2

Socioeconomic Fault Lines

INEQUALITY, POVERTY, AND DEVELOPMENT

WHAT IS GOLD WORTH?

Michelle, a 15-year-old Filipino girl, works at an underwater gold mine. She started when she was 8 years old. She, along with many of her friends, spends much of her day standing waist deep in a mercury-contaminated river panning for gold ore. When they find ore, they mix mercury into it in open wooden pans with their bare hands and then burn it, with nothing to protect them from the toxic furnes. Michelle and her friends report that they suffer from tremors and muscle spasms. They thought that the cold water caused their problems. No one told them that mercury was toxic.

Mercury is a toxin that attacks the nervous system. Mercury exposure can cause brain damage, tremors, partial blindness, deafness, memory loss, and spasms, among many other problems. Household use and many other uses are banned in the United States and other developed countries.

Some children at the mine are submerged for hours a day in the polluted water, digging gold ore out of the mucky river floor. Even though underwater mining is identified as being among the worst forms of child labor,¹

LEARNING OBJECTIVES

After completing this chapter, students should be able to do the following:

- 2.1 Document the trends in inequality of income and wealth among and within the globe, regions, and nations as well as among individuals
- 2.2 Evaluate the consequences of inequality and poverty for people's life chances
- 2.3 Understand how globalization, historical, environmental, cultural, and geographic factors contribute to uneven development and inequality among countries
- 2.4 Distinguish developing countries from developed countries and know the basis on which they are classified
- 2.5 Understand the relationship between labor force participation in economic sectors and human development
- 2.6 Propose actions that international governmental organizations, the private sector, non-governmental organizations, and states can take to improve people's life chances

14 percent of children who live in the mining areas of the Philippines—about 18,000—work in the mines, underwater and underground. Many are 9 or 10 years old, some even younger. In addition to tremors and spasms, they complain of back, shoulder, hand, and other pain from carrying heavy loads of ore and from being submerged in cold water. Some children die from suffocation when their air compressors fail. None of them knew of hidden, long-term consequences they may be suffering.

The Philippines is the 20th largest producer of gold in the world. Small-scale mines are scattered through 30 provinces of the Philippines. Although children under 18 years are not permitted to labor in hazardous conditions, laws are rarely enforced in the small mines that produced 70 to 80 percent of the nation's 18 tons of gold in 2014. Tens of thousands of children work in equally hazardous conditions in the small-scale gold mines in Africa, Asia, and Latin

America. Many toil with rarely a day off, and many never go to school, let alone enjoy the lifestyle of teens in the developed world.

Ruth, who was 9 years old when she started laboring in the mines, is now 15. She says, "There were times I would think about slashing my wrists because I couldn't take the hardship."

Source: As reported by Kippenberg (2015), Human Rights Watch.

Is the gold worth the cost of these children's health, education, and future? What chance at life do Michelle and Ruth have?

The personal is political" was an anthem of the feminist movement of the 1970s. As a slogan, it insisted that the personal problems that women faced—from poverty, to inequality in the workplace, to lack of representation in the power centers of governments and the economy—were a function of systematic discrimination, not personal failing. The slogan applies not just to women. It also applies to the poor and to racial, ethnic, religious, and other minorities all over the world.

Despite the Millennium Development Goals' success in halving the number of people living in extreme poverty from 1990 to 2015 and continuing economic growth, more than 800 million people still lived in extreme poverty in 2015 (United Nations [UN] 2015b) (Figure 2.1). Poverty and inequality are widespread throughout the world and within societies but are not spread randomly. They are built into the global economy and enshrined in both national and global policies. Who benefits most from a country's economy and who receives the least is a function of both the society's position in the world and individuals' positions within the society. Their personal experiences of inequality are political.

This chapter examines the functions and dysfunctions of the global economy—who benefits and who does

not. Poverty and economic inequality plague both global and domestic economies. Both affect an individual's life chances. This chapter explores the links among societal and global development, economic inequalities, and life chances.

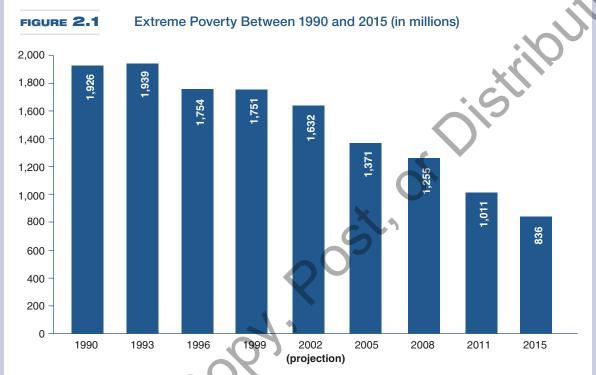
HOW WELL DOES THE GLOBAL ECONOMY FUNCTION?

How bad can life be that families keep their children out of school and put them to work in dangerous conditions? How can the global community, which has so much wealth and plenty, allow this to happen? How and why has the global economy failed so many people?

We can evaluate an institution by how well it fulfills its primary functions. An economy should procure, produce, and distribute adequate means of survival for the people dependent on it. For the global economy, that is all of humankind. The means of survival include food, water, shelter, energy, and freedom from preventable

PEOPLE LIVING ON LESS THAN U.S. \$1.25 A DAY

The number of people living in extreme poverty has declined by more than half since 1990, but close to a billion people still qualify as extremely poor.



Source: From The Millennium Development Goals Report 2015, by the Inter-Agency and Expert Group on MDG Indicators led by the Department of Economic and Social Affairs of the United Nations Secretariat, © 2015 United Nations. Reprinted with the permission of the United Nations.

illness. The economy should not sully the necessities of life such as air, water, land, and other living things because health and long-term sustainability depend on them. The means through which the global economy provides for life chances are the subject of continual debate. What cannot be denied is that billions of people are living on the edge of survival and too many are not surviving. The global economy is failing many people in the world. Here is a sampling:

- 45 percent of childhood mortality is caused by hunger (World Health Organization [WHO] 2016).
- More than 800,000 children under 5 years die from diarrheal disease related to polluted water every year (Centers for Disease Control and Prevention [CDC] 2016).
- About 1 billion people lack adequate shelter;
 100 million are homeless (United Nations

Educational, Scientific, and Cultural Organisation [UNESCO] 1998–2001a).

- 3 billion people do not have access to enough energy to meet their needs (UNESCO 1998– 2001b).
- Approximately 7 million people died prematurely in 2012 as a result of air pollution exposure (WHO 2014).
- More than 900,000 children under 5 years die from pneumococcal diseases, preventable with a vaccine (WHO 2015).
- Nearly 4 million women, who would not have died if they lived in higher income countries, go missing each year (World Bank 2012).

It is not surprising that the opportunities to achieve our potential are not randomly distributed. For the most part, the statistics above are characteristic of developing countries. Living in a poor country makes a person more likely to be a victim of food scarcity, to live in a slum, to live without electricity, to be poisoned by air pollution, to lack basic health care, and to die early. People in developing countries are more likely to be victims of violent conflict, human trafficking, environmental destruction, and nearly every global social problem. That is the cost of global inequality among countries.

The relative position of individuals within societies also affects life chances. It goes without saying that those at the bottom of the economic pyramid, at both the societal and global levels, suffer more than those at the top. The poor in some rich societies have life expectancies, health, and education outcomes similar to those in many developing societies. In addition, it is important to note that in societies that have limited people's life chances through inequality, everyone suffers, not only those at the bottom. For those reasons, it is necessary to examine both global and domestic economies and inequalities.

UNDERSTANDING INEQUALITY

Measuring inequality is not as straightforward as it might seem. Both income inequality, usually measured as an annual flow of money accruing to an individual, a household, society, or the world, and wealth inequality, the total financial assets of these actors, are important. How much income comes from labor—a wage—and how much is earned through ownership of financial assets (stocks, bonds, real estate, etc.) is also important in understanding the capacity of an actor to accumulate wealth.

There are also several ways to measure inequality. The Gini ratio looks at the deviation of the actual distribution of income or wealth in comparison with perfect equality, with perfect equality being 0 and one person owning everything being 1. The Parma method looks at the relationship between the bottom 40 percent and the top 1 percent. Other methods look at some portion of the top (1, 10, or 20 percent) in relation to some portion of the bottom, or the earnings of people at the 90th percentile in comparison with people at the 10th percentile (the 90/10 inequality ratio).

Income Inequality Among Regions

The World Bank is a major source of data on income, inequality, and life chances. The World Bank reports that the value of the world production in 2014 was close to U.S. \$78 trillion. While there is sufficient income to give everyone sufficient life chances, inequality of life chances is high. Growth has been uneven; while a few regions² are converging with higher income countries, many are relatively stagnant or have declined (Table 2.1 and Figure 2.2). Sub-Saharan Africa has only 6 percent of the gross national income (GNI) per capita of North America, and South Asia has less than 10 percent. GNI per capita of low-income countries is only about 1/60th that of high-income countries. There is also significant inequality among countries within regions.

Comparing the ratio of the incomes of developing regions to that of developed regions over time shows that inequality is decreasing; the line representing the developing world rises, indicating that the income gap between developing and developed nations has been decreasing since about 1990. However, as the lines for each region show, the increase is due to growth in East Asia, particularly the rapid growth of China and India at the end of the 20th century. The lines representing Latin America, Africa, and Oceania remain virtually unchanged, indicating that inequality between each

INEQUALITY AND THE INCOME GAP BY INCOME LEVEL AND REGION

TABLE 2.1 GNI per Capita by Level of Development and Region

The GNI per capita of the lowest quintile is less than 2 percent of the Euro area income. The GNI per capita of sub-Saharan Africa is only 6.2 percent of that of North America.

Income Category GNI per capita	Low \$629	Middle (lower and upper middle) \$4,666	Lower Middle \$2,012	Upper Middle \$7,901	High \$38,274	Euro \$39,162	Area
Regions	East Asia and Pacific	Latin America and Caribbean	Middle East and North Africa	South Asia	Sub- Saharan Africa	North America	Europe and Central Asia ^a
GNI per capita (U.S. \$, 2014 purchasing power parity)	\$14,903	\$15,226	\$17,754	\$5,298	\$3,396	\$54,748	\$28,827

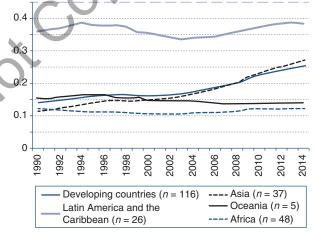
a. Europe and Central Asia includes the former Warsaw Pact countries in Eastern Europe, Russia, and the other former Soviet countries that comprised the USSR.

Source: Adapted from World Bank (2016b:52), World Development Indicators.

FIGURE 2.2

Ratio of Incomes in Developing Regions to Incomes in Developed Countries, 1990–2014

While world and Asian gross domestic product per capita rose from 1990 to 2014, other developing regions were stagnant.



Source: From Income convergence or persistent inequalities among countries? Development Issues No. 5 by Development Strategy and Policy Analysis Unit in the Development Policy and Analysis Division of UN/DESA, © 2015 United Nations. Reprinted with the permission of the United Nations.

of these countries and the developed world is virtually unchanged despite some fluctuation (UN 2015a).

Wealth Inequality Among Regions

Whereas income is an amount received over a period of time, wealth is the net assets, both financial and nonfinancial, minus debt. Because it takes money to make money, wealth inequalities are greater than income inequalities. Every region except Europe and North America has a lesser share of the world's wealth than their share of population (Table 2.2). The Asia—Pacific region is close to even. The more wealth in a region or country, the more it can invest in its people. The country and region into which people are born significantly affects their life chances.

A CLOSER LOOK

GLOBAL WEALTH

By comparing the percentage of the global population in each region with the percentage of its share of various forms of wealth and debt, it is evident that global wealth is very unequally distributed. How might this affect life chances?

TABLE 2.2

Distribution of Global Wealth Among Regions

Region	Percentage Share of Adults	Percentage Share of Wealth	Wealth per Adult	Financial Wealth per Adult	Nonfinancial Wealth per Adult	Debt per Adult	Median Wealth per Adult ^a
Africa	12.0	1.0	4,536	2,441	2,605	511	639
Asia-Pacific	23.8	18.4	40,505	25,270	22,297	7,691	2,711
China	21.2	9.1	22,513	12,752	11,704	1,943	7,357
Europe ^b	12.2	30.0	128,506	69,211	81,510	22,216	16,142
India	16.6	1.4	4,352	651	4,047	346	868
Latin America	8.5	3.0	18,508	7,682	14,093	3,267	4,034
North America ^c	5.7	37.1	342,302	271,267	129,303	58,269	59,737
World	100	100	52,432	33,659	27,442	8,668	3,210

a. Notice that this is median wealth per adult, not a mean. The mean income and wealth figures such as GNP and GNI per capita allow for comparisons in income and wealth among countries. However, they do not indicate the "average" person's income because people with extreme wealth skew the mean upward. The median is a much better indicator of how well the average person is doing. Because of inequality, the mean income in the United States is tens of thousands of dollars more than the median.

(Continued)

b. In this table, "Europe" includes Eastern European countries, not only the richer Western European countries.

c. According to the Credit Suisse 2015 Wealth Databook, the United States has 32 percent of global wealth and about 4.4 percent of global population.

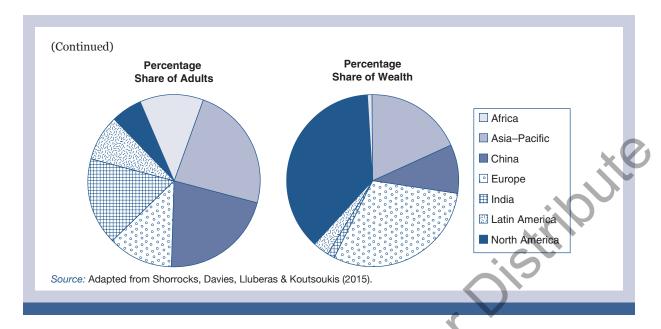
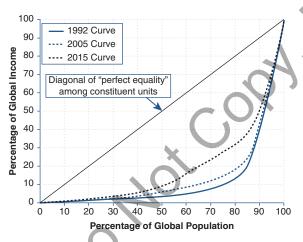


FIGURE 2.3

Global Inequality of Income: The Lorenz Curve

Measuring global inequality of income using the Lorenz curve and Gini coefficient shows a decrease in inequality from 1992 to 2005 to 2015.



Source: Center for Systemic Peace (2017).

Note: Inequality is measured by the area inside the diagonal and the curves.

