{2}\sigma_x^2$$

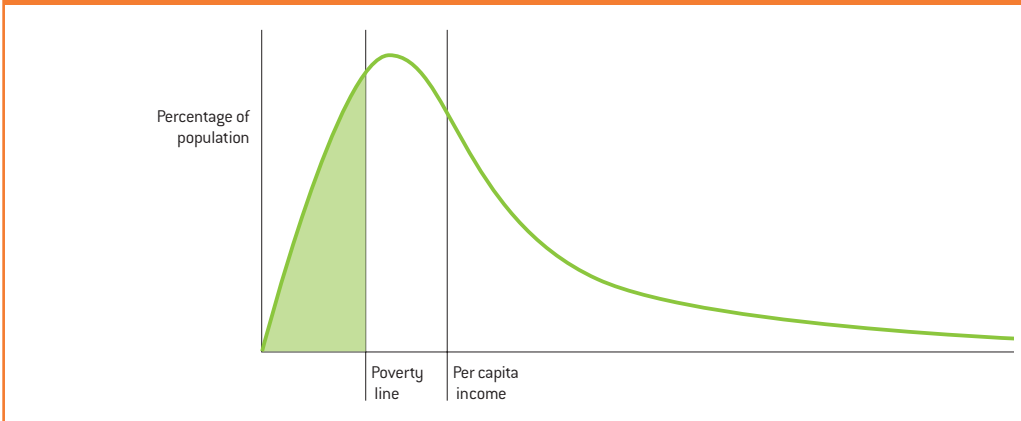
$$\sigma_x = \sqrt{2}\Phi^{-1}\left(\frac{G+1}{2}\right),$$

where Φ is the standard normal distribution. If we denote the lognormal cumulative distribution by $\Lambda(\mu_x, \sigma_x)$, the headcount ratio for the poverty line z is given by

$$H(z) = \Lambda(z, \mu_x, \sigma_x)$$

Source: Aitchinson and Brown (1963).

Figure 3.2 Income distribution and poverty headcount



The income distribution and population also make possible calculation of the poverty gap and relative poverty. With respect to relative poverty, suppose the poverty line were set at one-third the average per capita income. The poverty line would then be drawn at this level instead of the fixed \$1-per-day level. The area to the left of the poverty line would give the proportion of the population living in relative poverty and, when multiplied by the population, would provide the number of people living in relative poverty.

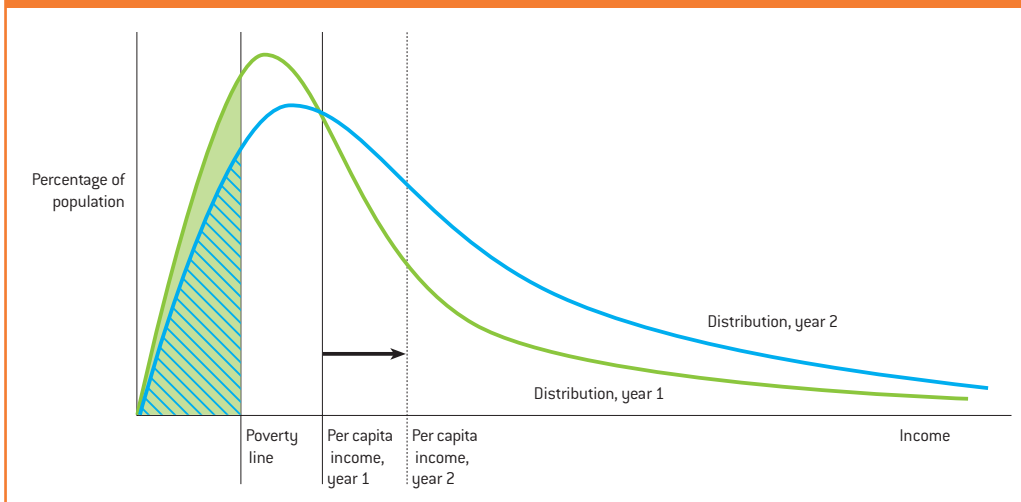
What is the role played by economic growth—the third vertex of the triangle discussed by Bourguignon (2003)—in calculating poverty? The discussion up to now has focused on calculating poverty at a particular point in time, when the distribution and population are known.

Economic growth is related to the evolution of poverty over time.

Although economic growth usually refers to an increase in per capita income (the average of the income distribution) over time, the process of growth should be more generally understood as affecting the entire income distribution. The incomes of different segments of the population will grow at potentially different rates. Figure 3.3 illustrates how the ensuing change in distribution will affect poverty.

In Figure 3.3, the second vertical line shows the distribution for a given point in time, say year 1. The dashed vertical line shows the distribution for a subsequent time, say year 2. The two vertical lines together show growth from year 1 to year 2 in per capita income, the average of the respective distributions. The area of hatched, dashed lines to the left of the

Figure 3.3 How economic growth affects poverty



● Significant difficulties surround the use of income elasticities in understanding or forecasting poverty reduction. ●

poverty line in the new distribution shows the new poverty headcount ratio. This area is smaller than the area under the year 1 distribution, and the poverty headcount ratio has decreased. What happens to the poverty headcount number depends on the how the population has changed from the first year to the second. If the population increases significantly, the headcount number can increase even if the headcount ratio decreases.

In this illustration, economic growth gives rise to a decrease in the poverty rate, since the left-hand tail of the distribution becomes smaller. That need not always happen. In order to understand the effects of growth and distribution on the dynamics of poverty, we need next to decompose poverty changes into growth and distribution effects.

Decomposition of poverty changes into growth and distribution effects

The exact way in which the income or consumption distribution changes over time will clearly affect the poverty numbers. Economic growth increases the mean or per capita income by shifting parts or all of the distribution to the right. If the entire distribution shifts right without changing shape, or changes shape such that the left tail of the distribution becomes thinner, then growth will necessarily reduce poverty for a fixed poverty line. Otherwise, poverty could increase even if the per capita income grows.

Bourguignon (2003: 3) describes a decomposition of changes in poverty into growth and distributional changes as follows (see also Datt and Ravallion 1992):¹

A change in the distribution of income can be decomposed into two effects. First, there is a proportional change in all incomes that leaves the distribution of relative income unchanged, i.e., a *growth* effect. Second, there is the effect of a change in the distribution of relative incomes, which, by definition, is independent of the mean, i.e., a *distributional* effect.

What is the evidence on poverty changes arising from the interaction of growth and distributional effects? There is evidence that

growth tends to be “distribution neutral” on average; Martin Ravallion and Shaohua Chen (1997), Ravallion (2001), and Dollar and Kraay (2002a), find almost no correlation between changes in inequality and economic growth. Those findings are consistent with the evidence that the growth effect dominates and that growth tends to reduce absolute poverty (Fields 2001; Kraay 2004; Ravallion 1995; Ravallion and Chen 1997; and World Bank 1990). The World Bank (2001) and Ravallion (2004b) suggest that the “elasticity” of the \$1-per-day poverty rate to growth is -2 ; an increase in the growth rate by 1 percent is associated with a decrease of 2 percent in the headcount index of poverty.

Although there is general consensus that growth is good for poverty alleviation, a few voices of caution can be heard. The actual reduction in poverty is arguably lower than might be expected, given recorded rates of economic growth. This has been termed “the paradox of persistent global poverty” (Cline 2004: 28). Poverty in the 1990s declined by less than would have been predicted with a poverty growth elasticity of around -2 . Haider Khan and John Weiss (2006) warn that the elasticity of poverty to growth can vary widely—only -0.7 for the Philippines compared to -2.0 for Thailand—depending on the initial inequality and changes in inequality over time. Ravallion (2004) lists a few reasons to be cautious about the distribution neutrality of growth: measurement error in changes in inequality, possible churning under the surface with winners and losers at all income levels, and possible increases in absolute income disparities. Moreover, a few countries and regions could experience poverty increases from distributional changes, even if on average there is neutrality.²

In addition to uncertainties introduced by income inequality effects, the elasticity approach to anticipating poverty decline with income suffers from a problem that Chapter 2 discussed. A given rate of economic growth will have a bigger impact on poverty headcount when the poor are clustered closely around the poverty line than when their incomes fall markedly below the line. In some countries this phenomenon might explain the weaker-than-expected response of poverty levels to growth in the face of only modest changes in overall inequality.³

The lognormal approach for forecasting poverty in this volume eliminates the elasticity approach. In fact, lognormal specifications could be used to calculate variable poverty elasticities across countries and time.

