Chapter 1 Unleashing growth and poverty reduction

1.1 A good investment climate fosters productive private investment—the engine for growth and poverty reduction. It creates opportunities and sustainable jobs for people in all strata of society. It increases the variety of goods and services available and reduces their cost—to the benefit of consumers, including poor people. It improves infrastructure, courts, and financial markets—and reduces crime, corruption, and policy uncertainty—raising living standards for people even if they don't work or engage in entrepreneurial activities. And it helps to support a sustainable source of tax revenues to fund other important social goals.

1.2 Improving the investment climate—the opportunities and incentives for firms and entrepreneurs to invest productively, create jobs, and expand—is the key to sustainable progress in attacking poverty and improving living standards. Varying enormously around the world, both across and within countries, the investment climate influences the decisions of firms of all types and sizes. Decisions of the rural microentrepreneur to start a small business to supplement her family's farm income. Of the local manufacturing company to expand its production line and hire more workers. Of the multinational enterprise to locate its next global production center.

1.3 This chapter looks at how improvements to government policies and behaviors shaping the investment climate matter not only for firms but also drive growth and poverty reduction. It opens by looking at what we know about the investment climate. Some of the many factors influencing the decisions of firms to invest productively, create jobs, and expand are specific to each firm—its ideas, its resources, and its strategies. But many more are specific to each location—to the investment climate in its broadest sense. Governments may have limited influence over factors like geography. But they have much more over the security of property rights, approaches to regulation and taxation (both at and within their borders), the adequacy of infrastructure, the functioning of finance and labor markets, and broader features of governance such as corruption.

1.4 Earlier work looking at differences in incomes across countries highlighted "institutions." Now new sources of micro-level data allow us to go further and provide fresh insights into how the details of institutional arrangements vary across and within countries—and influence the level and productivity of private investment.

1.5 The chapter then looks at how variations in government policies and behaviors affect the investment climate—and thus growth and poverty reduction. For growth, the key is to reduce the costs and risks that firms face, and to reduce the barriers to competition, and so encourage firms to innovate and increase their productivity. An investment climate that encourages growth also creates sustainable jobs and opportunities for microentrepreneurs—the key pathways out of poverty for poor people, pathways to become more crowded with the demographic changes expected over coming decades. It also helps to reduce the costs of goods consumed by poor people, and improves the living

conditions of poor people directly. And it contributes to an expanding tax base that allows governments to invest in the health, education, and welfare of its people.

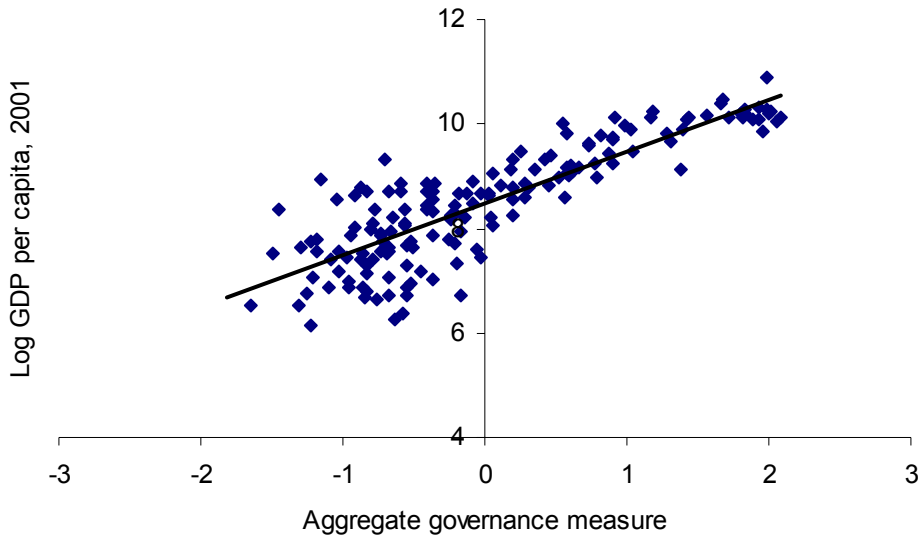
1.6 The key message: for governments at all levels, a top priority should be to improve the investment climates of their societies. To do so, they need to understand how their policies and behaviors shape the opportunities and incentives facing firms—a broad range of firms, domestic and foreign, as well as firms and entrepreneurs in the informal economy. The agenda is broad and challenging, but delivering on it holds great promise for reducing poverty and improving living standards.

Understanding the investment climate

1.7 Early efforts to understand the investment climate focused on broad indicators of country risk, often based on surveys of international experts and usually resulting in a single score for each country.[1] Many studies have focused on the narrower question of the constraints facing foreign investors or how governments might do more to attract foreign investment.[2] The last 20 years have seen a broadening and deepening of these efforts to understand differences in incomes across countries.

1.8 Researchers began by looking at various aggregate indicators of a country's institutional and policy environment—such as the rule of law, corruption, openness to trade, legal origins, and financial sector depth.[3] Their work generated some useful insights—the most important is that institutions are central in economic growth (figure 1.1).[4]

Figure 1.1 Institutions, broadly measured, clearly matter for long run growth



Note: The horizontal axis represents the average of 'rule of law', 'government effectiveness', 'regulatory quality' and 'control of corruption' as defined in Kaufmann, Kraay, and Mastruzzi (2003). The variables are normalized so that the average is at 0, and the standard deviation equals 1.
Source: Kaufmann, Kraay, and Mastruzzi (2003).

1.9 This work highlights the importance of property rights and good governance. But relying on aggregate indicators and cross-country regressions provides limited insights into the heterogeneity of institutional arrangements across and within countries—or the impact of those arrangements on the investment decisions of different types of firms.[5] It is also difficult to distinguish the effects of specific policy actions from the broader background institutions that influence the content and impact of those actions.[6]

1.10 These limits inspired the search for micro-level evidence on the quality of a location's investment climate and for ways to trace the climate's impact on firm performance and investment decisions. The World Bank is contributing to this work in several ways, including Investment Climate Surveys and Assessments and the Doing Business Database (box 1.1). These and other new sources of data provide fresh insights into how investment climates vary across and within countries—and what the impact is on firm performance and growth.

Box 1.1 New sources of micro data from the World Bank

The World Bank recently launched some major initiatives to understand more about the micro-level determinants of growth and productivity. The new data provide details on specific constraints facing firms and relate them to measures of firm performance, growth, and investment.

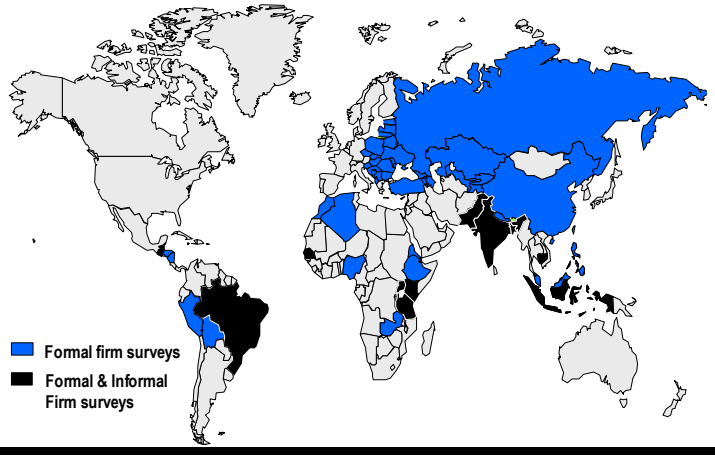
- *World Business Environment Surveys (WBES*). Launched in 1999 the WBES covered small random samples of firms in more than 80 countries, focusing on regulation, administrative barriers and governance. They largely collected perceptions data, but also contained some objective measures.

- *Investment Climate Surveys (ICS).* In partnership with country counterparts, the World Bank has collected data from large, random samples of firms in more than 50 countries. In many cases subnational jurisdictions are included, capturing variations across locations within a country. The surveys collect objective, quantitative data on measures of the investment climate and information on firm performance. This allows linking the investment climate indicators with performance to understand their impact on productivity, investment decisions, and employment decisions. The surveys were launched in 2001, with about 20 new surveys conducted each year since. So far, more than 26,000 formal firms have been interviewed, half of them with fewer than 50 employees.

- *Doing Business*. Covering more than 130 countries, this project reports on the costs of doing business for a "typical" firm based on the views of selected experts (lawyers, accountants). Underlying information includes the time and costs of complying with various areas of regulation—including labor, finance, contract enforcement. A first report was published in 2003, with annual updates scheduled with additional topics.

This Report has complemented these initiatives by surveying 3,000 informal sector entrepreneurs in 11 countries recently completing Investment Climate Surveys, and by drawing on new sources of census and business registry data on the dynamics of starting and closing businesses for a range of countries.

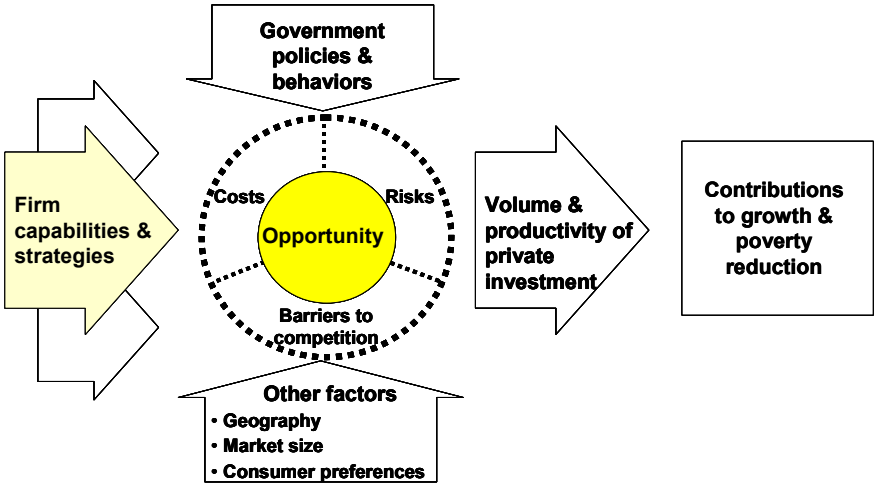
Countries included in the World Bank Investment Climate Surveys



1.11 Firms base decisions on their assessments of opportunities as a whole. And a simple view of the investment climate highlights how various factors influence the opportunities and incentives facing firms, the volume and productivity of private investment, and the contributions to growth and poverty reduction (figure 1.2).