The disparity between the proportion of the world's population in each region and the proportion of global wealth highlights that there are sufficient global resources to alleviate the world's problems of hunger, malnutrition, water, and shelter. It is the distribution of resources,

particularly but not only income and wealth, that is the primary factor preventing people from having equal life chances.

Inequality Among Individuals

Global Inequality of Income

Estimating the distribution of income among individuals both globally and within societies provides another perspective on inequality.

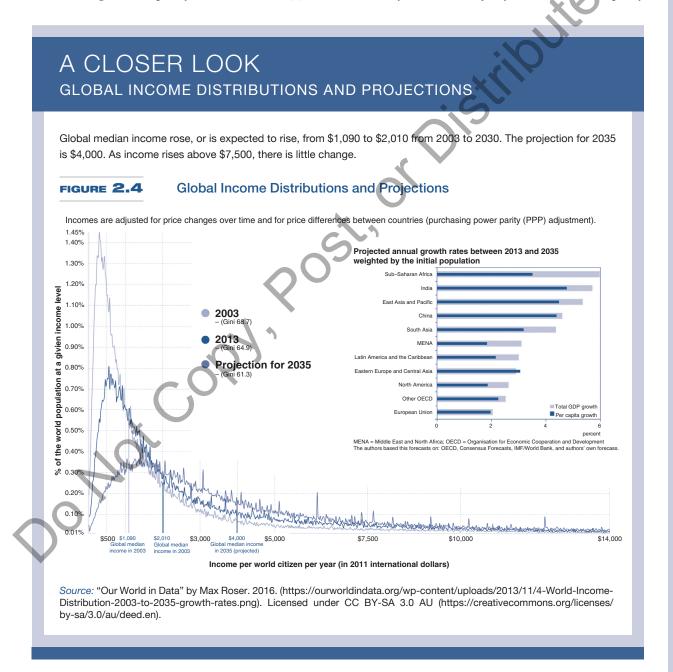
The Lorenz curve visualizes the percentage of a given variable—in this case global income—that accrues to every percentage point of a population—in this case all of the people in the world (Figure 2.3). If there were perfect equality, every percentage point of the population would receive 1 percent of the global income, producing a straight line when graphed. The curve on the graph is the actual distribution. The innermost curve represents the actual share of income received by percentage of the population in 2015. The curve hugs the graph below 10 percent of global income until it reaches 50 percent of the population—indicating that half of the global population has hardly any of the global income-and shows that 80 percent of the population receives only 30 percent. The curve then rises rapidly, indicating the disproportionately large share of income accruing to the richest people in the world. The share of income of the richest 10 percent (640 million) of people based on the populations and GNI per capita of the richest

countries barely changed during those years, claiming 42 percent of global income in 2010. The poorest quintiles barely changed either at only 1 percent (Conference Board of Canada 2011).

The Gini coefficient³ is a measure of the deviation of the actual distribution from the line of perfect equality. The larger the Gini coefficient, the greater the inequality. The chart in Figure 2.4 shows a slight decrease in global inequality of income from 1992 to

2005 and a much more significant decrease in 2015. The decrease reflects the reduction of poverty in China and, to a lesser extent, in India, Brazil, and South Africa.

Median income doubled from U.S. \$1,090 to \$2,010 from 2003 to 2013, decreasing the 90/10 ratio from 37.6 to 30.2. The Gini coefficient decreased from 68.7 to 64.9. If growth rate projections hold, the Gini would decrease to 61.3 by 2035. The majority of decrease in inequality



would arise from increasing incomes at the bottom of the pyramid (Roser 2016).

The primary drivers of the decline in global inequality are China and India. From 1985 to 2000, China drove the decline almost single-handedly. After 2000, India has had a large effect on declining global inequality. As in most other countries, however, inequality within each of these countries increased (Milanovic 2011).

Inequality of Income Within Countries

Income inequality within countries persists and has grown in many countries over the past decades. From the mid to late 1970s, the primary beneficiaries of growth have been the richest people in the richest countries and an emerging middle class in developing nations such as China. Others, not so much.

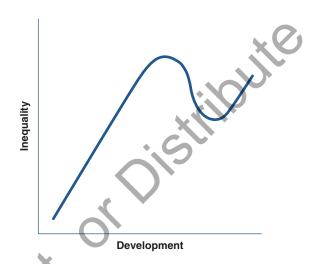
The Gini coefficient calculated for a country measures inequality among individuals within the country. If the country Gini index is weighted by population, indicating inequality among individuals, it shows a steady decrease in inequality. Once again, if China is removed, it shows that the historical trend for most of the world has been increasing inequality among individuals (Conference Board of Canada 2011). Even before the recession of 2007-2008 hit countries all over the world, inequality within countries had been growing for decades. In 2011, the average income of the richest 10 percent of people within Organisation for Economic Cooperation and Development (OECD) countries was nine times the income of the poorest 10 percent (OECD 2011). Throughout history, as countries developed from the simplest to more complex economies, inequality increased. It peaked in the feudal agricultural societies in which nobility, a small portion of the population, had extreme wealth and peasants, the vast majority of people, had little. When societies industrialized, a middle class emerged, making societies more equal. However, as societies moved into the service and information economies, inequality began to increase again. This pattern of increasing inequality, then decreasing, and then increasing again is the "Kuznets curve" (Figure 2.5). It is not inevitable.

In many societies, inequality is increasing to extreme levels. The Bureau for Development Policy of the UN Development Programme (UNDP) found that between 1990 and 2010, inequality increased by 9 percent in

FIGURE 2.5

Inequality and Development: The Kuznets Curve

The Kuznets curve illustrates the relationship between inequality and economic stages of development. Diagram is for illustration only.



high-income countries and by 11 percent in developing countries (UNDP 2013). Countries with the highest inequality are clustered in Central and South America and southern Africa. Countries moving up the economic ladder, such as China, have greater proportions of income and wealth in the high and very high brackets (Canadian Conference Board 2011). Lower inequality is clustered in Europe; however, inequality is increasing as wages stagnate. Inequality varies significantly by country, but overall the top 10 percent of workers now take home more than twice their share and about the same portion of income (25 percent) as the bottom 50 percent.

With respect to wage inequality, inequality within enterprises now explains more of the inequality than inequality between enterprises. Most workers, including 80 percent in Europe, make less than the average wage of the enterprise where they work, indicating that salaries at the top pull the average wage far above what the median worker makes. Globally, those at the top of the income hierarchies continued to experience the most growth and take home large shares of total country income. The 1 percent of companies with the highest wages in Europe paid their top 1 percent of workers take-home wages of about €844 an hour in comparison with an average of €7.1 for

THE BIFURCATED SERVICE INDUSTRY



PHOTO 2.1 The annual World Economic Forum meetings host a dinner for high-powered technology executives. Both they and the wait staff are parts of the "service economy"; however, their incomes and wealth place them worlds apart economically.

Robert Scoble/CC BY 2.0.

their bottom 1 percent in 2016 (International Labour Organization [ILO] 2016).

Growth itself does not correct inequality. Productivity drives growth, but productivity and worker compensation do not necessarily grow together (Figures 2.6–2.10 and Table 2.3). For example, China's rapid growth was accompanied by rapid increases in inequality. Inequality declined slightly as growth in China slowed, but more important was the increasing urbanization of the workforce that improved wages of the unskilled and migrant workers and increased the income stream into the rural areas as migrant workers sent money home (Shi 2016).

Neither did India's rapid growth increase equality. Much of the growth was in services that offer little in employment such as finance. The wage share of income dropped from 40 percent in 1990 to 34 percent by 2009; unearned income made the difference. Furthermore, a large part of the Indian population still toils in low-productivity agriculture. During early periods of growth, public spending to improve the situation of the poor was the primary stimulus. Recent financial policy—deregulation and tax and credit policy to stimulate spending among the wealthy—exacerbated inequality (Ghosh 2016).

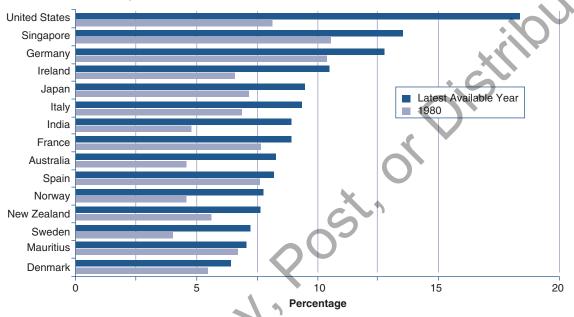
Within the rich societies, the main reason for the increases in inequality is the explosive growth in income at the top of the pyramid (the "super-manager") and stagnation at lower levels. Corporate executive salaries are controlled by corporations' boards of directors

INEQUALITY WITHIN COUNTRIES

FIGURE 2.6

Deepening Income Inequality, 1980–2014

A sampling of OECD countries illustrates the extent of deepening income inequality as greater shares of income accrued to the richest 1 percent in each of these countries.

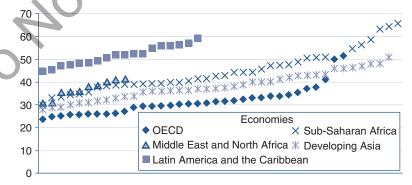


Source: Yates (2016). Reproduced with permission.

FIGURE 2.7

Country Income Inequality Within Regions

Each graph point represents a country; the lines are the regions. Income inequality within countries in all regions is rising. With the exception of two OECD countries, countries in developing regions had higher levels of inequality than OECD countries.



Source: Zhuang, Kanbur, and Maligalig (2014). Reproduced with permission.

TABLE 2.3 Inequality by Income Group

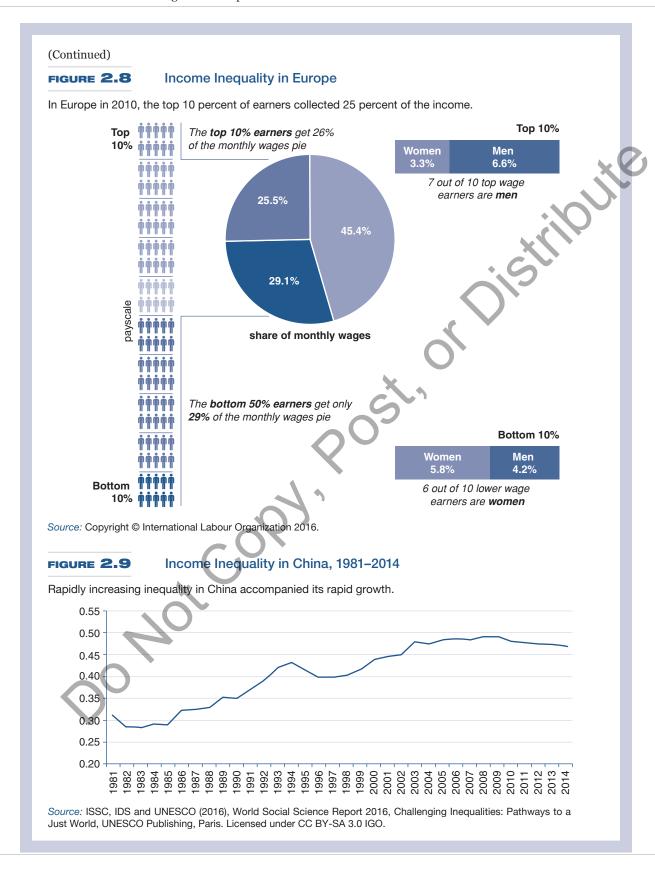
Inequality clusters in the low-income and lower middle-income countries. The richest countries, particularly with strong social welfare programs and policies, are more equal.

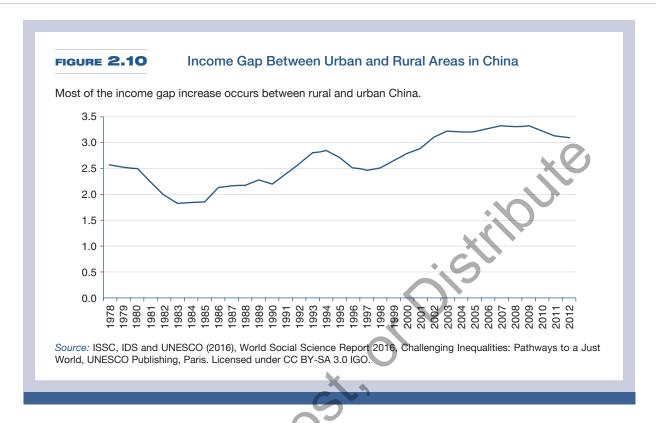
Income	Income Classification Criteria: Gross National Income per Capita in	Number of Country Countries Example	Country	Total Population	Average Income in Secondary 2010 (constant School PPP 2005 Enrollment international \$\\$\)	Secondary School Enrollment Bate, 2010**	Life Expectancy at Birth (years, 2009)	Infant Mortality Rate (per 1,000 live births,
High-income countries (rich countries)	Higher than \$12,276	70	Canada, Poland, U.S.	1/1 billion	\$33,232	100%	79.8	5.8
Upper-middle- income countries	\$3,976 to \$12,275	54	Brazil, China, Russia	2.5 billion	\$8,731	%06	71.5	17.5
Lower-middle- income countries	\$1,006 to \$3,975	56	Guatemala, India, Nigeria	2.5 billion	\$3,287	64%	64.8	51.7
Low-income countries	\$1,005 or less	35	Bangladesh, Cambodia, Kenya	817 million	\$1,099	39%	57.5	76.5

* The World Bank calculates gross national income using the Atlas conversion factor, which reduces the impact of exchange rate fluctuations when comparing national incomes across different countries.

** Ratio of enrollment in secondary school (regardless of age) to the population of the age-group that corresponds to that level of education.

Source: Conference Board of Canada (2011). Reproduced with permission





composed of super-managers from other corporations or nonprofit organizations. At the same time, many transfer programs to assist lower-level workers have been cut.

Government policies affect equality. The inequities are decidedly more extreme in the Anglo-Saxon countries (the United States, Great Britain, Canada, and Australia) than in Continental Europe (France, Germany, and Sweden) and Japan. From 1960 to 1970, European countries were quite close in the share of income of the top percentile, ranging from about 6 to 9 percent, with the exception of Germany topping the list at 12 percent. The share going to the top decreased slightly from 1970 to 1980 but then rose dramatically in the Anglo-Saxon countries and rose less in other countries. The top 10 percent rose as well, but less in Continental Europe and barely at all in Southern and Northern Europe (Picketty 2014).

