CHAPTER 3

Overcoming structural barriers to growth—to achieve the Goals

The core message of the Millennium Development Compact—and this chapter—is that many of the world's poorest countries and regions face structural impediments that have made it very difficult to achieve sustained economic growth. Thus it is no accident that they are the poorest.

Sustained growth requires that countries first attain basic thresholds on a number of fronts: sound economic governance, basic health care and education, core infrastructure, access to foreign markets. If a country falls short on one or more of these thresholds because of structural conditions—rampant disease, or a location far from world markets, or especially fragile soils and low food production, or high susceptibility to natural disasters—it tends to fall into a poverty trap, making sustained economic growth unlikely. Because these countries face high hurdles and have limited resources, they cannot achieve the thresholds for growth on their own: they require external assistance.

Even in countries otherwise doing well, structural impediments can contribute to pockets of entrenched poverty. China's remote inland regions, for instance, face much longer distances to ports, much poorer infrastructure and much tougher biophysical conditions than the country's coastal regions, which are enjoying the fastest sustained economic growth in human history. Reducing poverty in such highly populated countries as China, Brazil and India requires focusing on how to allocate resources to reduce poverty and inequalities. But this challenge is very different from the one facing the top and high priority countries, which are typically stuck in poverty traps and have insufficient resources to meet the needs of average citizens-let alone the poorest. Resources are insufficient largely due to a lack of economic growth (box 3.1).

Economic growth is necessary to meet the Millennium Development Goals for two reasons.

First, economic growth directly reduces income poverty for many households, increasing their savings and freeing resources for investments in human development. Without economic growth countries cannot expect to halve the proportion of people living in income poverty, the first target of the Goals. Second, economic growth tends to increase government revenue. Because most investments in human development—health, nutrition, education, infrastructure—come from the public sector, greater fiscal resources are critical to meeting the Goals.

But while economic growth is necessary for increased public spending on human development, it is hardly sufficient. Some governments neglect such investments or discriminate in their provision among population groups, weakening the potential benefits that overall economic growth can provide for meeting the Goals. Past *Human Development Reports* have used the term "ruthless growth" to describe growth that does not reach poor people, either because richer households receive most of the increase in income or because governments do not use the additional revenue to invest in the human development

BOX 3.1

Growth needed to halve income poverty

Economic growth is important for achieving all the Millennium Development Goals, but it relates most directly to the first target, which calls for halving the proportion of people in poverty between 1990 and 2015. Many studies have calculated an "elasticity of poverty to average income"—the percentage decline in the headcount poverty ratio for each 1% increase in per capita income. A typical estimate in the vast econometric literature, holding constant the distribution of income, is that the poverty rate declines by 2% for each 1% increase in average per capita income, for an elasticity

Source: Bruno, Ravallion and Squire 1996; Adams 2002.

of 2 (Bruno, Ravallion and Squire 1998; see also Adams 2002).

This elasticity estimate suggests that cutting headcount poverty in half requires a 41% increase in per capita income. If the 41% is spread over 25 years (1990 to 2015), annual growth of 1.4% is needed. If a country must accomplish the entire 41% increase between 2003 and 2015, a much higher annual rate (2.9%) is needed. Yet even the higher rate is well within the realm of possibility for a low-income country—if preconditions and policies for growth are in place.



needs of poor people. And as *Human Development Report 1996* showed, economic growth cannot be sustained without substantial improvements in education and health.

In countries with higher per capita incomes, a smaller proportion of people fall below the poverty line, suggesting that higher incomes are required to reduce poverty. But while there is an inverse relationship between a country's income poverty and income level, the relationship is far from perfect. Poverty rates can vary considerably across countries with similar per capita incomes: Tanzania and Niger have similar incomes, yet Tanzania has a much lower poverty rate (figure 3.1).

Per capita income is also closely linked to non-income poverty. Still, some countries (such as Viet Nam) have good levels of human development for their income, while other countries (such as Zimbabwe) are performing worse than others with similar levels of economic development (figure 3.2).

Thus the strong links between economic growth and poverty reductions are mediated by policy choices and structural factors. Several countries with economic growth of more than 4% a year since 1990 have not advanced much in some non-income dimensions of poverty (the Dominican Republic, Mozambique).¹ So while economic growth may provide resources to improve a variety of outcomes, policy-makers need to focus public policies and investments on noneconomic outcomes even as they focus on growth. That is why the Millennium Development Compact advocates using public policies to reduce various dimensions of non-income poverty.

FROM HUMAN DEVELOPMENT TO ECONOMIC GROWTH—AND BACK

Good education and health have intrinsic value for people's well-being. And the two are closely linked: education helps improve health, and good health contributes to better education. Moreover, education contributes to economic growth and raises poor people's incomes. Improvements in health also generate significant economic returns.²

Consider the average growth in per capita incomes in several dozen developing countries between 1965 and 1995, grouped by their incomes and infant mortality rates in 1965. (Infant mortality is a general proxy for overall disease levels.) In countries starting with per capita incomes below \$750 (in constant 1990 dollars adjusted for purchasing power parity) and infant mortality



When poor people have political power protected by civil and political rights, they can be more effective in pressing for policies that create social opportunities

rates above 150 per 1,000 live births, incomes grew by an average of 0.1% a year—while those with rates between 100 and 150 grew by an average of 1.0% a year and those with rates below 100 grew by an average of 3.7% a year.

In countries with initial incomes of 750-1,500, those with infant mortality rates above 150 experienced negative growth averaging -0.7% a year, while those with rates between 100 and 150 averaged 1.1% annual growth and those with rates below 100 averaged 3.4% annual growth.³ Thus, even after accounting for initial incomes, countries with better health conditions were systematically more successful in achieving higher growth. Moreover, economic growth provides more resources to invest in education and health—and as noted, those investments contribute to higher growth.

This two-way link between human development and economic growth implies virtuous circles—with good human development promoting economic growth, which in turn advances human development (figure 3.3). But it also implies vicious circles—in which poor human development contributes to economic decline, leading to further deterioration in human development. For many countries—particular the top priority ones—achieving the Millennium Development Goals will require breaking out of vicious circles (or poverty traps, to use a closely related concept) and entering virtuous circles.

The synergies among various aspects of human development are also important: improving health and education requires related interventions in schooling, family planning, health care, nutrition and water and sanitation. For instance, controlling diarrhoea and measles not only improves health, it also reduces malnutrition. Malnutrition severely undermines a person's capacity to learn and grow, and so has important implications for education and the development of a productive workforce. But control of diarrhoea is affected by improved water and sanitation—as well as by hygienic behaviour fostered by education.

Underlying many of these synergies are agency and equity. When poor people have political power protected by civil and political rights, they can be more effective in pressing for policies that create social and economic opportunities.⁴ Such power is especially important for women, as well as for ethnic and racial groups that face discrimination. Promoting gender equity and women's capabilities is crucial to advancing economic development and to achieving the Goals (see chapter 4).⁵



To get the most from the complementarities among basic social services, universal primary education should be an early and essential focus, particularly for girls—along with heavy investments in health, family planning and water and sanitation.⁶ Most of these investments are not automatic side effects of economic growth: they require major efforts by the public sector.

