



Patterns of Development

THREE VIGNETTES¹

MALAYSIA

During the early 1980s, when she was 17 years old, Rachmina Abdullah did something no girl from her village had ever done before. She left her home in a beautiful but poor part of the state of Kedah in Malaysia, where people grew rice in the valleys and tapped rubber trees in the nearby hills, and went to work in an electronics plant in Penang, 75 miles away. Rachmina's family was poor even by the modest standards of her village, and her parents welcomed the opportunity for their daughter to earn her own keep and possibly even send money back to help them feed and clothe the family, deal with recurrent emergencies, and raise their five younger children. With these benefits in mind, they set aside their reservations about their unmarried daughter's unheard-of plan to go off by herself to work in the city.

¹The three narratives that follow are fictional. The vignette on Malaysia is loosely based on Fatimah Daud, *Minah Karan: The Truth about Malaysian Factory Girls* (Kuala Lumpur: Berita Publishing, 1985), and Kamal Salih and Mei Ling Young, "Changing Conditions of Labour in the Semiconductor Industry in Malaysia," *Labour and Society* 14 (1989), 59-80. The narratives on Ethiopia and Ukraine are based on discussions with experts who have lived and worked in these nations. The named individuals are constructs rather than actual people. Data used in all three vignettes are from *World Development Indicators Online*.

Rachmina got a **job** assembling integrated circuits in a factory owned by a Japanese company. Every **day**, she patiently soldered hundreds of tiny wires onto minute silicon chips. It was **tedious**, repetitive work that had to be performed at high speed and with flawless accuracy. From a long day of hard work with few breaks, Rachmina could earn the equivalent of a few dollars. Because their wages were low, Rachmina and her colleagues welcomed **opportunities** to work overtime. Often they put in two or three extra hours a day, for **up** to seven days a week. They **particularly** liked working Sundays and holidays, when double wages were paid. Rachmina shared a small house in a squatter area with **seven** other factory workers. By **living** simply and inexpensively, most of the young women managed to send money back home each month and generally enjoyed the unfamiliar freedom of living apart from their families and villages.

Five years later, Rachmina, who had accumulated some savings, decided it was time to return to her **village**, where she soon married a local man and settled down. She later had two **children**—fewer than her friends who had stayed in the village and married earlier. Her savings helped provide for her family, and she was able to enroll her children in the **local** school.

Rachmina's chance to work in an electronics factory came about because, starting in the 1970s, American and Japanese electronics manufacturers were moving into export processing zones (EPZs) established by the Malaysian government. The national unemployment rate was high, and the government was particularly anxious to find more urban, nonagricultural jobs for the indigenous Malay population. In the mid-1970s, demand for electronic devices was growing by leaps and bounds, and international firms were looking for overseas locations where they could carry out parts of their operations at lower cost. The first beneficiaries of this migration were the newly industrializing nations of East Asia: Hong Kong, Singapore, South Korea, and Taiwan. Malaysia, with its good infrastructure, English-speaking workforce and stable political environment, also attracted foreign investors. Although the wages were lower than those paid in Japan and the United States, they were much higher than most Malays could earn through farm work, and people lined up for the opportunity to secure these prized jobs.

Malaysia, which previously had been known mainly for the export of rubber, tin, and palm oil, became one of the world's largest exporters of electronic components and other labor-intensive manufactured goods. Partly because of these exports, Malaysia emerged as one of the fastest growing economies in the world and a leading development success story. The income of the average Malay more than *quadrupled* in real terms between 1970 and 2010, infant mortality fell from 41 to 6 infants per thousand, and life expectancy rose from 61 to 75 years. Adult literacy jumped from 58 to 92 percent and the ratio of girls to boys enrolled in school increased from 83 to 103 percent. (In other words, if Rachmina had grandchildren, today her granddaughters would be slightly *more likely* to attend school than would her grandsons.)

The Malaysian economy changed as well. Agriculture accounted for about one third of national output in 1970; today it accounts for less than 10 percent. Households in Kedah still grow rice, and young women still work in electronics assembly

in Penang as they did in the 1970s. (If you own a Dell laptop, it very well may have been assembled in Penang.) But Penang must now look to the future. Low wage competition from Vietnam and elsewhere in Southeast Asia is attracting the electronic assembly plants that once came to Malaysia. Penang is hoping to develop a more knowledge-based economy, which might include biotechnology, business-process outsourcing, and medical tourism.² Rachmina's grandchildren in all likelihood will live in a Malaysia far different from the one she knew.

ETHIOPIA

On another continent and at about the same time that Rachmina was on her way to begin working in Penang, Getachew was born in Ethiopia. Getachew's family and many of his relatives lived in a rural area outside of Dese, a drought-affected area in Amhara region and a day's bus ride from the capital city of Addis Ababa. The family lived in a thatched hut and had few possessions. They owned cooking utensils, some blankets and clothing, a radio, and a bicycle. Getachew's sisters spent two hours a day fetching water from a small stream outside their village. The village did not have a paved road or electricity. In addition to growing teff, a cereal crop similar to millet, the family grew vegetables and relied on its own production for most of its consumption needs. The family was especially proud of their livestock. Getachew's father raised and traded oxen, which earned the family most of their meager cash income.