Wealth Inequality Among Individuals: The Global Wealth Pyramid

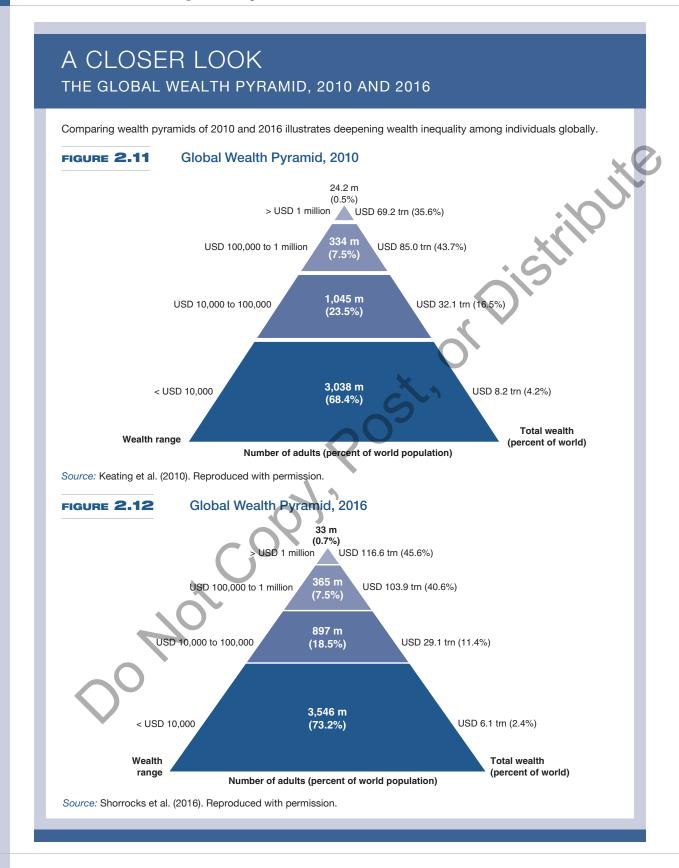
The world, as a whole, is wealthy. Global household wealth totaled about U.S. \$256 trillion in 2016.⁴ The global wealth pyramid depicts how wealth is distributed

among individuals, providing insight into how much of the world's wealth is held by people at the bottom or top of the wealth pyramid regardless of their country's wealth (Figures 2.11 and 2.12).

At the base of the 2016 pyramid are 3.5 billion adults, 73.2 percent of the adult population of the world, each of whose net worth is less than U.S. \$10,000. Combining all of their assets, they own only 2.4 percent of global household wealth. Most of them live in developing societies, but about 20 percent of the base (about 700 million people) are in developed societies. Many may be there due to temporary setbacks such as prolonged unemployment; some may be elderly (Shorrocks et al. 2016).

Comparing the 2016 pyramid with the 2010 pyramid, increasing inequality is evident. In 2010, more wealth (4.2 percent) was held by a smaller portion of the global population (68.4 percent) living at the bottom of the pyramid than in 2016. The middle portion of the pyramid also lost in its share of wealth. In 2010, each 1 percent in the middle averaged 0.7 percent of the global wealth, while in 2016 that was reduced to 0.6 percent.

In 2016, only 18.5 percent of adults (about 900 million) possessed U.S. \$10,000 to \$100,000 in wealth.



Country representation within tiers varies widely. For example, India and China have similar-sized populations, but 33 percent of the people in this tier are from China, whereas only 3.1 percent are from India. India's share has changed little in the past decade, whereas the portion that is Chinese has doubled since 2000 (Shorrocks et al. 2016).

There is greater concentration of wealth in the top two tiers of the pyramid. The top 8.2 percent of the global population had 86.2 percent of the global wealth in 2016, with most of that (45.6 percent) being in the possession of the top 0.7 percent. The average share of each 1 percent of the top 8.2 percent was 10.44 percent in 2016. In 2010, each 1 percent of the top 8 percent of the population possessed, on average, 9.9 percent of global wealth. Although this class is transnational and every region is represented, North America dominates the ranks of ultra-high net worth individuals, accounting for 49 percent of this class.

It is worth looking at some finer distinctions within the 2016 pyramid. The 50th percentile, the point at which half of all adults are above and half are below, is U.S. \$3,210. Credit Suisse estimates that the bottom 50 percent of the global population has only 1 percent of the global wealth (Stierli et al. 2015). Many students in the developed world may meet the criterion to be included in the top half.

The global middle class, with assets of U.S. \$50,000 to \$500,000, expanded from 2000 to 2015. The expansion was dominated by China, but every region experienced some increase in adults reaching the middle-class threshold. It peaked before the financial crisis of 2007–2008 and had not recovered fully by 2015. In some regions, the middle class was still declining as of 2015. For example, in Egypt the middle class shrunk by half, and in Argentina it shrunk by two thirds. Growth in wealth flowed to the upper classes. For the world as a whole, wealth shifted 2:1 in favor of the upper classes. In North America, the shift was greater at 4:1 (Stierli et al. 2015).

Wealth Inequality Within Countries

As within the globe, wealth inequality within countries increased from the 1970s onward. In capitalist systems, inequality is thought to be necessary for growth by creating incentives for people to work hard, study hard, or take entrepreneurial risk. When inequality inhibits the opportunities for success, it operates like any form of discrimination and is dysfunctional not only for individuals denied their full life chances but also for the

society. Society is denied the contributions of many people (Milanovic 2011). For example, the economic pie in the United States has been growing, but not everyone has benefitted equally.

Because it requires a surplus of income to create wealth and wealth creates more wealth, it is not surprising that wealth inequality is increasing in societies and that wealth is significantly more concentrated than income. The share of the country's income generating wealth held by the top 20 percent increased, while the share of the bottom 80 percent decreased. Those in the top 20 percent also increased their share of the overall net worth of the country. Without access to income-generating financial wealth, middle- and low-wage workers will not decrease the gap. As illustrated in Figures 2.13 to 2.16, the level of wealth inequality within countries today is one cause of diminishing life chances for many people.

IMPACTS OF GLOBAL POVERTY AND INEQUALITY

This discussion of income and wealth focuses attention on the prosperity of the world as a whole and the inequalities in income and wealth among regions, countries, and individuals.⁵ Inequalities of income and wealth would not be important if they did not affect the quality of people's lives and affect their life chances and well-being. But they do. The society into which a person is born and its level of wealth and inequality have a profound impact on the person's life.

Income sustains us day to day. Two people may have the same income but different levels of wealth. The one with more wealth has more opportunity. Wealth allows for investment, to use money to make money, or to move to a safer neighborhood or one with better schools or better recreational opportunities. A person with some wealth could invest in training for a new job or let his or her children develop their talents through music or art lessons. Even a little wealth can help a person recover more easily from unforeseen events. For example, when a car or hot water heater breaks down, a person with some wealth can have it repaired without going into debt.

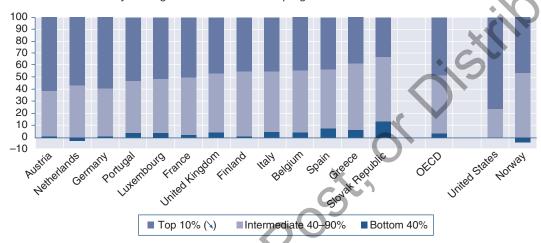
For societies, it is the same. Wealth allows for investment in human capital such as education, health, nutrition, and welfare programs. It allows for investment in physical capital such as more productive machinery and infrastructure (e.g., roads). It allows a country to rebound more easily after unforeseen events such as

WEALTH INEQUALITIES

FIGURE 2.13

Inequalities of Wealth in Select OECD Countries

Many European OECD countries have high levels of wealth inequality. Although the share of the top 10 percent is not as large in Norway as in several other countries, Norway's bottom 40 percent has negative wealth—more debt than assets. Norway has a generous social welfare program.



Source: Organisation for Economic Cooperation and Development (2017). Reproduced with permission.

FIGURE **2.14**

Wealth Inequalities Within Countries

Gini measures of inequality show countries of high inequality clustered in Latin America and southern Africa.



Source: World Economic Forum (2016). Reproduced with permission.

FIGURE 2.15 Distribution of Net Worth in the United States, 1983–2013

The distribution of net worth in the United States has become increasingly unequal.

	Total Net Worth					
	Top 1 percent	Next 19 percent	Bottom 80 percent			
1983	33.8%	47.5%	18.7%			
1989	37.4%	46.2%	16.5%			
1992	37.2%	46.6%	16.2%			
1995	38.5%	45.4%	16.1%			
1998	38.1%	45.3%	16.6%			
2001	33.4%	51.0%	15.6%			
2004	34.3%	50.3%	15.3%			
2007	34.6%	50.5%	15.0%			
2010	35.1%	53.5%	11.4%			
2013	36.7%	52.2%	11.1%			

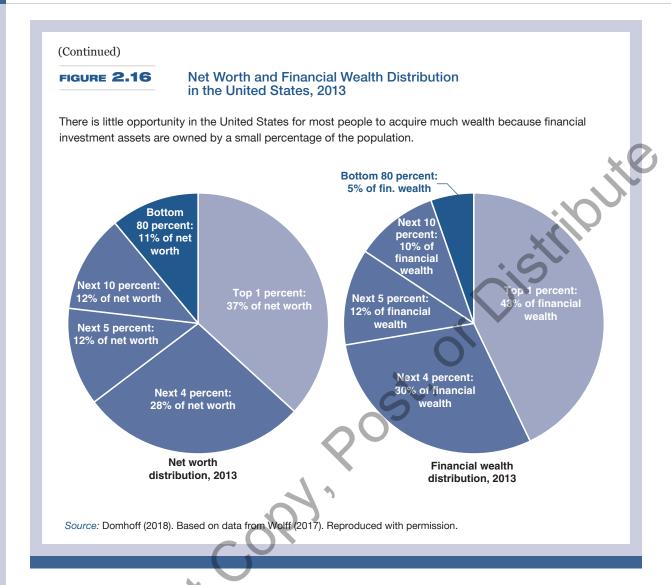
	Fi	Financial (Non-home) Wealth						
	Top 1 percent	Next 19 percent	Bottom 80 percent					
1983	42.9%	48.4%	8.7%					
1989	46.9%	46.5%	6.6%					
1992	45.6%	46.7%	7.7%					
1995	47.2%	45.9%	7.0%					
1998	47.3%	43.6%	9.1%					
2001	39.7%	51.5?/o	8.7%					
2004	42.2%	50.3%	7.5%					
2007	42.7%	50.3%	7.0%					
2010	41.3%	53.5%	5.2%					
2013	42.8%	51.9%	5.3%					

Total assets are defined as the sum of (1) the gross value of owner-occupied housing; (2) other real estate owned by the household; (3) cash and demand deposits; (4) time and savings deposits, certificates of deposit, and money market accounts; (5) government bonds, corporate bonds, foreign bonds, and other financial securities; (6) the cash surrender value of life insurance plans; (7) the cash surrender value of pension plans, including IRAs, Keogh, and 401 (k) plans; (8) corporate stock and mutual funds; (9) net equity in unincorporated businesses; and (10) equity in trust funds. Total liabilities are the sum of (1) mortgage debt; (2) consumer debt, including auto loans; and (3) other debt. From Wolff (2017).

Source: Domhoff (2018). Based on data from Wolff (2017). Reproduced with permission.

(Continued)

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natural disasters, extreme weather events, and economic shocks

Increasing divergence in income and wealth results in increasing divergence in life chances:

- Despite the successes of the poverty reduction and related development efforts, many countries have failed to grow, much less thrive.
- Within regions, countries have different rates of success and have reached different levels of development.
- China, with about one third of the global population, has accounted for much of the global reduction in poverty, whereas other countries have had little to no reduction.
- Inequality, despite fluctuations, has increased since the 1970s.

How these trends developed, how they affect people's life chances, and how they can be combatted are discussed in the remainder of the chapter.

The UNDP measures and tracks many indicators on which the quality of life and life chances depend. The foundation of life chances are good health, appropriate education, nutritious food, adequate shelter, and sufficient wealth and income (a decent standard of living). The conditions that support the foundation are security, equality, a healthy environment, and a vibrant social and political community. Together, these form the Human Development Index (HDI) (Figure 2.17).

Life expectancy at birth, expected years of schooling, mean years of schooling, and GNI per capita are the four indicators that form the basic HDI. These are among the most standardized and readily available statistics as well as reasonable indicators of general well-being. The HDI scores approximate how well a country fares in providing life chances. It is also a point of comparison among countries and a means of assessing countries' improvement.

HDI varies widely by region (Tables 2.4 and 2.5). As would be expected, the two regions with the lowest income measures also have the lowest HDI. But given how far below the global average the South Asia region is in income, you might expect a much lower HDI. Similarly, the sub-Saharan Africa HDI is far below other scores, but its income is not as far below that of South Asia as one might expect. Income is not the sole determinant of HDI.

The relationship between income and human development is more complex than a straightforward correlation.

Including income in the HDI exaggerates the relationship between them. Note these anomalies:

- In the case of the Arab states, given an income measure significantly higher than the global average, one might expect a much higher HDI, one at least above the global average. However, it is lower. Their score would be much lower if income were not a component.
- Table 2.5 classifies countries by levels of development. A more direct relationship between income and HDI score is evident here. Note, however, that the world HDI is lower than those for high-income countries, but the gross domestic product (GDP) per capita is somewhat higher.

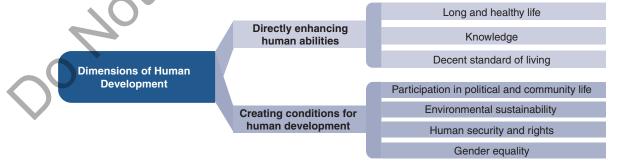
What do you suspect accounts for these anomalies? Is this because of the level of inequality across countries of the world? How might the level of inequality within regions and within countries influence the HDI?

Policy matters. There are many countries whose populations enjoy better life chances than people in countries with more income and wealth. Equatorial Guinea, for example, has roughly four times the GDP per capita of Vietnam (U.S. \$21,056 in comparison with

FIGURE 2.17

Dimensions of the Human Development Index

The Human Development Index focuses on indicators related to health, education, and income—factors believed to be essential to achieving life chances.



Source: United Nations Development Programme Human Development Reports. "What is Human Development?" by HDRO Outreach (http://hdr.undp.org/en/content/what-human-development), licensed under CC BY IGO 3.0 (https://creativecommons.org/licenses/by/3.0/igo/).

HUMAN DEVELOPMENT MEASURES

GDP per capita and human development scores are related, but country income is not the only determinant. Good policy can increase a country's human development above that of richer countries. Bad policy can worsen it.

