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What Development Economics Is All About

Suppose you were blindfolded and airlifted abroad. After you arrive in a small town and remove the blindfold, your job is to determine the income level of the place based only on sixty seconds of observation. What would you look for? If you have traveled or lived in a developing country, you might have a head start on this assignment: Is it hot and humid? What are people wearing? Eating? How are people getting around? What do the streets and buildings look like? Do the animals look pampered? Do you see trash or trash cans? And the new smells! Most people, when exposed to living standards far below their own, want to help in some way. Economists (yes, even economists!) feel this impulse and wonder: Why are some places rich and others poor? What can be done to reduce poverty and encourage economic growth? In this chapter, we introduce development economics and describe the emergence and evolution of this field.

ESSENTIALS

- ► Evolution of development economics
- ► "Big push" interventions
- Import substitution and export promotion
- ▶ Market failures
- ► Inseparability of efficiency and equity

alawi is one of the poorest countries in the world. The average person living there had an annual income of \$389 in 2018. That is not even a dollar a day. Even when we adjust for a low cost of living, the average Malawian lived off what in the United States would be the equivalent of around \$3 a day.¹

"What is the solution to Malawi's pervasive poverty?" While it is certainly natural to ask it, this question may not be very helpful in practice. In the words of economist Thomas Sowell: "There are no solutions. There are only *trade-offs.*"

Like other least-developed countries (LDCs), Malawi has tried a number of different strategies to stimulate development and raise the welfare of its people.² It made the growth of smallholder production a cornerstone of its development and poverty-alleviation strategy by focusing on improving smallholders' access to agricultural input and output markets. Eighty-one percent of Malawi's population is rural, and smallholders make up about 90% of the poor. Food production is a major source of livelihood for most rural households. Productivity and, in particular, fertilizer use, are low. Only 67% of agricultural households used fertilizer in 2004.³

Before 1998, Malawi relied on market price supports to transfer income to farm households. (Other African

countries continue to pay farmers above-market prices.) In recent years, fertilizer subsidies were the primary method of transferring income to rural Malawi households. Paying for farmers' inputs is expensive and controversial. More than 50% of the Ministry of Agriculture's budget has gone toward paying for input subsidies.⁴

Most recently, the country has taken a new line of attack by introducing a social cash transfer scheme (SCTS) that targets ultra-poor households (those living on less than \$0.10 per day) whose members are unable to work due to disability, age, illness, or a high dependency ratio (too many people to take care of at home). Rather than specifically targeting agricultural production, like the price supports or fertilizer subsidies, cash transfers raise incomes directly, allowing households to increase consumption or to invest in production activities. The government and researchers hope these transfers will stimulate production in other ways while creating positive spillovers that benefit other households in the economy.

Field research to test the effectiveness of SCT programs is ongoing. SCT programs are being implemented throughout the continent, in Ethiopia, Ghana, Kenya, Zambia, Zimbabwe, Lesotho, and other poor countries. The United Nations Children's Fund (UNICEF) and the UN's Food and Agricultural Organization (FAO), in conjunction with several universities and agencies, have launched an ambitious project to document the impacts of these transfer programs on a range of outcomes, from crop production to HIV/AIDS prevention.⁵

Development economists are on the front line of this most recent effort, helping to design and evaluate SCT programs. On a micro level, this is a good example of the sorts of things development economists do. More generally, development economics is about sizing up the trade-offs involved in poverty alleviation and economic development more broadly. Recently, much of this work aims to rigorously assess what works and what doesn't as part of exploring these trade-offs, which is why we dedicate chapter 2 to this topic.

WHAT IS DEVELOPMENT ECONOMICS?

Usually, a development economics class is a potpourri of special topics. It's hard for it not to be, because economic development involves so many different things:

- It's income growth (how can we have development without growth in countries whose per capita incomes now hover around \$1–2 per day?).
- It's welfare economics, including the study of poverty and inequality.
- It's agricultural economics. How to make agriculture more productive is a big question in countries where most of the population—particularly the *poor* population—is rural and agricultural.

- It's economic demography, the study of population growth in a world with more than 7 billion people, and population distribution in a world with more than a quarter of a billion international migrants and many more internal ones. (China alone has hundreds of millions of internal migrants.)
- It's labor economics: education, health, conditions in the workplace.
- It's the study of markets for goods, services, inputs, outputs, credit, and insurance, without which whole economies can grind to a standstill.
- It's public economics, including the provision of public goods from roads and communications to utilities and waste treatment, and it's about managing the macro economy, too.
- It's about natural resources and the environment: energy, water, deforestation, pollution, climate change, sustainability.

What is economic development not about, you might ask?

Lurking behind this question is another—one that lies at the heart of why we wrote this book: Why is there even a field of development economics? After all, most economics departments have courses in each one of the above areas—and more.