Getachew was the fifth of eight children, one of whom died at birth and another before her third birthday. Getachew received five years of schooling, but the years were not in succession. In some years, he needed to tend the family's crops and livestock with his father and brothers. In other years, the family did not have enough money to pay for uniforms and other school fees and could afford to send only one or two of their children to school. Priority was given to Getachew's older brothers. By the time he was 16, Getachew was able to read and write, although not well.

Getachew and his family have known hard times. His mother died shortly after the birth of her last child. This was due, in part, to her weakened state as a result of the drought and famine in 1984, compounded by multiple births and lack of emergency postpartum care. Despite worldwide attention to Ethiopia's plight that year, relief came too late to help them. The area has been affected by drought and shortages of food since then, but none as severe. Political transition in 1991 brought a lot of uncertainty, even to the countryside. The village school remained closed that year, as the teacher returned to live in the capital. Prices for most commodities went up at the same time that Getachew's father earned little for his oxen. In 1998, war broke out between Ethiopia and neighboring Eritrea. Getachew was staying with his brother in Addis at the time and escaped the draft, but several of his friends were conscripted to serve. One lost a

²Homi Kharas, Albert Zeufack, and Hamdan Majeed, *Cities, People & the Economy: A Study on Positioning Penang*, Khazanah Nasional Berhad and the World Bank (Kuala Lumpur, 2010).

leg during the war and returned home but was no longer much help tending livestock. Another contracted HIV/AIDS and, without treatment, died soon after.

Getachew's second oldest brother is a truck driver and occasionally provides the family with goods and cash. Getachew went with his brother to Addis Ababa and lived there for a time, finding only occasional casual day labor. Life was hard in the city, in some ways harder than in the countryside. Back home everyone lived similarly. In Addis, many people had money to spend while Getachew did not. When his father fell ill from tuberculosis, Getachew went back to help out on the farm. He would like to get married but land has become increasingly scarce in his village, and it is unclear when he will be able to support a family of his own.

Getachew's life has been much like his father's and parallels that of most Ethiopians and many Africans. Per capita incomes in 2004 were at about the same levels as in 1981. In the intervening years, incomes at times increased and at other times declined, but overall, economic stagnation characterized the nation. Since 2004, however, economic growth has been faster and more consistent, averaging 6.6 percent per year. This is much faster than at any time over the past three decades. Despite the global recession of 2008–09, Ethiopia's economy continues to grow rapidly, although it is hard to know if this will be sustained.

Looking at other indicators of living standards, infant mortality rates fell from an estimated 136 per thousand in 1970 to 67 per thousand in 2009, reflecting the potential for health outcomes to improve even when income does not. Life expectancy, at 56 years, is 13 years more than in 1970 but still well below the levels in Malaysia and other more affluent economies. Adult literacy is less than one out of three, but this will improve in the future. Four out of every five of Ethiopia's children of school age are now enrolled in primary school—double the level of a decade ago. The economy is changing too, albeit slowly. In 1970, 61 percent of national output was derived from agriculture; today this figure is 51 percent. Growing crops and tending livestock remain the main economic activities for Getachew and three quarters of all Ethiopians.

With more than 80 million people, Ethiopia is one of the most populous poor nations in the world. But it is also one of Africa's emerging economies. Exports of primary products (including coffee), remittances from Ethiopians working abroad, and foreign direct investment are all fueling the nation's recent growth. Underlying these trends are better economic policies and management; the spread of new technologies, including cell phones; and increasing economic relations with China, India, and the Middle East.

UKRAINE

Unlike Getachew or Rachmina, Viktor and Yulia are relatively well educated. Both were born in L'viv in western Ukraine, about 300 miles from the capital, Kyiv. They graduated from secondary school in 1980 and went on to study for several more years

at the local polytechnic institute, which is where they met. Viktor studied engineering, and Yulia architectural drawing. After finishing their studies, they married, and Viktor began work at a local glass factory. Yulia was hired by a municipal agency. As was common during the Soviet era, the couple moved into the one-bedroom apartment where Yulia's parents lived. Viktor and Yulia owned a refrigerator and other kitchen appliances, a television, furniture, some musical instruments, many books, and a telephone. They went on vacations, often going to a state-subsidized "sanatorium" in the Carpathian Mountains in Ukraine's southwest. Their daughter, Tetiana, was born in 1986, and Yulia was able to take a paid maternity leave.

Viktor's and Yulia's lifestyle in the 1980s was certainly modest by American or western European standards. They enjoyed few luxuries but most of their everyday needs were met. Often this required standing in long lines at government stores for staples such as bread, cooking oil, milk, and sugar. They also had their own garden plot where they grew flowers, fruit, and vegetables. Occasionally they purchased Polish goods in the gray market (technically illegal but not enforced). Healthcare and daycare were publicly provided.

Like many other ethnic Ukrainians in L'viv, Viktor, Yulia, and Yulia's parents longed for national independence. They spoke and maintained their native language even though the official language of the Soviet Union was Russian. Beyond their nationalist leanings, they thought their lives would be better in a less-centralized economy but were unaware of the severe consequences the breakup of the Soviet Union would entail.