TABLE 2.4 Human Development Index Scores by Region

Region	Arab States	East Asia and Pacific	Europe and Central Asia	Latin America and Caribbean	South Asia	Sub- Saharan Africa	World
Number of countries and territories	20	24	17	33		46	188
HDI	0.686	0.710	0.748	0.748	0.607	0.518	.711
GDP per capita ^a (U.S. \$, 2011 PPP)	\$16,697	\$10,799	\$12,929	\$13,877	\$5,324	\$3,339	\$13,964

Source: Adapted from Human Development Report 2015: Work for Human Development by United Nations Development Programme (http://hdr.undp.org/sites/default/files/2015_human_development_report.pdf), licensed under CC BY IGO 3.0 (https://creativecommons.org/licenses/by/3.0/igo/).

TABLE 2.5 Human Development Scores by Development Group

Development Group	Very High	High	Medium	Low	Average Least Developed	Average OECD	World
HDI	0.896	0.744	0.630	0.505	0.502	0.880	.711
GDP per capita ^a (U.S. \$, 2011 PPP)	\$41,395	\$13,549	\$6,106	\$2904	\$2,122	\$36,923	\$13,964

a. Gross domestic product (GDP) per capita is stated in purchasing power parity (PPP) for better comparison across countries and regions.

Source: Adapted from Human Development Report 2015: Work for Human Development by United Nations Development Programme (http://hdr.undp.org/sites/default/files/2015_human_development_report.pdf), licensed under CC BY IGO 3.0 (https://creativecommons.org/licenses/by/3.0/igo/).

Note: Scores on the HDI range from 0 to 1. The higher the number, the better the human development.

U.S. \$5,092) and an HDI of .587, yet Vietnam's HDI is higher at .666. South Africa has more than twice the GDP of Vietnam, yet they have the same HDI score of .666. The United Arab Emirates ranks about 10th in GDP per capita but drops to 41st in HDI. Cuba ranks in the high human development category, but its GDP per capita is only U.S. \$7,301, comparable to the medium-scoring countries.

The HDI and economic status of a country are more significant in a person's life chances than a person's own talent and ambition. Living in a low-HDI country, a person does not have the same opportunity for an education or good health as a person in a higher HDI country. In a poor country, regardless of how hard they work and how smart they are, people do not have access to the same job opportunities or financial and physical infrastructure to "get ahead" as people in a richer country. Securing better life chances drives migration to higher HDI and higher income countries.

Societies with low HDI, particularly those with low income, experience the most social problems, including environmental destruction, violent conflict, and discrimination. However, not everyone in those societies suffers equally, nor does everyone in wealthy societies benefit equally from the opportunities wealthy societies afford.

The effects of income inequality within countries, even wealthy ones, are destructive. Income inequality stifles intergenerational upward mobility, leading to feelings of hopelessness and disaffection from the society. It stifles economic growth of the society as a whole, breeds social resentment, and can generate political instability. Oxfam International (2014), an international nongovernmental organization, succinctly stated the dangers of extreme inequality:

Extreme economic inequality is damaging and worrying for many reasons: it is morally questionable; it can have negative impacts on economic growth and poverty reduction; and it can multiply social problems. It compounds other inequalities, such as those between women and men. In many countries, extreme economic inequality is worrying because of the pernicious impact that wealth concentrations can have on equal political representation. When wealth captures government policymaking, the rules bend to favor the rich, often to the detriment of

everyone else. The consequences include the erosion of democratic governance, the pulling apart of social cohesion, and the vanishing of equal opportunities for all.

Using three key indicators, the HDI computes an inequality *adjusted* index. The adjusted index accounts for the loss to a country or region in human development because of inequality. The more inequality in the region, the greater the difference between scores (Table 2.6 and Figure 2.18). Where there is inequality, portions of the population are not given the opportunity to develop their potential and the society does not develop human capital.

How the income and wealth of a country is used along with the distribution of income and wealth influences life chances and well-being. Countries that direct a greater portion toward public goods such as education, health, and building good governance and infrastructure will have better outcomes in terms of people's life chances than societies that invest less. When more income and wealth is directed to private consumption, it benefits only those individuals. When invested in public goods, the entire population benefits.

Even among rich societies, societies that are more unequal and spend less on public goods experience more social problems and quality of life issues than more equal societies. They may suffer more problems than some societies that are less wealthy but more equal. They tend to have lower overall educational attainment, poorer health, and more violent crime than they would have if they were more equal. In more equal societies and societies that use more wealth for the common good, the poor may have life chances equal to those in somewhat wealthier societies.

In societies that limit people's life chances through inequality, everyone suffers, not only those at the bottom. Research by Richard Wilkinson and Kate Pickett illustrates each of these points convincingly. The authors started with the simple question of why, "at the pinnacle of human material and technical achievement, we find ourselves anxiety-ridden, prone to depression, worried about how others see us, unsure of our friendships, driven to consume and with little or no community life" (Wilkinson and Pickett 2009). What they found might surprise some people.

THE IMPACT OF INEQUALITY ON HUMAN DEVELOPMENT

TABLE 2.6

Regional Inequality and Human Development Index

HDI scores drop significantly in every region when controlled for inequality, indicating that the level of inequality diminishes people's life chances.

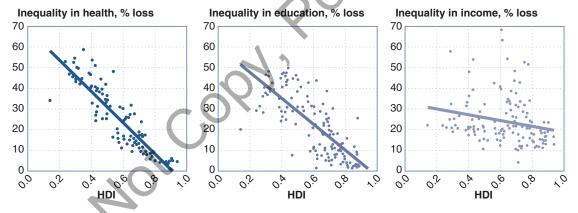
		East Asia		Latin America and		Sub- Saharan
Region	Arab States	and Pacific	Central Asia	Caribbean	South Asia	Africa
HDI	0.686	0.710	0.748	0.748	0.607	0.518
Inequality- adjusted HDI	0.512	0.572	0.651	0.570	0.433	0.345

Source: Adapted from Human Development Report 2015: Work for Human Development by United Nations Development Programme (http://hdr.undp.org/sites/default/files/2015_human_development_report.pdf), licensed under CC BY IGO 3.0 (https://creativecommons.org/licenses/by/3.0/igo/).

FIGURE 2.18

More Human Development Is Associated With Less Inequality

As evident in these graphs, the higher the level of human development, the less inequality there tends to be. Countries scoring below the lines are less unequal than would be expected; those scoring above the lines are more unequal.



Source: United Nations Development Programme Human Development Reports. "Reducing inequality can significantly improve human development" by Selim Jahan (http://hdr.undp.org/en/content/reducing-inequality-can-significantly-improve-human-development), licensed under CC BY IGO 3.0 (https://creativecommons.org/licenses/by/3.0/igo/).

The severity of social problems and income are related when considering all societies—poorer societies have more problems. But among wealthy countries, there is no relationship between income and severity of problems. The wealthier are no better off, nor are the poorer suffering more. They are equal in their

problems. However, there is a significant relationship between inequality and social problems. Among rich societies, the more unequal societies experience more severe social problems. Using data compiled by international organizations and national governments, they found that this relationship holds for all the problems Wilkinson and Pickett (2009) tested, from measures of child welfare to violent crime.⁶

Among rich societies, more equal societies are healthier. More equal societies have less mental illness, longer life expectancy, lower infant mortality and obesity, and fewer teenage births and homicides. They have fewer people in prison, more social mobility, and higher levels of trust. In every measure in the United Nations International Children's Emergency Fund (UNICEF) index of child well-being, children in more unequal societies fare less well regardless of income level. States within the United States reflect the same relationships; states that are more unequal have worse outcomes than states of similar wealth (Wilkinson and Pickett 2009).

The most disadvantaged are most vulnerable and suffer the most, but inequality reaps destruction through all income levels of a society. When comparing the health of people in the same income levels across societies, people in more equal societies fare better than people of the same income in more unequal societies. This relationship holds true even for the poorest and wealthiest members of a society (Wilkinson and Pickett 2009).

Inequality, according to Wilkinson and Pickett (2009), is structural violence. It breeds family stress and breakdown. It entrenches an "us against them" mentality and discourages spending on the common goods such as education. It encourages us to compare among ourselves. These "psychosocial" factors—the fear of judgment, status competition, and status insecurity-create chronic stress. The authors cited a review of 208 studies showing that threats to social status, confidence in one's own competence, or belonging to a group perceived as inferior affects performance. In an experiment in which boys were asked to complete mazes, children from lower castes performed slightly better than those from upper castes. When asked to announce their names, as well as their fathers' and grandfathers' names, villages, and castes before completing the mazes, the performance of the lower caste boys dropped significantly.

Reducing the inequalities among us can improve the quality of life for all of us.

QUALITY OF LIFE ALONG LEVELS OF DEVELOPMENT

Statistics on poverty, inequality, and human development do not mean much without some basic understanding of people's lives at different levels of socioeconomic status.

The Bottom of the Pyramid

Franklin Roosevelt used the term "the bottom of the pyramid" to describe "the forgotten, the unorganized, but the indispensable units of economic power" (Roosevelt 1932). He was referring to the bankrupt farmers and workers who were at the bottom of the pyramid in the United States. He stressed their importance in rebuilding the U.S. economy from the bottom up. Many politicians and financial and industrial leaders of the period proposed "top-down" plans to revitalize the nation. They wanted to give money to big banks, railroads, and corporations. Roosevelt wanted to give at least as much help to the "little fellow" and to the little banks and loan companies that would help those at the bottom build themselves up again. There is still a bottom of the pyramid in the United States inextricably connected to the global bottom of the pyramid. People in the global "bottom" live in every country. Like the bottom of the pyramid of which Roosevelt spoke, it remains an indispensable unit of economic power both nationally and globally. Although myths about the poor being lazy abound, the poor are the hardest workers in the world and the foundation of the global economy.

Who are the people at the bottom of the pyramid? What are their lives like?

Slavery: It Still Exists

No one shall be held in slavery or servitude: slavery and the slave trade shall be prohibited in all their forms.

-UN Declaration of Human Rights, Article 4

At the base of the pyramid are slaves. Slavery is illegal in every country in the world but still exists. Sustainable Development Goals Target 8.7 calls for "immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking, secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms."

There were 45.8 million slaves spread over 167 countries in 2016. Most of the slaves are in India, China, Pakistan, Bangladesh, and Uzbekistan (Walk Free Foundation 2016). However, slaves are found in every

CONSIDER THIS

WHEN A SOCIETY ACCEPTS SLAVERY

"Chains are for the slave who has just become a slave... but the multi-generation slave, the slave descending from many generations, he is a slave even in his own head. And he is totally submissive. He is ready to sacrifice himself, even, for his master."

-Boubacar Messaoud, son of slaves

Can slavery be so ingrained in a national culture that neither the enslavers nor the enslaved recognize that anything is wrong? Where slavery in inherited, generation after generation, it seems the natural order. It has the quality of destiny. Abdel Nasser Ould Ethmane, now an abolitionist in his homeland Mauritania, was allowed to choose his own birthday gift when he was 7 years old. Rather than a toy or candy, he chose Yebawa Ould Keihel, a dark-skinned boy who amused him. Yebawa tended the family's flocks in the hot sun, stood in the cold rain to support a tent to keep the family dry. Neither Abdel nor Yebawa questioned this. When Abdel went away to school, he encountered books on the French Revolution,

human rights, and the abolition of slavery in other countries. At first, he thought the books were filled with lies. By age 16, he was convinced slavery was a grave injustice. He recognized that slaves deserved all the rights he enjoyed. He freed his slaves, but they did not know what freedom was, nor did they want to be free.

Mauritania did not abolish slavery until 1981 and did not make slave owning a crime until 2007. Still, there are hundreds of thousands in slavery. It is one of the poorest countries in the world, with 44 percent of its population living on less than \$2 a day. Slaves have little hope for a life of plenty in or out of slavery. Many "masters" prevent them from leaving. Despite physical and sexual abuse, some do not understand that their enslavement is not their duty or destiny. Educating slaves to understand freedom and convincing them to want to be free are the first hurdles that SOS Slaves, founded by Abdel and Boubacar, and other abolitionist groups must overcome.

-as reported by John D. Sutter (2012), CNN News

country. Slavery goes by a variety of different names, including forced labor, involuntary servitude, bonded labor, debt bondage, child sex trafficking, child soldiers, human trafficking, and traditional slavery. Regardless of terminology, people held in compelled service are slaves.⁷

Slavery isn't just in Mauritania. It hides all over the world, in the supply chains of our clothing and electronic devices, in the kitchens and nurseries of the wealthy, in agriculture and mines, in virtually every industry.

Working Hard for Less than U.S. \$3 a Day

Slightly above slaves in the socioeconomic hierarchy are people who earn less than \$1 a day. They lack the basic necessities—food, clean water, and shelter. They may be among the "modern slaves" or live in a barter economy. They may be displaced from their homes by war, natural disasters, or civil strife. There are roughly 1 billion people living at this level.

A step above, those who earn \$1 to \$3 a day, are usually poorly educated and unskilled. They work as

day laborers, migrant farmhands, helpers and assistants in petty trades, or temporary workers. They may have been displaced from their homes by conflict, natural disasters, persecution, famine, or other hardships. Their paychecks are unsteady. They might be able to afford only one meal a day, usually of substandard nutritional value. They are likely to lack improved sanitation, health care, and education. They may live in slums or shantytowns. There are about 1.6 billion people living at this level—a subsistence level (Rangan, Chu, and Petkoski 2011).

Work at these levels is insecure. When we talk about \$1 or \$1.25 or \$3 a day, a worker is not earning that every day. For example, during harvest season, workers may earn more than their yearly average. On many days in the "off season," they might not earn anything at all.

Most of the very poor cobble together an income from several jobs doing different things—whatever work they can get. They lack the opportunity for a full-time job even at that low wage.

For example, the rural poor may have a small plot of land to farm but not enough to make a living or feed

their families. In addition, they may work as day laborers or migrate for temporary work. Rickshaw drivers, for example, usually work only four days a week because of the hardship of the job. However, bad weather, police harassment, scarcity of riders, whether or not a rickshaw is available, and bad luck may mean that even a four-day week is not possible. They too work several jobs. In Guntur, India, a typical scenario for very poor women is to start off their day selling rice and bean breakfast pancakes. After that, they collect trash, make and sell pickles, maybe gather and sell fuelwood, fruits, and vegetables, and possibly work as laborers. A study of working poor by Massachusetts Institute of Technology economists found that the median family in villages in West Bengal, India, had three working members with seven different occupations among them (Radelet 2015).