1.12 Each firm brings to the investment decision its distinctive ideas, capabilities, and strategies. But the opportunities and incentives to invest are conditioned by *costs*, *risks* and *barriers to competition*. Each factor matters independently—and they are interrelated. Some risks can be mitigated by incurring greater costs. High costs or risks can be barriers to competition. And barriers to competition can reduce risks for some firms but deny opportunities to others.

Figure 1.2 Investment decisions and the investment climate



The investment decision is characterized by the horizontal row of arrows. Firms come to the decision with different capabilities and strategies. They assess the overall investment opportunity, with the volume and productivity of their investment contributing to growth and poverty reduction. The vertical column of arrows represents the investment climate. Government policies and behaviors, as well as other factors, shape opportunities and incentives through their impact on costs, risks, and barriers to competition.

1.13 The costs, risks, and barriers to competition in a particular investment climate are shaped by many factors. Some are less amenable to direct government influence, at least in the near term—things like geography and consumer preferences (box 1.2). But government policies and behaviors have a more decisive influence over other aspects of the investment climate, and so influence how firms can take advantage of their capabilities and the features in any location (table 1.1).

Box 1.2 Geography matters…but it is not destiny

Some aspects of the investment climate are more difficult for governments to influence than others. The most important of them is geography, which can have direct and indirect effects on the investment climate.

Countries with large domestic markets, or near larger markets, may be more attractive to investors than smaller or more remote markets, though moves toward more open trade and advances in transportation and communications are reducing the gap. Within countries, low population densities and distances from markets can also affect the attractiveness of rural areas, though investments in physical infrastructure can make a difference.

Climatic variables can also influence the feasibility of some types of activity, such as agriculture and tourism. And countries in malaria-affected regions also face disadvantages—underlining the importance of international efforts to help bring the disease under control.

Large endowments of natural resources were once thought to be an important advantage. But such concentrations of potential wealth have led some societies to be consumed by rent-seeking, raising the question of whether such endowments are always a blessing (chapter 2).

Whatever the weight of geography, it is clear that efforts to improve aspects of the investment climate more amenable to government influence can offer large payoffs. They help a society make the most of its innate resources—physical and human.

Sources: Easterly and Levine (2003), Gallup, Sachs, and Mellinger (1999), Diamond (1997).

Table 1.1 Government policies and behaviors and investment decisions—some examples

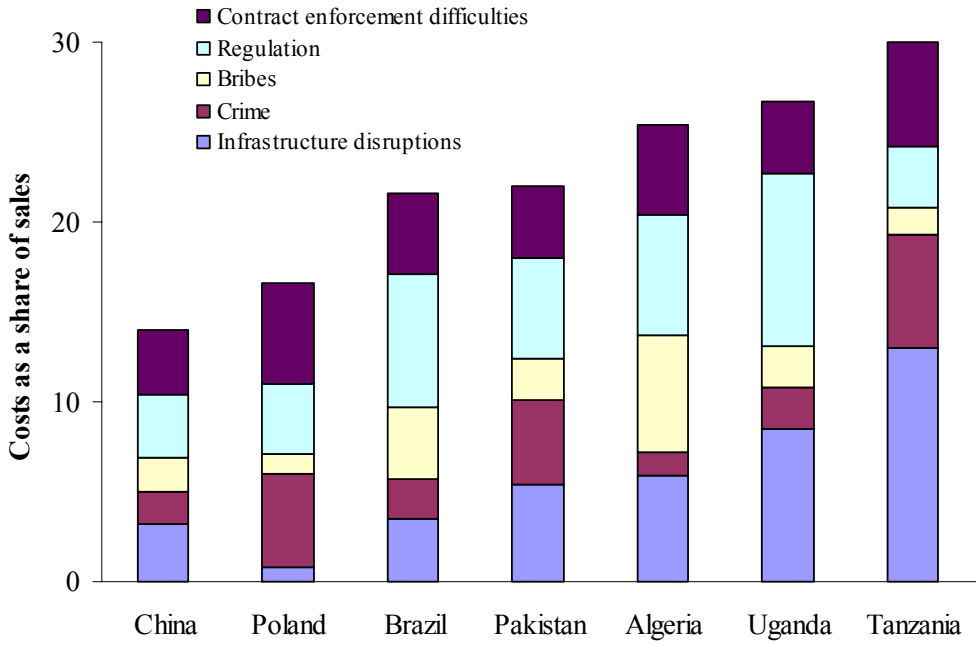
	Strong government influence	Less government influence
Costs	▪ Taxes ▪ Regulatory burdens, red tape ▪ Corruption ▪ Infrastructure and finance costs ▪ Labor market interventions	▪ Distance to input and output markets ▪ Economies of scale and scope associated with particular technologies
Risks	▪ Macroeconomic stability ▪ Policy stability and predictability ▪ Title to property ▪ Contract enforcement ▪ Expropriation	▪ Consumer responses ▪ External shocks ▪ Natural disasters ▪ Supplier reliability
Barriers to competition	▪ Regulatory barriers to entry and exit ▪ Functioning finance markets and infrastructure ▪ Competition law and policy	▪ Market size ▪ Natural barriers ▪ Economies of scale and scope in particular industries

1.14 The new sources of micro-level data show how costs, risks and barriers to competitive can affect firms' investment behavior—and vary around the world.

Costs

1.15 The costs of producing or distributing goods influences the range of opportunities that may be profitable. Many costs faced by firms are a normal function of commercial activity. But other costs flow directly or indirectly from government policies and behaviors. The most obvious direct cost is taxation. But governments also provide public goods, support the provision of infrastructure, and mitigate other market failures. And the ways they do this can have a big impact on the costs that firms face. Costs associated with infrastructure disruptions, crime, corruption, regulation, and poor contract enforcement can amount to 30 percent of sales—or three to four times the amount typically paid in taxes. The level and composition of these costs vary widely (figure 1.3).

Figure 1.3 Costs—vary widely in level and composition



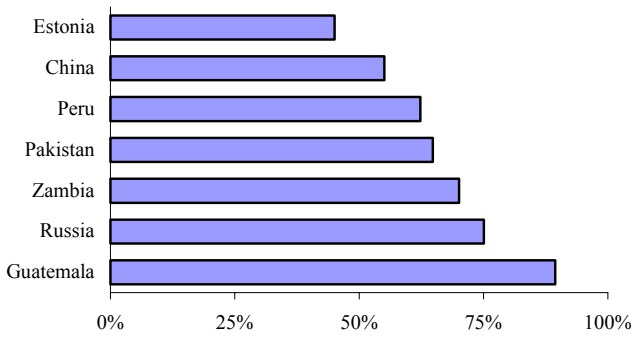
Source: World Bank Investment Climate Surveys. The survey asked registered firms to report values either in monetary terms, directly as a share of sales, or in terms of time. 'Contract enforcement difficulties' captures the share of inputs that are below agreed upon quality (weighted by material inputs in total sales) and overdue payments (as share of total payments, using an interest rate of 10 percent for the average length of overdue payments). 'Regulation' captures management time spent dealing with officials (weighted by the cost of management compensation to total sales), and the gap in actual employment relative to desired levels due to regulatory costs associated with hiring and firing workers (weighted by total labor costs in sales). 'Bribes' are the total cost of bribes as a share of sales. 'Crime' is the sum of losses due to theft, security costs and protection payments (as a share of sales). 'Infrastructure disruptions' includes sales lost to interruptions in power, water and telecommunications and share of sales lost or damaged in transit. Countries were selected to illustrate the range of costs borne by firms.

1.16 The time costs of complying with particular regulatory requirements also vary widely around the world. For example, the Bank's Doing Business Project shows that registering a new business can take 11 days in Latvia—but 203 days in Haiti.[7]

Risks

1.17 Investment decisions are forward looking, allocating resources today in the hope of future rewards. Many investment risks are a normal function of commercial ventures, including responses from consumers and competitors, and so firms should bear them. Governments can help firms cope with other risks, including improving the security of property rights. But governments can also increase the risks and uncertainty that firms face—with policy uncertainty and instability, with government expropriation, with unpredictability in the interpretation of regulations (figure 1.4). Policy uncertainty ranks consistently as one of the leading concerns of firms in developing countries.

Figure 1.4 Regulatory unpredictability is a big concern for firms
Percentage of firms finding the interpretation of regulations unpredictable



Source: World Bank Investment Climate Surveys. Countries selected to illustrate the range of responses.