Pro-poor growth

If growth in general reduces poverty, are certain types of growth patterns particularly helpful? The idea of **pro-poor growth** is at the heart of many a poverty reduction strategy. Ravallion (2004) uses the decomposition of poverty into growth and distribution components to formalize the notion of pro-poor growth. One usage defines growth as pro-poor only if poverty falls by more than it would have if growth were distribution-neutral (Baulch and McCulloch 1999; Kakwani and Pernia 2000). In other words, pro-poor means that the poor experience higher growth than the nonpoor. Policy prescriptions associated with pro-poor growth typically include rapid job creation for the relatively unskilled; public expenditure on infrastructure, health, and education disproportionately oriented toward the poor; and “narrowly targeting” measures to provide special support to the poor.

As an alternative, Ravallion and Chen (2003) define “distributional correction” as the ratio

of actual poverty over time to the poverty that would have resulted under distribution neutrality. If the distribution shifts in favor of the poor, it would be greater than one, and if it shifts in favor of the rich, it would be less than one. The formulation becomes:

$$\text{Rate of pro-poor growth} = \text{Distributional correction} \times \text{Ordinary growth rate.}$$

Their definition is less restrictive in the sense that the rate of pro-poor growth can be high even if the distributional correction is less than one (distribution shifts in favor of the rich), provided the ordinary growth rate is high enough. They argue it is the right way to measure pro-poor growth when the objective is to assess poverty reduction caused by growth.

The Deep Drivers of Poverty

Given that growth, inequality, and population are the proximate determinants of poverty, what are the factors that in turn drive these determinants? Montek S. Ahluwalia, Nicholas Carter, and Hollis Chenery (1979) undertook an early effort in mapping both proximate and deep drivers, as well as some of the policy levers that might move the deep drivers. The bold lines in

Figure 3.4 Deep drivers of poverty as seen by Ahluwalia, Carter, and Chenery

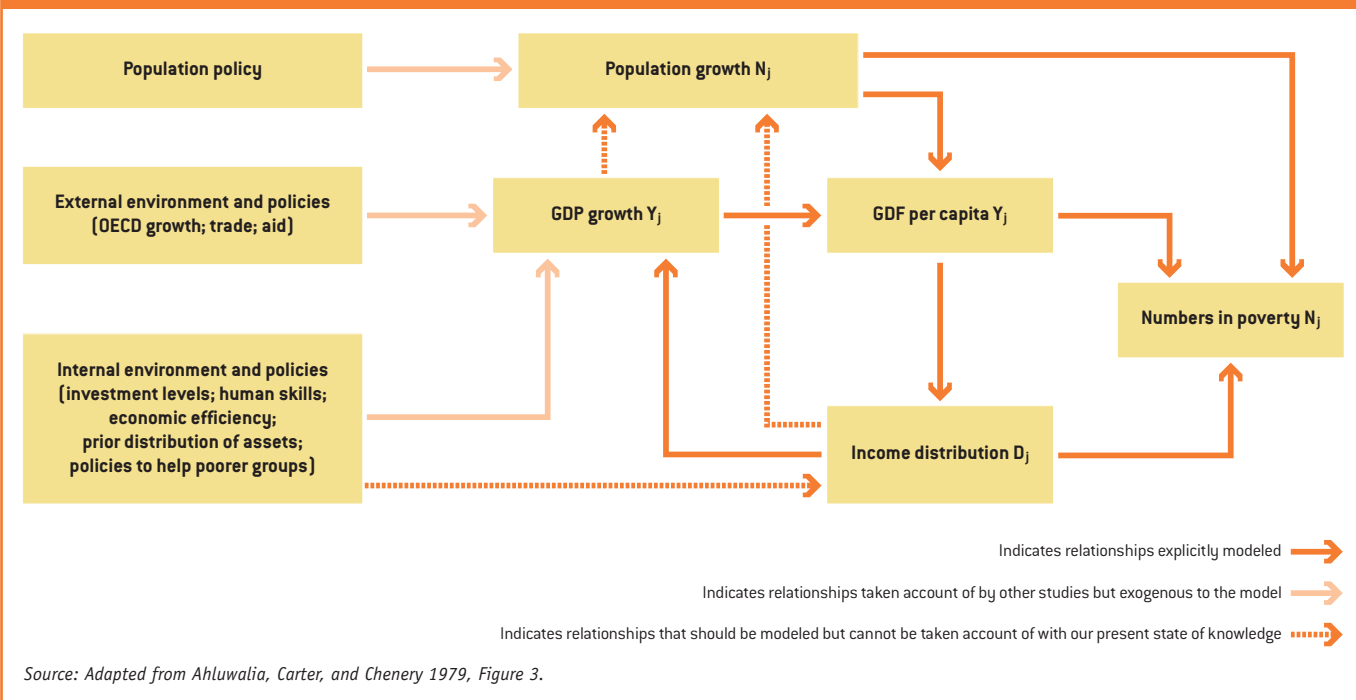
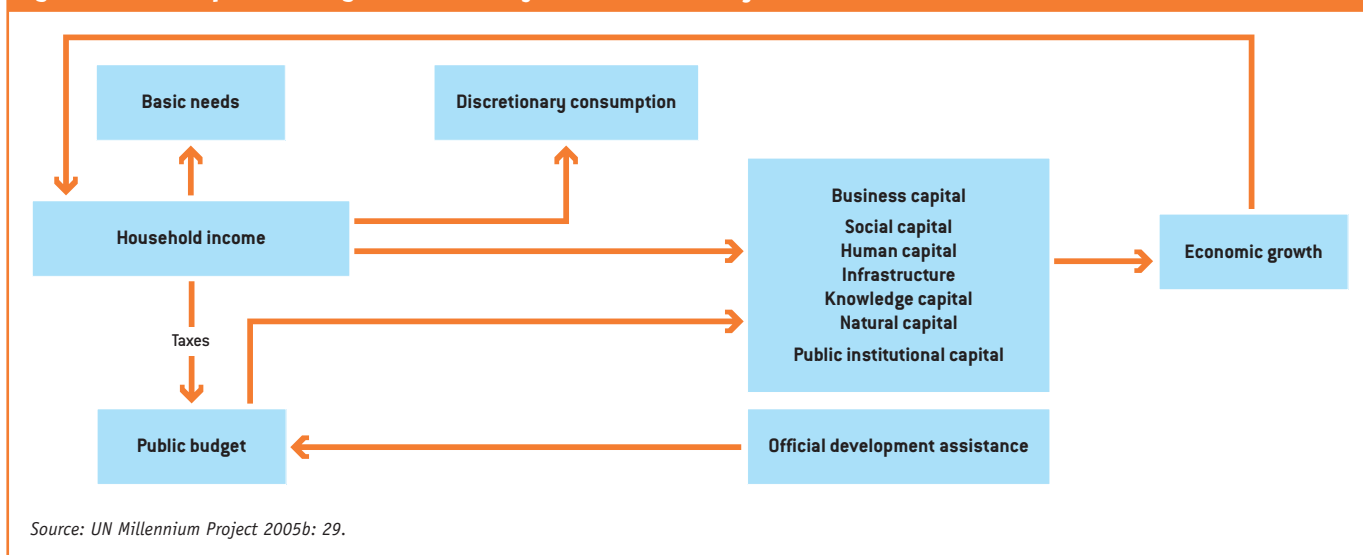


Figure 3.5 The deep drivers of growth as seen by the Millennium Project



Source: UN Millennium Project 2005b: 29.

Figure 3.4 trace the connections between the proximate drivers and poverty. The figure also identifies deep drivers such as investment levels, human skills, and economic efficiency.

The UN Millennium Project (2005a) also identified deep drivers of economic growth (see Figure 3.5). In order to develop and present its “practical plan” for achieving the Millennium Development Goals (MDGs), the project elaborated a causal understanding of change in levels of poverty, hunger, education, and other variables related to the goals. The **production function** with which most growth economists model a country’s output motivated their list of deep drivers. The factors of production that typically enter this function are business or physical capital (equipment and structures) and labor. There is also an aggregate efficiency term, total or multifactor productivity (MFP). In highly reduced form approaches, the MFP is a residual that captures everything that is not measurable physical and human input. However, quantitative studies show that these measurable inputs account for only a small portion of variations in growth and income, which has prompted calls to better understand the components of this residual (Klenow and Rodriguez-Clare 1997a; Prescott 1998). The inclusion of factors such as human capital, social capital, infrastructure, knowledge capital, and institutional capital in Figure 3.5 captures the attempts to get into the black box of productivity.