Although there are non-cash assistance programs in wealthy countries such as the United States, there are still people working at an average of U.S. \$2 a day or less. They share similar hardships. In their decadeslong studies of poverty in the United States, Kathryn Edin and H. Luke Shaefer studied the plight of very low-income, particularly \$2-a-day, workers. They found that the number of households living on \$2 a day had roughly doubled from 1995, the latest era of welfare reform. In 2011, there were roughly 1.5 million households, about 4 percent of all households, living on \$2 a day per person or less. They spanned family types, with one third being two-parent families. They spanned the races, with nearly one half being white, although the rate of growth among Hispanics and African Americans was higher than that among whites (Edin and Shaefer 2015).

Their work is irregular and unpredictable. A large pool of low-wage workers, many of whom were pushed into the workforce by lifetime limits on cash assistance, makes it easy for employers to demand that workers be available on call "24/7." There is no vacation time, sick leave, or health insurance. Even with food stamps and housing allowances, children go without regular meals and health care and sleep in substandard, overcrowded apartments. In at least one family living in the Mississippi Delta, the children reported that they often wished they were dead rather than be so pained with hunger (Edin and Shaefer 2015).

Just above them on the pyramid are the \$3-to-\$5-aday workers.⁸ This may not sound like a big difference, but even this little bit more means a more secure life. People at this level may have a few years of secondary

education. They may work in such jobs as construction or petty trades, as drivers, or as staff in public or commercial establishments. They may own bicycles, televisions, and cell phones. There are approximately 1.4 billion people living at this level (Rangan et al. 2011). Their health is generally better at this level, so fewer days of work are missed. Their work not only pays more but also is more regular and secure.

The most success in the global struggle against poverty has been at these lowest levels, lifting people from extreme poverty to low income. An increase from less than U.S. \$1.25 to just \$2 a day makes a significant difference in people's lives. From \$3 to \$5 a day makes an even greater difference. These may mean a difference in food security or the chance to send children to school. It may mean being able to purchase tools to begin a small business. But even \$5 a day is less than \$2,000 a year and still poverty wages on the global pyramid. Many people in these lowest categories are among the modern slaves such as the migrant construction workers in the United Arab Emirates whose passports are taken away from them when they arrive. They work for about U.S. \$167 a month (Walk Free Foundation 2016).

ORIGINS OF CONTEMPORARY INEQUALITY AMONG NATIONS

Prior to the Industrial Revolution, all societies were poor, and aside from a small elite class or caste, there was not a great deal of difference in how people lived from society to society or within societies. Nearly everyone lived an agricultural small town lifestyle. Nearly everyone was poor. A rough estimate is that in 1820, 94 percent of the global population lived on under \$2 a day (in contemporary dollars) and 84 percent on under \$1 (Radelet 2015).

Development and Economic Transitions

Traditionally, when social scientists refer to a society as developing, they refer to the process of economic transition, which leads to growth. In general terms, there are three sectors of economic activity: primary (agricultural), secondary (manufacturing), and tertiary (service) industries. The primary sector is that portion of the economy or labor force that involves securing raw materials and resources directly from the land. This can be thought of as the first step in a commodity

or production chain. Agriculture, mining, fishing, and lumberjacking all secure raw materials from the earth. The secondary sector is manufacturing. This sector turns the primary resource into a product or goods. Manufacturing "adds value" to the resource. There are levels of manufacturing. Some are basic such as filleting and freezing fish and spinning cotton to thread. Examples of much higher levels of manufacturing are the chemical industry and new materials manufacturing. Higher levels of manufacturing add considerably more value than lower levels. Tertiary industry is the service industry. It is bifurcated with a low-level sector of low-skilled occupations that require little education and a highly educated, highly skilled workforce. The lower skilled sector performs many of the tasks associated with domestic work-from janitors, to launderers, to fast-food preparation, to child and home health care. The higher level service sector is in finance, marketing, upper management, and high-tech positions. Professionals-from technicians, to doctors, to teachers, to lawyers—are in this category.

Advances in technology propel societies along the developmental path. Technology releases people from lower level work, replacing them with increasingly efficient machines and robotics. In agriculture, for example, a few large expensive pieces of machinery can replace scores of workers. With further advances in technology, fewer workers are needed in manufacturing. Factories that employed thousands can get by with hundreds. The labor force moves into service. The occupational structure shifts from primary to manufacturing and then to service industries. The transitions are not easy, and workers are displaced. As societies transition at different rates, they diverge from one another in the value they produce and subsequently their income and wealth.

The Industrial Revolution was the first opportunity for societies to significantly increase their income and accumulate wealth relative to other societies. Before the Industrial Revolution, the richest societies were only about three times richer than the poorest. In 1820, nearly everyone lived in absolute poverty. The first divergence among countries occurred with the Industrial Revolution (Figure 2.19). At this time, most of the world, some 75 percent, was still living under colonial rule and did not have the opportunity to develop independently. A small group of 17¹⁰ countries industrialized and grew relatively rapidly and at similar rates during this early period of industrialization.

As manufacturing moved from the most advanced societies, it provided a second opportunity for development. Manufacturing began moving to less developed nations in the late 19th century. Latin America was free from colonization, but Africa and much of Asia were not. The 1950s were a take-off period for many societies from South America to East Asia. Among developing societies, a surge of growth from 1960 to 1990 produced a second divergence. Of the 108 developing societies, 11 experienced explosive growth, averaging more than 4.2 percent a year.

Other societies, about 40, grew at less than 1 percent, 28 grew at less than 0.5 percent, and 16 experienced negative growth. Some, such as Argentina, started out among the wealthier societies but went from wealth to poverty. Others, such as India, were already poor and grew so slowly that they grew increasingly poor in relation to global per capita incomes. The gap in per capita income between the richest and poorest grew 10-fold from 1870 to 1990, from about \$1,286 to \$12,662 (Pritchett 1997). In sub-Saharan Africa, the GDP per capita fell from one third of the richest nations in 1820 to one twentieth by the 2000s (Sindzingre 2005).

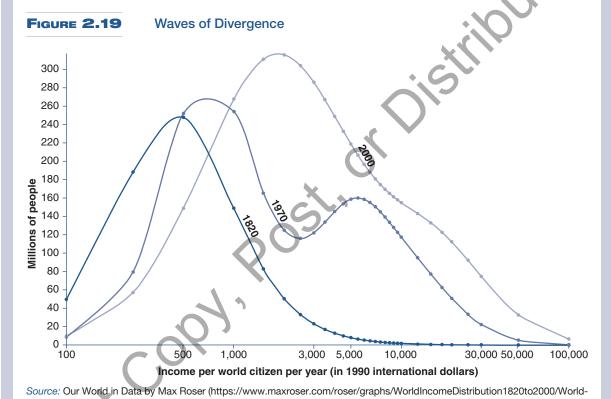
Because of differing rates of development, some societies remain heavily invested in agriculture and other primary industries in terms of both the proportion of their GDP that comes from the agricultural sector and the proportion of their labor force engaged in primary industry and agricultural work (Table 2.7). Manufacturing jobs typically pay more than primary industry jobs¹² and initiate the development of a middle class. As societies develop newer technologies, fewer workers are needed in lower level manufacturing. Ideally, they move to higher level manufacturing and services.

The proportion of GDP derived from each economic sector also indicates the level of development. A greater proportion of GDP is generated by "industry" and "services" in more developed countries (Table 2.8). Worker per worker, workers in higher level industries (except the low-level services) produce more value as measured by their contribution to GDP.

There is a general argument that people are poor because they must not work or work hard or because they do not have entrepreneurial talent or desires. Each of these arguments is false. As is evident in examining the "bottom of the pyramid," people in countries with low levels of development work hard—much harder, one might

WAVES OF DIVERGENCE IN THE GLOBAL ECONOMY

In 1820, all societies were very poor. There were few wealthy individuals. By the 1970s, there were two distinct categories of nations. The largest category containing the bulk of the world's population did not develop and was not much wealthier in 1970 than in 1820. As development spread to more parts of the world, incomes in those regions increased. But most of the world is still relatively poor.



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argue, than people in wealthy societies. But they work for less money. Their work, whether in agriculture, low-level manufacturing, forestry, or mining, is necessary for global growth but does not bear a living wage on the global market (Table 2.9). This makes it difficult, if not impossible, for individuals or the countries in which they live to provide adequately for a life of survival, let alone comfort. At the same time, global trade allows many goods made by these workers or made from materials collected by these

workers, from T-shirts to toilet paper, to be purchased by consumers in wealthy countries for prices below their cost just 40 years ago.

Wages are the primary source of income in developed and developing societies alike. The opportunities that people have to earn an income are dependent on the jobs that are available where they live. What people are paid for their work varies by the distribution of jobs in the occupational structure of the society.

THE RELATIONSHIP BETWEEN THE LABOR FORCE AND GDP

This sample of countries illustrates the level of employment in each industrial sector. As a general rule, the labor force transitions from agriculture into manufacturing and then into the services as workers reach advanced levels of development.

TABLE 2.7 Labor Force and Economic Sector

HDI Rank (Country)	Percentage of	Percentage of Labor Force in Economic Sector				
	Agriculture	Manufacturing	Services			
Very High (United Kingdom)	1.3	15.2	83.5			
High (Bulgaria)	7	30.1	62.9			
Medium (Vietnam)	48	21	31			
Low (Zimbabwe)	66	10	24			

Source: Adapted from 4.2 World Development Indicators: Structure of output by World Bank (http://wdi.worldbank.org/table/4.2) licensed under CC BY 4.0 (https://creativecommons.org/licenses/by/4.0/).

TABLE 2.8 Percentage of GDP per Economic Sector in 2015

Higher-level manufacturing is distinguished from all industry in this chart, although it is included in the industry total. Manufacturing represents higher level industry.

Income level (GNI/capita)	Agriculture Percentage	Industry Percentage	Manufacturing ^a Percentage	Services Percentage
Low (\$1,045 or less)	31	21	8	48
Lower middle (\$1,046 to \$4,125)	16	30	16	52
Upper middle (\$4,126 to \$12,735)	7	34	21	59
High (\$12,736 or more)	1	25	15	74

a. These sectors are classification categories 15 to 37. They are included within "industry" percentages. They include the higher level manufacturing sectors such as chemicals, pharmaceuticals, electrical equipment, and machinery as well as some lower level sectors.

Source: Adapted from 4.2 World Development Indicators: Structure of output by World Bank (http://wdi.worldbank.org/table/4.2) licensed under CC BY 4.0 (https://creativecommons.org/licenses/by/4.0/).

TABLE 2.9 Percentage of Working Poor per Region

Many people think that the poor do not work. There are many people who work every day and are at or below poverty levels.

Percentage of Workers Living in Poverty (less than U.S. \$1.25 a day)		Percentage of Workers in Develo Working at Each Income Level (L	
Developing world	11	Extremely poor (less than \$1.25)	11
Oceania	18	Moderately poor (between \$1.25 and \$2)	16
Southern Asia	17	Near poor (between \$2 and \$4)	25

Percentage of Workers L than U.S. \$1.25 a day)	iving in Poverty (less	Percentage of Workers in Develo Working at Each Income Level (\text{\text{\text{\$V\$}}}	
Southeast Asia	7	Total poor and near poor	52
Eastern Asia	3		
Latin America and the Caribbean	2		
Caucasus and Central Asia	1		140
North Africa	1		
Western Asia	1		

Source: Adapted from The Millennium Development Goals Report 2015 by the Department of Economic and Social Affairs, © 2015 United Nations. Reprinted with the permission of the United Nations.

FACTORS INFLUENCING VARYING LEVELS OF DEVELOPMENT

Why some societies broke from the historical record of slow growth, developed quickly, and became wealthy while others remained poor is a central question of the social sciences, including not just economics but also political science, geography, anthropology, and sociology.

Economic Growth

With the exception of the "Asian Tigers"—Hong Kong, South Korea, Taiwan, and Singapore—that successfully developed from 1960 to the 1990s, the developing world lagged behind the developed world for most of the post-World War II period. It was not until 2000 to 2009 that growth accelerated among other developing countries. When it did, it accelerated dramatically—7.6 percent, 4.5 percent faster than the developed world (Figures 2.20 and 2.21). If those rates had held steady, per capita incomes in the developing world stood ready to converge with those in the developed world in just 30 years. They seemed to be doing everything right—from improvements in education, to clamping down on corruption, to opening up markets to global trade and building infrastructure.

Growth was not evenly spread. East Asia, Eastern Europe, and the BRICS (Brazil, Russia, India, China, and South Africa) led in growth, with China accounting for the greatest share. Nevertheless, even the least developed societies, some 48 countries (34 in Africa, 13 in the Asia—Pacific region, and Haiti in the Caribbean), experienced rapid growth rates in that decade, peaking at 9.53 percent in 2007

(Figures 2.22 and 2.23). Since then, the growth rate has slowed to 3.553 percent in the least developed countries and dipped into negative numbers in Brazil and Russia for 2015.

A plethora of factors, both internal and external to societies, accelerate or inhibit economic growth. Competing theories—from geography, to institutions, to culture—all need to be considered because each is convincing in the evidence it brings to the debate and each may have an important role, whether in shaping historical development or explaining contemporary development and underdevelopment.

Extractive Institutions and Inequality

Institutions matter to development. Good institutions can influence every sphere of life, providing life chances and ensuring the rule of law. Acemoglu, Johnson, and Robinson (2001, 2002) and Acemoglu and Wolitzky (2011) looked to institutions for at least part of the explanation of modern inequality.

Former colonies and dependencies vary in their rates of growth post-independence. Paap, Franses, and van Dijk (2005) clustered countries according to their rates of growth. They found that on every colonized continent, there are a variety of growth rates (Table 2.10).

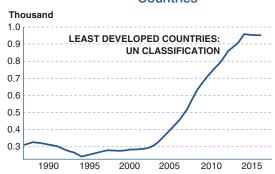
Different colonies presented Europeans with different opportunities for wealth. Consequently, Europeans developed two distinct institutional systems in their colonies. Europeans were highly susceptible to diseases found in Africa and Asia. In addition, those areas were densely populated when colonizers arrived. These factors limited the colonizers' opportunities to settle there, but population density offered an economic advantage—the

GDP IN THE LEAST DEVELOPED COUNTRIES AND BRICS

While growth in developing countries and the BRICS did not keep pace with the rest of the world following World War II, GNI per capita rose rapidly beginning in 2000.