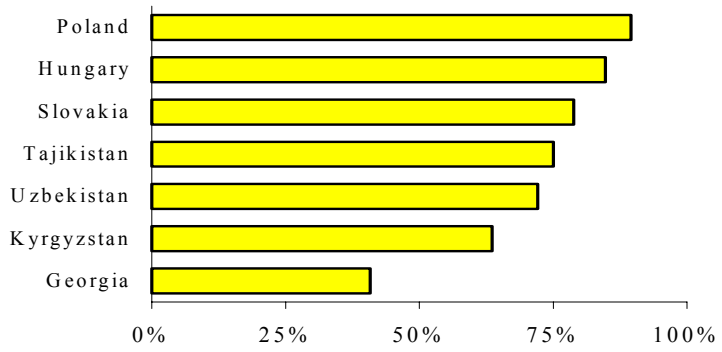
1.18 Measuring the impact of risks is complicated by the different ways firms respond—investing for the long term, the short, or not at all. Firms operating in some high risk countries in Africa require more than twice the rate of return they would in lower risk countries to compensate for the extra risks.[8] But firm level surveys show that enhancing policy certainty and predictability can increase the probability of new investment by more than 30 percent (chapter 2).[9]

Barriers to competition

1.19 Firms naturally prefer less competition than more. But a barrier to competition benefiting one firm denies opportunities for others. And competitive pressures drives firms to innovate, to improve their productivity, and to share the benefits of productivity gains with consumers and workers. The competition in a market can be influenced by many factors, including economies of scale and market size. But governments also influence competitive pressure through their regulation of market entry and exit—and their responses to anti-competitive behavior by firms. Competition is difficult to measure

at the aggregate level, but micro-level evidence shows how much competitive pressure can vary between countries (figure 1.5).

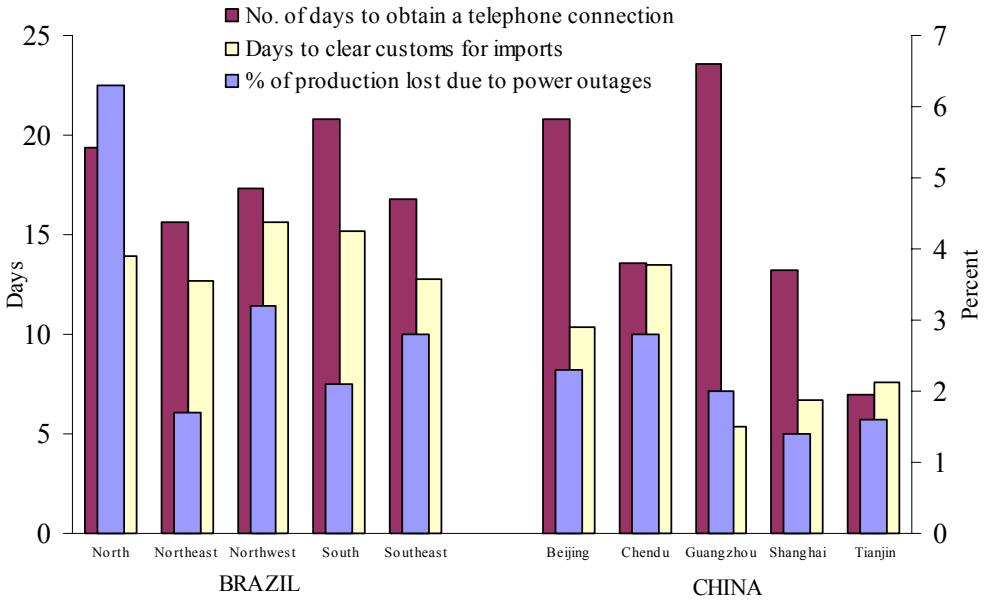
Figure 1.5 Competitive pressure can vary significantly between countries
Percentage of firms feeling significant competitive pressure



Source: World Bank Investment Climate Surveys/BEEPS II. Countries selected to illustrate the range of responses.

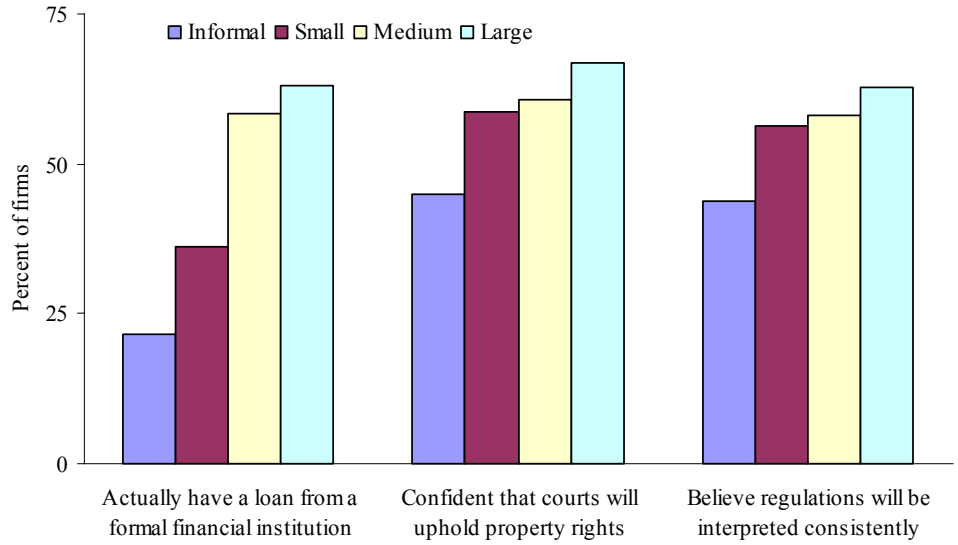
1.20 Improving the investment climate is not about reducing all costs, all risks, and all barriers for firms. Taxes and regulations support a sound investment climate and protect broader social interests. Managing the tension between creating a favorable investment climate for firms and achieving other social goals is a major challenge for governments—and a key theme of this Report. And governments—national, regional and local—vary in their abilities to do this. The micro-level evidence shows large variations across and within countries (figure 1.6). It also shows how investment climate conditions can affect firms differently—often hitting smaller firms the hardest (figure 1.7).

Figure 1.6 Investment climate conditions also vary within countries



Source: World Bank Investment Climate Surveys.

Figure 1.7 Investment climate conditions can affect firms differently



Source: World Bank Investment Climate Surveys in Bangladesh, Brazil, Cambodia, Guatemala, India, Indonesia, Pakistan and Tanzania, the countries that conducted the informal sector survey extensions.

How investment climate improvements drive growth and poverty reduction

1.21 With rising populations, growth is the only sustainable mechanism for increasing a society's standard of living. It is associated not just with higher incomes, but with better indicators of human development, such as lower infant mortality, broader education, and longer life expectancy. It provides opportunities for enterprises of all sizes, creating jobs and expanding the tax base that can help fund public services. And individuals as well as firms benefit from improved property rights, courts, financial markets, and infrastructure services. It is also now widely understood that growth must be sustainable, safeguarding the value of national assets—including environmental assets—and the potential for future growth (box 1.3). A growing body of research provides insights into how investment climate policies contribute to economic growth, and how policy approaches might be tailored to better target the needs of poor people. What has been learned?

Box 1.3 The environment matters for well-being and productivity: main messages from WDR 2003

Growth in income and productivity is required to eliminate poverty in developing countries. But it needs to be environmentally sustainable. The immediate gains of depleting or degrading environment assets can be outweighed by the costs in productivity and lost options. Over the longer run, economic growth is unlikely to be sustained unless enough attention is paid to environmental assets, such as fresh water and fish stocks.

Even in the short to medium run, addressing the objectives for growth and the preservation or restoration of environmental assets can be critical to raising production and incomes. Consider Madagascar, where the conversion of biodiversity-rich forests to mostly unsustainable low-yield agriculture has been costly. With three-quarters of country's people in rural areas and three-quarters of them poor, productivity growth in

agriculture is critical to reducing poverty. But agricultural productivity has been stagnant over the past four decades. Much of the new cropland is degraded, and hillside erosion clogs downslope waterways. The country's per capita GDP slid from $383 (in 1995 dollars) in 1960 to $246 in 2002.

Environmental conditions, deteriorating in many places, will only worsen if present trends continue. People in hundreds of developing country cities live with unhealthy air, which causes premature deaths that would be preventable at a modest cost. Nearly 23 percent of all cropland, pasture, forest, and woodland worldwide has been degraded since the 1950s. Local water conflicts and the loss of freshwater ecosystems loom in some regions. Two-thirds of all fisheries are exploited at or beyond their sustainable limits. Every decade, another 5 percent of tropical forest is cleared.

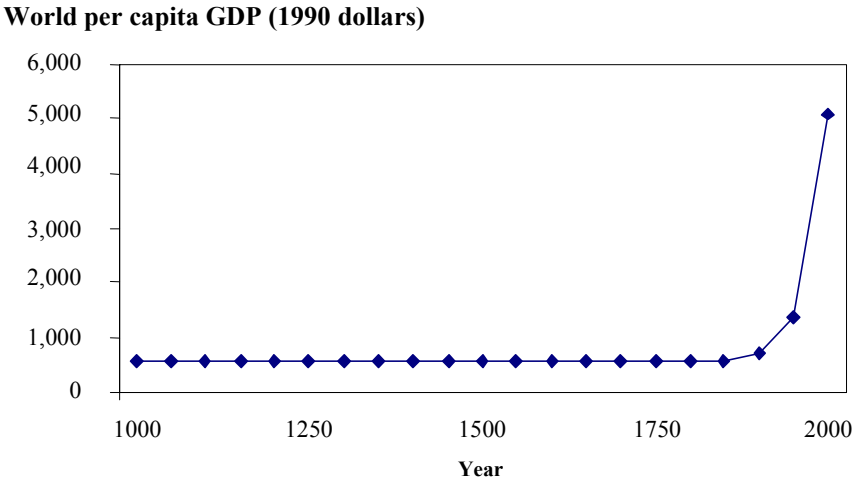
Why are environmental assets particularly threatened and underprovided? Because of spillovers. The actions of one person may impose environmental costs, such as pollution, on other people—costs that the responsible party does not bear. Addressing these environmental problems requires governments to take a long-term view and manage a broad portfolio of assets that includes not only human and physical capital but also environmental assets. Policies that have proved successful in solving these problems are those that align individual with social incentives—including those for taxes, subsidies, regulations, and new market mechanisms. Such measures form part of a sound investment climate.