Ukraine became independent in December 1991, with 90 percent of voters in support of a referendum on independence. Street celebrations and emotional speeches about freedom marked the event. But independence also had negative consequences. Trade with Russia collapsed and, with it, so did orders at the glass factory where Viktor was employed. Viktor was paid less and less often. A common refrain heard throughout the former Soviet Union was "they pretend to pay us and we pretend to work." Ukraine relied on energy supplies from Russia, but without foreign exchange to pay for them, Russian fuel exports dwindled, and many Ukrainians had to endure cold winters without much heat in their homes or offices. Mismanagement of the domestic economy led to hyperinflation in 1993-94, with prices rising almost 5,000 percent. The hyperinflation destroyed the purchasing power of pensioners, like Yulia's aging parents, and others living on fixed incomes. The healthcare system fell apart. Medicine, at times, had to be obtained on the black market, and one could never be sure of its efficacy. Life became harsher, with more anxiety, stress, and uncertainty about the future. Life expectancy for Ukrainian men was 66 years in 1989 but fell to 62 years by 1995. In 2009, it was still lower than two decades earlier, at 64 years.

Ukrainians had hoped that after independence foreign investment would flow into their country. It did not. Foreigners looked at Ukraine's situation and found existing technology backward, products of poor quality, and corruption rife. Instead of foreign purchase of factories, company officials often stripped factories of whatever assets they

had and kept the proceeds themselves. Per capita income in 1998 was only 40 percent of its pretransition peak in 1989. All of this was happening in a society in which adult literacy was universal and where the nation's boys *and* girls were all well educated.

Viktor was one of many Ukrainian men who had a difficult time with the transition. He could not adjust to changing circumstances and never found a new job. He spent a lot of time at home, doing some carpentry and other odd jobs now and then. His health was poor as a result of smoking too much and, Yulia believes, the environmental hazards of the glass factory. Many of Viktor's friends from the factory have similar health problems: a few have died prematurely. Yulia is holding the family together. She has reinvented herself. She still is employed at the municipal agency, although her wages are not always paid. She spends much of her time at work drawing plans for some of the newly rich Ukrainians who are building summer villas and renovating apartments. She prefers not to discuss where the money to pay for these villas, and for her services, is coming from.

Ukraine's economy rebounded during the 2000s, and Viktor and Yulia were starting to feel more optimistic about the prospects for their daughter. By 2008 income per capita had risen to three quarters of its level in 1989. But the global recession hit Ukraine hard, in part because of a sharp decrease in demand for steel, one of the nation's major exports. A weak domestic banking sector also proved vulnerable to the world financial crisis. The economy shrank by 15 percent in 2009. (By way of comparison, during the Great Recession the U.S. economy contracted by only 2.5 percent.) Although the economy improved again in 2010, the nation is plagued by political turmoil and poor governance. Problems of corruption, cronyism, and unresponsive public institutions remain unresolved.

DEVELOPMENT AND GLOBALIZATION

These three development vignettes, about Malaysia, Ethiopia, and Ukraine, are meant to capture the range of experiences of individual nations over the past three to four decades. Some nations, including Malaysia, have experienced historically unprecedented rates of economic growth, which have dramatically changed the lives of their populations. In other parts of the world, including Ethiopia and much of sub-Saharan Africa, economic growth, at least until fairly recently, has been minimal, and standards of living have changed far less from one generation to the next. A third group of nations experienced a fundamental transition from one economic system to another. In many nations, including Ukraine, this resulted in an abrupt and steep decline in living standards. Recovery occurred in some but not all areas during the 2000s; the global financial crisis in 2008–09 hit some nations harder than others. Understanding the causes and consequences of these different patterns of economic development is the central goal of this textbook.

Economic growth, stagnation, and transition have had a profound impact on the lives of Rachmina, Getachew, and Viktor and Yulia, respectively, and on the more

than 5.6 billion people of the developing countries these individuals are meant to personify. As different as the outcomes have been across nations, all countries have been affected by dramatic changes both within their borders and outside of them.

- Political systems have undergone profound changes, especially since the end of the cold war. Many low-income countries have adopted more democratic political systems since the early 1990s. The relationship between these political changes and the process of economic development and poverty reduction remains a matter of considerable debate.
- Substantial demographic shifts have led to a fall in population growth rates in many countries, with a decline in the number of dependent children and a corresponding growth in the share of workers in the population. Looking forward, many low-income countries will soon see large segments of the population reaching retirement age, with important implications for savings, tax revenues, pension systems, and social programs.
- The spread of endemic disease, including the HIV/AIDS pandemic, threatens development progress in many countries. In more than half a dozen African countries, more than a quarter of the adult population is HIV-positive. HIV/AIDS, malaria, tuberculosis, and other diseases bring a heavy human toll and substantial economic costs.
- Global trade has grown rapidly in line with sharply falling transportation and communication costs, giving rise to far more sophisticated global production networks. Instead of products being made start to finish in one location, firms in one country specialize in one part of the production process, while firms in another country play a different role. There has been a dramatic shift away from producing goods for the local market under government protection toward greater integration with global markets.³
- Capital moves much more quickly across borders than it did several decades ago. More sophisticated financial instruments and a greater emphasis on private capital have opened opportunities for low-income countries to access foreign capital for local investment. In some countries rapid financial liberalization resulted in deep financial crises when local financial institutions were weak and foreign capital was quickly withdrawn. On the other hand, the financial crisis of 2008–09 that originated in the United States and other advanced economies had far less of an impact on many developing economies than was expected.