RECENT PATTERNS—AND PROBLEMS—OF GLOBAL ECONOMIC GROWTH

Of the world's 128 countries with at least 1 million people in 1990 and with sufficient data, 76 saw per capita incomes grow in 1980–98—but 52 saw them shrink (see feature 3.1, table 1). Countries with large populations tended to grow, so when economic trends are measured by numbers of people, the outcomes appear much better. More than 4 billion people live in countries that experienced real per capita income growth of more than 1.4% in 1980–98—including China and India, the two most populous countries.⁷ This 1.4% figure provides a rough estimate of the per capita growth rate required to achieve the Millennium Development Goal of halving income poverty (see box 3.1).

But economic advance does not guarantee that developing countries will achieve the Millennium Development Goals. Growth could be skewed towards higher-income households, or its fiscal dividends might not be invested in the poorest people. Still, many developing countries are amassing resources to invest in achieving the Goals.

About 1.5 billion people live in developing countries that saw per capita incomes grow by less than 0.7% a year in 1980–98, including many of the poorest countries.⁸ If these countries continue to stagnate, they will not have the resources required to achieve the Goals. Finding ways to achieve the Goals, especially in top priority countries that combine widespread poverty with little or no economic growth (see chapter 2), requires understanding why such countries are experiencing little or no growth while so many others are growing rapidly.

Success—or failure—in economic growth is closely linked to how an economy is integrated with global markets. Some forms of globalization help produce economic growth, but some do not. Success or failure is related less to a country's initial income than to the structure of its exports. Excluding transition and fuel-exporting countries, middle-income countries achieved average annual growth of 1.3% in 1980–98, while low-income countries averaged –0.1%.⁹ But many low-income countries, including China and India, did extremely well.

Most of the low-income success stories concentrated on manufactured exports (see feature 3.1). Among developing countries with sufficient data on trade and economic growth for 1980–98, 24 exported primarily manufactured goods and 61 exported mainly primary commodities (other than oil) in 1995.¹⁰ Only one of the manufacturing exporters failed to achieve

BOX 3.2

Bangladesh-large and inland, with access to the coast

Since Bangladesh's birth in 1971, it has evolved into a democracy, achieving major reductions in income and non-income poverty. Income poverty dropped from 48% in 1989 to 34% in 2000. Basic social policies—health, education, reproductive health services, family planning—helped lower population growth and shrink the labour force. Moreover, most of the population is becoming literate. The positive changes unleashed by an export drive reinforced the need for better-educated people.

Growth in manufacturing was a major source of this success. In addition, government agencies have supported the private sector through investments in infrastructure and skills, crucial for launching and sustaining the export drive. The government has also maintained the stability vital for pro-poor growth policies. As a result of these pol-

Source: World Bank 2003i; Bangladesh Garment Manufacturers and Exporters Association 2003.

d \$4.6 billion in 2002 (Bangladesh Garment Manui-facturers and Exporters Association 2003).
s, But though Bangladesh has achieved impressive success in growing out of deep poverty and advanc-

success in growing out of deep poverty and advancing maternal and children's health over the past 30 years, its experiences may not be universally replicable. The reason: Bangladesh is a large economy, with a population of 133 million people.

icy initiatives, Bangladesh's labour-intensive gar-

ments exports jumped from \$867 million in 1991 to

Moreover, even with its successes Bangladesh is still far from reaching several of the Millennium Development Goals—including those for hunger and sanitation. So the central recommendation of the Millennium Development Compact still applies: a multipronged approach is required to achieve the Goals across sectors.

economic growth during this period, compared with 32 of the primary commodity exporters.

By recognizing the links between economic growth and economic structure, it is possible to focus on the problems facing the poorest countries. For example, why did China become a manufacturing exporter but not Mali? Was it solely economic policies, or did structural conditions also play a role? And if structural conditions played a role, how can Mali's underlying structures be improved so that it can become a successful manufacturing exporter?

Becoming internationally competitive in products beyond traditional primary commodities is not easy. Returns on manufacturing investments in Mali are not very high, and not just because of economic policies. The country is landlocked and suffers from high levels of malaria, tuberculosis, HIV/AIDS and other diseases. Fragile soils and erratic rainfall over many decades have resulted in low food productivity. Because of few energy resources, fossil fuels must be imported. Finally, Mali's small population means that its domestic market is tiny. Investors consider the country's education and skill levels too low to justify the costs imposed by landlockedness, poor health, low nutrition, a tiny domestic market and related barriers. In short, Mali does not meet the thresholds required to attract many foreign or domestic investors outside traditional sectors.

Thus achieving the Millennium Development Goals in Mali-and many other countries in similar circumstances-will require special investments in a wide range of sectors. Better health, education, water, sanitation, roads, ports and power are needed to reach the thresholds required for private, market-based investments (box 3.2 illustrates the success in Bangladesh). Among other things, Mali could become a successful garment exporter, tourist destination and processor of tropical agricultural products. But such activities will take off only after health, education and other key thresholds are reached. Because the country is much too poor to make these investments on its own. partner countries must provide the financing for economic takeoff.

STRUCTURAL CHALLENGES OF UNFAVOURABLE GEOGRAPHY, SMALL MARKETS AND HIGH TRADING COSTS

To understand why some countries face higher hurdles in reaching thresholds for economic growth, first consider the structural implications of physical geography. For the reason Adam Smith explained more than two centuries ago, a country's ability to sustain the complex division of labour required for internationally competitive manufacturing depends on the extent of the market. For the reason Adam Smith explained more than two centuries ago, a country's ability to sustain the complex division of labour required for internationally competitive manufacturing depends on the extent of the market

Geography's effects on markets, trade and growth

There are two ways for a country to have a large extent of the market. The first is through a large population: countries with small populations tend to have small domestic markets. (Here countries with small populations are defined as those with fewer than 40 million people in 1990.) The second is through low-cost trade with world markets, recognizing that trading costs are strongly influenced by geography. Countries next to major markets (for Mexico, the United States, and for Poland, Germany) or coastal countries with easy access to low-cost ocean shipping have advantages over inland countries far from major markets or ocean ports. (Here inland countries are those where more than three-quarters of the population lives more than 100 kilometres from a coast.)

In 1980–98 developing countries with large populations, coastal locations or both achieved much higher economic growth than countries with small populations and inland locations. Large coastal countries grew in 3 of 4 cases, at an annual average of 3.2% per capita (see feature 3.1, table 2). Large inland countries grew in 10 of 10 cases, at an average of 2.5%. Small coastal countries grew in 15 of 17 cases, at an average of 1.9% (see feature 3.1). But only 24 of 53 small inland countries grew. Moreover, the group's average per capita growth rate was negative.

Though these data might seem skewed by Sub-Saharan Africa—home to more than 30 small inland countries—the same pattern holds elsewhere: Of the 50 non-African countries in

BOX 3.3

The Andean countries include Bolivia, Colombia, Ecuador, Peru and Venezuela. Of these, Colombia, Ecuador, Bolivia and Peru share similar structural constraints and policy challenges. These countries have medium human development indicators, yet the region faces persistently high poverty and inequalities. Although average incomes vary greatly across these four countriesmeasured using purchasing power parity, 2001 per capita income was \$2,424 in Bolivia, \$3,202 in Ecuador, \$4,799 in Peru and \$6,248 in Colombia-more than a third of the population is still living on less than \$2 a day. Venezuela, despite being the world's sixth largest oil producer, faces equally imposing challenges. Per capita GDP growth has averaged between -0.7% and -1.0% over the past two decades, and nearly a quarter of the population lives on less than 1\$ a day.

Several structural features help explain the persistence of economic stagnation and poverty in the Andean countries.