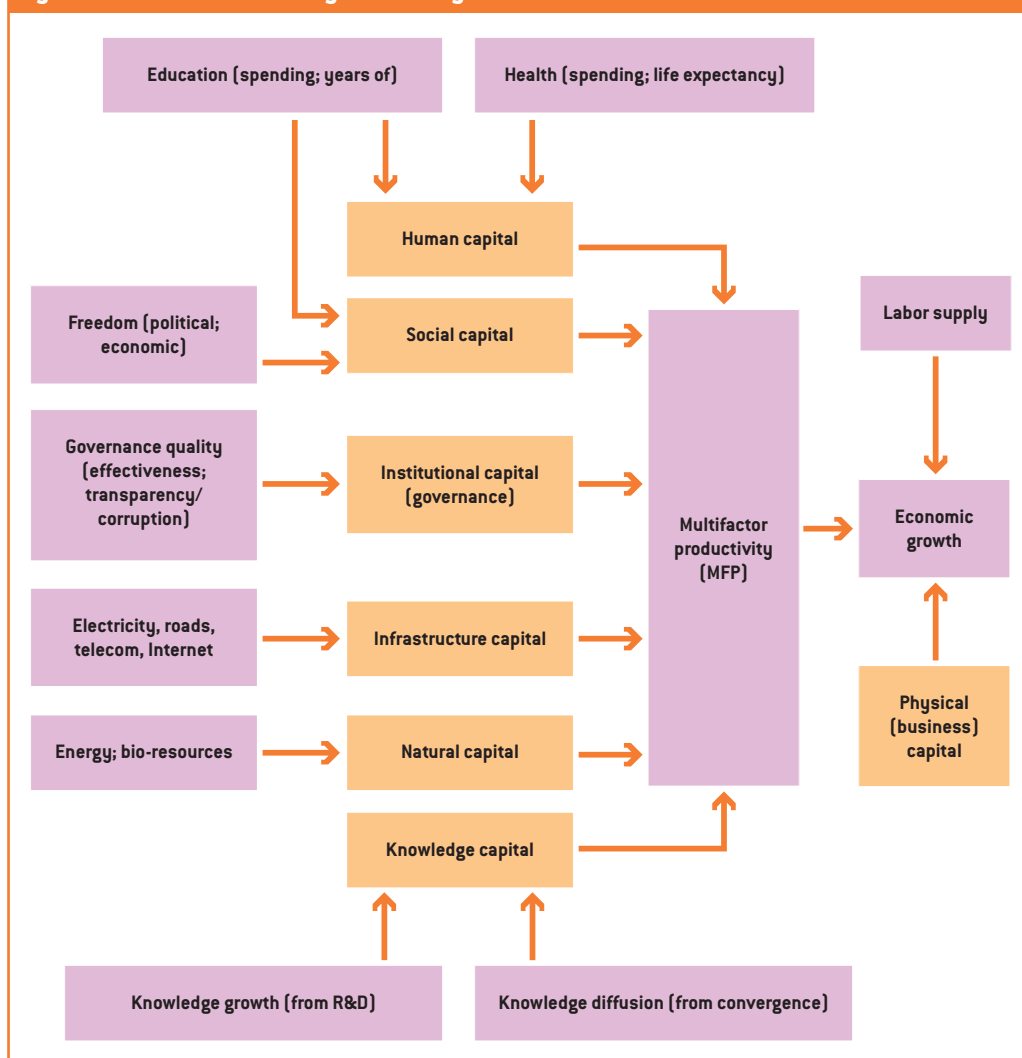
Listing deep drivers of economic growth

Figure 3.6 further elaborates on this theme. The figure shows that MFP, labor supply, and physical capital determine growth. In other words, the figure captures the production function. Although growth in all these inputs can cause economic growth in the short run, growth in MFP is primarily responsible for sustained long-run growth. MFP responds to changes in human capital, social capital and governance, infrastructure capital, natural capital, and knowledge. The schema is broad enough to allow for the contribution that infrastructure makes to MFP, as well as factors such as natural resources and the environment, which neoclassical economic analyses of growth do not typically include. The IFs model that we use to simulate poverty over time uses the structure of Figure 3.6 to determine production and growth. Box 3.2 describes in greater detail the types of capital depicted in Figure 3.6.

Further exploring the deep drivers of economic growth

The systematic search for the deep drivers of economic growth (see, again, Figure 3.5) goes back at least to Robert M. Solow (1956, 1957), who demonstrated that an economy cannot grow by accumulating capital alone. Diminishing returns on capital—the tenth machine in a factory with a constant labor force will produce proportionately less extra output than the first one—means that growth will eventually taper

Figure 3.6 Factors influencing economic growth



Box 3.2 The various types of capital

Physical Capital: Equipment and structures used in the production process. A broad conception of physical capital might include land as well as residential structures and commercial ones. Investment augments capital.

Human Capital: Broadly, the quality of labor used in the production process. Expenditures on child rearing, education and health, and time devoted to on-the-job training and learning by doing augment human capital.

Social Capital: The quality of *interactions* among individuals. This measure captures the benefits accruing to individuals through their membership in groups and social networks. Social capital has served as an umbrella term for a variety of concepts, such as transactional efficiency, trust, social networks, honesty, and civic engagement. Education, development of social norms and institutions, and culture are a few of the determinants of social capital.

Institutional Capital (Governance): The institutions and processes by which a social grouping manages itself, specifying power distributions and usage, including citizen participation. The quality of governance depends heavily upon the extent of social capital.

Infrastructure Capital: Roads, airports, and public transportation, and other public goods, where use by one party does not exclude its use by others. In most countries, the government is heavily involved in infrastructure investment and provision. Infrastructure also includes utilities such as electricity and water. Use of these utilities by one precludes use by others, and therefore the private sector can in principle provide these services. Given the scale of investment and operation involved, however, the government provides them in most developing countries.

Natural Capital: The physical and biological environment. Minerals, fossil fuels, and publicly held land, such as national parks and wildlife preserves, are types of natural capital. Although the amount of natural capital is fixed in a country, investments can be made in mineral exploration to discover new sources and in improvements of environmental quality.

Knowledge Capital: Knowledge not embodied in an individual or equipment. It is typically “nonrival”; use of, say, blueprints by one person does not preclude their use by another. R&D, expenditures in research institutions, and institutions of higher learning constitute investment in knowledge capital.

Forecasting many drivers of multifactor productivity helps endogenize economic growth.

off. Only growth in MFP will sustain growth in the long run. Indeed, exercises in “growth accounting” reveal that there is a large portion of growth for which measurable inputs in capital and labor cannot account. Solow did not take a stance on how this productivity growth arose; it was exogenous to his framework, beyond the control of economic agents.

A series of papers in the 1980s by Paul M. Romer (1986, 1987) and Robert E. Lucas (1988) ushered in a new era in the research and understanding of economic growth. These “new growth theories” view growth as endogenous, arising from intentional actions of economic agents and governments. Romer posited that increasing returns, resulting from the use of specialized inputs in production or externalities in the use of capital, can overcome the stumbling block of diminishing returns and sustain long-term growth. Lucas posited that there are no diminishing returns on the accumulation of human capital used in production and that it can sustain growth in the long run.

The implications of endogenous growth are profound. Taking a stance on the reasons (“engines”) for growth allows one to recommend policies to increase growth. For instance, if externalities associated with human capital result in underinvestment in education and other forms of human capital, subsidies for such investment can increase growth. Exploring endogenous growth also offers the possibility of getting into the black box of productivity and understanding its origins. Indeed, numerous factors have been suggested and studied as engines of growth since the 1980s. We offer a very brief and necessarily incomplete survey of these engines of growth, in order to provide an elaboration of the deep drivers in the previous two figures.

Human capital

The origins of “human capital,” the idea that investment in oneself is akin to investment in capital such as machines, can be traced back to Theodore W. Schultz (1963) and Gary S. Becker (1964). Lucas (1988) pioneered the notion of human capital as an engine of growth.⁴ In his framework, externalities in production arising from human capital account for any residual in growth for which growth in measurable inputs cannot account.

Evidence on the causal connection between human capital and growth is mixed. N. Gregory Mankiw, David Romer, and David N. Weil (1992), Jess Benhabib and Mark M. Spiegel (1994), and Krishna B. Kumar (2003) found that educational measures (enrollment and attainment) cause growth. However, Peter J. Klenow and Andres Rodriguez-Clare (1997a), Edward C. Prescott (1998), and Mark Bils and Peter Klenow (2000) question the role of human capital in growth; they found that differences in human capital account for little of the cross-country variation in economic growth and income. William Easterly (2001) also provided a skeptical view of human capital. One problem with obtaining decisive evidence on the role of human capital in growth is the difficulty in measuring it. Even though educational variables are typically used as proxies, human capital encompasses more—improvements in labor productivity arising from repeated production (“learning by doing,” as in Arrow 1962), on-the-job learning, and the knowledge of institutions (Kumar and Matsusaka 2006) to name just a few. As the following example from Lucas (2002: 13) shows, human capital is a very broad concept and therefore difficult to measure: “The idea that it will help business to smile at customers is not patentable or publishable, but whenever someone remembers and implements it, it shows up in profits and total factor productivity as well.”