³Malaysia has been most obviously helped by this process, and, at least in the short run, Ukraine has been hurt. Even rural Ethiopians who engage in subsistence agriculture are not insulated from global economic events. The Asian financial crisis of the late 1990s provides an example. The crisis resulted in a sharp decline in global demand for shoes, handbags, and other goods made from leather. This in turn lowered the demand and price for animal hides, a traditional Ethiopian export, and reduced the cash income of rural Ethiopians who might have had no idea why the prices they received for their animal skins had fallen.

- Information and ideas spread much faster around the globe than in earlier times. Cell phones, the Internet, and other communications technology have created new opportunities for low-income countries. Farmers can get pricing information that previously was unavailable, and family members can send money without the need of traditional banks. The new technology has created jobs that provide services via satellite and through the Internet, such as accounting, data entry, and telephone help lines.

Many forces are at work behind these changes. One of the most important is the process of **globalization**. *Globalization* is a term used by different people to mean many different things. Columbia University economist Jagdish Bhagwati defines *economic globalization* as the integration of national economies into the international economy through trade in goods and services, direct foreign investment, short-term capital flows, international movements of people, and flows of technology. Globalization has important noneconomic aspects as well, including integration of cultures, communications, and politics. It is not a new phenomenon: The early voyages of Ferdinand Magellan, Christopher Columbus, Zheng He, Marco Polo, and others opened an early epoch of globalization, and the late nineteenth and early twentieth centuries saw increased global integration until the process abruptly ended with the onset of World War I. But the current era has included more parts of the world and affected far more people than earlier episodes.

These broad global trends and the individual stories of Rachmina, Getachew, Viktor and Yulia raise many issues central to the process of economic development addressed in this book. How do governments promote investment, industrialization, and exports? How do countries educate their citizens and protect their health, enabling them to become productive workers? Who benefits from foreign investment and integration with global trading networks, and who loses? How does the shift from agriculture to manufacturing affect the lives of the majority of people in developing countries who still are rural and poor? How will climate change affect the lives of those who already face extreme poverty? This book explores the economics of these and other issues in an attempt to understand why some countries develop rapidly, whereas others seem not to develop at all. Remember that within each nation are people like Rachmina, Getachew, Viktor and Yulia, whose lives are deeply affected by the progress their nations make along the path toward economic development.

RICH AND POOR COUNTRIES

The countries with which this book is concerned have been labeled with many different terms. A term in vogue during the 1980s, especially in international forums, was the **third world**. Perhaps the best way to define it is by elimination. Take away the

industrialized economies of western Europe, North America, and the Pacific (the first world, although it was rarely called that) and the industrialized, formerly centrally planned economies of eastern Europe (the second world), and the remaining countries constitute the third world. This terminology is used much less frequently today. The geographic configuration of the third world has led to a parallel distinction of **North** (first and second worlds) versus **South**, which still has some currency.

The more popular classifications used today implicitly put all countries on a continuum based on their degree of development. Therefore, we speak of the distinctions between developed and underdeveloped countries, more and less developed ones, or—to recognize continuing change—**developed countries** and **developing countries**. The degree of optimism implicit in the words *developing countries* and the handy acronym **LDCs** (less-developed countries), make these widely used terms, although they suffer from the problem that *developed* implies the process is fully complete for wealthier countries. The United Nations employs a classification scheme that refers to the poorest nations as the **least-developed countries**. Some Asian, eastern European, and Latin American economies, whose industrial output is growing rapidly, are sometimes referred to as **emerging economies**. Richer countries are frequently called **industrialized countries**, in recognition of the close association between development and industrialization. The highest-income countries are sometimes called postindustrial countries or service-based economies because services (finance, research and development, medical services, etc.), not manufacturing, account for the largest and most rapidly growing share of their economies.

The rich-poor dichotomy, based simply on income levels, has been refined by the World Bank⁴ to yield a four-part classification:

- **Low-income economies**, with average incomes less than \$1,005 per capita in 2010, converted into dollars at the current exchange rate.
- **Lower-middle-income economies**, with incomes between \$1,006 and \$3,975.
- **Upper-middle-income economies**, with incomes between \$3,976 and \$12,275.
- **High-income economies**, with incomes over \$12,275.

The World Bank's classification system dates back to the 1970s. The Bank wanted poorer countries to receive better lending terms. To do so required some way to distinguish economic capacity for repaying loans. Gross national product

⁴The World Bank, formally the International Bank for Reconstruction and Development (IBRD), borrows funds on private capital markets in developed countries and lends to developing countries; through its affiliate the International Development Association (IDA), it receives contributions from the governments of developed countries and lends to low-income countries at very low interest rates with long repayment periods. The Bank, as it often is called, is perhaps the world's most important and influential development agency. Its role is explored in more detail in the discussion of foreign aid in Chapter 14.