Source: World Bank (2003e).

Significant economic growth is a modern phenomenon, but one that is not shared by all

1.22 Some early economists were concerned that the potential for rising incomes was inherently limited, while mercantilists believed that growth was a zero-sum game, with gains by some countries coming only at the expense of others. For centuries, the average level of income did not change. Malthus's observation that any rise in income was quickly offset by a rise in population to leave per capita incomes constant was based on the experience of the centuries before his writing in 1798.[10] But over the next hundred years, the leading countries doubled their per capita incomes, with the speed accelerating over the twentieth century (figure 1.8). The time to double incomes fell from a millennium, to centuries, to just 20–30 years.

Figure 1.8 Significant economic growth is a modern phenomenon

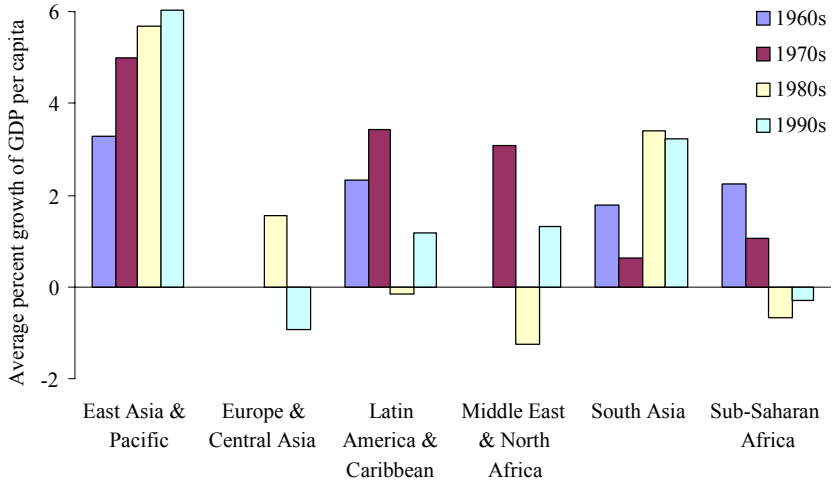


Source: Data from Maddison (1995).

1.23 Today, the world's per capita GDP is estimated to be at least five times what it was at the beginning of the nineteenth century.[11] And the comparison actually underestimates the growth achieved. It is not just a matter of looking at real incomes to judge whether more goods can now be purchased—the goods available have changed dramatically. Inventions in medicine (penicillin, vaccinations), transportation (cars, airplanes), and communication (mobile phones, email) are just some examples of new products greatly enhancing the quality, and even the length, of life. Using exchange rates that equalize the purchasing power of different currencies, about two-thirds of the world's people now live in a country with an average income more than that of the United States a century ago.[12] Taking into account the new products, the average material prosperity in Thailand or Tunisia in 2000 was three times that of the United States in 1900—and that in Botswana, Mexico, and Uruguay was five times greater.[13]

1.24 Countries have had mixed growth experiences. Some have experienced tremendous success, sustaining high growth rates over years and achieving significant reductions in poverty. China is the most striking recent example. India is another. Among regions, East Asia has had the fastest and most sustained growth, with Latin America more disappointing in recent years and Africa suffering from stagnant and declining growth. Many countries in Eastern Europe and the Central Asian Republics, after sharp declines in the early 1990s, are recovering their growth (figure 1.9). While some countries have converged on the richest countries, the inability of the poorest countries to do so means that incomes between the richest and poorest have diverged.[14] Too prevalent are the periods of short-lived growth—and of continued decline.[15] Igniting a growth spurt is clearly possible. The challenge is to sustain it.[16]

Figure 1.9 Growth among developing regions, decade averages



Source: World Bank (2003d).

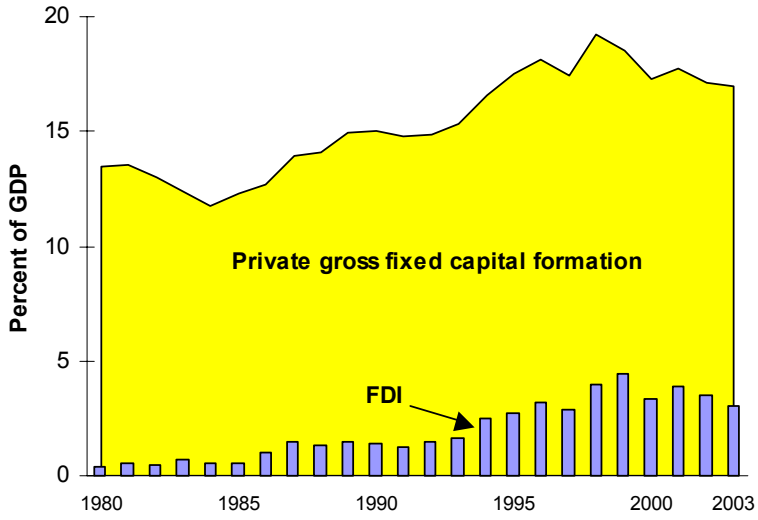
1.25 The search for a magic formula that would guarantee faster economic growth has been a long-standing but elusive quest.[17] But recent research provides important insights

on how investment and productivity contribute to growth—and how the investment climate determines the size of these contributions.

Investment and productivity

1.26 The role of private investment has grown in the last twenty years. While FDI has increased significantly, the bulk of investment is by domestic firms, reinforcing the importance of looking at the full spectrum of firms in analyzing the investment climate and its contribution to growth and poverty reduction (figure 1.10).

Figure 1.10 The contribution of private investment to GDP has grown



Note: Annual averages of 92 developing countries.
Source: World Bank (2003d).

1.27 The investment climate has an obvious role in influencing the level of private investment. And the evidence confirms that improving the opportunities and incentives for firms to invest by reducing unjustified costs, risks, or barriers has the predicted effect. For example, farmers in Thailand with secure title invested so much more in their land that their output was 14-25 percent higher than those working untitled land of the same quality (chapter 4). And dismantling monopolies in telecommunications around the world unleashed a dramatic rise in investment in the sector, including that by micro-entrepreneurs in Bangladesh (chapter 6). At the aggregate level, improvements in the investment climates in countries as diverse as China, India and Uganda have been marked by a strong growth in private investment (box 1.4). And cross-country evidence using broad proxies for investment climate quality confirm the link between the investment climate and private investment (figure 1.11).

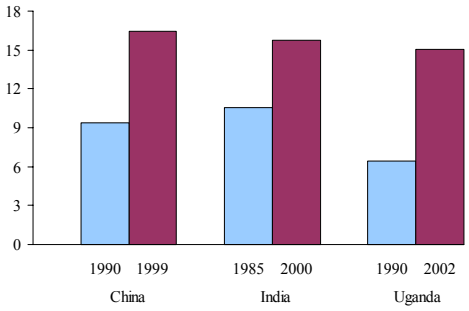
Box 1.4 Improving the investment climate and growth: the cases of China, India and Uganda

China and India have achieved impressive growth and poverty reduction in recent years. In both cases, the roots can be found in improving their investment climates. In the early 1980s China began with rudimentary systems of property rights and private enterprise, then liberalized trade and investment, and then embraced a broad program of improvements across the investment climate. India began with initial reforms to reduce tariffs and some loosening of licensing requirements, followed in the early 1990s with more extensive trade liberalization and further dismantling of the licensing raj. The results? Per capita GDP in China rose tenfold from $440 in 1980 to $4,475 in 2002 (in international prices), and India's almost quadrupled from $670 in 1980 to $2,570 in 2002. And both experienced dramatic reductions in poverty (see figure 1.17)—each on distinctive paths, but both sustaining efforts to improve the opportunities and incentives for firms to invest productively.

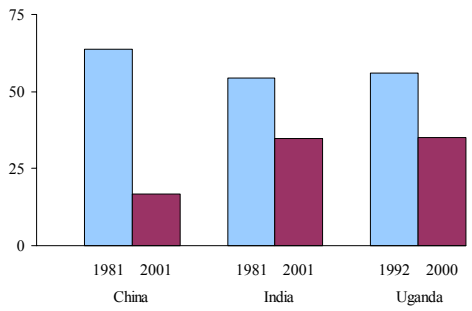
Nor are the benefits limited to large countries. Take Uganda. Many countries in Africa have experienced limited or negative growth, with investment climates often clouded by historical legacies, political stability, excess government interference, and other factors that stifle opportunities and incentives for firms to invest productively. But beginning in the early 1990s Uganda embarked on a program to improve its investment climate. Macro stability was achieved. Expropriations undertaken by a previous government were reversed. Trade barriers were reduced. Tax and court systems were reformed. Private sector participation and competition were introduced in telecommunications. And efforts are under way to improve business regulation. While many challenges remain, these efforts are reaping rewards. The share of private investment in GDP more than doubled between 1990 and 2000. Per capita GDP grew by 3 percent. The percentage of the population living below the poverty line fell from 56 percent in 1992 to 35 percent in 2000, and infant mortality fell from 93 to 85 per 1000 live births.