Knowledge base/technologies

Human capital, by definition, is embodied in individuals. Romer (1990) suggested that the growth in disembodied knowledge (technological blueprints) is an engine of economic growth. In his framework, intentional R&D by monopolistically competitive firms results in the discovery of new goods and specialized inputs. Human capital is viewed as an input into technology or knowledge production.⁵

Romer (1989) provided evidence for the R&D-based view of growth. Economic openness or an external orientation is an alternative to doing R&D to gain access to new technologies, and especially so for developing countries, which do not have the resources to engage in original R&D.⁶

Social capital and governance

Even though the concept of social capital appears to have originated in the early

twentieth century (Hanifan 1916, 1920), it attracted the attention of economists and sociologists only recently. Joel Sobel (2002: 139) defined social capital succinctly as follows: “Social capital describes circumstances in which individuals can use membership in groups and networks to secure benefits.”

Social capital has served as an umbrella term for a variety of concepts, such as trust, social networks, honesty, and civic engagement, to name a few (Coleman 1988; Fukuyama 1995, 1999; Putnam 1995). On the ability of social capital or social infrastructure to account for some of the unexplained variation in cross-country incomes, see La Porta et al. (1997), Knack and Keefer (1997), and Hall and Jones (1999).⁷

Despite ongoing debates about its measurability and ability to explain growth, social capital has been useful in conceptualizing the role of formal and informal institutions (and thus governance) in economic growth. It has also allowed researchers to think about human capital, the deep driver discussed above, in different ways. Education does more than increase the productivity of labor in goods production. For instance, Krishna B. Kumar and John G. Matsusaka (2006) viewed social capital as human capital, or the knowledge of how to use institutions. Education also politically empowers people and improves freedom, and therefore the “capability to function” in the sense used by Amartya Sen (1999).

Social capital, broadly construed, also deals with issues of governance and with institutions in general. Daron Acemoglu and Simon Johnson (2005) found, for instance, that institutions that define and enforce property rights have an important effect on economic growth. Edward L. Glaeser and his colleagues (2004) were skeptical of this view, and found that human capital, rather than institutions, is a more fundamental force for growth. Kumar and Matsusaka (2006) argued that the human capital versus institutions debate might be too narrowly framed, because human capital *about* the functioning of institutions is an important facet of economic development.

Infrastructure and natural resources

Infrastructure is a public good that improves the efficiency with which other productive, private inputs are combined with one another.

Therefore, infrastructure rightly deserves to be considered a crucial component of MFP. The World Bank (1994) studied the role of infrastructure in economic development. It surveyed the recent studies on the impact of infrastructure on economic growth and found very high rates of return on investment, sometimes up to 60 percent. It is possible that these returns could be overstated because of omitted factors and two-way causation between infrastructure and growth. However, based on studies of cost reduction resulting from infrastructure improvements, such as by David A. Aschauer (1993), the report concluded that the role of infrastructure in growth is “substantial, significant, and frequently greater than that of investment in other forms of capital.”

Although theoretical treatments of natural resources, the environment, and growth are rare (see, for example, Stokey 1998 on the limits to growth), a few empirical studies have investigated the connection between natural resources and growth. Jeffrey Sachs (1995) and Sachs and Andrew M. Warner (1997) found a strong negative connection between use of natural resources and growth. An increase in the share of natural resource exports in GDP from 10 to 20 percent reduces the annual growth rate by 0.33 percentage points. They speculated that there might be greater incentives for rent-seeking in resource-rich economies, that natural resources might provide a false sense of security and postpone economic reforms conducive to growth, or that the economies could be suffering from a form of “Dutch disease” (the surge in raw material exports drives up the real exchange rate or real wages and hurts other exports). Thorvaldur Gylfason (2001) presented evidence to argue that natural capital slows economic development because resource-rich countries inadvertently or deliberately neglect expenditures on human capital.

The availability of natural resources can have a positive effect on growth. For instance, exhaustible resources such as oil are usually a bottleneck in production, and their extra availability will increase output. Likewise, the availability of water and fertile soil are crucial for agricultural production. But the above literature also alerts us that natural resources can be used as a tool of abuse.

Inequality

Inequality, a proximate driver of poverty, could itself affect growth, another proximate driver. Bourguignon (2003) surveyed theories as to how inequality could affect growth. Credit market imperfections (liquidity constraints, collateral requirements, enforcement difficulties) could cause investment to be undertaken only by those with enough initial wealth, whereas other, potentially more productive projects do not get initiated for lack of funding. In such cases, redistribution from the wealthy to the poor could enhance growth. Oded Galor and Joseph Zeira (1993), Abhijit V. Banerjee and Andrew F. Newman (1993), and Philippe Aghion and Patrick Bolton (1997) provided formalizations of this idea. Elizabeth M. Caucutt and Krishna B. Kumar (2006c) considered a similar situation but highlighted redistribution from low-ability to high-ability individuals in a stagnant economy where wealth-based redistribution is not possible. A second line of explanation argues that greater inequality would increase the political will for higher taxes and redistribution, taking resources away from growth-causing activities such as investment (Alesina and Rodrik 1992; Persson and Tabellini 1992). A third explanation is that high inequality can lead to political instability and

therefore lower investment and growth (Alesina and Perotti 1996).

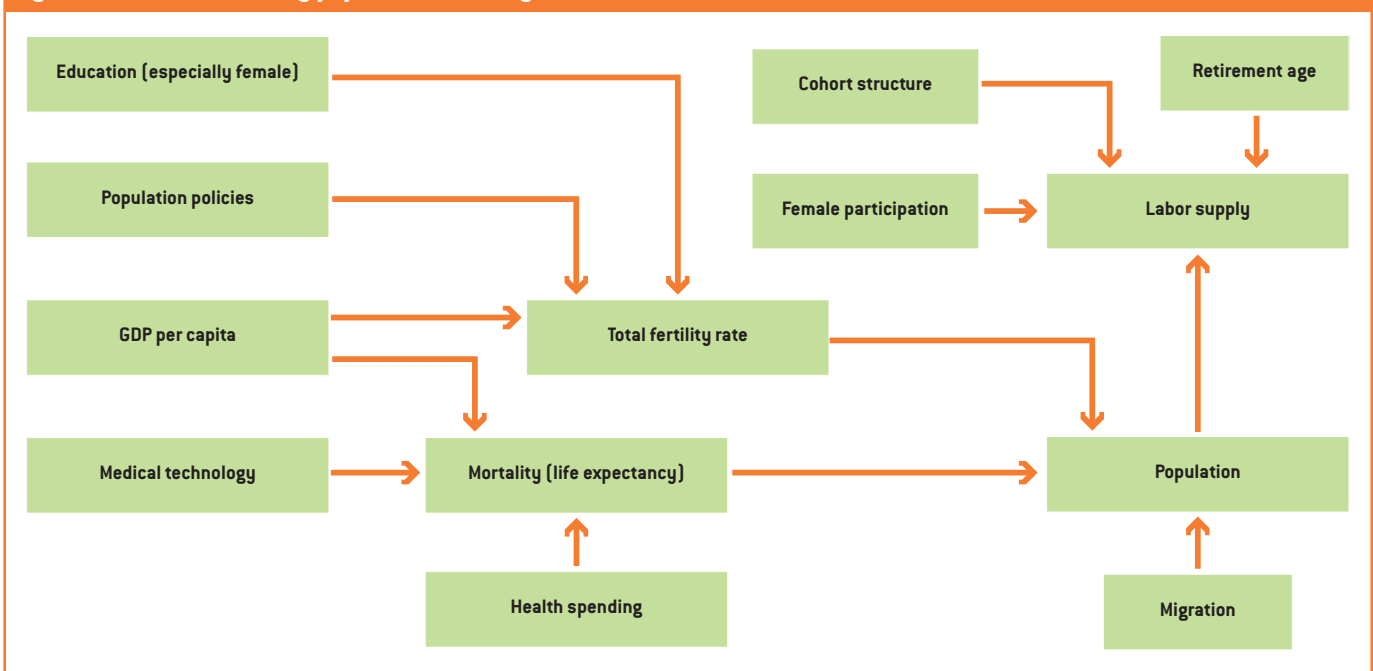
Aggregate cross-country evidence for the inequality-growth connection is also inconclusive (Forbes 2000). Bourguignon (2003) argued for tests of the micromechanisms suggested by the theoretical works.

Surveying deep drivers of population

The deep drivers of population growth, one of the proximate drivers of poverty, also influence the total production of a country via the amount of labor. Fertility rate and life expectancy, and to a lesser degree migration, affect population growth. Per capita income, the education level of women, and advances in medical technology influence in turn these drivers of population. In addition to population size, the cohort structure of population, retirement patterns, and female participation rates determine the labor supply. Figure 3.7 captures these interconnections.