(GNP) per capita, also referred to as GNI (gross national income) per capita, was adopted as such a measure. The actual cutoffs used to distinguish between low-, middle-, and high-income economies were based on natural gaps among countries. The threshold income levels are updated annually to account for international price inflation.⁵

Table 1-1 divides the world according to the Bank's classification scheme. It may surprise you that the largest number of countries, 70, falls into the high-income category. This is because in addition to the well-known rich nations such as France, Japan, and the United States, there are a large number of small rich nations, including Aruba, Brunei, Isle of Man, Liechtenstein, and Qatar. Despite the number, the high-income economies represent only 16 percent of the world's population. The middle-income economies represent 72 percent. China and India alone account for almost half of the population of the middle-income economies. The 35 low-income economies, the poorest nations in the world, represent 12 percent of humanity. These economies can be found mostly in sub-Saharan Africa. Haiti is the only nation in the Western Hemisphere that is still a low-income country. Other low-income nations are located throughout Asia, with Bangladesh being the most populous of these. As a group, the low-income nations in 2010 averaged just over \$1,200 GNI per capita, measured in terms of **purchasing power parity (PPP)**. PPP is a way of accounting for the difference in prices between nations and gives a more accurate comparison of incomes among countries. (PPP is discussed at greater length in Chapter 2.) Average GNI per capita in low-income nations in 2010 was a mere 3.4 percent of the average GNI per capita of high-income nations, \$37,183. We will have more to say about global income inequality in Chapter 6.

Table 1-1 provides a snapshot of the world in 2010. It tells us that one out of every two people in the world live in low- or lower-middle-income countries where the average standard of living is well below that in the upper-middle-income and high-income economies. But it does not tell us much about how things have changed over time. In 1983, when this textbook was first published, 16 percent of the world's population lived in high-income countries, the same percentage as today. But 50 percent of the world's population in 1983 lived in low-income countries, compared to only 12 percent today. This is a dramatic change, the result of rapid economic growth in China, India, and many other previously very poor nations.⁶

⁵The inflation rate used today is an average of inflation in the Euro Zone, Japan, the United Kingdom, and the United States.

⁶According to World Bank estimates, India graduated from low-income to lower-middle-income status in 2009. China became a lower-middle-income economy in the late 1990s and graduated into the upper-middle-income group in 2010. Because of systematic undervaluation of its currency, China actually graduated from one income category to the next earlier than reported by the World Bank. When China officially became an upper-middle-income economy in 2010, the average GNI per capita of both the lower and the upper-middle-income groups fell. Do you see why?

TABLE 1-1 Classification of World Economies, 2010

COUNTRY CLASSIFICATION	GNI PER CAPITA* (US\$)	COUNTRIES† (NO.)	POPULATION IN MILLIONS (% OF WORLD TOTAL)	AVERAGE GNI PER CAPITA‡ (US\$, PPP)	REGIONAL EXAMPLES§
Low-income	≤ \$1,005	35	817 (12%)	\$1,247	Ethiopia, Bangladesh, Cambodia, Haiti, Tajikistan
Lower-middle-income	\$1,006–3,975	57	2,466 (36%)	\$3,701	Senegal, Sri Lanka, Philippines, Ecuador, Jordan, Ukraine
Upper-middle-income	\$3,976–12,275	54	2,449 (36%)	\$9,904	Gabon, Malaysia, Brazil, Iran, Romania
High-income	>\$12,275	70	1,123 (16%)	\$37,183	Australia, France, Japan, Norway, Saudi Arabia, Taiwan, United States
World**	\$9,097	216	6,855 (100%)	\$11,058	

*Gross national income (GNI) per capita expressed in terms of current market exchange rates.

†Countries with populations of 30,000 or more people are included.

‡Average GNI per capita by income group in terms of current purchasing power parity (PPP).

§For the low- and middle-income groups, the examples are listed by World Bank geographical regions in the following order: Sub-Saharan Africa, South Asia, East Asia and Pacific, Latin America and the Caribbean, Middle East and North Africa, and Europe and Central Asia.

**World GNI per capita values are based on the population weighted average of all 216 countries.

Source: World Bank, "World Development Indicators," <http://databank.worldbank.org>.

GROWTH AND DEVELOPMENT

While the labels used to distinguish one set of countries from another can vary, one must be more careful with the terms used to describe the development process itself. The terms **economic growth** and **economic development** are sometimes used interchangeably, but they are fundamentally different. *Economic growth* refers to a rise in national or per capita income. If the production of goods and services in a country rises, by whatever means, and along with it average income increases, the country has achieved economic growth. Economic growth explains why the percentage of the world's population living in low-income countries, defined in terms of GNI per capita, has fallen so rapidly over the past three decades. *Economic development*

implies more—particularly, improvements in health, education, and other aspects of human welfare. Countries that increase their income but do not also raise life expectancy, increase schooling, and expand individual opportunities are missing out on some important aspects of development. The extent to which economic growth supports these broader criteria for development is related to **income distribution** within countries. The average income figures cited earlier tell us nothing about how widely (or narrowly) the benefits of growth are shared within countries. If all of the increased income is concentrated in the hands of a few or spent on monuments or a military apparatus, there has been very little development in the sense that we mean.