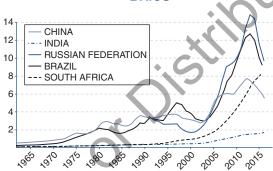


GDP per Capita in the Least Developed Countries



Source: Created from GNI per capita, Atlas method (current US\$) by World Bank (https://data.worldbank.org/indicator/ NY.GNP.PCAP.CD?locations=XL) licensed under CC-BY 4.0 (https://creativecommons.org/licenses/by/4.0/).

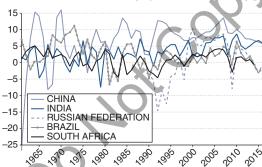
GDP per Capita in the BRICS



Source: Created from GNI per capita, Atlas method (current US\$) by World Bank (https://data.worldbank.org/indicator/NY.GNP. PCAP.CD?locations=BR-CN-IN-RU-ZA) licensed under CC-BY 4.0 (https://creativecommons.org/licenses/by/4.0/).

Developing nations experienced rapid rates of growth beginning around 2000. The BRICS grew as they suffered few years of negative growth.

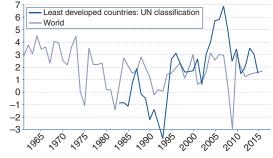
GDP per Capita Growth in the BRIC



Source: Created from GDP per capita growth (annual %) by World Bank (https://data.worldbank.org/indicator/NY.GDP. PCAP.KD.ZG?locations=BR-CN-IN-RU-ZA) licensed under CC-BY 4.0 (https://creativecommons.org/licenses/by/4.0/).

FIGURE 2.23

GDP per Capita Growth in the Least Developed Countries



Source: Created from GDP per capita growth (annual %) by World Bank (https://data.worldbank.org/indicator/NY.GDP. PCAP.KD.ZG?locations=XL-1W) licensed under CC-BY 4.0 (https://creativecommons.org/licenses/by/4.0/).

opportunity for forced labor, whether on plantations or in mines. Where slavery had been practiced by indigenous groups, extractive political systems were already in place and people paid duty to powerful chieftains—much as in feudal Europe. In such cases, Europeans merely took control. Authoritarian and absolutist political systems developed that benefitted the few at the expense of the majority (Acemoglu et al. 2001).

FORMER COLONIES BY GROWTH AND REGION

Former colonies within regions achieved various levels of success. However, none within Africa or the Middle East advanced to high levels of human development.

TABLE 2.10

	Low	Medium	High
Africa	26	8	0
America	7	6	1
Asia	2	5	6
Middle East	1	7	0

Source: Adapted from Paap, Franses, and van Dijk (2005).

Note: Low growth—Africa: Benin, Burkina, Burundi, Cameroon, Chad, Comoros, Côte D'Ivoire, Equatorial Guinea, Ethiopia, Gambia, Ghana, Guinea, Guinea Bissau, Kenya, Madagascar, Mali, Mozambique, Niger, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Togo, Uganda, and Zambia; America: Argentina, Bolivia, Ecuador, Jamaica, Peru, Uruguay, and Venezuela; Asia: Bangladesh and Philippines; Middle East: Jordan. Medium growth—Africa: Congo, Cape Verde, Gabon, Lesotho, Malawi, Mauritius, Seychelles, and Zimbabwe; America: Brazil, Chile, Colombia, Dominican Republic, Paraguay, and Trinidad and Tobago; Asia: India, Indonesia, Nepal, Pakistan, and Sri Lanka; Middle East: Algeria, Egypt, Iran, Israel, Morocco, Syria, and Turkey. High growth—America: Barbados; Asia: China, Hong Kong, Japan, Korea, Malaysia, and Thailand.

"Extractive institutions" neither supported long-term development nor disappeared with the end of colonization. Lange (2004) discovered a long-term legacy of "indirect rule" in which the British colonial powers worked through intermediaries, such as chieftains, to exert control and administer the colonies. Chiefs were given power over all aspects of government. They existed as clients of the British, their patrons. Chiefs extracted wealth from the population for themselves and the British. The colonies were in effect clusters of kingdoms linked only weakly through a common colonizer. Looking at data for 33 British colonies, Lange found a robust negative association between indirect rule and "political stability, bureaucratic efficiency, lack of state regulatory burden, rule of law, lack of government corruption, and democratization" (p. 906). Indirect rule, he found, resulted in ineffective government and despotic decentralization, not bureaucratic rules.

In contrast to extractive institutions, North America developed inclusive, direct rule institutions. North America was lightly populated with a hospitable environment. Europeans settled there instituting direct rule characterized by formal rules, a centralized administrative structure, and a formal chain of command (Lange 2004). Acemoglu

et al. (2002) identified a cluster of social, political, and economic institutions—the institutions of private property—necessary to ensure that a broad cross section of a society has the opportunity to develop. The political institutions were inclusive, for example, the town hall meetings of New England. The colonizers who lived there, whether of lower or higher social status, wanted their rights ensured.

The type of institutions a society developed made the biggest difference with respect to industrialization. Where rights were widely shared, there was incentive to take advantage of new technologies. The institutions that encouraged investment and protected private property facilitated development in the Americas, Australia, and New Zealand. Where rights were secure for only a small elite, neither the elite nor non-privileged classes were likely to take advantage of the new opportunities. The elite could take advantage of the new technologies only if they themselves had the entrepreneurial skills and ideas necessary for technological development. People other than the elite would not be motivated because their property would not be protected and their successes could be snatched away arbitrarily. In any case, elite classes would be likely to block efforts of others because they themselves would not benefit and their position could be challenged by new wealth. Successful industrialization requires a large number of people willing to make risks on investments. The United States, Australia, Canada, Japan, and Hong Kong were industrialized through the activity of their large middle classes (Acemoglu et al. 2002). Direct rule made it possible, whereas indirect rule subject to clientelism and the arbitrary decisions of intermediaries thwarted development.

To investigate the long-term legacy of colonialism, Nunn (2007) tested two variables: rates extraction and the resources devoted to securing property rights. The extractive institutions—land appropriation, tax systems, and forced labor—had a long-term impact on development. Highly extractive industries, the slave trade to start, reduced previously productive societies to low production. With high extraction, there is not motivation on the part of the populace to produce, and many people are motivated to engage in low-productive activities (securing the output of the producers through robbery, extortion, kidnapping, conflict, etc.), which discourages development. This low-production combination is stable and related to the decreasing development that many societies experienced post-independence.

In the case of African colonies, many were in a highproduction equilibrium before contact with Europeans. Where there was high foreign extraction and unproductive activity, first through the slave trade and then through colonial rule, low-production equilibrium developed. In the case of Mozambique, as the slave trade increased, rice and wheat production fell. (It is now in the lowest 5 percent in human development.) A colonial administrator on the Gold Coast lamented that "the natives nowadays no longer occupy themselves with the search for gold, but rather make war on each other to furnish slaves" (Nunn 2007). Where colonizers chose lower levels of extraction and invested more in protecting property from "unproductive actors," people invested in productive activities and the colony was more likely to maintain development after independence. Where colonists settled, long-term development strategies held-in keeping with Acemoglu's theories concerning disease and development.

Extractive as opposed to inclusive institutions apply in the differences among the northern regions of North America and the southern regions of North America and South America. Land inequality and political inequality dominated the large plantation systems of the southern regions. They developed extractive systems based on slave labor and labor of indentured servants. Only an elite had property rights. In the north of the Americas, above the "Mason–Dixon line," the land was not suitable for

large plantations but rather small landholdings. To this day, South America and the "Deep South" states of the United States are less developed and remain poorer than the north.

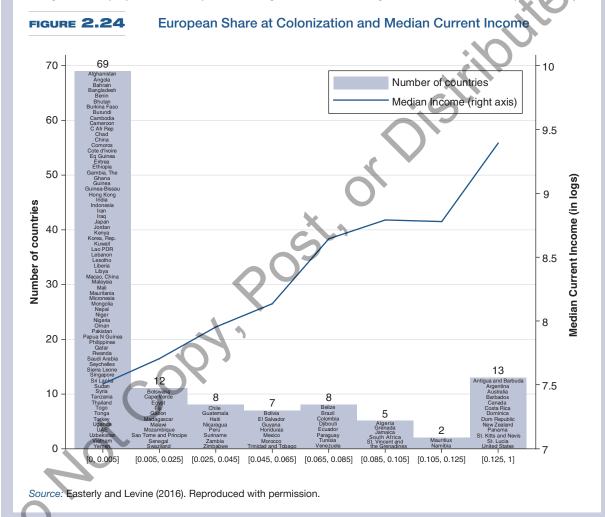
Easterly and Levine (2016) tested the effect of settler and non-settler colonization by measuring the relationship between the number of Europeans living in the colonies and their economic development in the late 20th and 21st centuries. They found robust evidence that current country income increases as the proportion of Europeans living in the colonies increases. In examining the population data, a "natural break" between what would be thought of as settler colonies and non-settler colonies fell at 12.5 percent. Testing only the colonies whose share of European settlers fell below 12.5 percent, a marginal increase in the percentage of European residents resulted in a greater increase in income than for the settler colonies. Furthermore, the positive effect on income of the proportion of Europeans living in the country during colonization remains when controlled for the proportion of Europeans living in the country today (Figure 2.24).

Easterly and Levine's (2016) evidence complements Acemoglu et al.'s (2002) reversal of fortune thesis that regions that were the most productive pre-1500 became the least productive after colonization and those that were the least productive pre-1500 became the most productive. Fewer colonizers settled in more densely populated colonies (an indicator of productive success); those colonies provided more opportunity for extraction because there was more for Europeans to tax away from the colonies and more labor force to exploit in plantations and mines. This inhibited development. Where there was lower population density, Europeans settled and brought human capital, more egalitarian political institutions, and other factors such as technology and knowledge of global markets that fueled long-term economic development. Even with small settlements, but above 4.8 percent, there is some benefit that offset the negative effects of the extractive institutions.

Colonialism lasted into the 1960s and 1970s, even later in some countries. While scientists in advanced economies sent people to the moon, majorities in many post-colonial societies remained uneducated. In 1960, only 10 percent of adults in the low-income countries were literate (World Bank 1978). The five best universities in Africa, according to the *African Economist* (2015), all are in South Africa, a Dutch settler colony. The next four are in Egypt. There is only one in the top ten not from these countries. It is in Tanzania. Even today, Africa has few scientists and engineers, about one for every 10,000 people in comparison with 20 to 50

RELATIONSHIP BETWEEN PROPORTION OF EUROPEAN POPULATION DURING COLONIALISM IN RELATION TO INCOME

The greater the proportion of Europeans residing in the colonies, the greater their level of development today.



per 10,000 in industrial nations. Although the African Union hoped for a scientific revolution in Africa to fuel development, improve agricultural productivity, fight disease, and preserve the environment, most countries have not followed through on commitments to advance science education (Mutume 2007).

Diversity and Conflict

While many rich countries, particularly the United States and Canada, welcome diversity as a source of creativity, energy, and entrepreneurship, diversity inhibits many developing societies. After shattering African states and kingdoms during the slave trade, colonial rule established political borders that fractured ethnic communities and combined them with others; some of them had developed animosities related to the slave trade. Colonizers imposed Christianity and Islam on indigenous religions, creating religious fault lines in addition to the ethnic ones. Ideological struggles during the Cold War pitted people against their fellow nationals. Despots of one ethnic or religious group led the persecution of the others. Many societies never developed a sense of national identity capable of encompassing all groups.

Diversity in these societies weakened rather than strengthened development. Intra-societal violence across ideological lines during the Cold War and religious and ethnic lines thereafter have ravaged populations and societies. While the human cost has been high, the economic effects are also high; the working-age population of many societies has been decimated, infrastructure destroyed, and the environment ravaged. Orphaned children and those living in refugee camps lose years of intellectual development, and physical growth is often stunted. Emotional and psychological trauma is extensive. A conservative estimate of the costs of a civil war to a country and its neighbors is about U.S. \$64 billion. Over the past few decades, there have been two new civil wars a year on average. That brings the cost to about \$100 billion a year, every year, for decades-double the foreign aid budget (Collier 2007).

In societies where diverse groups compete for power, developing institutions and spending money for the common good is not a priority. Only some of the population will thrive. A society cannot do well if only a portion of human capital is developed.

Corruption

Corruption is endemic to inequality and underdevelopment. The poorest societies also tend to be the most corrupt. Transparency International's (TI) 2016 Corruption Perceptions Index (TI 2017) found that corruption is even more strongly related to inequality than to income. The costs of corruption are high; the World Bank found that by controlling corruption, a country can realize a fourfold increase in income per capita, it can realize a 75 percent reduction in child mortality, and businesses can increase growth by about 3 percent a year.

The OECD (2014) publication "CleanGovBiz" cited corruption as one of the main obstacles to development

for all economies. It listed four main ways in which corruption inhibits development:

- 1. Corruption increases the cost of doing business.
 - The World Economic Forum estimates that corruption increases the costs of doing business by 10 percent on average.
- Corruption leads to waste and the inefficient use of public resources.
 - Gupta, Davoodi, and Tiongson (2001) found that child and infant mortality and student dropout rates are significantly higher in countries with high levels of corruption.
 - African GDP loses 25 percent, U.S. \$148 billion, to corruption every year.
- Corruption excludes poor people from public services and perpetuates poverty.
 - Because they cannot afford bribes, many of the poor are denied services.
 - Corruption reduces government offerings to the poor.
- Corruption corrodes public trust, undermines the rule of law, and ultimately delegitimizes the state.
 - Bribery of public officials, bypassing regulations to protect the public, and corruption in political parties and elections undermine the foundations of democracy. This could lead to withdrawal of the public from political life or to protests and uprisings such as those that led to the Arab Spring in 2011.

Corruption, the unequal distribution of power, and economic inequality reinforce one another while the majority of people suffer (TI 2017). Bribery is a common form of corruption. People may need to pay bribes to get their children into school, to get a driver's license, or to get their trash collected. The World Bank (2004) estimated the global cost of bribery in the developing world, conservatively, to be U.S. \$1 trillion a year.¹³

The World Economic Forum calls corruption the "hidden tax on global growth." This was a key topic at its 2017 annual meeting. Corruption undermines the development of countries in subtle ways. Olken and Pande's (2012) study of corruption drew from examples across a

wide range of activities and a multitude of ways in which corruption costs societies. Efficiency costs are severe. For example, in Aceh, Indonesia, the authors found that truck drivers regularly paid bribes to avoid being forced off the road at weigh stations. Nearly all the trucks weighed in their research were overweight. Two in five were more than 50 percent overweight. This leads to rapid deterioration of the roadways. This is a hidden cost. In other cases, public expenditures might never reach their targets. In Uganda, one grant for special education sent by the central government had shrunk by 87 percent by the time it reached the local school.