Development economics seeks to understand the economic aspects of the development process in low-income countries. This implies that there must be something different about studying economics in low-income countries.

Clearly there is. Economic development entails far-reaching changes in the structure of economies, technologies, societies, and political systems. Development economics is the study of economies that do not fit many of the basic assumptions underpinning economic analysis in high-income countries, including well-functioning markets, perfect information, and low transaction costs. When these assumptions break down, so do the most basic welfare and policy conclusions of economics.

This book, like other development economics texts, touches on many different topics. However, its focus is on the fundamental things that distinguish rich and poor countries and the methods we use to analyze critical development economic issues. After reading and studying it, you will be familiar with the basic tool kit development economists use to do research, begin to understand what makes rich and poor countries different, and have an appreciation for the theory and practice of development economics.

THE EVOLUTION OF DEVELOPMENT ECONOMICS

Economics classes rarely spend much time on history. But the brief history of development economics is instructive. Appreciating how economists have come to understand economic development helps *us* understand the various development approaches people have taken over time and how we got to the

ideas that are popular now. What economists *thought* development meant at the beginnings of our field's history is quite different from the way we see it today.

The origins of modern development economics are not found in low-income countries, but rather in relatively developed countries devastated by war.⁶ In the aftermath of World War II, there was a need for economic theories and policies to support the rebuilding of war-torn Europe and Japan. The United States adopted the Marshall Plan to help rebuild European economies. This was a massive program: \$13 billion over four years was a lot of money back then!

In the wake of the success of the Marshall Plan, economists shifted their attention in the 1950s and 1960s from Europe to the economic problems of Africa, Asia, and Latin America. Lessons learned in Europe did not transfer easily to those settings; it quickly became clear that poor countries faced fundamentally different challenges.

Early development economists focused on income growth, often blurring the lines between growth and development. In poor countries, major structural transformations were needed to achieve growth. By comparing different countries' growth experiences (including the past experiences of the more developed countries), economists tried to uncover the conditions that determine successful development and economic growth.

Taking Off

Seminal work during this early period of development economics includes Walter Rostow's treatise on the stages of economic growth: the traditional society, the preconditions for take-off, the take-off, the drive to maturity, and the age of high mass consumption. Nobel laureate Simon Kuznets (whom we shall revisit later in this chapter) countered this simplistic view that all countries go through a similar linear set of stages in their economic history. He argued instead that key characteristics of today's poor countries are fundamentally different from those of high-income countries before they developed.

The Anatomy of Growth

Economists recognized the need to understand how the growth process works. Growth is important enough to get its own chapter in this book (chapter 7). There, we'll focus on modern growth theory, but growth models have played an important role since the start of development economics.

A simple aggregate growth model developed by Sir Roy F. Harrod and Evsey Domar became part of the basic creed of development economists in the 1950s and 1960s. The Harrod-Domar model's main implication was that investment is the key driver of economic growth. It focused economists' and policy makers'

attention on generating the savings required to support higher growth rates in poor countries. Although simplistic, this was a precursor to models used to analyze economic growth in developing countries today.

Nobel laureate W. Arthur Lewis viewed growth through a higher-resolution lens. His famed work, "Economic Development with Unlimited Supplies of Labor," shifted attention from aggregate growth to structural transformation. Lewis introduced the dual-sector model, demonstrating that the expansion of the modern (industrial or capitalist) sector depends on drawing labor from the traditional (agricultural or subsistence) sector. He focused on poor, labor-rich countries in which a labor surplus in the subsistence sector could be a valuable resource for industrial growth: industry could expand without putting upward pressure on wages. Implicit in the Lewis model is a simple, demand-driven model of migration: as urban industry expands, people move off the farm to fill the new jobs. Whether or not workers really can be moved out of agriculture without losing crop production is an empirical question that some economists still try to answer today.

Lewis was criticized for largely ignoring agriculture. His work was extended and formalized by Gustav Ranis and John Fei, who demonstrated that industrial growth depends on agricultural growth as well as industrial profits. ¹⁰ If agricultural production does not keep up, food prices rise, and this forces urban wages up, squeezing profits and investment in industry. The growth of industry, then, depends on agriculture in a way that is easy to miss. Recognition that different sectors of the economy are linked in critical ways was an important contribution of dual-economy models and is a basis for more sophisticated economy-wide models today. We look at these models in chapter 10 (structural transformation).