Box figure Following investment climate reforms, private investment increased dramatically and poverty rates fell

Private investment as a percent of GDP

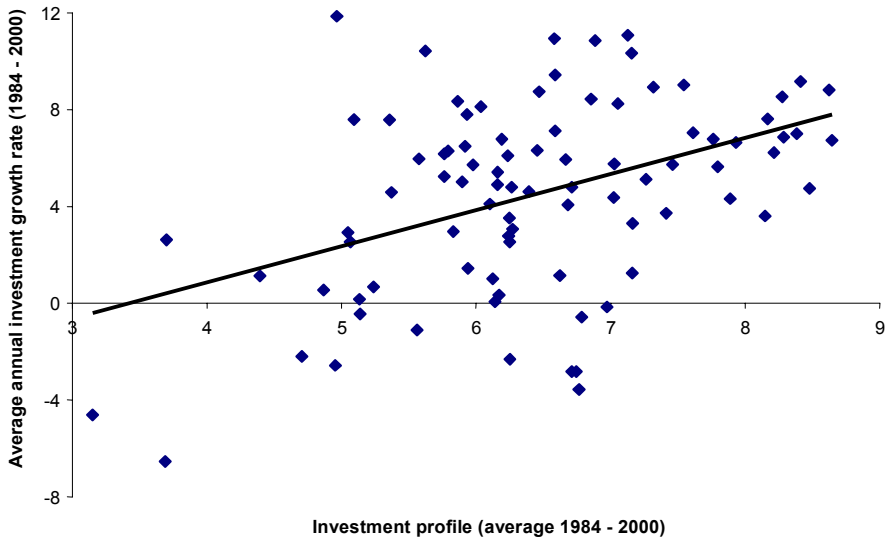


Share of population below the poverty line



Note: Dates for China are earliest and latest available; for India and Uganda the periods reflect the timing of reform efforts.
Sources: Ahluwalia (2002), DeLong (2003), Chen and Wang (2001), Qian (2003), Rodrik and Subramanian (2004); Young (2003), Young (2000), Holmgren and others (2001), World Bank (2002a), World Bank (2003b); International Monetary Fund and International Development Association (2003).

Figure 1.11 Private investment has grown more rapidly in countries with a stronger investment climate



Source: World Bank (2003d) and International Country Risk Guide. ICRG's index of "investment profile" is based on measures of contract enforceability, expropriation, profit repatriation and payment delays. Higher numbers are associated with less risk and stronger investment climates.

1.28 But investment rates by themselves are not the main driver of growth. True, capital accumulation brings additional inputs to the production process. But there is a limit to how much this process can sustain growth because of the decreasing marginal impact of additional capital. So, the measure of success of an investment climate is not the quantity of investment—it is the *quality* of investment, and quality is also influenced by the investment climate.

1.29 Indeed, experience provides many examples of investment projects that yielded few or no benefits. This is most obviously the case with "white elephant" projects in the public sector, such as the Tanzanian shoe factory that produced no shoes, the nuclear power plant in the Philippines that was never commissioned, and the numerous roads to nowhere.[18] Similarly, the former Soviet Union had very high investment rates in the 1950s, but too often in projects that provided little economic or social return.

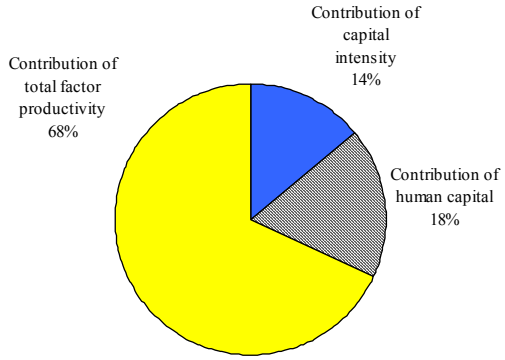
1.30 Reflecting this, cross-country studies find little correlation between aggregate investment and growth, particularly if no distinction is made between public and private investment. Even looking at private investment, the effect can be negligible.[19] This highlights the importance of ensuring investment is undertaken with some discipline to improve the likelihood of it being productive. That discipline will most likely be forthcoming when private firms put their own money at risk to invest in a competitive business environment, so that they bear the consequences of their investment decisions.

1.31 The critical role of productivity is underscored by studies of aggregate growth performance between countries. Over 1960-2000 the bulk of the differences in growth between countries (55-90 percent) is accounted for not by the accumulation of physical

capital, or of human capital, but by total factor productivity—the productivity contributions above those made by physical and human capital (figure 1.12).[20] The links between productivity and investment can be complex. For example, some capital investment (new computers) may be required to take advantage of productivity improvements, while the prospect of greater productivity enhances potential profitability and so encourages investment. As Krugman said, "productivity isn't everything, but in the long run it's almost everything."[21]

1.32 Early growth research emphasized technical progress in explaining total factor productivity, suggesting that differences in growth rates were driven by differences in the technologies adopted.[22] The dramatic acceleration in income levels among the fast growing countries over the last 200 years can be understood by improvements in technology.[23] But "technology" in this sense is not limited to scientific breakthroughs of the kind that might merit a patent. It can also include more modest advances as well as new and better ways to organize a production process, manage inventories, interact with consumers, or distribute goods.

Figure 1.12 Productivity is the key: explaining differences in output per worker in the top five countries and the bottom five



Source: Hall and Jones (1999).

1.33 Importantly, firms and countries do not have to invent everything afresh. Even in countries that make some of the biggest contributions to innovation, the ratio of adaptation to innovation is still extremely high—Janovich estimates it at 20 or 30 to 1 in the United States.[24] This highlights the huge potential for developing countries to catch up with richer countries by creating an environment that facilitates the diffusion of ideas developed elsewhere, as well as the development of new ones. The potential for catching up is real. It took some of the first industrializing countries 40 to 60 years to double their incomes in real terms. But others have done this much faster—Costa Rica in 19 years starting in 1961, Jordan in 15 years starting in 1965, Taiwan (China) in 10 years starting in 1965.[25]

1.34 The investment climate shapes the opportunities and incentives for firms to adopt new and better ways of doing things to improve their productivity. A good investment climate reduces unnecessary costs and risks flowing from government policies and

behaviors. But at least as important is elimination of unjustified barriers to the adoption or adaptation of new processes—and fostering competition to encourage firms to take up those opportunities (box 1.5).

Box 1.5 Growth with a poor investment climate—possible, but not for long

It is possible to experience growth with a poor investment climate—but not to sustain it. For example, in the 1960s and 1970s Brazil experienced strong growth while closing domestic markets to international competition and pursuing heavy public investment through state-owned enterprises. The initial results were impressive, but the growth proved unsustainable. Protected firms lacked the incentives to improve their productivity and fell further behind international best practices. Other firms had less access to new technologies and had to pay higher prices for inputs supplied by protected sectors. Public investment to sustain growth led to severe debt problems—and ultimately to a macroeconomic crisis. Subsequent efforts to improve the investment climate initially met with a cautious response from firms. Many attribute this to questions about the credibility of the government's commitment to reforms, particularly in the wake of repeated macroeconomic instability in the 1980s. Now, as firms are developing more confidence in the direction of government policy, investment and growth have shown signs of picking up.

Sources: Pinheiro and others (2001), Schor (forthcoming).

Productivity and competition

1.35 Firms do not innovate or improve their productivity from any sense of public philanthropy, for the processes can be demanding and disruptive. Most firms would prefer the "quiet life"—which Hicks noted was the best of all monopoly profits.[26] Instead, firms adopt and develop new and better ways of doing things in response to the pressures they face to survive and prosper in a competitive marketplace.[27] A sound investment climate supports the dynamic processes that Schumpeter called "creative destruction." It encourages firms to experiment and learn, it rewards success, and it punishes failure (box 1.6). The Bank's Investment Climate Surveys confirm the importance of competitive pressure on the incentives to innovate (figure 1.13) and increase productivity.[28]

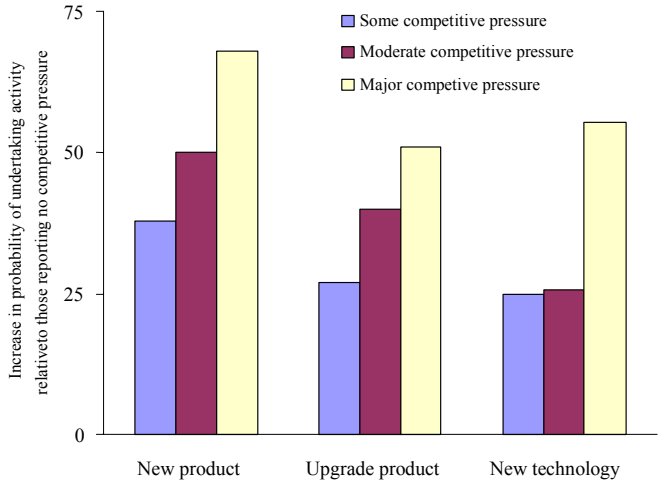
Box 1.6 Developing a product is a learning process—as Hyundai shows

Hyundai's efforts to produce a car began with purchasing of foreign equipment, hiring expatriate consultants, and signing licensing agreements with foreign firms. But the process was not a simple matter of adopting the technology. Despite the training and consulting services of a foreign consultant and three experts, Hyundai engineers repeated trials and errors for fourteen months before creating the first prototype. The engine block broke into pieces at its first test. New prototype engines appeared almost every week, only to break in testing. No one on the team could figure out why the prototypes kept breaking down, casting serious doubts, even among Hyundai management, on the company's ability to develop a competitive engine.

The team had to scrap eleven more broken prototypes before one survived the test. There were 288 engine design changes, 156 in 1986 alone. Ninety-seven test engines were made before Hyundai refined its natural aspiration and turbocharger engines; 53 more engines were produced for durability improvement, 88 more for developing a car, 26 more for developing its transmission, and 6 more for other tests, totaling 324 test engines. In addition more than 200 transmissions and 150 test vehicles were created before Hyundai perfected them in 1992.