• A first, well-known factor is the persistence of inequalities. Each country has a Gini coefficient above 0.5. These inequalities are particularly pronounced due to ethnic divisions. Any successful development policies for these countries must focus on the public provision of key social services in education, health and water and sanitation to expand opportunities for excluded groups.

• A more commonly overlooked structural factor contributing to these countries' development challenges is that each has a significant amount

Challenges in the Andean region

of its population living at high inland altitudes. Thus their economies must surmount high transport costs to gain access to global markets. While Bolivia is the only landlocked country, half of Ecuador and Peru's citizens live more than 100 kilometres from the coast. About a quarter of Colombia's population lives inland as well.

• This lack of market access contributes to the countries' dependence on natural resources, and consequent exposure to major fluctuations in commodity prices. In Venezuela oil accounts for more than 80% of exports. More than half of Ecuador's exports are oil (30%) and bananas (21%), while less than a quarter are manufactures (23%). Bolivia is still largely dependent on gas and soy (45% of exports), with manufactures making up a small fraction (14%).

• Another challenge is posed by El Niño, a cyclical climate fluctuation of temperature and rainfall that has major implications for agricultural output. To overcome susceptibility to external fluctuations, these countries require active infrastructure policies, particularly for ports and roads, to provide access to global markets. They also need active industrial policies to help develop a diversified manufacturing base for exports.

• Finally, these countries face a structural constraint that reflects their persistent economic troubles: debt overhang. Bolivia, Ecuador and Peru have each had at least five Paris Club debt reschedulings (with public creditor countries) over the past 20 years. These debt constraints have made it difficult to make domestic investments that would increase human capabilities and stimulate economic growth.

In Venezuela a lack of export diversification and falling productivity have contributed to economic stagnation. In recent years political unrest, rising inequality and poor economic planning have added to these challenges.

Alongside these structural challenges, the region's social, economic and political instabilities have interacted with the production of coca leaf and cocaine, mainly for US and European markets. The drug industry has led to a proliferation of organized crime, corruption and other ills of public administration, leading to militarization of these societies and persistent threats to social peace and democracy.

Recent estimates based on historical trends indicate that of the five countries only Colombia appears to be on track to meet the poverty Goal, while the other four are expected to see increasing levels of poverty, largely as a consequence of increased inequality, economic slowdown, or both (UNDP, ECLAC and Instituto de Pesquisa Economica Aplicada 2002).

While this combination of challenges is significant, policies can overcome them. Roads and ports can be built. Governments can invest in excluded groups. Markets can be diversified. And debtor relationships can be renegotiated. What is crucial, as outlined in the Millennium Development Compact, is that all these challenges be addressed simultaneously, under a commitment to a compact between each country and its partners.

Source: World Bank 1998b, 2002h, 2002i; UNDP, ECLAC and Instituto de Pesquisa Economica Aplicada 2002.

the sample, 27 of 30 that are large, coastal or both experienced economic growth—while only 11 of 20 that are small and inland did so.

This sample shows that about half the world's people live in large inland countries that have experienced sustained growth, including China and India. Meanwhile, nearly 420 million people live in large coastal countries—with 341 million in robustly growing economies. (The other 77 million live in the Philippines.) Most of the 130 million people in small coastal countries live in growing economies. But almost 420 million people live in small inland economies that are not growing. Some of these countries are in the Andean region (box 3.3).

These numbers do not mean that everyone in growing economies is experiencing greater well-being. Structural constraints can apply within countries as well as between them, and other inequalities might be present. China and India still have large pockets of persistent poverty that require the attention of domestic policies (box 3.4).

Nor do these numbers reflect a high standard of growth, because a country is considered to be growing even if it averaged just 0.1% annual growth in 1980–98. But the numbers highlight the type of countries—small inland economies—facing the greatest challenges in achieving the Goals, requiring the most support from the international community and meriting

BOX 3.4

China and India-impressive growth, important differences

China and India, together containing a third of the world's population, have enjoyed tremendous economic growth over the past decade. Their successes in advancing average well-being imply major improvements for a large portion of humanity. But their experiences also point to the importance of looking beyond national averages to understanding differences within countries.

Though both countries have achieved rapid, sustained economic growth, their rates of progress have been quite different. China has enjoyed the fastest sustained economic advance in human history, averaging real per capita growth of 8% a year over the past decade. Its per capita income is now \$3,976 in purchasing power parity (PPP) terms. Meanwhile, real per capita income in India grew at a robust though more modest average rate of 4.4%, reaching \$2,358 in 2001. Reflecting their successful economic growth, both countries have seen significant reductions in poverty. According to World Bank estimates based on consumption surveys, the proportion of people living on less than \$1 a day declined in China from 33% in 1990 to 16% in 2000, and in India from 42% in 1993/94 to 35% in 2001 (World Bank 2003i). While highly contested because of differences in methodology, survey design, and samples, these calculations nonetheless provide a rough indication of poverty trends in these countries.

Market reforms

China's exceptional growth is partly explained by its market-based reforms that started in 1978, well before India's similar reforms began in 1991. These reforms have enabled China to integrate with the global economy at a phenomenal pace. Today it is the largest recipient of foreign direct investment among developing countries, with annual investment rising from almost zero in 1978 to about \$52 billion in 2002 (nearly 5% of GDP). Foreign direct investment in India has also increased significantly, though at much lower levels, growing from \$129 million in 1991 to \$4 billion in 2002 (less than 1% of GDP).

Robust export growth has contributed to the economic performance of both countries, with a growing dominance of manufactured exports though again, China has had much more success in this realm. Its exports reached \$320 billion in 2001, compared with \$35 billion for India. Manufactured exports accounted for 53% of China's total exports in 1981 and for 90% in 2001; in India that share rose from 60% to 77%. China has had particular success in moving from labourintensive to technology-intensive exports: telecommunications equipment and computers now account for a quarter of its exports.

Social investments

Social investments are required for sustained economic growth. In China public spending on education is 2.3% of GDP while that on health is 2.1% of GDP. The outcomes for human development are clear. Literacy stands at 84%, infant mortality rates at 32 per 1,000 live births and under five mortality rates at 40 per 1,000 live births.

India, in contrast, has traditionally had lower spending levels. Health spending stands at 1.3% of GDP (central and state governments combined). Spending on education has increased significantly, from 0.8% of GDP in 1950 to 3.2% today, though it still falls short of the government target of 6% of GDP. Human development indicators for India remain much lower than for China. Literacy stands at 65%, infant mortality at 68 per 1,000 live births, and under-five mortality rates at 96 per 1,000 live births.

Regional variations and other challenges

It would be misleading to talk solely in terms of national averages for two countries so large in population and area. As noted in chapter 2, in China the highest economic growth has occurred in the coastal provinces—while the geographically isolated north-western provinces have experienced much lower growth. India also harbours stark regional variations. In 1992–97 per capita economic growth ranged from –0.2% in Bihar to 7.8% in Gujarat. Similar variations appear in other human development indicators, such as those for education and health.

Both countries still face challenges, such as the spread of HIV/AIDS and other sexually transmitted diseases accompanying increased labour migration and international trade. And both face the challenge of fostering a knowledgebased economy to maintain consistently high economic growth as average skill levels increase. Both also need to focus on spreading the gains of growth to regions, communities and ethnic groups that have seen so little benefit from the new prosperity. Inclusive public policies should focus on investments in health, education and infrastructure for future development.