The economic analysis of fertility can be traced back to Becker (1960), who introduced the quantity-quality trade-off inherent in fertility decisions. Given their income and time endowments, parents can either have many children but afford to impart to each child only small amounts of education or human capital, or have few children but provide each with large

Figure 3.7 Factors affecting population and its growth



amounts of human capital. Robert J. Barro and Gary S. Becker (1989) analyzed fertility in the context of economic growth. Becker, Kevin M. Murphy, and Robert Tamura (1990) argued that, given the fixed costs inherent in childbearing and child rearing, an economy can either stagnate in a “Malthusian” state with high fertility and low human capital, or experience sustained growth with low fertility and high human capital. Oded Galor and David N. Weil (2000) provided a unified framework to analyze the transition from Malthusian stagnation to a situation with moderate growth and high fertility and eventually to high growth and low fertility.

The World Bank (1980) reported that socioeconomic factors, such as income, literacy, and life expectancy, account for a significant variation in fertility changes in developing countries. As opportunities for education and employment improve for women, the value of their time increases. They tend to marry later and prefer to have fewer children. When infant mortality is high, poor families tend to have many children as “insurance” against the expected loss of children.

In the same report, the World Bank listed the purchasing power of basic necessities, conditions of the environment (including sanitation), and an understanding of nutrition, health, and hygiene as the basic determinants of health. It also noted that a major problem with mortality of children in poor countries is the interaction of infectious diseases with malnutrition.

Surveying deep drivers of inequality

Individuals who differ in the amount of assets they possess earn different incomes. Access to markets and institutions that allow individuals to acquire these assets in the first place also varies widely across and within countries. The distribution of intrinsic ability would no doubt be responsible for some of the differences in outcomes. In this sense, some amount of inequality is inevitable. However, the inequality in ability could interact with, and sometimes be amplified by, constraints imposed by the environment. Since these constraints are most likely to apply to the poorest people, they induce a degree of persistence in poverty.

For instance, financial constraints—limits on borrowing, the need for collateral, and so on—can severely limit access to entrepreneurial

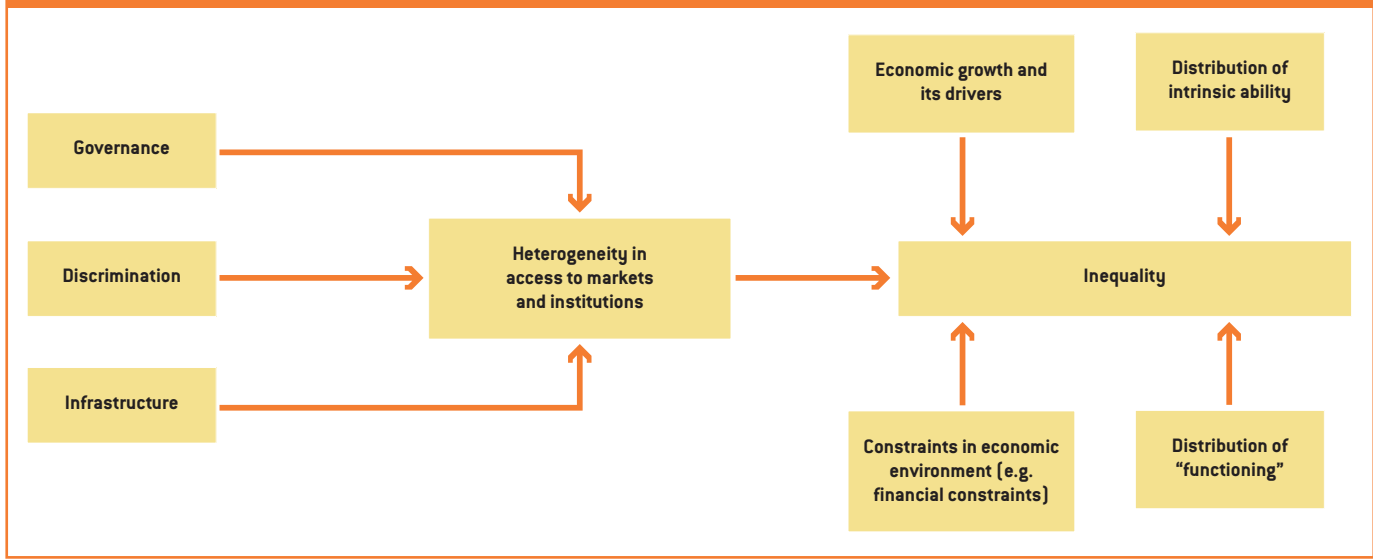
projects and other productive activities. Even if productive or educational ability is distributed independently from generation to generation, the presence of such constraints can cause persistence in inequality. Glenn C. Loury (1981) is an original influence in highlighting such persistence; see Elizabeth M. Caucutt and Krishna B. Kumar (2006a) for a more recent example. Richer and more educated parents can afford to educate their children more, even if the children are not intrinsically able. In contrast, even high-ability children of poor parents might not receive education because their parents, who find education unaffordable, cannot borrow to cover costs.

The existence of credit constraints implies that one’s inheritance—the initial distribution of assets—matters for what activities one can undertake. Only the wealthy can engage in productive activities and can afford to make large enough bequests to their children. The poor will either subsist or work for low wages, and cannot make sizable bequests to their children. A persistence of inequality results.⁸

Even where the government steps in to address such constraints, say, through public expenditures, differences in access to publicly provided services can cause inequality to persist. A bias in expenditures toward urban schools, hospitals, financial institutions, and infrastructure can severely limit access to these public services for the rural poor. For instance, Kremer et al. (2005) found that lack of proper roads is one of the main reasons for the rampant teacher absenteeism in Indian public schools. Since the poor rely more heavily on public schools, they are more likely to be affected by this negligence. For that reason Khan and Weiss (2006) advocated public expenditure on infrastructure, health, and education disproportionately oriented toward the poor. Discrimination by gender, race, skin color, or caste can also limit access to publicly provided services.

A related cause for the persistence of or rise in inequality is poor governance. Misappropriation or misallocation of public funds can alter the distribution of factor endowments and skew access to public services. For instance, Sanjeev Gupta, Hamid Davoodi, and Rosa Alonso-Terme (2002) found in a cross-country sample that corruption increases

Figure 3.8 The deep drivers of inequality



inequality in education and land distribution, decreases social spending, and decreases the progressiveness of taxes, thereby contributing to increased income inequality and poverty.

Poverty can be characterized as the deprivation of “capabilities”—freedom, social functioning, education, and health—that are intrinsically important, according to Sen (1984, 1999). In this view, income is only instrumental; how this income translates into capabilities varies by individuals or groups of individuals, and this variability captures a dimension of inequality not captured by inequality in income alone.⁹ Figure 3.8 depicts the deep drivers of inequality discussed above.

In general, different policy levers that affect growth would therefore also have implications for inequality. For example, accumulation of human capital by the poor would increase their chances of upward mobility and decrease inequality. Likewise, investments in infrastructure or institutional improvements (social capital), if done in a way to benefit the poor, would also decrease inequality. We turn to surveying such policy levers next.

**Policies to Reduce Poverty:
A Selective Survey**

A wide range of policy levers have the potential to reduce poverty. To identify those policies, we rely heavily on policy positions and documents from development institutions that are on the front lines of fighting poverty. As measured by

the headcount of people living on less than \$1 per day, more than 85 percent of the world’s poor live in China, South Asia, and sub-Saharan Africa. (The figure is a little over 80 percent if the \$2-per-day measure is used.) Therefore, policies that have been suggested and used for these regions are of particular interest and importance.

Our aim is twofold. The first is collation: we list policy levers suggested by major sources. The second is extraction and synthesis: we identify strategic orientations, conceptualizations, and philosophies that various organizations follow in fighting poverty. Extracting these orientations allows us to consider packages of policies in the next section.

An early framework

As discussed earlier (see, again, Figure 3.4), Ahluwalia, Carter, and Chenery identified sets of policies to address poverty in 1979: population policy, policies relating to the external environment (poverty alleviation via international trade, increased high-income country growth, and foreign aid), and policies relating to the internal environment (investment, human capital, policies to directly help poorer groups, and policies that affect distribution of income).

We have learned much since that study, but the schema is a strong one overall. Specifically, the division of policies into internal versus external is a natural classification, one that

recurs in other prescriptions. One can see in these sets the possibility of an “inward,” do-it-yourself orientation; an “outward,” economically open orientation; and an orientation based on foreign assistance. Some of these policies are at the discretion of the developing country itself—for instance, whether to adopt an open stance or not. Some require coordination among developed countries—for example, the degree of free trade among countries and coordinated Organization for Economic Cooperation and Development (OECD) policies that increase world growth.

The World Bank’s policies

The World Bank has been more extensively involved in global poverty alleviation than any other organization. From Robert McNamara’s announcement in 1968 that the fundamental work of the Bank was to improve the lives of the poor to the adoption of “a dream of a world without poverty” as the Bank’s motto by then-president James Wolfensohn, the intentions of the institution have been clear. However, the Bank’s philosophy and approach to fighting poverty have evolved over time.