Source: Kim (1997).

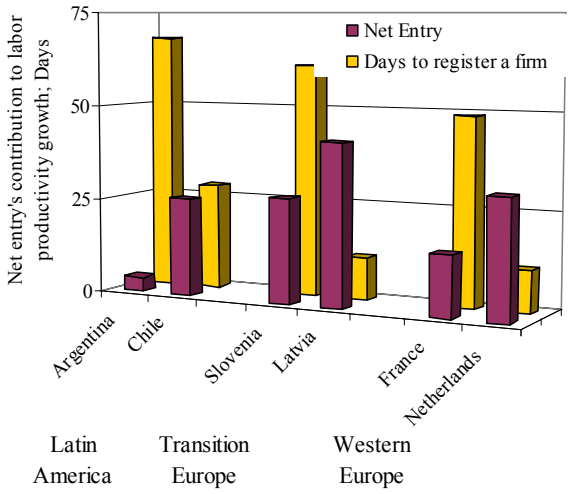
Figure 1.13 Stronger competitive pressure increases the likelihood of innovation



Source: World Bank Investment Climate Surveys/BEEPS II in 27 countries in Eastern Europe and Central Asia.

1.36 Healthy market economies exhibit fairly high rates of opening and closing firms. In OECD countries, 5–20 percent of firms enter and exit the market every year.[29] Firms that leave the market are the least productive, and their departures contribute over 20 percent of the productivity gains. New firms are more productive—though it can sometimes take them several years before their productivity reaches that of incumbents.[30] The combined effect of net entry is substantial, particularly in countries with fewer barriers to entry (figure 1.14).

Figure 1.14 The contribution of net entry to productivity is higher when barriers to entry are lower



Note: Data covers manufacturing firms from 1988-2000 using census data.
Source: Bartelsman and others, Background paper for the World Development Report 2005, Doing Business Database.

1.37 The contribution of new entrants to productivity is particularly strong in higher technology sectors. And there is evidence that sectors with many new entrants push incumbents to increase their productivity. Why might entry rates be strongly correlated with productivity growth by incumbents? Perhaps because new entrants are attracted to productive sectors. Or because the new entrants stimulate incumbents to increase their productivity to maintain their market shares. Census data from developing countries confirm the importance of the second explanation.[31]

1.38 A flexible economy that can adjust more easily is not only better posed to take advantage of internal opportunities, but also to weather external shocks. Evidence from Latin America and East Asia indicates that countries with more microeconomic flexibility experienced less dramatic declines in output and recovered faster than less flexible economies.[32]

Sharpening the focus on poverty reduction

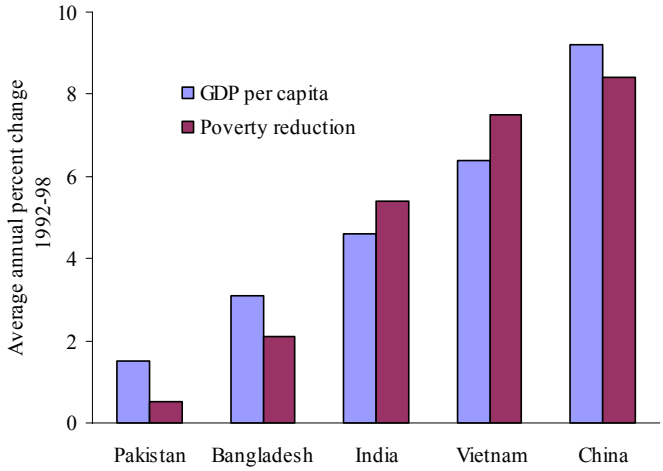
1.39 The investment climate clearly matters for private investment and for economic growth. But even more important is understanding how investment climate improvements can improve the situation of the nearly half the world's people living on less than $2 a day, and the 1.2 billion people who barely survive on less than $1 a day.

1.40 The relationship between the investment climate and poverty reduction can be seen in two ways: by looking at the links between growth and poverty reduction at the aggregate level, and by looking at the ways investment climate improvements affect the lives of people directly.

The link with economic growth

1.41 There are almost no examples of countries experiencing growth without reducing poverty.[33] And growth in average incomes associated with broad-based growth has been found to account for up to 90 percent of the reductions in poverty (figure 1.15).[34]

Figure 1.15 The relationship between higher average incomes and poverty is clear



Source: Dollar (2002). *Note*: Bangladesh figures for 1992-2000. India figures for 1993-99.

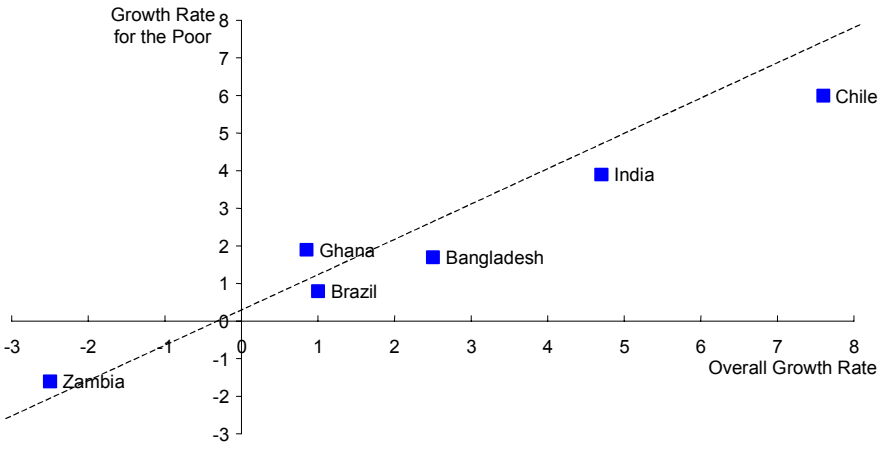
1.42 The experience of investment climate improvements in China and India have driven the greatest reductions in poverty the world has ever seen (box 1.4).[35] The increases in income were also matched by gains in health outcomes. In China, life expectancy rose 3.5 years and infant mortality fell from 49 to 32 per 1000 live births. In India, life expectancy increased from 54 to 63 years, infant mortality fell 40 percent, and evidence of malnutrition dropped too.

1.43 The incomes of poor people can increase in two basic ways—if average incomes increase and the distribution of income stays the same, or if the distribution of income shifts to become relatively more pro-poor. Clearly the biggest impact is if growth is combined with a shift to a more equal distribution of income. If the feedback from greater equality reinforces growth processes, the dynamic system can significantly reduce poverty over time.[36]

1.44 With income distribution being relatively stable, growth is often said to be good for the poor as the share of the income going to the poor rises in tandem with average incomes.[37] But there is evidence that the variations in the rate by which growth translates to poverty reduction are correlated with the level of inequality in a society (see box 1.7). Thus, it is not just that in a more unequal society that poor people's share of income is relatively smaller—it also rises by less than one for one with average incomes.[38]

Box 1.7 How growth translates to rising incomes for the poor

The extent of inequality affects how much average growth is shared by the poor. Concerns about whether growth is "pro-poor" raises a debate whether absolute or relative rates of growth for the poor are what matters. The figure illustrates these points. First, there is clearly a strong relationship between rising average incomes and incomes of the poor, as illustrated by comparing Zambia and Chile. But countries above the 45 degree line are ones where the growth in incomes of the poor is higher than average; the incomes of the poor are growing not only in absolute terms but also relative to the average. In Zambia and Ghana, inequality declined (in Zambia, the poor suffered less declines in income than on average, in Ghana, declining inequality and growth combined to boost incomes of the poor). But there are clearly variations around the trend line. Brazil and Ghana have roughly equal growth rates, but in Brazil the incomes of the poor grew by only 0.7 percent while in Ghana the rate was 1.8 percent. Indeed, the rate in Ghana is even slightly higher than in Bangladesh whose growth rate is triple that of Ghana.



Using the relative definition of pro-poor, inequality must fall. In contrast, the absolute definition concerns itself with the growth of the poor whether or not inequality changes. Using the relative definition, Ghana's performance is better than India's—even though in India the absolute income of the poor grew by 3.9 percent, twice that of Ghana. While Ghana's inequality was falling, its slower overall growth translated into less poverty reduction than in India with its slight increase in inequality but faster growth. Which definition matters depends on objectives. The Millennium Development Goals have targeted the absolute rate of $1 a day, a level recognized as supporting only the most minimal standard of living.

Source: U.K.Department for International Development (2004), Pritchett (2003), Lopez (2003).

1.45 Inequality can be of concern for other reasons too. Greater inequality is associated with less social cohesion, less secure property rights, and greater risk of significant political upheaval.[39] Thus inequality can have important implications for the likelihood and nature of investment climate improvements, the credibility of policy changes, and thus the impact on decisions of firms and entrepreneurs. This reinforces the importance of governments being sensitive to the distribution of gains from growth.