Source: Woo and Bao 2003; World Bank 2003e, 2003f, 2003i and calculations by Shaohua Chen of the World Bank and Angus Deaton of Princeton University; India 2003; China 2003; Bajpay 2003; UNCTAD 2002b.

The focus on geography here highlights the need for policies tailored to each country's challenges. With proper policies even the difficulties of small markets—or poor soils, or climatic fluctuations can be overcome the greatest attention under the Millennium Development Compact. This is not to say that some large countries with significant coastal regions, such as Pakistan, should be ignored. They too face major challenges in reducing poverty and advancing human development.

Some additional points on geography:

• Geography can be a boon as well as a bane. It is no coincidence that all the East Asian success stories of the late 20th century have access to coasts and major shipping routes—thus access to large markets can help counter the effects of small populations.

• Natural resources—another manifestation of geography—can provide a major boost if their financial dividends are properly managed. The best example is Botswana's diamond discoveries, where revenues invested in education and health helped a fairly tiny, landlocked country quadruple its per capita income in 25 years (though these advances have recently been hindered by a heavy HIV/AIDS burden).

• A country's market size and coastal orientation are not the only geophysical issues requiring urgent attention. Some regions are vulnerable to climatic shocks (such as El Niño) while others are not. Some regions are vulnerable to natural disasters (earthquakes, tropical storms, volcanic eruptions, floods) while others are not. Some regions are prone to environmentally based diseases (malaria) while others are not. Some regions are suffering from extreme water stress while others are not. All these geophysical constraints can weigh heavily on an economy—and require policy attention.

But geography is not destiny

While geography can pose challenges, it does not define a country's destiny. The focus on geography here highlights the need for policies tailored to each country's challenges. With proper policies even the difficulties of small markets or poor soils, or climatic fluctuations—can be overcome. In geographically isolated countries better roads and communications can trounce many of the disadvantages of distance.

In countries with small populations, integration with neighbouring countries can provide the requisite scale for markets. Moreover, rich countries can open their markets to exports from small developing countries. That is how the small or landlocked countries of Western Europe have succeeded: through the close economic integration of the European Union.

If an economy is burdened by poor soils, soil nutrient supplements are needed (through fertilizers, leguminous trees, better crop rotation and other means). And tropical diseases can be controlled through interventions such as insecticide-impregnated bednets to fight malaria. The problem is not that geophysical obstacles are insurmountable. The problem is that they are too often overlooked—and addressing them costs money.

Good policies, economic growth and human development

A first step in economic progress often involves increasing the productivity of poor small farmers. This can happen when market forces yield agricultural advances or governments invest in research and development. Poor farming households often produce food for their own subsistence, with little left over for the market. So, increasing agricultural productivity—say, through improved seed varieties and fertilizers, as during the green revolution of the 1970s-raises household income and nutrition. It also enables poor households to invest more in their children's health and education. Many of these children end up migrating to urban areas, particularly since food needs can now be met by fewer (but more productive) farmers.

In manufacturing, increased productivity comes from a stable macroeconomic environment, sound public institutions and reliable physical infrastructure. Growing urban populations also support larger and more productive manufacturing. In addition, manufacturing productivity is often given a major push by highertechnology imports. In East Asia manufacturing productivity increased when domestic companies became suppliers to multinational corporations, using technologies and products specified by those corporations. Common earlystage manufacturing exports include toys, apparel, footwear, electronics components, automotive components and the like. Rising incomes lead households to spend more on health and education. They invest in safer water, or send their children to school or buy drugs when illness hits. They also improve their nutrition. People can afford safer homes—buying screens for windows to keep out disease-bearing mosquitoes or stoves fuelled by propane rather than highly polluting wood. Household investments in health and education are often accompanied by public investments in social services.

As incomes rise, so do national saving rates (the proportion of national income remaining after household and government consumption). At very low incomes, households are too poor to save: they must spend all they have simply to survive. Most spending goes for food, shelter and clothing—and when an emergency hits, health care. As incomes rise above the survival threshold, households can afford to save money for their future well-being and economic security. National savings give another boost to economic growth because it enables investments by private business and government. Such investments lead to rising physical capital and infrastructure stocks per person.

Another vital boost to economic growth comes when fertility rates fall in response to public policies and rising household incomes. Poor households with many children are rarely able to invest enough in each child's health and education. Perhaps only the eldest son has the chance to attend school for more than a few years. But when fertility drops, even poor families can provide a good education for, say, two children instead of six—and can invest more equally in sons and daughters. By this stage an economy is on a robust, self-sustaining growth path. No longer mired in subsistence agriculture, the dynamics for persistent economic growth are under way.

At a later stage another important trend emerges. As education levels rise and domestic companies produce more sophisticated goods and services (often supported by investments, know-how and technology transferred from foreign corporations), domestic scientists and engineers begin developing new products. Private spending on research and development increases, as do government outlays. In addition, local universities make critical contributions to economic growth by training scientists and engineers and by being home to a growing amount of research and development.

WEAK POLICIES, ECONOMIC DECLINE AND HUMAN POVERTY

So what happens—or does not—in countries that fail to achieve this kind of economic takeoff? As before, such economies start out poor and primarily rural, with limited urban manufacturing. But unlike in growing economies, agricultural productivity—and so the rural economy—is stagnant or falling because of depleted soils and climatic shocks. As populations have grown, so has deforestation and water scarcity. No new technologies, public or private, have been introduced to boost agriculture. Farmers cannot even get their products to markets because governments cannot afford to build or maintain roads.

In these countries children in farming households work from very young ages—for example, often walking several kilometres a day to fetch water and firewood. Even if schooling is available, children have no time or energy to attend. They also have no access to the primary health care required to prevent or treat malaria, worm parasites and other ailments because their families cannot afford doctors and governments cannot afford doctor salaries or needed medicines. Many children—perhaps 15 of every 100—die before age five. As a result parents have many children.

Making matters worse, productivity is low in urban areas. Moreover, manufacturing activities may be cut off from world markets because a country is landlocked and remote from ports or because its main export is subject to trade barriers around the world. Perhaps the road from the capital to the nearest port passes through another country hostile to the economic interests of its landlocked neighbour. Or maybe the coastal economy is poorly managed, so that even if a landlocked country builds a well-functioning trunk road to the border of the transit country, the coastal economy will not build, maintain and police the road all the way to the port.

As noted, small populations add to the burdens of many poor landlocked economies. As As education levels rise and domestic companies produce more sophisticated goods and services, domestic scientists and engineers begin developing new products Though good economic governance and sound economic policies are needed to escape poverty traps, they are not enough a result international investors have little interest in establishing local production operations to serve local markets. If they sell anything, they will do so through exports to the country rather than local production.

Under such circumstances, even with the most efficient government policies, local manufacturing is unlikely to trigger self-sustaining growth. Local manufacturers may provide local markets with some basic goods—soap, processed foods, wooden furniture, bricks and other building materials, a few chemicals—but little else. Technology is basic, and firms are not competitive enough to sell to world markets, especially with the high costs of transporting goods to ports (and the prohibitive costs of air transport for basic items). With no engine of growth in manufacturing, such economies are unlikely to start growing.

Even if the public sector is making the most of its resources, such countries face numerous bottlenecks to growth:

• Private saving rates are low—if not negative.

• Governments use most or all of their revenues to pay public employees (army, police, teachers, public administration), leaving little or nothing to invest in health, education and infrastructure.

• Agricultural productivity is low partly because there are few inputs from domestic manufacturing, such as fertilizers. And severe transport problems make importing fertilizers prohibitively expensive for most small farmers.