For over three decades the World Bank viewed development as an issue of economic growth (Birdsall and Londono 1997). In the 1960s, its lending focused on transportation and power, agriculture, industry. Poverty alleviation became a goal in itself in the 1970s, though lending continued to be aimed at filling infrastructure and external financial gaps to stimulate growth. In the 1980s, though distracted by adjustment demands caused by the debt crises, the Bank recommended reallocation of public spending to human capital, primary education, and health (World Bank 1980). The focus returned directly to poverty reduction in the 1990s, with strategies for pro-poor growth, social services targeted to the poor, and the creation of safety nets. Below we consider three landmark *World Development Reports* on poverty, released in 1980, 1990, and 2000–2001.

World Development Report, 1980

During the 1970s, as it became clear that economic growth alone would not reduce poverty at an acceptable speed, the World Bank and other organizations gave attention to four strategies: increasing employment, meeting basic needs, reducing inequality,

and raising the productivity of the poor. The 1980 report combined these approaches with a strong concern for growth, and it integrated them with human development, recognizing it as an end as well as a means for economic progress. As ways to raise incomes of the poor, it suggested land reform and tenure; public investment (such as irrigation projects) and private investment by nonpoor; improved education, health, and nutrition; a decrease in fertility; research into technology appropriate for poor countries (such as the introduction of high-yield seeds); migration by people to places where there are better opportunities; and transfers and subsidies.

The policies tend to be “progrowth,” with improvements in education, health, nutrition, and fertility intended to increase growth. However, the report did pay attention to “human development” as an end in itself. Associating poverty with low levels of human development is substantively important. Ravi Kanbur and Lyn Squire (1999: 2) noted: “As more aspects of poverty are recognized, so more policies become relevant to fighting poverty—moving beyond income to health, for example, introduces a new set of policy instruments.”

One can also see pro-poor policies in the attempts to increase the incomes of the poor. However, not until the 1990 World Development Report do we see a strong emphasis on growth in which the poor can participate.

World Development Report, 1990

The three pillars of poverty alleviation outlined in this report were encouraging patterns of growth that use labor more efficiently, targeting basic social services to the poor, and using transfers and social safety nets.

In order to encourage efficient use of labor, the report suggested avoiding excess taxation of agriculture, partly by avoiding overvalued exchange rates, providing strong support for rural infrastructure, making technical innovations accessible to small farmers, and fostering urban job creation by minimizing distortions in the product and factor markets and by providing suitable urban infrastructure.

The report also suggested that growth would be “poverty reducing” if the poor had access to land (improving property rights, tenancy), credit (microcredit and informal channels, rather

■ ***The World Bank has been at the forefront of efforts to reduce poverty, and its understanding has evolved over time.*** ■

than government-subsidized formal credit), and public infrastructure and services (adapting technologies to small farmers and improving rural infrastructure).

Under the umbrella of social sector policies (“investing in people”), the report included family planning to help reduce fertility, expanding the education system and improving the curriculum, and improving health.

Regarding transfers (for the poor who will need time to fully participate in the economy) and safety nets (for the poor who will be affected adversely by shocks), the report recommended attention to food pricing and distribution, public employment schemes, and social security. The report also highlighted the need for macroeconomic stability to encourage private investment and quick adjustments to shocks. On the external front, it pointed out the need for liberalization by industrialized countries. The developing countries need relatively undistorted sectoral terms of trade to avoid bias against agriculture. The aim is to promote labor-intensive growth through economic openness. It suggested that debt relief and foreign aid be tied to policy reforms.

One can see “poverty-reducing growth” emerge as a strategic priority in this report. That is, growth is still seen as important for poverty reduction, but this growth needs to allow the poor to participate, via increased employment and access. The goal of “human development” or “investing in people” was solidified, with education, health, and fertility reduction emerging as strong priorities. There was an emphasis on “openness.” One also sees the emergence of an “efficiency first” call for a distortion-free environment—lower agricultural taxes and removal of distortions in sectoral terms of trade, industrial policy, exchange rates, and product and factor markets in general. Likewise, the issue of political feasibility arose in many a context—land reform, choice of macroeconomic policy, and so on. Even though “improved governance” was not a major theme, one can see hints of it throughout the report. Cooperation from the industrialized countries in the form of trade liberalization was mentioned, but calls for debt relief and aid from them were highly nuanced and tentative.

World Development Report, 2000–2001

This report reflected the movement to center stage in the 1990s of governance, institutions, and vulnerability of the poor. It proposed a three-pronged, complementary strategy for attacking poverty.

- Promoting opportunities by encouraging effective private investment, through macroeconomic stability, sound financial systems, and the rule of law; expanding into international markets; building the assets of the poor; addressing socially based asset inequalities; and getting infrastructure and knowledge to poor areas.
- Facilitating empowerment by providing a political and legal basis for inclusive development, enabling inclusive decentralization and community development, promoting gender equity, tackling social barriers, and supporting poor people’s social capital.
- Enhancing security for the poor in the face of economy-wide and regionwide risks by formulating a modular approach to help poor people manage risk, providing national programs to prepare for and respond to macro shocks, designing social risk management programs that are also progrowth (such as unemployment insurance that does not compromise the incentive to work), addressing civil conflict, and tackling the HIV/AIDS epidemic.

The report noted the need for international action in these areas in addition to domestic implementation. Increased focus on debt relief and effective aid contingent on sound domestic policy are needed. Industrialized countries must open their markets to developing country imports in agriculture and in labor-intensive manufacturing and services. Poor countries need a greater voice in international forums, and international financial institutions should also strengthen the financial architecture to lessen economic volatility. Still further, international cooperation is needed in developing vaccines and technologies specific to the poor and in protecting the environment.

Growth was still the overarching poverty reduction tool in this report, but pro-poor growth was emphasized. “Improved governance”

took center stage as a poverty reduction strategy as well. Policies to promote “stability” at the individual level (insurance against risks) and at the macroeconomic level (sound economic architecture and policies to minimize shocks and deal with them when they happen) were given considerable importance. And instead of viewing domestic self-help and external assistance as alternate strategies, the report viewed “domestic self-help *plus* external assistance” (for example, opening of markets by industrialized countries) as a complementary strategy. “Environmental sustainability” also received attention.

Poverty Reduction Strategy Papers

The need for concerted action on the strategies outlined in these reports prompted the World Bank and the International Monetary Fund (IMF) to initiate the Poverty Reduction Strategy Papers (PRSP) in 1999 to facilitate a “comprehensive country-based strategy for poverty reduction.” The IMF’s website describes the papers as follows:

Poverty Reduction Strategy Papers (PRSPs) are prepared by governments in low-income countries through a participatory process involving domestic stakeholders and external development partners, including the IMF and the World Bank. A PRSP describes the macroeconomic, structural and social policies and programs that a country will pursue over several years to promote broad-based growth and reduce poverty, as well as external financing needs and the associated sources of financing. ... PRSPs provide the operational basis for Fund and Bank concessional lending and for debt relief under the Heavily Indebted Poor Countries (HIPC) Initiative.¹⁰

The PRSP process thus emphasizes wide domestic ownership of a plan that combines growth and pro-poor orientations with identification of the external assistance needed.

Other World Bank documents

Guillermo E. Perry and his colleagues (2006) provided a detailed survey of the empirical literature on the effect of various policies on growth and inequality. Within that

literature, policies to increase economic growth (and decrease inequality) divide into the categories of structural policies (and institutions) and stabilization policies. The structural policies involve improvement in education and governance; increases in financial development, infrastructure, and trade openness; and decreases in the size of government. Macroeconomic stabilization, a reduction in external imbalances, and minimization of financial turmoil are the suggested stabilization policies.

Despite occasional disagreements, there is a fair degree of empirical consensus that these policies increase growth. There is less consensus on whether three of the policies—financial development, openness, and government burden, or size—decrease inequality.

Financial development can ease credit access for the poor, who are often liquidity-constrained, and thereby decrease inequality. However, financial assets are mainly held by the rich and financial institutions concentrated in the high-income urban centers; thus some “improvements” in the financial arena can actually increase inequality. Alessandra Bonfiglioli (2005) presented evidence that inequality increases with financial development up to a certain level and declines after that.

Trade and openness are viewed as key elements of high growth, but if capital goods become cheaper to import and cause workers to lose jobs because capital is substituted for labor, inequality will increase. Capital-skill complementarity will further magnify this effect. Although some studies find that the positive effect outweighs or is at least as strong as the negative, Branko Milanovic (2005) found that openness reduces the income share of the bottom eight deciles and increases the share of the top two deciles. Only beyond a certain level of economic development do the poor and middle class benefit from trade.