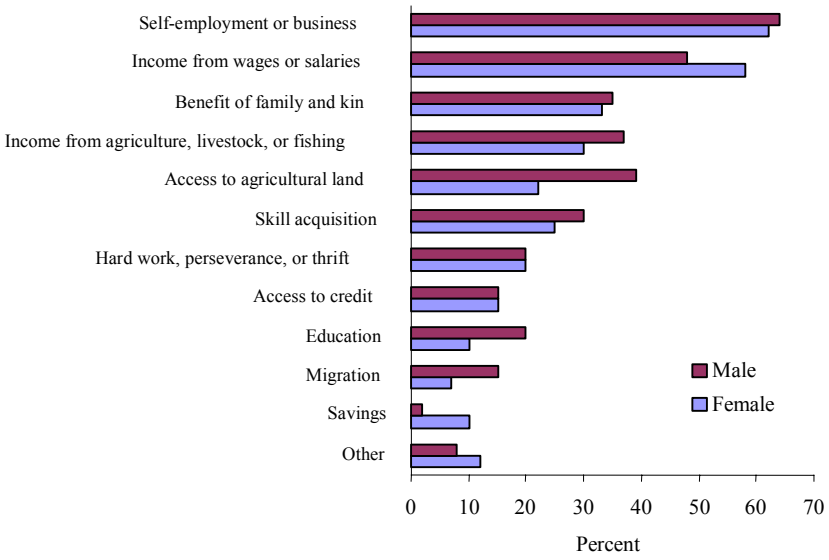
The investment climate and the lives of poor people

1.46 Governments committed to attacking poverty aggressively thus have to look beyond aggregate numbers and understand how investment climate improvements can improve the lives of poor people. In this context it is useful to distinguish the impacts on poor people in their capacities as workers; as entrepreneurs; as consumers; as users of infrastructure, finance, and property; and as potential recipients of tax-funded transfers or services.

1.47 *As workers*. Studies looking at households that have escaped poverty find that in more than 80 percent of cases the decisive factor was the head of a household's getting a new job. The World Bank's "Voices of the Poor" study of more than 60,000 poor men and women in 60 countries identified "getting a job" as their top priority and means of improving their situation (figure 1.16).

Figure 1.16 Self-employment and wage income are the ways out of poverty

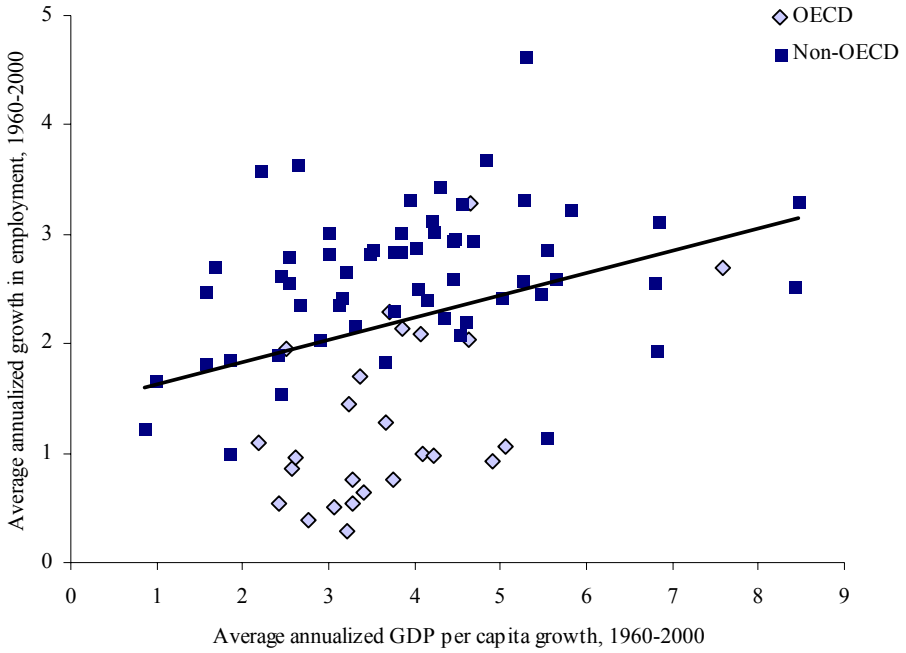
How 60,000 poor people thought they could escape poverty



Source: Narayan and others (2000).

1.48 The private sector is the engine for sustainable job creation.[40] Aggregate data show that growing economies create more jobs (figure 1.17). But the impact of investment climate improvements on employment growth can also be seen by looking at experiences in individual countries. For example, investment climate improvements in countries as diverse as China, India, and Uganda contributed to employment growth of over 2 percent a year between 1985-2000. The garment sector in Cambodia also illustrates the potential impact of a thriving private sector: exports grew from $20 million in 1995 to more than $1 billion 2002, employing an additional 200,000 workers, many of them women and many previously poor.[41]

Figure 1.17 Growing economies generate more jobs—particularly in developing countries



Source: World Bank (2003d).

1.49 A vibrant private sector can also contribute to higher wages. More productive firms, nurtured by a good investment climate, can pay higher wages and invest more in training their workers.[42] The expansion of firms can also have knock-on effects, raising the wages of those in smaller enterprises as the pool of available workers tightens. Similar patterns are found in rural areas, with rising non-farm employment raising agricultural wages—with significant impacts on poverty reduction.[43]

1.50 Improving the investment climate does more than create jobs and improve living standards today. It also encourages people to invest more in their own education and skills to take advantage of better jobs in the future. There is thus a two-way link between skills and jobs, with an improved investment climate complementing efforts to improve human development (chapter 7).

1.51 Demographic trends underline the importance of generating decent and productive jobs. Nearly 3 billion people are under the age of 25 today, 1.5 billion people under 15. In the next 25 years the world population is expected to increase by 2 billion people—all but 50 million of them in developing countries. By 2030 the next generation of children will face a world with 7 billion of 8 billion in developing countries. And Sub-Saharan Africa, the region with the most poor people, will double by that time, even with today's incidence of AIDS.[44]

1.52 *As microentrepreneurs*. Many poor people in developing countries make their livings as microentrepreneurs—as farmers, street vendors, home-workers and in a range

of other occupations, a big share of them women (box 1.8).[45] They constitute a significant share of the informal economy, which is substantial in many developing countries (figure 1.18).[46]

Box 1.8 Gender and the investment climate

Over the past decade women's share of the formal labor force has increased almost everywhere—to close to 40 percent worldwide and to at least a third in all regions except MENA and Central Asia. Data on women's participation in entrepreneurial activity indicates that between a quarter and a third of firms are owned by women. Women run multimillion dollar enterprises that employ thousands of staff. In China an estimated sixth of women-owned firms employ more than 1,000 workers.

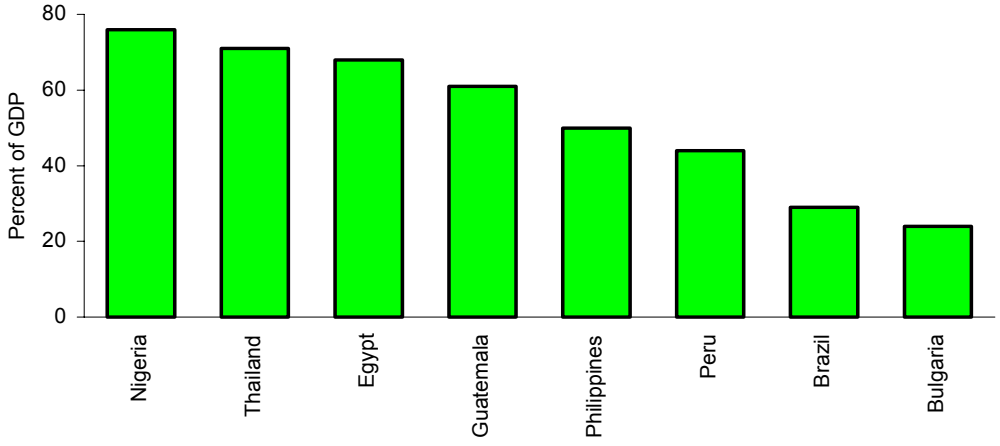
But women predominate in the informal sector, particularly in microenterprises or as home-workers. Some of this reflects discrimination and the difficulties women can face obtaining a formal job, but it can also reflect how children and other family obligations can make the greater flexibility associated with jobs in the informal sector more attractive. More than 95 percent of the female nonagricultural labor force work is in the informal sector in Benin, Chad, and Mali—and more than 80 percent in Guinea, Kenya, India, and Indonesia.

Analyses based on cross-country data suggest that as countries progress to higher per capita incomes, higher female labor force participation results in significantly faster growth in incomes. If female participation rates had been at predicted levels in the Middle East and North Africa, per capita GDP growth rates might have been 0.7 percentage points higher in the 1990s.

As countries develop more competitive and productive economies, the incentive to discriminate on noneconomic grounds also diminishes. In Burkina Faso, where women have more secure land rights than in many other African countries, female farmers' productivity is significantly higher. The spread of microfinance institutions is also helping in putting women's entrepreneurial talents to work. Many microfinance institutions target women clients, and women borrowers have proved to be more creditworthy than their male counterparts. Commercial rural banks in the Philippines participating in a new microfinance program have female microentrepreneurs as 85 percent of their clients.

Sources: Ellis (2003), Grameen Bank website: http://www.grameen-info.org/, Kabeer (2003); Klasen (1999); Klasen and Lamanna (2003), Maloney (2000), Narayan and others (2000),Rama (2002), United Nations (2000), World Bank (2001), World Bank (2003b), Maloney (2000).

Figure 1.18 The informal economy is substantial in many developing countries



Source: Estimates reported by Schneider (2002).

1.53 Measures that improve the incentives and opportunities for larger firms can also help individual entrepreneurs and microenterprises. They benefit from lower costs of doing business (including crime, red-tape, and corruption), from lower risks (including more secure property rights and less policy uncertainty, which exposes them to harassment or demands for bribes), and fewer barriers to competition. Indeed, since microentrepreneurs are rarely the beneficiaries of government monopolies, efforts to expand competition typically benefit them by expanding their opportunities and reducing the costs of inputs they transform. The way microentrepreneurs have benefited from telecoms liberalization in Bangladesh and Uganda provides illustrations (chapter 6).

1.54 *As consumers*. Improving the investment climate reduces the costs of producing and distributing goods. Coupled with measures to enhance competition, these improvements create the potential for poor people to benefit from lower prices for the goods they consume, including staples.