• Fertility rates remain high, reflecting low education for girls and women, large rural populations, high child mortality rates and lack of family planning and reproductive health services.

• Maternal health suffers because women have little access to education or health care, with negative implications for their children. Most people stay in rural areas because they are needed to grow food for swelling national populations—resulting in high food costs for urban residents.

• With rising rural populations, farmland per agricultural worker falls, reducing output per farmer. That, combined with lack of health care, worsens public health, contributes to the spread of infectious disease (partly prompted by weakened immune system due to malnutrition) and reduces labour productivity.

In short, such countries are trapped in poverty. They have insufficient resources to overcome structural challenges and fall short of critical thresholds—in health, education and infrastructure—to achieve self-sustaining economic growth. Many of the top priority countries identified in chapter 2 fall into this category. Though good economic governance and sound economic policies are needed to escape poverty traps, they are not enough. In most cases enormous structural constraints must also be overcome to reach the thresholds for sustained growth.

Note the distinction between structural constraints to the thresholds for sustained growth and economic governance constraints to those thresholds. Corrupt or incompetent governments wreak havoc on many countries, preventing the investments needed for economic development. This burden can be due to kleptocratic politicians, weak legal institutions, corrupt bureaucrats or political or armed conflicts (box 3.5).

ESCAPING POVERTY TRAPS

So what can be done for countries stuck in poverty traps? This Report's Millennium Development Compact, building on a baseline of sound macroeconomic management, aims to bolster human development by combining six clusters of policies:

• *Investments in the social sectors.* Major progress can be made in health, nutrition, education and water and sanitation in low-income settings when additional donor resources are available, because the needed interventions are well known and long proven, and the main investments can be made by the public sector backed by donor financing. Big gains in health and education are required before per capita incomes can be raised substantially.

• Investments to raise agricultural productivity. Agricultural productivity can be raised by introducing better technology (improved seeds, tillage and crop rotation systems, soil nutrient management, pest management) and improving rural infrastructure (irrigation projects, storage and transport facilities, roads connecting villages to larger markets). In addition, security in land holding can protect farmer rights and encourage them to invest in land improvements that raise long-term productivity.

The Millennium Development Goals and conflict countries

Any serious attempt to launch a successful campaign to achieve the Millennium Development Goals must pay special attention to conflictaffected areas. Nearly 60 countries experienced violent conflict during the 1990s. Beyond its direct cost in human lives, conflict can undermine economies, destabilize governments, damage infrastructure, disrupt social service delivery and provoke mass movements of people. More than 14 million people face hunger due to present or recent conflicts. HIV/AIDS and other infectious disease often spread ferociously in conflict-affected areas. In some militaries of Sub-Saharan Africa more than half the soldiers are HIV-positive. Maternal and infant mortality often increases substantially in war zones, with health services destroyed and childbirths during flight.

Analysis of the 25 countries hit hardest by conflict between 1960 and 1995 reveals substantial variation in the human and economic costs of war. Ethiopia, Liberia and Uganda, for example, had significantly higher infant mortality rates during conflict than in peacetime. Yet, El Salvador, Guatemala and Mozambique experienced rates below their regional average even during war. The findings suggest that policies can be adopted—even during conflicts—to reduce the human and economic costs.

Reducing the human costs of conflict

Broad policy prescriptions are difficult given the heterogeneity and complexity of waraffected economies. War aims may include depriving certain regions of essential services (Sudan). Conflict may also severely weaken governments, leaving them unable to provide services to any group (Afghanistan, Sierra Leone, Somalia). Indeed, the collapse of government without the emergence of substitute structures has led to particularly adverse human and economic war outcomes (Uganda). Countries able to reduce the human and economic costs of war, and in some cases make progress towards development targets, did so only when all households-on both sides of the battle lines-had access to food, basic health care and primary education (Guatemala, Mozambique, Sri Lanka).

Adequate public funding of essential services can often be maintained even with the rising military spending that accompanies war. Mozambique, Nicaragua and Sudan markedly increased per capita social spending during their conflicts. But even if cuts in social spending are necessary, they should not automatically translate into slashing basic social service budgets. Even in peacetime these services account for only a fraction of social spending.

Social spending cutbacks are often compounded by depletions in human resources, as teachers and doctors flee conflict-affected regions. And the cuts are coupled with unpredictable breakdowns in delivery mechanisms. So, flexible approaches to service provision are essential using diverse actors, such as non-governmental organizations (NGOs) and quasi-governmental structures. Mozambique experimented with mobile clinics and classrooms when health and education buildings became war targets. In El Salvador both sides halted fighting on three different occasions to allow for child immunizations.

People in conflict-affected areas are particularly vulnerable to severe malnourishment, as food production declines and conflict disrupts normal relief efforts. Escalating food prices are often a key threat to food security. During their wartime periods many rich countries subsidized and rationed food to prevent price escalation. Nicaragua also used these mechanisms to improve the nutritional status of people in waraffected regions.

In urban areas such efforts are relatively easy to administer. Rural communities, however, may benefit more from agricultural support in the form of supplies, loans and paid work. Food delivery through schools and clinics can also improve access without encouraging movement into camps. Such delivery can help promote school attendance and reduce incentives for children to become soldiers or thieves.

Reducing the economic costs of conflict

The economic costs of conflict affect human well-being in numerous ways, from rising food costs to declining employment opportunities. On average, countries hardest hit by conflict between 1960 and 1995 experienced significant declines in economic growth, reductions in export production, falling consumption levels and dminished government revenue (as a percentage of GDP) compared with non-war countries. Most countries also faced rising budget deficits and spiraling debts, as significant increases in military expenditure were met with substantial declines in government revenue. But some countries were able to defy the average, even showing impressive economic performance during wartime. Sri Lanka, for example, sustained 2% economic growth during the same decade as it experienced conflict. Countries experiencing ongoing conflicts should focus on (at least) four key policy areas:

• *Maintaining fiscal revenue* in wartime economies is difficult because sharply declining tax revenue often meets escalating military spending. Institutional structures used in revenue collection need to be maintained throughout the war. Tax rates prevailing before the conflict should also be maintained, in addition to levying other taxes such as on luxury items and warrelated goods. Governments could also issue compulsory savings bonds as well as sell food aid to tap new revenue sources. Indeed, Nigeria, Sri Lanka and Sudan succeeded in sustaining revenue levels (as a percentage of GDP) during their conflicts.

• *Preventing runaway inflation* is necessary because escalating inflation creates uncertainty and promotes private sector speculation. Such inflation also makes public budgetary and financial control extremely difficult. Price liberalization during conflicts, given low supply elasticities, is a main contributor to escalating inflation. In Mozambique, for example, such liberalization led to huge increases in the price of rationed goods, such as maize, cooking oil and sugar.

• Securing foreign exchange resources is essential because declining foreign exchange resources contribute to reductions in output. Some Sub-Saharan countries have experienced devastating famines due to a mix of conflicts, output reductions and droughts. To sustain output, national and international policies should aim to finance productive imports by keeping open and assisting export markets and providing aid and loan support for such imports. National policies should also ensure that available foreign exchange resources are used to purchase essential goods, such as medicines and agricultural inputs. Import controls, such as quotas and tariffs, may be used to ensure this occurs.