Corruption by low-level officials and bureaucrats bears a high economic cost and a high cost in human capital, as when children lose out in education or nutritional and health care deficits lead to physical and mental stunting or infant and child mortality. Corruption at high levels, kleptocracy, steals from every institution and every person in the society and undermines the legitimacy of the government. With corruption, people go hungry while the corrupt live in luxury. Corrupt leaders of many former colonies enriched themselves at the expense of their people. Foreign aid channeled through corrupt leaders ended up in overseas bank accounts or was used to build lavish palaces with exotic animals. The World Bank found that about U.S. \$20 to \$40 billion of development assistance is stolen by high-level corruption.

Wealthy countries that shelter money for politicians or business owners are complicit in the corruption and benefit from it. Financial Flows and Tax Havens (Centre for Applied Research 2015) reports on recorded and unrecorded "net resource transfers" from poor to wealthier nations. Developing countries have been acting, in effect, as creditors to wealthier nations, with the balance of money flowing out from the poor to the rich nations. This is, of course, the opposite of what development efforts aim to accomplish. The report calls tax havens and illicit financial flows one of the greatest drivers, if not the greatest driver, of inequality in developing countries. The financial flow and tax haven study found that developing countries lost nearly U.S. \$3 trillion in recorded transfers out of the countries and \$13.4 trillion¹⁴ in capital flight. These transfers are, in effect, loans to wealthy financial institutions in developed countries.

Political leaders guilty of grand corruption span the globe. Zine al-Abidine Ben Ali, the former president of Tunisia and the first leader to fall in an Arab Spring uprising, stole U.S. \$2.6 billion from his country (TI 2017). Viktor Yanukovych, former president of Ukraine, lived in a lavish estate with an exotic zoo, a golf course, a spa with a salt grotto, and a full-sized Spanish galleon. Decorative items in his estate totaled in the millions of dollars. During the Cold War, corruption was endemic among heads of state of developing countries. Mobutu Sese Seko of Zaire (now the Democratic Republic of the Congo [DRC]), Suharto of Indonesia, Ferdinand Marcos of the Philippines, and many more of that era and beyond took trillions of dollars from their countries—much of it development aid—and contributed to the impoverishment and failure to develop or thrive of their people. In some of these societies, such as the DRC, development was more robust in colonial times than in independence.

Kleptocracy is not limited to the developing world. No nation is without corruption. In the United States, Illinois Governor Rod Blagojevich went to prison for trying to profit from his authority to appoint someone to fill the U.S. Senate seat vacated by Barak Obama when Obama became president. Ray Nagin, the mayor of New Orleans, profited from funds intended to help the recovery following Hurricane Katrina. Edwin Edwards, a long-serving governor of Louisiana, collected millions on the awarding of casino licenses.

The Resource Curse

Ironically, many countries that are rich in a resource such as oil or precious metals are poor. While being resource rich should be a boon to growth, it can also inhibit growth. One way in which this happens is through the "Dutch disease." When the Netherlands discovered large gas reserves in the 1960s, gas exports surged, bringing in foreign currency and driving up the value of Dutch currency. The increased value of the Dutch currency made Dutch exports more expensive and less competitive. Other industries suffered and unemployment increased.

Resources are also a curse if investors rush to invest in the resource, neglecting other development. The economy does not diversify. Many of the extraction industries do not employ many people once the wells are dug and the pipelines laid. While construction might employ thousands, operating the facilities often employs fewer than a hundred.

Dependence on one or two commodities is risky for a country. Prices are volatile, and supply and demand are not predictable. Consider oil prices. In less than 10 years, prices were slashed more than 50 percent. First, in the 2007–2008 recession, production virtually stopped due

to decreasing demand for oil. China's growth is slowing, also decreasing demand. New natural gas wells in the United States increased the fossil fuel supply and decreased demand for oil. Prices dropped to below U.S. \$50 a barrel, whereas they had been above \$100 before the recession. Oil-dependent countries suffered.

How a country uses the profits from valuable commodities influences whether it will help or hinder development. China's growth fueled demand for Africa's natural resources. This could have revived Africa's manufacturing. Instead, Africa's industrial output decreased from 3 percent of global output in 1970 to half of that in 2016 despite the economic boom. Most African countries used the windfall to fund nonproductive programs. Some economists fear that this is going to be a repeat of commodity-driven boom and bust—a resource curse (Tafirenyika 2016).

Where governments control resources, authoritarian governments may use them to their own advantage to consolidate power. When Russia benefitted from the pre-recession increase in demand for oil, Vladimir Putin's authoritarian tactics did not seem to bother many Russians. After a short run with democracy in which the economy did not do well, they were happy with the stronger economy. The revenue stream from resources can pay for benefits as long as the commodity price holds. Populations can be kept satisfied with state-offered benefits. At the same time, politicians can enrich themselves with little public oversight of state-run enterprises. Corruption can thrive.

Resources are not necessarily a curse. Whether or not they are depends on human agency. Britain and the United States used vast coal reserves to industrialize. Ethiopia and Tanzania, while resource rich, experienced high economic growth without depending on their resource wealth. Whether it is a curse or a blessing depends on the governance structure and how the benefits from the resource are used. If they fuel diversification and industrial or service development, other industries can be built. Saudi Arabia, faced with falling oil prices and a public more restive due to the resulting decrease in benefits, recognized that the country could not depend on oil and is now trying to diversify its economy.

Climate Change

Climate change and pollution bear a cost to societies. The World Bank (2010) projected the costs for developing countries to range from about U.S. \$75 to \$90 billion annually for the years 2010 to 2050, 15 based on two different scenarios. The costs include such things as

adapting agriculture, preventing and treating increases in vector-borne diseases, and harm to trade and fisheries, among many other impacts. This estimate does not include the cost of forced migration and illnesses such as heat stress, pollution, and increased allergen levels. Climate change also contributes significantly to violent conflict, particularly due to drought and food insecurity. Conflicts may be localized among groups competing for resources, as in Kenya and Uganda, or may evolve into civil wars. Terrorist groups also take advantage of drought conditions to control water supplies (as Al-Shabab has done in Somalia) or to lure recruits. These latter costs cannot be reliably estimated. However, they are, and will undoubtedly continue to be, in the billions.

In Africa, the costs of premature death due to pollution are high. In 2013, there were more than 250,000 premature deaths from ambient air pollution and more than 450,000 from indoor air pollution. The economic cost of these deaths was U.S. \$447 billion. The United States also experiences thousands of premature deaths every year due to air pollution. No continent can afford to lose this much human or economic capital (Roy 2016).

The Global Economy

Participating in the global economy, the global division of labor, is essential for lifting countries out of poverty. Openness to the global economy, as measured by the percentage of GDP accounted for by imports and exports, is positively related to human development. Münch (2016) found that urbanization fosters specialization and facilitates integration into the global division of labor. Government expenditures on public goods, such as education, the rule of law, and health care, and the percentage of the population that is economically active enhance human development.

How a country participates is important. Developing countries have higher portions of GDP and labor in agriculture. The export of cash crops and raw materials, low value chain exports with easily manipulated prices, remains the mainstay of the least developed societies. They also tend to have high fertility rates. Both inhibit human development (Münch 2016).

For now, manufacturing remains critical for development in most countries. Without developing their manufacturing industries with reasonable wages, countries are less able to advance economically. Integrating into the supply chain of an international firm can help developing nations to advance, but they do not always benefit from a transfer of technology. This was something that the Asian Tigers insisted on, thereby facilitating their own growth.

While a developing country increases its total exports by entering a supply chain, it does not necessarily advance its own manufacturing sector.

VARYING PATHWAYS TO DEVELOPMENT

Societies exist across the continuum of development. As discussed above, most of the developed countries, those of Western Europe and North America, diverged at the time of the Industrial Revolution. Other societies never "took off" and are still growing slowly. There are at least two other patterns worth considering. Not all of the most advanced countries took the "Western" route, yet they advanced and took places among the wealthiest societies. Other countries showed rapid development and yet stalled. This section examines these alternate routes of development. Each provides a framework for thinking about global inequality and poverty in specific contexts.

Divergence in Asia: The Fast Growth of Japan and the East Asian Tigers

Landes (1999) contrasted the post-World War II success of Japan and the late 20th-century rise of the East Asian Tigers with the stagnation and decline of other societies. According to Landes's analysis, Japan's success grew from deep roots in every aspect of its society. Its success, and that of Hong Kong and Singapore, diffused through some other Asian societies as production and know-how spread through the region.

A fundamental feature of Japanese culture is the strong sense of family that extends up through to the nation. This translates to a sense of higher purpose, including in economic activity, serving the nation first, family second, other groups third, and the self somewhat further down the line. This dutifulness supports a strong work ethic that would make the Calvinists jealous. Education played an important role as well. Education has been important historically in Japan, being among the first countries to require universal primary education. Education includes willingness to learn from other countries. When manufacturing moved to Japan, companies did little to protect the intellectual capital in their products, believing they had nothing to fear from these "defeated" people. Japanese engineers quickly "reverse engineered" foreign technology, disassembling and learning from it. When traveling to factories abroad, they "humbly" asked questions, photographed, tape recorded, watched, and learned (Landes 1999).

Japanese engineers also invented, focusing on the highest technology products. They studied the markets and created products to meet demands. They developed more efficient production techniques. Their ethic of collective responsibility fostered a team approach and willingness of workers to submit to their superiors. Economic policy stressed protecting fledgling industries. When forced into open trade agreements, they instituted non-tariff barriers such as refusing some products due to the "different conditions" in Japan. Their economic policy was not to get the "lowest prices" and "discount distribution" but rather to build market share, capacity, and industrial and military strength (Landes 1999).

While the international financial institutions advocated import substitution—replacing imported products with ones manufactured domestically—the Japanese complied but developed export markets as well. When privatization was advocated, Asian governments established industries needed for development if the market did not. This is how Korea created one of the most efficient steel industries in the world, spurring its automotive and other industries, and how Taiwan created its Formosa Plastics industry (Stiglitz 2006).

Rather than choosing between an economy completely open to market forces and strict central planning, the Asian societies that grew quickly in the 1980s and 1990s took another path. They managed their economies but spread the benefits of development widely. Although specific policies varied, the main strategies included the following (Stiglitz 2006):

- Encouraging saving by creating savings institutions to ensure capital flow from stable domestic sources. Singapore took this a step further by requiring mandatory savings through wage attachments
- Opening their markets slowly while protecting fledgling industries
- Planning growth in export industries carefully, specifying which industries would be developed and how imports would be restricted
- Selecting foreign investment cautiously and requiring foreign companies to transfer technology and train workers
- Opening financial markets slowly and methodically

Development in these societies was successful but not trouble free. Too great an influx of foreign capital along with relaxing regulations led to short-term speculation and the financial crisis of 1997 (Stiglitz 2006).

Slow Growth or Income Traps?

The explosion of growth in the 2000s lifted many countries and people out of poverty and into low-income status. From 2001 to 2011, the poverty class shrank by 669 million people, about one third. Growth rates averaging about 6 percent a year in a few developing societies pushed people over the poverty threshold into low income. Every 1 percent growth per capita in a society reduced poverty by about 1.7 percent on average. Poverty dropped even more in more equal societies (*The Economist* 2013).

Does this mean that all societies will at some point converge? There has been mobility, but most mobility among people has been from poor to low income. Because growth did not move as many people from low income to middle income as from poor to low income, the low-income class grew by 694 million people (Figure 2.25).

From 1950 to 1980, there was significant mobility in terms of the numbers of societies that moved up income categories. From the postwar period into the 1980s, industry "unbundled" and manufacturing spread into poorer economies, lifting incomes in Latin America, parts of Eastern Europe, and Asia. Japan and Korea rebuilt with the help of the West after World War II and the war in Korea. The industrialized world turned toward more services and higher-level manufacturing (Baldwin 2006). Advancing through income categories took longer in the decades from 1980 to 2013 than from the 1950s to 1980. Although 31 countries moved from low-income status (1990 purchasing power parity less than \$2,000) to lower middle-income status (\$2,000 but less than \$7,250) during the 1950s, 1960s, and 1970s, only 2 moved up during the three decades from 1980 to 2013 (Felipe, Kumar, and Galope 2017). Some societies have remained in lowincome status for generations, as have 35 from 1950 to the present (Felipe et al. 2017).

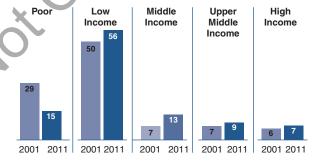
Movement among societies from lower-middle to upper-middle class (\$7,250 but less than \$11,750) and from middle to upper income (above \$11,750) is also

A CLOSER LOOK

GLOBAL ECONOMIC MOBILITY, 2001-2011

Poverty decreased from 2001 to 2011. Most people remained poor, and most mobility was from poor to low income. Fewer people moved from lower income to middle-, upper middle-, and high-income classes.





Source: "A Global Middle Class Is More Promise than Reality." Pew Research Center, Washington, D.C. July 8, 2015. http://www.pewglobal.org/2015/07/08/a-global-middle-class-is-more-promise-than-reality/.

progressing more slowly since 1980 than it did from 1950 to 1980. After 1950, the median number of years it took countries to advance to the upper middle-income category was 28. However, three countries in this group took from 50 to 54 years. Others advanced much more rapidly. In addition, the number of high-income countries increased from 3 to 21 from 1950 (beginning in earnest in 1960) through the 1980s but increased by only 12 from 1980 to 2013 (Felipe et al. 2017).

Given their current growth rates and the year that they entered their income category, there are 10 countries undergoing slower than average transitions out of lower middle-income status and 4 undergoing slower than average transitions from upper middle-income to high-income status (Felipe et al. 2017). Countries now ranked as high-income status (U.S. \$12,000 or above) enjoyed, at some point in their development, a high share of manufacturing employment—18 to 20 percent is the threshold for countries that are rich. The earlier that countries achieved their peak in manufacturing employment, the greater their GDP per capita was likely to be at that time (Felipe, Mehta, and Rhee 2018).

Are those countries that did not advance trapped in low- and middle-income status? There is no clear definition of a "middle-income trap." Using the term "trap" is misleading because countries can and do move up income levels, albeit at varying rates. Some move more rapidly and some more slowly, depending on a complex of circumstances that contribute to growth.