Government spending via taxation can be distortional and inefficient, but if the spending is done on health care, primary education, and infrastructure, it can decrease inequality. Since *disposable incomes* matter more for poverty reduction than market income, Perry and colleagues (2006) surveyed the evidence on redistributive taxation and inequality. They found taxes and transfers have a greater impact

● *The Poverty Reduction Strategy Papers are comprehensive, country-owned strategies for reducing poverty.* ●

■ **The Asian Development Bank fights extreme poverty in the region of its greatest incidence.** ■

on inequality in developed than in developing countries. However, they noted this important policy lesson: redistribution takes place largely through transfers rather than taxes (that is, tax progressivity). They suggested that attempts to address inequality and poverty should first address the composition and structure of existing transfer programs, and only then turn to obtaining more resources via taxes, minimizing distortions as much as possible.

These documents espoused the strategy of pro-poor growth, displaying strong concern for policies that increase growth *and* decrease inequality. These policies can also be viewed through the lens of “inward” versus “outward” strategies. A great deal of commonality exists between this set of policies and others mentioned previously, such as improved governance, increased education, increased openness, and macroeconomic stabilization. And yet again, there was a greater degree of consensus on policies that increase growth than on those identified as pro-poor.

The Asian Development Bank’s policies

Given that over 65 percent of the \$1-per-day poor live in Asia, strategies devised to address poverty in that region are of particular relevance. We therefore consider the policies that the Asian Development Bank (2000, 2004a, 2004b) has recommended. Three elements (“strategic pillars”) guide its policies: pro-poor, sustainable economic growth; good governance; and social development.

Growth *can* reduce poverty, and labor-intensive growth can reduce it even faster. The policies that aid such growth include removal of market-distorting interventions (overvalued exchange rate, import and export restrictions, credit subsidies, and state ownership of enterprises), encouragement of microfinance, infrastructure development, sound macroeconomic management, encouragement of the private sector, and policies that enhance the health of the environment and the protection of natural resources.

Several actions support good governance: strengthened public expenditure management at the national level, policies to promote equity (progressive taxation and adequate allocation of expenditures for basic education, health, and public services), and delegation of responsibility for the provision of public services to the lowest appropriate level of government.

Addressing the needs of specific groups aids social development. The budget allocation has to provide for human capital development (access to basic education, primary health care, and other services), early childhood development, population policies (universal education for girls, accessible reproductive health services), social capital development, gender parity, and social protection (unemployment insurance, old age pension, safety nets).

The strategy of the Asian Development Bank relies heavily on microfinance as a way to increase incomes and access. John Weiss and Heather Montgomery (2004) reached a nuanced conclusion about the effectiveness of microfinance in reducing poverty. The evidence suggests that microfinance has positive impacts on poverty reduction, but it is unlikely to be a panacea, since those considered to be high risks for formal credit are also likely to be high risks for microfinance and might be denied access. The bank’s view that the microfinance strategy can also aid in building participatory institutions is a more subtle argument, even if challenging to evaluate.

Given clearly articulated strategic pillars, the Asian Development Bank’s policies naturally fall into those that increase growth (pro-poor growth), decrease inequality (human development), and address institutional changes that aid both goals (improved governance). The bank’s strategy also suggests that its policies have been assigned to the following groups: (1) “population” (discussed under social development), (2) “outward” (labor-absorbing, trade-led growth, removing distortions such as overvalued exchange rate and import and export restrictions, sound macroeconomic management, and regional cooperation) and (3) “inward” (the remaining policies). We can also see that the policies reviewed thus far have similar views on the deep drivers of growth.

The United Nations and the Millennium Development Plan

The Millennium Project’s understanding of growth drivers, presented in Figure 3.5, focuses on both the internal and external elements of policy. Taxes collected from the developing country’s citizens are the internal source of funds for the public budget, and official development assistance (foreign

aid) forms the external source of funds. The public budget is then used to fund accumulation of various forms of capital that constitute the deep drivers of growth, especially forms such as infrastructure, which are public goods.

The UN Millennium Project (2005a) listed more details of interventions that would allow the MDGs to be met. Some of these interventions, like the MDGs themselves, reach well beyond poverty reduction. However, many interventions, such as investments in rural development, urban development, and slum upgrading, the health system, education at all levels, gender equality, and environmental sustainability, are relevant to poverty reduction.

With its emphasis on health and education, the UN Millennium Project was clearly

advocating a strategy of human development that is pro poor. Its distinction between rural and urban policies suggested strategies of rural development and urban development. The former might be particularly important, given that the vast majority of the poor live in rural areas. However, since the rise of megacities with a large population of slum dwellers, urban policies have also become specific targets for intervention. As with the Asian Development Bank, “environmental sustainability” is a major concern.

Policies: A summary table

We summarize the policies discussed in the earlier subsections in Table 3.1.

● *Then—UN Secretary-General Kofi Annan charged the UN Millennium Project with developing an integrated plan for the MDG-related assault on poverty.* ●

Table 3.1 A summary of policies to reduce poverty

Policy	Proximate driver(s) affected	Deep driver(s) affected	References	Comments and discussion
Increased access to reproductive health services (family planning)	Population	Fertility	ADB, WB	
Investments in rural development (water, sanitation, etc.)	Population, inequality	Mortality	ADB, Millennium Project, Oxfam	
Increased education expenditure for girls	Population, growth, inequality	Human capital, fertility	ADB, Millennium Project, Oxfam, WB	
Increased non-OECD R&D expenditures	Growth	Knowledge capital	Millennium Project	
Increased investment	Growth	Physical capital	Ahluwalia et al.	Is it directly needed, or will it happen via other channels? Can it be caused by an investment subsidy?
Privatization	Growth	Physical capital, human capital	ADB	Affects MFP if public and private enterprises have different efficiencies.
Export promotion	Growth	Knowledge capital, human capital	ADB, WB, Oxfam, Ahluwalia et al.	
Increased R&D in OECD countries on technologies relevant to non-OECD countries (including increased technology transfers)	Growth	Knowledge capital, human capital	Ahluwalia et al.	
Increased foreign direct investment (FDI), portfolio investment	Growth	Knowledge capital, human capital	ADB, WB, Oxfam	
Removal of other external distortions such as overvalued exchange rates	Growth	Knowledge capital, human capital	ADB, WB, Oxfam	
Decreased product market and factor market distortions	Growth	Physical capital, labor	WB	
Decreased agricultural taxes	Growth	Land, physical capital, labor	WB	
Increased investment in primary health care	Growth, Population	Mortality, human capital	ADB, Millennium Project, Oxfam, Khan and Weiss	
Increased education expenditure	Growth, inequality	Human capital, fertility, social capital	ADB, WB, Millennium Project, Oxfam, Ahluwalia et al, Khan and Weiss	Some argue supply-side push for education has not been effective (Easterly 2001).

Table 3.1 A summary of policies to reduce poverty *continued*

Policy	Proximate driver(s) affected	Deep driver(s) affected	References	Comments and discussion
Improved governance (economic freedom, governance effectiveness, decrease corruption)	Growth, inequality	Social capital	ADB, WB, Oxfam	Costs of effecting these changes are unclear.
Increased expenditure on infrastructure (roads, electricity, telecommunications, etc.)	Growth, inequality	Physical capital	ADB, WB, Millennium Project, Oxfam	
Enhanced quality of environment and protection of natural resources	Growth, inequality	Physical capital	ADB, Millennium Project, Oxfam	Unclear how this policy is put into operation. Via development of renewable energy?
More microfinance	Growth, inequality	Physical capital, social capital	ADB, WB	See Montgomery and Weiss (2004) for an assessment.
Financial development (private domestic credit)	Growth, inequality	Physical capital, human capital	ADB, WB	
Increased soundness of macroeconomic management (low inflation, minimal distortion to interest rates, decreased fiscal deficit)	Growth, inequality	Physical capital	ADB, WB	
Increased expenditure on early child development	Growth, inequality	Human capital	ADB	
Increased expenditure on urban development and slum upgrading	Growth, inequality	Human capital, social capital	Millennium Project	
Increased openness via decrease in import duties, tariffs, quotas	Growth (+), inequality (-)	Knowledge capital, human capital	ADB, WB, Oxfam, Ahluwalia et al	
Lowered corporate and marginal taxes	Growth (+), inequality (-)	Physical capital, human capital	WB	
Decentralization, community-based governance	Inequality	Social capital	ADB, Oxfam	Costs of effecting these changes are unclear.
Increased budget expenditures on services specifically for the poor (education, health care, public services, etc.)	Inequality	Human capital, social capital	ADB, WB, Millennium Project, Oxfam, Ahluwalia et al., Khan and Weiss	Assume the negative trade-off on growth, if it exists, is minimal (Khan and Weiss, 2006).
Increased transfers to poor households (such as food subsidies)	Inequality	Human capital	WB	
Increased expenditure on social safety nets	Inequality	Human capital	ADB, Oxfam	
Increased public employment	Inequality	Labor	WB	
Reduced social barriers	Inequality	Social capital	WB	
Greater poor people's social capital	Inequality	Social capital	WB	
Increased female participation in labor force	Inequality, growth	Labor	ADB & Millennium Project (under gender parity)	Costs of effecting these changes are unclear.
Progressive taxation	Inequality (+), growth (-)	Physical capital	ADB	
Increased immigration/labor mobility, leading to increased worker remittances	Inequality, growth	Human capital	WB	
Increased foreign aid	Inequality, growth	All types of capital	Millennium Project, Ahluwalia et al.	
Land reform	Inequality, growth	Land, physical capital	WB	
Social risk management	Inequality, growth	Social capital, human capital	WB	

Note: ADB refers to Asian Development Bank; MFP, multifactor productivity; OECD, the Organization for Economic Cooperation and Development; WB, the World Bank.