• Maintaining a competitive real exchange rate. Conflict-affected countries face enormous difficulties in managing their balance of payments under conditions of uncertain export income and aid commitments. Policies must maintain a competitive real exchange rate to avoid disincentives to exports. Countries should also secure control over nominal exchange rates given the inevitable macroeconomic disequilibria of war. In Angola, for example, inflation rose from 160% to 246% between 1991 and 1992, hitting poor Angolans hardest.

Source: Stewart 2003; Fitzgerald 2001.

The key idea is that poor countries in stagnation or decline can be pushed above the thresholds and establish self-sustaining growth if they receive enough aid to health, education and basic infrastructure • *Investments in infrastructure.* Reaching an adequate threshold of roads, power, ports and communications to support economic diversification into non-traditional areas will be relatively easy in some areas, such as coastal port cities. But it will be much harder elsewhere, such as landlocked or mountainous countries suffering from high transport costs.

• Industrial development policies to bolster private activities. Successful development of non-traditional activities often requires special industrial policies, including selective, temporary and well designed tax holidays, export processing zones, special economic zones, science parks, investment tax credits, promotion of science and technology, targeted research and development funding and public grants of infrastructure and land.

• A broad emphasis on equity throughout society. Political institutions must allow poor people—especially women—to participate in decisions that affect their lives and protect them from arbitrary and unaccountable actions by governments and other forces. Thus strategies for achieving the Millennium Development Goals must ensure women's rights to education, reproductive health services, property ownership, labour force participation and secure land tenure. Strategies must also focus on eliminating all other forms of discrimination, including by race, ethnicity or regional origin.

• An emphasis on environmental sustainability and urban management. Many of the world's poorest places are in regions of enormous climatic variability and vulnerability, requiring sound ecological management. These include tropical and subtropical regions vulnerable to El Niño-driven fluctuations in rainfall and temperature—regions also experiencing the pressures of long-term climate change. Another ecological challenge is managing rapid urbanization through careful planning and large public investments.

These policies can trigger a takeoff out of poverty. Countries can start to supply labourintensive goods (apparel, electronics components) for external markets. Tourism and information-based services (such as data transcription and back-office computer operations) may lead to a comparable boom in service exports. This growth in non-traditional exports can drive the cumulative processes of growth described earlier, including rising saving rates, rising government revenues, rising urbanization, falling fertility and rising agricultural productivity (partly because of more inputs from manufacturing).

To achieve long-term growth, all these policies need to be addressed simultaneously, regardless of a country's stage of economic development. But the poorest countries cannot afford these investments on their own. For them the Millennium Development Compact stresses that donors should help cover the costs—assuming that low-income countries hold up their side of the deal by promoting good economic governance, protecting human rights and pursuing transparent and efficient policies (box 3.6).

The key idea here is that poor countries in stagnation or decline can be pushed above the basic thresholds and establish self-sustaining growth if they receive enough aid to invest in health, education and basic infrastructure. External financing is not needed to fund the entire growth process—merely to support the takeoff. In most cases that takeoff can be achieved within a generation.

GROWTH POLICIES THAT BENEFIT POOR PEOPLE

This chapter has emphasized the need for comprehensive, multisectoral strategies to achieve economic growth, including policies to promote manufacturing exports. Considering the different structural barriers facing countries, it is clear that each needs to pursue policies that make sense for its conditions (see the special contribution by Nobel Laureate Joseph Stiglitz). This section addresses two related issues aimed at ensuring that growth benefits poor people. First, what policies can promote the growth of labour-intensive (rather than capital-intensive) manufacturing exports? Such products can directly expand employment opportunities and increase real wages for poor people. Second, what policies can also ensure higher incomes for poor people not directly employed by manufacturing? Such policies are needed in lowincome countries as well as in middle-income countries with persistent pockets of poverty.

What's needed to make the Millennium Development Compact work in Uganda

Uganda has made excellent economic progress over the past decade. But despite average real growth of 3.7% in 1992–97, Uganda still has a per capita income of just \$330.

Uganda is small and landlocked, with agriculture employing 80% of the workforce. In 1997 the poverty headcount was 44% of the population, infant mortality was 83 per 1,000 live births (in 2000), maternal mortality was 505 per 100,000 and under-five mortality was 161 per 1,000.

In 1997 Uganda pioneered a povertyoriented development strategy by designing a Poverty Eradication Action Plan, which in 2000 was revised as the country's Poverty Reduction Strategy Paper in agreement with the World Bank and International Monetary Fund. In the paper Uganda set four goals:

• Reducing absolute poverty to 10% of the population by 2017.

• Raising the educational achievements of Ugandans.

- Improving people's health.
- Giving voice to poor people.

Source: Uganda 2002; IMF 2002a; World Bank 2000b.

Policies to promote labour-intensive manufacturing

Over the past 20 years too much development thinking and practice have confused marketbased economic growth with laissez faire. Even when economic growth is based on private ownership and market forces, government policies must promote efficient and competitive national industries. Supporting the creation of manufacturing exports, for example, can be half the battle of achieving sustained growth especially if a country's economic history has involved exporting primary commodities.

Similarly, policies can be central to promoting labour-intensive rather than capital-intensive activities, increasing employment and, in the long run, raising productivity and lifting real wages. Policies have long played a key role in spurring industrial development, as in East Asia's "tiger" economies since the 1960s. But this depended on a number of conditions—particularly disciplined institutional capacity within governments.

Pro-poor industrial development policies should follow a few general guidelines. First, as this chapter has shown, manufacturing

To achieve these goals, the government formulated policies based on four pillars that overlap in many ways with the policy dimensions in the Millennium Development Compact. These pillars include creating a framework for economic growth and transformation through macroeconomic stability; focusing on strategic exports; and promoting the private sector. For this Uganda will have to attract much more foreign direct investment and diversify its economy—both difficult given the country's landlocked status and high transport costs.

The fourth pillar includes promoting good economic governance and security, actions that directly increase poor people's ability to raise their incomes (through a plan to modernize agriculture) and that directly improve their quality of life (through better health, education and safe water and sanitation). But the key question is whether Uganda will be able to make the investments to implement these strategies and achieve these goals.

Budget planning is being aligned with the Poverty Reduction Strategy Paper, and social

spending will draw on funds freed up by debt relief. According to a 2002 estimate by the Economic Policy Research Center, implementing the paper's plans would generate a resource gap of \$417 million in 2003, or 6.4% of GDP—and this is based on a fairly low estimate of health care costs. Indeed, if the costs of achieving all the Millennium Development Goals were included such as providing safe water and sanitation, alleviating hunger and providing infrastructure—this gap would be even wider.

These projections are of great value to the international community because they provide an indication of the increased spending required at the national level. Spending on HIV/AIDS needs to increase by 83%, on education by 109% and on health by 212%. So despite the best commitment and planning at the country level, the Millennium Development Goals will remain unattainable unless supported by much larger financial flows from the international community—which constitute a major part of the role of rich countries in the Millennium Development Compact.

exports are crucial to long-term growth. To that end, macroeconomic and trade policies are key to diversifying economic structures. Overvalued exchange rates that hurt exporters can severely limit possibilities for employment growth. The transition to export orientation is complex (and debated at length elsewhere). But especially for small economies, macroeconomic policies require an export orientation. In China and the Republic of Korea government protection to domestic markets coexisted with export incentives. Korea provided exporters with tax incentives and duty-free imports of inputs, which raised returns to capital invested in desired sectors.