Development is also usually accompanied by significant shifts in the structure of the economy, as more and more people typically shift away from rural agricultural production to urban-based and higher-paying employment, usually in manufacturing or services. Economic growth without structural change is often an indicator of the new income being concentrated in the hands of a few people. Situations of growth without development are the exceptions rather than the rule, but they do happen. Take the case of Equatorial Guinea, a small nation of fewer than 700,000 people on the west coast of Africa. The discovery and development of vast oil deposits off the nation's coast raised its GNI per capita income from an estimated US\$330 in 1990 to US\$12,420 in 2009. During the 2000s, Equatorial Guinea was the fastest-growing economy in the world, averaging growth rates of 25 percent per year, far greater than China, India, or any other successful economy. With growth rates of this magnitude, Equatorial Guinea moved from being a low- to a high-income economy in about a decade.

Does this also mean that Equatorial Guinea became a developed economy? By 2009, Equatorial Guinea had a per capita income comparable to Hungary's, but this is where the similarity between the two nations ends. Life expectancy in Equatorial Guinea stands at 50 years. In Hungary it is 74 years. About 90 percent of school-aged Hungarian children are enrolled in primary school; for Equatorial Guinea it is closer to 50 percent. Despite Equatorial Guinea's sudden high level of per capita income there has been little transformation in the low levels of education and poor health care of most Equatorial Guineans. Nor has there been much change in their economic activity. Rapid economic growth has not brought economic development to most of the population of Equatorial Guinea. But again, this case is the exception rather than the rule. In most cases, increases in per capita incomes and economic development have moved together.

Modern economic growth, the term used by Nobel laureate Simon Kuznets, refers to the current economic epoch as contrasted with, say, the epoch of merchant capitalism or the epoch of feudalism. The epoch of modern economic growth still is evolving, so all its features are not yet clear, but the key element has been the application of science to problems of economic production, which in turn has led to industrialization, urbanization, and even explosive growth in population. Finally, it should always be kept in mind that, although economic development and modern economic growth involve much more than a rise in per capita income or product, no sustained development can occur without economic growth.

DIVERSITY IN DEVELOPMENT ACHIEVEMENTS

A large number of less-developed countries have experienced growth in income over the past four decades and many have enjoyed substantial growth. The most rapidly growing economies have been in Asia and include China, India, Indonesia, Korea, Malaysia, and Thailand. But several non-Asian countries also are among the fast growers, such as Botswana, Chile, Estonia, and Mauritius. Since 1970, Botswana, a landlocked country in southern Africa, has been one of the fastest-growing economies in the world and one that has used its increased income to improve the lives of its citizens. Botswana's experience challenges the stereotype that all African countries have been stuck with little growth and development. At the same time, several Asian countries have grown slowly or not at all, including Myanmar (Burma), North Korea, and Papua New Guinea.

There are many examples of countries that have had an income growth exceeding 2 percent a year over the past four decades. At 2 percent annual growth, average income doubles in 35 years; at 4 percent, it doubles in 18 years. In most of these countries, manufacturing grew more rapidly than the gross domestic product and thus moved these economies through the inevitable structural change that reduces the share of income produced and labor employed in agriculture. Many other countries experienced slower (albeit positive) growth and development, with incomes growing 1 or 2 percent per year. In still others, incomes stagnated or declined. Most of the countries in this latter group are in Africa, although income also fell elsewhere, including in many of the transition economies of eastern Europe and Central Asia.

Perhaps the most remarkable changes in low-income countries in recent decades have been the virtually universal improvement in health conditions and the availability of schooling. From 1970 to 2009, the infant mortality rate in today's low-income nations fell dramatically from 147 to 76 per thousand births. This means that within this group of nations an additional 71 children out of every 1,000 lived to see their first birthday. For today's middle-income nations, which in 1970 included many countries that were still low-income, the results are similarly dramatic. Primary school enrollment became nearly universal in middle-income economies and rose substantially in most of the low-income countries. With few exceptions, more than three-quarters of eligible children attend primary school in poor countries. Despite this good news, more than 1 billion people in the developing world continue to live in extreme poverty.

The study of economic development is not mainly a review of what has and has not been accomplished in the past. It is a field concerned most of all with the future, particularly the future of the least-advantaged people in the world. To comprehend the future, one must first try to understand how we got to the point where we are now. But the future will not be just a replay or a projection of trends of the past, as new forces that will shape that future also are at work. Some of these forces can be seen clearly today, whereas others are only dimly perceived, if they are seen at all.

Any list of changes that will make the future of economic development different from the past should probably start with the information revolution. Greatly enhanced communication around the world as represented by the Internet has sped up the flow of ideas across oceans and borders to an unprecedented degree. Lower transport costs, together with better information, contribute to global production networks and the expansion of global trade and investment. The rapid flow of information is also having an impact on politics by making it harder for authoritarian regimes to control what their people are allowed to know. Partly for this reason, democratic regimes are becoming more the norm than the exception in developing countries, and there is reason to expect this trend to continue.