The assumption that there is surplus labor in the traditional sector (i.e., that the marginal product of labor there is zero) was questioned by another Nobel laureate, Theodore Schultz. He pointed out evidence of labor shortages during peak harvest periods even in economies like India and China, where a labor surplus existed at other times of the year. Thus, he argued, one cannot assume that countries can move labor out of agriculture without suffering a drop in crop production—unless they adopt new agricultural technologies. Schultz emphasized the importance of technological innovation and revolutionized economists' thinking by putting forth the thesis that farmers in LDCs are "efficient but poor." That is, while they might appear to be inefficient (compared, say, to commercial farmers in rich countries), poor farmers actually optimize given the severe resource constraints they face, including traditional technologies and limited human capital. The efficient-but-poor hypothesis continues to shape the way development economists think about and model poor rural economies, as we see in chapter 9 (agriculture). Nevertheless, recent work questions whether production, land tenancy (e.g., sharecropping), and other institutions in poor countries really are efficient in an economic sense.

The burgeoning early development economics literature produced far too many works to catalogue here, but two others deserve special mention because of the far-reaching impact they had on economic thinking and, more importantly, policies.

Import-Substitution Industrialization

In 1950, Raúl Prebisch and Hans Singer independently observed that the terms of trade, or the ratio of prices, between primary (agricultural, resource extraction) and manufactured products erodes over time. As people's income increases, the share of income they spend on manufactures increases, while the share spent on primary goods falls. This happens globally as well as locally. Prebisch and Singer argued that this drives up the prices of manufactured goods relative to primary goods. Poor countries that continue to specialize in primary-goods production lose out compared to countries that protect and promote their industries. The way Prebisch and Singer saw it, sticking with primary-goods production is like investing in a waning industry—the opposite of what good investors do.

Prebisch and Singer's work was enormously influential in promoting protectionist trade policies, shielding infant industries in poor countries from international competition. Its policy prescriptions ran soundly against the doctrine that countries should follow their comparative advantage in trade. In retrospect, countries that followed this advice did not fare as well as countries like the "Asian tigers" (Hong Kong, Singapore, South Korea, and Taiwan), which followed more outward (trade)-oriented development models, as we shall see in chapter 13 (international trade and globalization).

Linkages

Albert Hirschman, another early pioneer in development economics, put forth the interesting and influential argument that imbalances between demand and supply in LDC economies can be good: they create pressures that stimulate economic growth. Hirschman was instrumental in creating a focus on economic linkages, which pervade economy-wide modeling, a staple of development policy analysis today (chapter 10) as well as of some recent project impact evaluation models (chapter 2). By promoting investments in industries with many linkages to other firms, governments can have a multiplier effect on economic growth; the effects of a policy spread to industries linked to the targeted industry. Backward linkages transmit growth effects from an input-demanding activity (e.g., textiles) to input suppliers (cotton mills or wool producers). Forward linkages stimulate the growth of activities ahead of firms, as when investment in an electricity generator facilitates the growth of electricity-using industries.

Hirschman argued that agriculture generated few linkages with the rest of the economy. This, particularly when combined with the Prebisch-Singer hypothesis, contributed to the sense among policy makers that agriculture is unimportant and countries ought to use their scarce resources to promote industrial, not agricultural, growth. John Mellor countered this argument in his seminal work, *The New Economics of Growth*, which documented the importance of consumption linkages between rural households and urban industries. If most of a country's population is rural, where will the demand for new industrial production be if not in rural households? Rising agricultural incomes, then, provide a critical market for manufactures, thereby stimulating industrial growth.

Development economists had begun to take more of a systems view of poor economies, recognizing the linkages among production sectors and between firms and households that are important in shaping economic growth. They would soon rethink their emphasis on growth, though.

Rethinking Growth: Inequality and Poverty

The United Nations declared the 1960s to be the decade of development. In 1961, it called "on all member states to intensify their efforts to mobilize support for measures required to accelerate progress toward self-sustaining economic growth and social advancement in the developing countries." Each developing country set its own target, but the overall goal was to achieve a minimum annual growth rate of 5% in aggregate national income by the end of the decade. The world came close to realizing the UN's goal. LDCs achieved an average annual growth rate of 4.6% from 1960 to 1967. However, their population also increased. As a result, their per capita gross domestic product (income divided by population) rose only about 2%.

By the time the UN "development decade" ended in 1970, the gap between rich and poor countries had widened: two-thirds of the world's population had less than one-sixth of the world's income. This raised new questions about the meaning of development. Evidently, a tide of rising world income did not lift all—or even most—boats. The UN General Assembly concluded that one of the reasons for the slow progress was the absence of a clear international development strategy.

The problem of rising inequality made development economists rethink their focus on growth. Before then, the key work linking growth and inequality was Simon Kuznets's "inverted U" hypothesis. It stated that economic growth decreases inequality in rich countries but increases it in poor countries. ¹⁶ It tended to create a sense of complacency about inequality: sure, inequality increases for a while as poor countries grow, but eventually countries "outgrow" it and become more equal. At least, that's what Kuznets saw when he used cross-section data to compare rich and poor countries. (Cross-section