Poverty Reduction Strategies: Search for Silver Bullets?

The search for silver bullets in the fight on poverty, for those measures that can have the greatest impact, ideally with the lowest cost, is unending. Identification of prospective silver bullets changes over time and across philosophical viewpoints.

As a field, development has always been subject to arguments about the relative merits of various philosophical tendencies, and different strategic orientations have had prominence over time and retained considerable support. As mentioned earlier, analysts considered economic growth synonymous with economic development up to the 1970s. When it became clear that

growth alone did not reduce poverty at an acceptable speed, attempts were made to target the poor directly. The approach changed from progrowth to pro-poor and human development. The elements of participatory growth by and for the poor were then integrated into the strategy of pro-poor growth. The success of the East Asian economies' export-led growth in reducing poverty gave rise to "outward" strategies based on openness. The East Asian crisis gave rise to calls for "stability." In recent years, in addition to the traditionally suggested strategies of trade and financial flow liberalization, other prominent strategies have surfaced. Stagnation and conflict in Africa, rampant corruption in Africa, and the role of weak institutions in the Asian crisis

Table 3.2 Strategic orientations and constituent policies

Strategic orientation	Source	Constituent policies
Major strategic orientations		
Inward, self-sufficient	ACC, ADB	All, except increased openness, export promotion, increased FDI, increased foreign aid
Outward, open	ACC, WB (WDR 1990), ADB	Increased openness, export promotion, increased FDI, increased immigration and remittances, removal of external distortions
Foreign assistance	ACC	Increased foreign aid, increased R&D in OECD countries on non-OECD technologies
Strategic components		
Inward + foreign assistance	WB (WDR 2000/2001)	All inward policies plus foreign assistance policies
Progrowth	WB (WDR 1980)	Increased expenditure on education, health care, infrastructure, R&D expenditures, investment; improve governance, privatization, financial development, sound macroeconomic management, increased openness, export promotion, increased FDI, removal of external distortions
Human development	WB (WDR 1980, 1990), ADB, MP	Increased expenditure on girls' education, increased access to reproductive health, investments in rural development, increased investment in primary health care, increased expenditure on early child development
Pro-poor	WB (WDR 1980), MP	Increased budget expenditures on services specifically for the poor, increased expenditure on social safety nets, transfers such as food subsidies, land reform
Pro-poor growth	WB (WDR 1990, 2000/2001), ADB	All progrowth policies plus encouragement of microfinance, increased education expenditure for girls, increased investment in primary health care, increased female participation in labor force
Efficiency first	WB (WDR 1990)	Increases soundness of macroeconomic management, removal of external distortions, decreased product and factor market distortions, lower corporate and marginal taxes
Improved governance	WB (WDR 1990, 2000/2001)	Improved governance, decentralization, support for poor people's social capital, corruption reduction
Stability	WB (WDR 2000/2001)	Increased soundness of macroeconomic management, increased expenditure on social safety nets, increased transfers such as food subsidies, microcredit
Environmental sustainability	WB (WDR 2000/2001)	Enhance quality of environment and protect natural resources
Population	MP	Increased education expenditure for girls, increased access to reproductive health services, increased female participation in the labor force
Rural and urban poor development	MP	Investments in rural development, increased expenditure on rural infrastructure, increased expenditure on urban development and slum upgrading

Note: ACC refers to Ahluwalia, Carter, and Chenery 1979; ADB, Asian Development Bank; FDI, foreign direct investment; MFP, multifactor productivity; MP, Millennium Project; OECD, the Organization for Economic Cooperation and Development; WB, the World Bank; WDR, World Development Report.

led to “improved governance” (a term typically connoting a combination of reduced corruption, increased protection of property rights, and liberalized markets) taking center stage. The drive toward debt forgiveness and increased but more effective foreign aid (especially for meeting the MDGs of the Millennium Project) by Jeffrey Sachs and others has brought to the fore the strategy of “external assistance.”

These are all outlooks on or orientations toward poverty reduction. Policies are the flesh and body that give these skeletal conceptualizations shape and life. In Table 3.2, we list combinations of policies taken from Table 3.1 that capture the intent of these strategic orientations and can translate these ideas and philosophies into plans of action.

We divide these strategic packages into three major orientations—clusters of initiatives frequently recurring in policy prescriptions, which taken together encompass all the policies listed in Table 3.1—and into strategic components that countries might choose to implement in different combinations.

The inward, self-sufficient, or domestic self-help orientation heavily emphasizes improved governance, at least in its latest incarnation. The argument is that external resources and even internal expenditures are very often wasted if governance quality is inadequate. Corrupt regimes that divert resources to offshore bank accounts sap, if not fatally wound, development efforts. Likewise, well-defined property rights are essential to encourage entrepreneurial behavior. Earlier incarnations of this prescription more often

focused on the development of human capital (as opposed to wasteful military expenditures) or basic infrastructure (in contrast with large-scale show projects or palaces for the privileged elite).

The outward, open, or external market orientation emphasizes the benefits of export promotion, increased trade as opposed to import substitution, and the encouragement of foreign direct investment. A contemporary variation of the general theme of external orientation concerns worker remittances and “brain circulation.” In contrast to the fears of brain drain that characterized those tuned to domestic self-help, the arguments are that the remittances have often proven substantially larger than other international flows and that migrants frequently return with new skill sets and entrepreneurial behavior patterns.

The orientation of foreign assistance or international transfers is driven by the belief among many analysts that domestic self-help, and often even external market orientation, are difficult to pursue without some external resources to jump-start the process. The target of 0.7 percent foreign aid is one of the longest-standing specific prescriptions in development (UN Millennium Project 2005a: 252). The need to address high levels of indebtedness, especially for the poorest countries, also receives regular attention.

Table 3.2 associates the strategic orientations with the various sources reviewed here and also elaborates some of their strategic components. Chapter 7 returns to the orientations and explores their potential for poverty reduction.

- 1 Bourguignon (2004) developed graphics that explain these effects more extensively. Perry et al. (2006) and Foster, Greere, and Thorbecke (1984) provided mathematical decomposition.
- 2 Perry et al. (2006) pay particular attention to inequality in their examination of poverty in Latin America. They argue that the growth elasticity of poverty decreases (in absolute value) with inequality. Since poverty in richer, more unequal countries is more reactive to changes in inequality, while poverty in poorer, more equal countries is more reactive to changes in growth, different policies might be needed to address poverty in different countries. Also see Ravallion and Chen (1997), Ravallion (2001a), and Kraay (2004) in this regard.
- 3 Cline (2004) uses this explanation for his “cross section paradox” that poverty levels are higher than expected on the basis of a standard form of income distribution in some of the large, higher-income countries like China, India, and Mexico. Technically, it means that the share of inequality taken by those around the poverty line is greater than would be found in a lognormal form of income distribution.
- 4 Becker, Murphy, and Tamura (1990), Stokey (1991), and Tamura (2001) also developed frameworks in which human capital is an engine of growth. The introduction to Lucas (2002) is a highly readable summing up of the literature and an articulation of why human capital is important for growth.
- 5 Grossman and Helpman (1991a, 1991b), Aghion and Howitt (1992), Aghion et al. (1998), and Stokey (1995) also studied the role of R&D in economic growth.
- 6 Romer (1993), Lee (1993, 1995), Klenow and Rodriguez-Clare (1997b), Borensztein, De Gregorio, and Lee (1998), and Kumar (2003) provide evidence in support of openness-induced technological change and growth. However, for a skeptical view of this literature, see Rodriguez and Rodrik (2000).
- 7 For a survey of the social capital literature, see Durlauf and Fafchamps (2005). Sobel (2002) provided a critical survey.
- 8 This point is made in various forms in Galor and Zeira (1993), Banerjee and Newman (1993), and Aghion and Bolton (1997). Birdsall and Londono (1997) find evidence that initial inequality in land and human capital has a negative effect on the income growth of the poorest.
- 9 See the discussion of capabilities in Chapter 2 for more details.
- 10 See <http://www.imf.org/external/np/exr/facts/prsp.htm>.