Not all the foreseeable trends of the future are positive. Despite the benefits of advanced technology and the information revolution, some groups in society, notably the better educated, may capture most of the gains while other large groups are left behind. The experience with HIV/AIDS must keep us vigilant for whatever the next new infectious disease might be. Natural disaster—droughts, earthquakes, hurricanes, and tsunamis—hit rich and poor nations alike, but the effects are usually far more severe the poorer the country. Environmental degradation is much more serious today than it was a century ago, when Europe and North America were in the early stages of economic growth. Global warming, as a result, is a problem likely to play an important role in our future. The one positive change in the environmental sphere is that people around the world are becoming aware of the danger at a much faster pace than in the past, though international cooperation in limiting climate change remains a challenge.

We probably are not even aware of many of the forces that will shape the future economic development of nations. No one at the end of the nineteenth century had heard of nuclear energy, DNA, or integrated circuits. No one in the 1970s had heard of cell phones, laptop computers, or antiretroviral (ARV) drugs used to treat HIV/AIDS. Given the pace of change in the current world of the new millennium, similar and possibly greater discoveries will profoundly influence how economies develop. That said, we cannot rely on future discoveries to solve the problems of economic development and poverty among nations. We must try to understand how the nations of the world got to where they are today so that we can do a better job of raising living standards for all in the future.

APPROACHES TO DEVELOPMENT

This book is not for readers looking for a simple explanation of why some countries are still poor or how poverty can be overcome. Library shelves are full of studies explaining how development will occur if only a country will increase the amount it saves and invests or intensify its efforts to export, among other prescriptions.

For two decades in the mid-twentieth century, industrialization through import substitution—the replacement of imports with home-produced goods—was considered by many to be the shortest path to development. In the 1970s, labor-intensive techniques, income redistribution, and provision of basic human needs to the poor gained popularity as keys to development. More recently, economists have counseled governments to avoid high protective barriers and to depend substantially on markets to set prices and allocate resources. A different theme for some analysts is that development will be possible only with a massive shift of resources, in the form of foreign aid and investment, from the richest countries to the poorest. Others call for debt forgiveness for poor nations that have found it difficult to repay earlier loans.

No single factor is responsible for poverty, and no single policy or strategy can set in motion the complex process of economic development. Each of the various explanations and solutions to the development problem makes sense if placed in the proper context and makes no sense at all outside that set of circumstances. Import substitution has carried some countries toward economic development, but export promotion has helped others when import substitution bogged down. Prices badly distorted from their free-market values can stifle initiative and hence growth, but removing those distortions leads to development only when other conditions are met as well. Finally, where leaders backed by interests hostile to development rule countries, those leaders and their constituents must be removed from power before growth can occur. Fortunately, the majority of developing countries have governments that want to promote development.

This book is not neutral toward all issues of development. Where controversy exists we shall point it out. Indeed, the authors of this book differ among themselves over some questions of development policy. But we share a common point of view on certain basic points.

This text extensively uses the theoretical tools of mainstream economics in the belief that these tools contribute substantially to our understanding of development problems and their solution. The text does not rely solely or even primarily on theory, however. For five decades and more, development economists and economic historians have been building up an empirical record against which these theories can be tested, and this book draws heavily on many of these empirical studies. We try to give real-country examples for the major points made in this book. In part, these examples come from the individual country and cross-country comparative studies of others, but they also are drawn extensively from our own personal experiences working on development issues around the world. The several authors who contributed to this textbook, both the current and past editions, have been fortunate enough to study and work over long periods of time in Bolivia, Chile, China, the Gambia, Ghana, Indonesia, Kenya, Korea, Malaysia, Nepal, Peru, Samoa, Sri Lanka, Tanzania, Vietnam, and Zambia. At one time or another, at least one nation from this group has exemplified virtually all the approaches to development now extant.

THE STUDY OF DEVELOPMENT ECONOMICS

If you are like most students taking a course in development economics this will not be your first course in economics. Most likely, you have taken courses in principles of microeconomics and macroeconomics. Some of you may have also studied intermediate economic theory, statistics, econometrics, and other economic subfields. Your study of these subjects will prove extremely useful in your examination of development economics. In your introductory microeconomics class you learned the importance of incentives and how markets tend to clear when quantity demanded equals quantity supplied. In macroeconomics you learned how expanding the money supply can lead to inflation. These insights are as applicable to poor nations as they are to rich ones. But there also are important differences between your earlier study of economics and the study of development. Context matters.

If you took your micro principles courses in a college or university in the United States or other high-income country, the examples you were given and the problems you studied reflected those of a rich nation. Rent control is a common example included in principles textbooks to explain price ceilings and how they can have unintended effects, including housing shortages and black market prices. In a developing country, price ceilings will have the same impact but are unlikely to be used to control apartment prices. A better example might be how governments have attempted to use price ceilings to lower urban food prices for urban consumers (usually at the expense of farmers, who are often much poorer than urban consumers). Rich nations are more prone to employ price floors to raise food prices and support farm incomes.

When discussing taxes, authors of principles textbooks in the United States will focus on how marginal tax rates can affect the supply of labor—the higher the tax, the less likely workers will want to work. In poor nations, the presence of such taxes is most likely to encourage growth in the informal sector in which people are employed, although those workers evade paying taxes on their earnings. This happens in rich nations too but is a much less common response. In low-income nations, the lack of secure property rights to land helps explain squatter settlements and urban slums. This is not much of a problem in rich nations and is less likely to be discussed.