Second, financing incentives are needed to get industries started in capital-scarce economies. A variety of policy instruments have been used: directed and subsidized credit, support to chosen subsectors, export subsidies, technology acquisition institutions and a host of other sector-specific interventions. Several South-East Asian countries have used export credits and fiscal incentives to raise returns to investments in exports. But as relative latecomers, foreign direct investment has typically played a larger role

BOX 3.6

SPECIAL CONTRIBUTION

Poverty, globalization and growth: perspectives on some of the statistical links

Several recent econometric studies have tried to show a systematic relationship between globalization and growth—and between growth and poverty reduction. The message of these studies is clear: open your economy, liberalize and you will grow, and as you grow, poverty will be reduced. This research is supposed to lay to rest the attacks on globalization and, though it shuns the words, breathe new life into long-discredited trickle-down economics, which held that "a rising tide lifts all boats".

Trickle-down economics became discredited for an obvious reason: it was not true. Sometimes growth helps poor people, but sometimes it does not. By some measures poverty increased in Latin America in the 1990s, even in many countries where there was growth. It was not just that well-off people gained disproportionately from growth: some of their gains may even have been at the expense of poor people.

Though there are a number of technical problems with these recent studies, the most telling problem is that they asked the wrong question: globalization and growth are endogenous, the result of particular policies. The debate is not about whether growth is good or bad, but whether certain policies—including policies that may lead to closer global integration lead to growth; and whether those policies lead to the kind of growth that improves the welfare of poor people. A look at the most successful countries, in growth and poverty reduction, shows how misleading these studies are.

China and other East Asian countries have not followed the Washington consensus. They were slow to remove tariff barriers, and China still has not fully liberalized its capital account. Though the countries of East Asia "globalized", they used industrial and trade policies to promote exports and global technology transfers, against the advice of the international economic institutions. Perhaps most important, unlike the Washington consensus, policies promoting equity were an explicit part of their development strategies. So too for perhaps the most successful country in Latin America, Chile, which during its high-growth days of the early 1990s effectively imposed a tax on short-term capital inflows.

The policy issue is not "to globalize or not to globalize" or "to grow or not to grow". In some cases it is not even "to liberalize or not to liberalize". Instead the issues are: To liberalize short-term capital accounts—and if so, how? At what pace to liberalize trade, and what policies should accompany it? Are there pro-poor growth strategies that do more to reduce poverty as they promote growth? And are there growth strategies that increase poverty as they promote growth—strategies that should be shunned?

For instance, neither theory nor evidence supports the view that opening markets to shortterm, speculative capital flows increases economic growth. But there is considerable evidence and theory that it increases economic instability, and that economic instability contributes to insecurity and poverty. So, such forms of capital market liberalization might in some ways increase "globalization". But they do not enhance growth—and even if growth increased slightly, this form of it might increase poverty, especially in countries without adequate social safety nets.

Similarly, trade liberalization is supposed to allow resources to move from low-productivity protected sectors to high-productivity export sectors. But what if export markets in areas of comparative advantage (such as agriculture) are effectively closed, or credit is not available (or available only at exorbitant interest rates) to create the new export-related jobs? Then workers simply move from low-productivity protected sector jobs to unemployment. Growth is not enhanced, and poverty is increased.

Even often-praised measures, such as tarriffication, have proven to be double-edged swords, because they have exposed developing countries to additional risks that they are ill prepared to cope with. Again, whether tarriffication leads to faster growth is not clear; that the increased variability increases poverty is far more evident.

There are policies that in the long run may enhance growth and reduce poverty, such as enhancing education opportunities for disadvantaged groups, which allows countries to tap into vast reservoirs of underused talent. But the returns to investments in preschool education today will not manifest themselves for two decades or more—not the kind of results that show up in typical econometric studies.

Hidden beneath the surface in these econometric studies of globalization is another subtext: because globalization has proven so good for growth and poverty reduction, critics of globalization must be wrong. But these cross-sectional studies cannot address the most fundamental criticisms of globalization as it has been practiced: that it is unfair and that its benefits have disproportionately gone to rich people. After the last round of trade negotiations, the Uruguay Round, a World Bank study showed that Sub-Saharan Africa was actually worse off. Asymmetric liberalization had global terms of trade effects. The globalization studies suggest that Africa has suffered because it has not globalized. That may be partly true. But it is also true that Africa has suffered from the way that globalization has been managed.

Thus these econometric studies on globalization, growth and poverty have been a misleading distraction, shifting the debate away from where it should be—on the appropriateness of particular policies for particular countries, on how globalization can be shaped (including the rules of the game) and on international economic institutions, to better promote growth and reduce poverty in the developing world. The antiglobalization movement has often been charged with being unthinking in simply asking whether globalization is good or bad. But the econometric studies, for all the seeming sophistication of their statistics, are equally guilty.

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Joseph E. Stiglitz Nobel Laureate in Economics, 2002

in their export drives—and in China's—than was the case for the East Asian tigers.

Third, a competent, professional, reasonably independent public bureaucracy is needed to support such policies. Undue political interference has been damaging to state institutions, in some cases leading to state failure. The response should not be to abandon the state. No matter how difficult, reviving state institutions may be vital in removing economic governance constraints to growth (see feature 3.1).

Public sector employment policy is important here. The state cannot be an "employer of last resort". In East Asia fairly high public sector salaries, particularly for managers, attract and retain skilled civil servants. These technocratic groups are reasonably insulated from political pressures, which helps ensure clarity in decisionmaking and builds market confidence. Getting this right has been as important as any policy intervention, because the "right" policies can have perverse effects when there is institutional incoherence.

Fourth, the public sector must support and build the private sector rather than compete with it. Public bodies can support private capacities in several ways. Japan, the Republic of Korea, Malavsia and Thailand established formal deliberation councils to reduce the information and transaction costs of private agents. A new form of deliberation council is being used for technology policy. In Costa Rica and Ireland technology foresight programmes and processes bring together government departments, the private sector, international organizations and non-governmental organizations to lower information and transaction costs-and to reach consensus on how to upgrade national technological capacities. These bodies can be particularly important for the development of export-oriented small and medium-size enterprises. Furthermore, efforts should be made to increase corporate social responsibility and transparency. In addition, international private businesses have an important role in encouraging local capital formation and local private sector development, fostering additional jobs in local labour markets. Finally, pro-poor growth can be achieved through more ambitious public-private partnerships, especially in the construction of basic infrastructure and the provision of services (such as electricity) in developing regions.

Policies outside manufacturing

The preceding industrial development policies can help develop an economy's engine of growth. But many (if not most) poor people work outside manufacturing—particularly at the early stages of development. Thus policies must address their needs as industrial development policies are pursued.

First, government needs an effective fiscal system to mobilize enough revenue to invest in poor people's basic needs. In the poorest countries this will require not only more domestic revenue, invested wisely, but also more donor assistance. An effective fiscal system does not imply high taxes. A more sensible course is to have rather low direct income tax rates—but to emphasize compliance and end abuse as well as politically motivated exemptions. A major revenue problem in many countries is that rich people simply do not pay direct taxes.

Second, countries with many farmers should invest in increasing agricultural productivity and diversifying cash crops for export markets. (Chapter 4 analyses agricultural productivity in greater detail.) Such efforts could include developing site-specific seeds and soil nutrient strategies to generate high yields under local conditions. Governments can also provide exporters with financial incentives and marketing assistance to diversify crops. They could also guarantee minimum prices for farmers in areas with fragile markets. Thailand did so when it moved from traditional crops to sophisticated crops for exports such as asparagus, which is not eaten domestically.