1.55 *As users of infrastructure, finance and property.* Many features of a better investment climate raise the living standards of people whether they engage in entrepreneurial activities or not. For example, improving access to electricity helps firms—but it also reduces the burden of women collecting firewood, reduces the health concerns associated with burning dung, and helps children study at night (box 1.9). Better access to modern telecommunications helps firms connect to markets—but it also helps in delivering educational and other services in poor areas. Improving roads helps firms get their goods to market—but it also helps poor people connect to other communities. Improving the functioning of finance markets helps firms—but it also allows poor people to weather family emergencies, improve their homes, and educate their children. Improving security of land title helps firms—but it also allows poor people to pursue opportunities outside the home. And reducing crime and corruption helps all members of a community.

Box 1.9 Benefits of an improved investment climate extend well beyond entrepreneurial activities

Investment climate improvements benefit people in their private capacity too. Here are some examples illustrating the gains to education, health and housing from improved infrastructure services.

In the Philippines where 83 percent of electrified households claimed it was easy to read in the evening whereas 49 percent of unelectrified (users of kerosene) houses claimed it was easy to read in the evening. Members of electrified households attain about two-years more formal education than do members of unelectrified households—translating into higher wage earnings for households with electricity whereby electrified households earned between $37 and $47 more per month than their counterparts without electricity.

In Morocco, after the construction of rural roads, villagers surveyed found economic and social benefits—97 percent found improvements in their economic opportunities and respondents found that the most positive effects from the improvements were improved transportation services, better access to schools and health services, and improved supply of food and basic necessities. Other results from Morocco indicate that as a result of investment in the roads sector, there were improvements in education, healthcare, and general welfare; enrollment in primary education more than doubled between 1985 and 1996, the use of health care facilities doubled, and rural-urban interaction increased several-fold. As a result of road

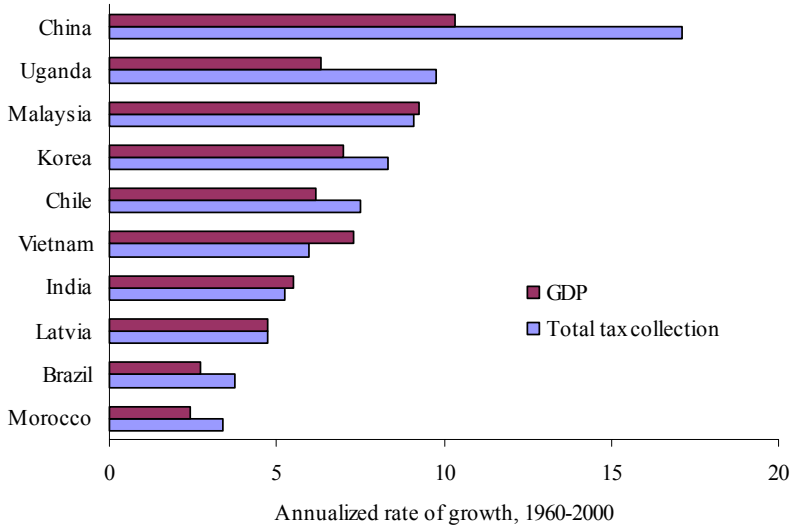
investment in Rajasthan, India, the portion of pregnant women traveling to Zanana Hospital from distances more than 100 km away nearly doubled.

In Peru, granting land titles to city slum dwellers not only significantly increased labor participation rates outside of the home, but also raised investments in improving housing quality by 17 percent. No longer needing to have someone stay to guard the home gave family members additional choices.

Sources: ESMAP (2002), World Bank (2002b), Levy (1996)

1.56 *As potential recipients of tax-funded services or transfers.* Attacking poverty involves more than just improving the investment climate. It also involves efforts to invest in and empower people, including public investment in education, health and other services. But these services need to be paid for, and the expansion in economic activity from a better investment climate permits an increase in the tax revenues to fund those services and make transfers to disadvantaged members of society. There is a close relationship between tax revenues and per capita growth (figure 1.19).

Figure 1.19 Rising GDP is associated with rising tax revenues—expanding the opportunities to fund services for poor people



Source: World Bank (2003d).

1.57 There can be tradeoffs between raising tax revenues and providing incentives for firms to expand. Widening the tax base, rather than increasing rates, minimizes potential tradeoffs (chapter 5). And the extent to which the public spending from a stronger tax base is directed toward services for the poor will depend on the government and its ability to spend resources wisely.[47] But economic growth remains the only way to sustainably increase the public resources to fund such services and transfers.

Can investment climate improvements be made more pro-poor?

1.58 Improving the investment climate promises huge benefits for a society. But can governments fashion their investment climate improvements in ways that deliver even

deeper reductions in poverty? Much depends on the part of the investment climate. Some investment climate improvements—such as improving macroeconomic stability, reducing corruption, and dismantling distortionary barriers to growth—deliver broad benefits across society. Other measures are more focused in their impact—such as addressing regulatory constraints affecting particular activities or improving infrastructure in particular locations. In the latter cases, governments can influence the distribution of benefits from investment climate improvements.

1.59 The best ways to reduce poverty are to focus on improving the investment climate where poor people live and to remove constraints to activities that poor people benefit from—as entrepreneurs, as workers, or as consumers. This implies that pro-poor strategies will not be limited to addressing the needs of smaller firms—they can encompass a broader set of actors in a range of activities.

Box 1.10 Showing the potential returns to improving the investment climate

The World Bank's Productivity and Investment Climate Surveys link firm performance to objective measures of costs and risks affected by policy.

- Firms in states in India and provinces in China with better investment climates show much stronger growth and productivity than their peers operating in states or provinces with worse investment climates.
- In India firms in poor investment climate states have 40 percent lower productivity than those in states with strong investment climates.
- If Tianjin, a large port city east of Beijing, could achieve the same investment climate conditions as Shanghai's, firm level productivity could increase by 15 percent and sales growth by 20 percent.
- For firms in Dhaka, Bangladesh, if the investment climate conditions matched those of Shanghai, they would reduce by 40 percent their productivity gap, and wages could rise by 18 percent.
- For Calcutta, the effect is even larger. Eighty percent of the productivity gap could be closed, and wages could rise by 38 percent. The benefits are shared between firms and workers, not just in higher wages, but also with additional efforts to train workers.

Source: Dollar, Hallward-Driemeier, and Mengistae (2003b); Hallward-Driemeier, Xu, and Wallsten (2003), Dollar and others (2004).

Realizing the potential

1.60 This chapter showed how improving the investment climate is the driving force for growth and poverty reduction (box 1.10). But if investment climate improvements are so beneficial, why is progress often so slow and difficult? The next chapter explores this important question, highlighting the tension that underlies policymaking for the investment climate and consequent challenges facing governments.

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Endnotes

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3 BERI database, Kaufmann, Kraay, and Mastruzzi (2003) etc.
4 Easterly (2001), Acemoglu and Johnson (2003); Acemoglu, Johnson, and Robinson (2002); Acemoglu, Johnson, and Robinson (2001), Dollar and Kraay (2003), Barro (1997); Djankov and others (2003); Levine (1997); Sala-i-Martin (1997), Djankov and others (2002).
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12 DeLong (2000).
13 DeLong (2000), p.30; In terms of pure purchasing parity, and looking at how much a bundle of 1900 era goods could be bought with today's incomes, Thailand's per capita income is 50% greater than the US in 1900 and Mexico and Uruguay not quite double it.
14 Pritchett (1997).
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17 See Easterly (2002), Aghion and Durlauf (2004).
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20 Bosworth and Collins (2003).
21 Krugman (1992) p. 9.
22 Solow (1957), Jones (2002), Barro and Sala-i-Martin (2003). More recent work still acknowledges the importance of technology, but broadens the view of total factor productivity to include concepts of institutions and social capital, concepts closely related to the investment climate. Hall and Jones (1999), Acemoglu and Johnson (2003).
23 Parente and Prescott (2000)
24 Jovanovic (1995)
25 Parente and Prescott (2000).
26 Hicks (1935)
27 Baumol (2002)
28 Bastos and Nasir (2003)
29 Haltiwanger (2000); Bartelsman, Scarpetta, and Schivardi (2003).
30 The relative productivity contribution of entrants depends in part on how much selection there is prior to entry or during the first years of production. In the United States, entry is relatively easy, and much of the selection occurs after that, leading to lower aggregate productivity of new entrants and many exits of young firms. In contrast, many European countries have regulations that prescreen potential entrants, leading to a pattern of slower productivity gains of new entrants and fewer exits of young firms. Similar patterns hold in developing countries. There is new work underway using developing country census data that will undertake work similar to that of: Scarpetta and Tressel (2003), Bartelsman, Scarpetta, and Schivardi (2003).
31 Potential endogeneity is controlled for using lagged values.
32 Desai and Mitra (2004),Caballero, Engel, and Micco (2004)
33 Dollar and Kraay (2001).
34 Kraay (2003)
35 While the trends are relatively undisputed, the exact levels of poverty are a matter of some debate due to differences in methodologies in calculating them (e.g. household surveys or national accounts, expenditure or consumption based measures, and the challenge of measuring non-monetary transactions). See Ravallion (2003) and Deaton (2002).

36 Bourguignon (2004)
37 Dollar and Kraay (2002)
38 Bourguignon (2004)
39 Collier and Hoeffler (2002), World Bank (2003c), Midlarsky (1999),Fearon and Laitin (2003)
40 Fields and Pfeffermann (2003).
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43 Lanjouw and Stern (1998)
44 United Nations (2002).
45 International Labour Office (2002)
46 The physical input (electricity) method, the currency demand and the model (DYMIMIC) approach were used in these calculations.
47 World Bank (2004b).