In learning macroeconomics, you may have studied how an expansion in the money supply may cause a nation's exchange rate to depreciate. You were less likely to have learned how a country can fix its exchange rate intentionally to undervalue its currency. Such practices are far more common in developing nations (including China) than in developed ones. You might have read about the importance of the independence of the Federal Reserve System in the United States, which helps insulate decisions about monetary policy from domestic politics. But in developing nations, the lack of independence of central banks is far more likely.

The study of macroeconomics in high-income economies tends to focus on economic stabilization—that is, on how monetary and fiscal policy can be used to keep

unemployment down and inflation low. Economic growth is less of a focus, in part because of the success high-income economies have had in growing their economies. To the extent you studied economic growth, much of the focus was on technological change as a determinant of growth. In the development setting, economic growth and structural change are central issues in the field. Growth rates depend not only on the technological frontier but also on the ability to mobilize savings and engage in productive investment. These issues will capture much of our attention in the chapters that follow.

A final difference between the study of economics in a developed versus a developing nation context is the role of **institutions**. Economic theory tends to take institutions (the rules of the game that govern the functioning of markets, banking systems, enforcement of property rights, and so on) as a given. But development is concerned with how one creates and strengthens institutions that facilitate development in the first place. How, for example, does a country acquire a government interested in and capable of promoting economic growth? Can efficiently functioning markets be created in countries that currently lack them, or should the state take over the functions normally left to the market elsewhere? Is a fully developed financial system a precondition for growth, or can a country do without at least some parts of such a system? Is land reform necessary for development and, if so, what kind of land reform? What legal systems are needed to support market-based growth? These institutional issues and many others like them are at the heart of the development process and will reappear in different guises throughout this book.

The economics you have studied before is an important foundation for the study of development economics. Be prepared to build on it.

ORGANIZATION

This book is divided into four parts. Part 1 examines the main factors, both those suggested by economic theory and those supported by empirical investigations, that contribute to differing rates of economic growth. This discussion involves the deliberate choices by governments, including the debate over how economic development should be guided or managed.

Part 2 goes beyond issues of economic growth and focuses directly on inequality and poverty. Because economic development first and foremost is a process involving people, who are both the prime movers of development and its beneficiaries, Part 2 deals with how human resources are transformed in the process of economic development and how that transformation contributes to the development process itself. Individual chapters are devoted to population, education, and health.

The other major physical input in the growth process is capital. Part 3 is concerned with how capital is mobilized and allocated for development purposes. From

where, for example, do savings come and how are they transformed into investment? How does government mobilize the resources to finance development? What kind of financial system is consistent with rapid capital accumulation? Will inflation enhance or hinder the process, and what roles will foreign aid and investment play?

Especially in the early stages of development, countries depend heavily on agriculture and on the export of food, fuel, and raw materials. Part 4 discusses strategies to enhance the productivity of such primary industries as a first, and often a continuing, task in stimulating economic development. Part 4 also explores trade in primary products, in manufactured goods and increasingly in services, too. In a more globalized world economy, trade plays a larger role in low- and middle-income nations than ever before. Part 4 concludes with the all-important question of environmental sustainability and the challenges developing nations confront in the face of climate change.

SUMMARY

- The last 40 years have seen a wide diversity of development experiences around the world. Some countries, including some very large ones like China, India, and Indonesia, have experienced rapid growth and development. Others, particularly many African countries and some in eastern Europe, have experienced stagnation or even a decline in incomes. Understanding the differences in these experiences and the lessons for the future is the core purpose of this book.
- Many different terms are used to differentiate poor from rich countries, but this text mainly uses the terms *developing* and *low- and middle-income economies* to refer to those nations with incomes substantially lower than the *developed* and *high-income* nations.
- Only 12 percent of the world's population today lives in low-income economies, nations with a GNI per capita falling below US\$1,005 (in 2010). Twenty-five years ago, *half* of the world's population lived in low-income nations. Economic growth in China, India, and many other previously poor nations accounts for this historic change. Of course, many very poor people still live in these economies, but their numbers have fallen significantly.
- *Economic growth* refers to an increase in per capita incomes, whereas *economic development* involves, in addition, improvements in health and education and major structural changes, such as industrialization and urbanization. Some countries may have economic growth, usually because of the discovery of great mineral wealth, but not development because they retain many of the structural features of a traditional society.
- No single factor is responsible for poverty, and no single policy or strategy can set in motion the complex process of economic development. We can

learn much from the past experience of other nations, especially those that have achieved rapid growth and experienced economic development in recent decades.

- We must also be aware that new forces, from new diseases to new technologies, will influence the path and opportunities facing today's developing nations. Changes in the global climate, including the planet's physical climate as well as its economic and political climate, will also impact the course nations follow.
 - The economics of development bears a lot in common with the economics you may have studied in other courses. But it is also different. Context matters. A focus on long-term economic growth and structural change in the economy and on the role of institutions commands the attention of development economists.
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