Third, policies must ensure poor people's access to economic assets. Without assets, poor people cannot participate in markets. They need land, finance and skills—and public action to acquire them. Investing in human development to expand social opportunities for all is one of the six policy clusters discussed in chapter 4. Here the focus is on land and finance.

Access to land. More than 500 million people, or roughly 100 million households in developing countries, lack ownership rights or owner-like rights to the land they farm. Most are tenant farmers, agricultural labourers or former collective farm workers. Also included are agricultural households with insecure tenancy rights, such as squatters or customary or traditional rights holders who do not hold formal rights to the land they occupy.

Lack of formal legal rights to land hinders these people's ability to generate income and earn livelihoods, undermining economic growth. Because land is their primary source of income and provides security and social status, formalizing their ownership rights through agrarian reform would serve several purposes:

• Creating transferable land rights with determinable market value makes land an intergenerational asset. A major revenue problem in many countries is that rich people simply do not pay direct taxes This chapter highlights the structural problems holding back economic growth in the top priority and high priority countries for achieving the Millennium Development Goals • Smaller holdings are often more productive than larger ones, hectare for hectare—especially if they are owned and operated by families.¹¹

• Landowners have an incentive and ability to make long-term capital investments that directly increase agricultural productivity.

• Access to land improves household nutrition—and increases non-farm incomes for some farming households.

• Strong legal ownership rights for women, often the food producers in a household, lead to more equitable income and welfare outcomes.

• Secure rights strengthen environmental management and increase community participation.

Even though land reforms have been politically contentious and difficult to implement as many experiences of the 1970s and 1980s show—their strong link with equity has returned them to the political agenda in many countries such as Brazil and China.

For the benefits of ownership to reach the most people, such rights must be provided on a large scale—especially to the female members of farming households. In addition, reasonable compensation should be provided to private landowners whose land is being redistributed. Similarly, reforms should be set in the context of customary land tenure systems so that traditional landowners do not lose their rights. Potential beneficiaries should be included in the design of such reforms. Finally, accompanying regulations should ensure secure tenure and impose the right incentives so that land transfer is real, and not just in name.

Access to credit. Microfinance—both microcredit and microsavings—provides poor people with a way to procure and build up assets. It encourages borrowers to invest in productive activities, and savers to amass assets and earn interest. Borrowers can also use the funds to smooth income flows and plan economic decisions over longer periods. The number of poor people with access to microcredit schemes rose from 7.6 million in 1997 to 26.8 million in 2001—21 million of them women, enabling them to control assets, make economic decisions and assume control of their lives.¹² According to some estimates, 5% of microfinance programme participants could lift their families out of poverty each year.¹³

From a macroeconomic perspective, microfinance is useful for channelling and generating credit for poor people. It remains an important policy instrument for large-scale poverty reduction. But its success depends on the scheme, the participating community and the support from donors, the local government and the administering agency. Scaling up depends on macroeconomic stability, on the health, coverage and efficacy of the financial sector and (in the long run) on the government's ability to reach poor people through the financial sector on a national scale.

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This chapter highlights the structural problems holding back economic growth in the top priority and high priority countries for achieving the Millennium Development Goals. It also offers practical remedies to overcome those problems. These countries must look well beyond market reforms to surmount basic challenges posed by widespread disease, geographic isolation, poor infrastructure, low human capital and limited markets. Major public investments are needed to reach the basic thresholds for health, education and other outcomes. Because these countries are too poor to fund these investments, rich countries must follow through on their commitment to the Millennium Development Goals by helping to finance core public investments that will yield long-term success in economic and human development.

Feature 3.1 Development challenges—through the lens of geography

MAP 1

Map 1 divides the world into five categories. First are countries with high economic innovation, as measured by the number of patents per million people, shown in dark blue. These tend to be the high-income countries. Second are developing country exporters of manufactured goods, shown in lighter blue. In 1995 at least half of these countries' exports were in the manufacturing sector. Third are the fuel-exporting economies, shown in blue-grey. Fourth are transition countries, in grey. Fifth are the commodity (non-fuel) exporting developing countries, in black.



TABLE 1

MAP 2

Country classification by average annual growth in GDP per capita, 1990

Commodity (non-fuel) exporters



Source: Maddison 2001; Gallup, Sachs and Mellinger 1999; World Bank 2003i.

Economic growth rates by country group, 1980–98

Group	Countries that grew in GDP per capita	Average annual growth in GDP per capita (%)
Technology innovators	18 out of 18	1.7
Transition countries	4 out of 12	-1.7
Fuel exporters	2 out of 13	-1.5
Manufacturing exporters	23 out of 24	2.7
Commodity (non-fuel) exporters	29 out of 61	-0.1

Note: GDP per capita is measured in purchasing power parity.

Source: Maddison 2001: World Bank 2002i.

Map 2 highlights patterns of economic growth during 1980-98 using constant per capita GDP in purchasing power parity terms. Note the remarkable relationship with the first map. The countries that are either innovators or manufacturing exporters tended to have economic growth, shown in dark blue, while other groups of countries (oil exporters, transition, commodity exporters) tended to experience economic decline. The growing economies include the regions of North America, Western Europe, Oceania, East Asia and South Asia. The declining countries are concentrated in Sub-Saharan Africa, the former Soviet Union, the Middle East, and parts of Latin America, mainly the Andes and Central America. Sub-Saharan Africa is the worst-performing region, with two thirds of its countries and three quarters of its population experiencing economic decline in 1990-98.

Table 1 breaks down patterns of economic growth by economic structure. Grouping countries in the same five categories as map 1, the table shows that the main problems in economic growth have come in three types of economies: transition countries, oil-exporting economies (which faced a huge loss of purchasing power from their single or dominant export commodity) and commodity (non-fuel) exporting developing countries. Most of the commodity exporting countries are in Sub-Saharan Africa, Latin America and Central Asia. Innovating economies and manufacturing exporters among developing countries by and large experienced economic growth.

OVERCOMING STRUCTURAL BARRIERS TO GROWTH-TO ACHIEVE THE GOALS

TABLE 2 Economic growth rates by population size and location, 1980–98

	Small countries			Large countries		
Geographic location	Countries that grew in GDP per capita	Average annual growth in GDP per capita (%)	Population living in countries that grew, 2001 (millions)	Countries that grew in GDP per capita	Average annual growth in GDP per capit (%)	living in countries that grew,
Inland populations Coastal	24 of 53	-0.2	379 of 799	10 of 10	2.5	3,087 of 3,087
populations	15 of 17	1.9	118 of 130	3 of 4	3.2	341 of 418

Note: GDP per capita is measured in purchasing power parity.

Source: Maddison 2001; Gallup, Sachs and Mellinger 1999; World Bank 2003i.

Table 2 highlights patterns of economic growth by looking through a different lens, that of geography. This figure assesses growth rates for all developing, transition and commodity (non-fuel) exporting countries for which data are available. It categorizes countries by their population size and the concentration of population near maritime trade routes. Small countries are those with fewer than 40 million people in 1990. Coastal countries are those with more than three-quarters of their populations living more than 100 kilometres from the coast. The data highlight how groups of countries that are large or coastal experienced systematic average per capita economic growth from 1980-98. Small and inland countries enjoyed much less economic success over the same period. The findings are particularly relevant for Africa, since 33 of the 53 countries counted as small and inland are on that continent.

Source: McArthur and Sachs 2002; World Bank 2002j, 2003i; IMF 2002b; Maddison 2001.