The 35 countries that have been in the lower-income tier since 1950 have high percentages of their workforces in agriculture. No country whose share of the labor force in manufacturing was below 16 percent ever achieved a per capita income of U.S. \$6,000 or above. It may well be that increasing a country's manufacturing workforce is more difficult than it was in the past (Felipe et al. 2018). Certainly, mechanization must be a factor. So too are movements toward more service economies. Another problem is that in poor countries manufacturing activity tends to be in the lowest levels of the value chain. When the work is similar, it pays poorly in comparison with similar activity in other countries; for example, contrast textile workers in Bangladesh (among the poorest) with those in Colombia (middle income). Poor-quality employment and insecure employment in developing and emerging economies also sustain poverty. Maintaining their growth rates and securing adequate jobs will be essential for these countries to advance to higher income levels.

Is China Stuck?

In 1978, China moved from a centrally planned economy to a market-based economy, spurring the fastest expansion of any society in history, averaging about 10 percent a year. Manufacturing wages in China tripled from 2005 to 2016, rising above wages in countries such as Mexico and Brazil, helping to push all wages upward as workers could leave poorer paying jobs for better wages (Worstall 2017). The millions of Chinese that growth lifted out of poverty is a major factor in improving global poverty statistics. This was not accomplished without problems. Rising inequality, environmental issues, rapid urbanization, large debt, and an aging population each poses a serious challenge to growth (World Bank 2016a).

In 2015, China had its slowest growth in 25 years. With a shrinking labor force, labor activism, and rising wages, industry costs are pushing upward and China is losing some of its competitive edge. Economic hardships in other countries have weakened demand for its exports. Without more efficient use of resources and improvements in productivity and innovation, China may remain in the middle, unable to compete effectively with lower cost countries or high-developed ones (Johnson 2015). China became a lower middle-income country in 1992 and by 2009 had achieved upper middle-income status. It will not be until 2024 that it would be considered as slower than the median in moving into upper income (Felipe et al. 2017).

Are We All Getting Stuck? Wages and Workers

The International Monetary Fund's (IMF) World Economic Outlook Update (IMF 2017) projected that the global economy would grow somewhat faster in 2017 (3.4 percent) and 2018 (3.6 percent) than in 2016 (3.1 percent).

How does growth translate for workers? The ILO (2016) reported that global wage growth dropped from 2.5 percent in 2012 to 1.7 percent in 2015, its lowest level in four years. Excluding China, wage growth in 2015 was only 0.9 percent. Since the 2007–2008 recession, most of the global wage growth had been driven by emerging and developing economies. Among the developing countries in the G20—the largest developing economies—growth fell from 6.6 to 2.5 percent from 2012 to 2015. Wage growth increased somewhat in the United States and Germany but declined in Asia and the Pacific. In Latin America and the Caribbean and Eastern Europe, real wages declined (ILO 2016).

Unemployment in most developed societies has recovered from the recession, but wages have not. Many workers are working fewer hours, and many are working part-time when they would prefer full-time work (Figure 2.26).

Sluggish wage growth is a risk factor for overall growth. With less income, people spend less, and consumer spending is an important driver of growth. This could in turn shrink wage growth.

Wage Growth in the United States

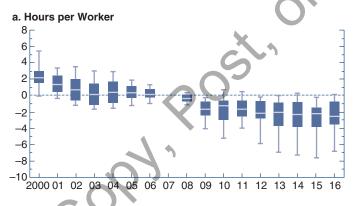
In the United States, wages and productivity grew together from 1947 until they diverged in the 1970s. Wages peaked in 1973 at U.S. \$22.41 (2014 dollars) and have not reached that level again—despite ever increasing productivity, increasing growth, and increasing job creation (DeSilver 2014).

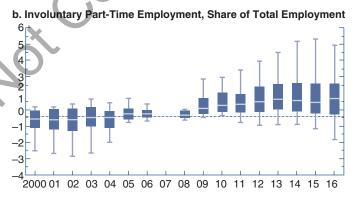
A CLOSER LOOK EMPLOYMENT STILL LAGS IN 2016

Fewer hours and more part-time employment impeded wage growth.

FIGURE 2.26

(a) Hours per Worker; (b) Involuntary Part-Time Employment, Share of Total Employment





Source: International Monetary Fund. 2017. Seeking Sustainable Growth: Short-Term Recovery, Long-Term Challenges. Washington, DC, October.

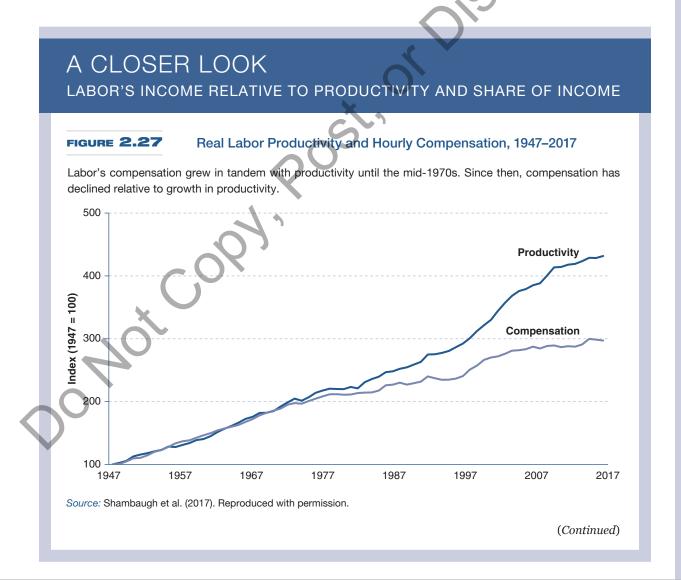
Note: (a) Log level difference relative to 2007; (b) Percentage-point difference relative to 2007.

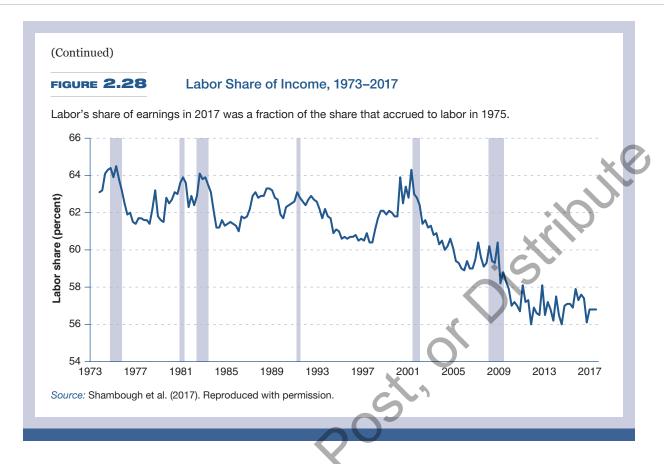
Labor's share of output diminished over time from the 1970s onward. Productivity growth outpaced wage growth, and the two diverged even further over time. Growing at an average of just below 0.2 percent from 1973 to 2017, wages overall rose 10 percent when adjusted for inflation. Not everyone's wages rose, however. People's wages in the bottom half of the wage earners have not grown. For the bottom quintile (20 percent of workers), wages decreased from 1979 to 2016. For those in the top quintile, they increased 27.41 percent from 1979 to 2016—significantly more than the 10 percent average (Figures 2.27 and 2.28) (Shambaugh et al. 2017).

The consequences of shrinking and stagnant wages are severe and limit people's life chances.

Minimum wage stagnation plays an important role in depressing growth. States and cities that increased their minimum wage experienced growth, not decreases, in low-wage worker income. Although not yet caught up to historic highs, minimum wage increases showed up in an overall wage increase in the bottom 10 percent since 2010. The increase was not as high as for the top two quintiles, but in states that increased the minimum wage the increase was 5.2 percent of real wage growth. In states that did not, it was 2.5 percent (Shambough et al. 2017).

Restricting worker power and choice also results in lower wages. This began in earnest in the 1980s. More than 28 percent of workers belonged to unions in 1956 compared with about 10 percent in 2016. Non-compete





contracts (even for lower level workers) and collusion among firms also hurt worker wages. Worker mobility, which contributes to about 1 percent of wage growth per quarter as workers move to find higher incomes, declined nearly 50 percent from 1990 to 2016. Recessions, licensing requirements, non-compete contracts, and land use restrictions related to housing all contributed to decreasing mobility (Shambough et al. 2017).

Government policies can make a difference in wage growth. Minimum wage reform, collective bargaining legislation, and programs to increase labor productivity through education and training, research and development funding, tax incentives, infrastructure investment, and universal occupational licensing are actions governments can take. Income tax legislation—such as earned income credit—can distribute the gains of productivity more equitably. Corporations must consider reforming methods of determining executive compensation and providing fair wages commensurate with labor productivity. Ending non-compete practices for skilled and unskilled workers and other

practices that limit mobility can help workers to help themselves.

In addition to wages, stock options provide wage workers with opportunities to grow wealth. Stocks grant workers a share in corporate or company ownership and profit that grows (or decreases) in value as the corporation does.

FIGHTING POVERTY AND INEQUALITY

What is the secret to providing equal life chances around the globe? There has been significant progress, but many countries and many people within wealthy countries still lag behind despite decades of efforts. There is not a "one size fits all" answer to any global problem. Developing and developed countries have unique histories and needs.

Providing people with equal life chances to achieve their potential is increasingly recognized as a human right. Equal life chances do not guarantee or mean equal results. They mean an equal chance to succeed. Providing for equal life chances requires addressing the needs of the poor in general as well as target groups such as women, children, and ethnic and racial minorities. It involves a combination of programs and policies to guarantee human and civil rights, eliminate extreme income inequality and extreme poverty, provide social welfare remedies to supplement labor market weakness, and address non-economic forms of inequality.

Programs and policies to spur development and combat inequality and poverty at the same time must build an infrastructure for inclusive and sustainable growth. In many respects, these activities are governance activities because they determine the direction the society takes and the opportunities afforded to people in the society. Efforts of national governments, international governmental and non-governmental organizations, and the private sector must be coordinated to tackle these problems.

National Governments

Although the global economy has eclipsed the nation-state or country, national governments still have an important role to play in reducing inequality and poverty. International aid and governmental organization should assist in these domestic improvements, but national governments need to take the lead.

Direct Economic Growth

Economic growth is not the best measure of the health of the global economy or a domestic economy. It is not an indicator of general well-being of people. It is important, but economic growth does not guarantee an increase in the life chances of people. The past few decades have demonstrated that economic growth alone does not reduce inequality; in many cases, it exacerbates it. "Inclusive growth" that is shared across all segments of society will not happen without deliberate effort.

Since the early 2000s, many economies that grew quickly experienced "jobless growth," signified by an employment to population percentage that stagnated at about 60 percent (UNDP 2013). Economic growth needs to target incomes at the bottom of the pyramid. This means more jobs and jobs that offer a living wage, security, and safe working conditions.

The UNDP (2013) called on governments to facilitate the growth of small and medium-sized enterprises. These

tend to be labor intensive and have proven to create more jobs faster than larger enterprises. Steps that governments have successfully implemented include the following:

- Working through central banks with public funds to guarantee loans, as has been done in China, Malaysia, Indonesia, and India.
- Offering education and information on new technologies, products, and markets.
- Offering incentives to larger enterprises to contract with smaller enterprises and procure materials and other inputs from them.
- Requiring a certain number or percentage of government contracts to go to small and medium-sized enterprises.

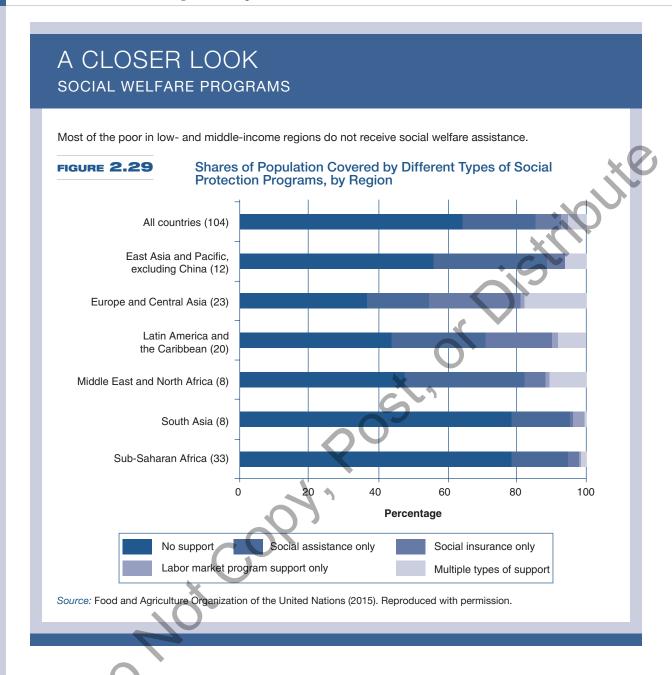
Governments also provide employment through public works projects such as infrastructure. These jobs have been shown to have a lower net cost per job created. These government-created jobs often create a "de facto" minimum wage and force other wages up to that minimum without minimum wage enforcement costs.

Tackle Inequality Directly Through Social Protection Programs

How growth diffuses through the globe and society matters. Where poverty and inequality efforts are not alleviated through work and wages, redistribution programs can substitute. Wilkinson and Pickett (2009) demonstrated that the strategy for achieving greater equality in a society does not affect the benefits to the society.

One strategy is social transfer. Finland, one of the most equal and wealthy societies, is also the most generous country. Its non-contributory social transfers—those to which neither the employee nor employer contribute—account for 43 percent of the income of households below the poverty line. Contributory transfers account for another 37 percent.

Social welfare programs cover few of the poorest people in the poorest nations. In sub-Saharan Africa and South Asia, which have the highest incidence of extreme poverty, only about 22 percent of the population has access to any type of social protection. Rural households tend to receive smaller amounts of income per capita than their urban counterparts (Figure 2.29) (Food and Agriculture Organization of the United Nations [FAO] 2015).



Closing the poverty gap through social protection programs for countries in Latin America and the Caribbean, the Middle East and North Africa, and East Asia would cost only about 0.1 percent of their GDP. It would take 1.6 percent in South Asia but 5.3 percent in sub-Saharan Africa, with some countries needing 10 percent. Even bringing the poorest up to U.S. \$1 a day would cost 0.1 to 2 percent of GDP for most of the poorest countries

but from 2.3 to 4.5 percent in others (FAO 2015). These programs are a good investment to ease populations displaced by structural transformations.

Ensure Dignity in Work

The international conventions requiring equal rights for all people have the force of international law, and their standing was reinforced by inclusion in national constitutions and subsequently other domestic laws. Elkins, Ginsburg, and Simmons (2013) confirmed that international treaties influence national constitutions and other domestic laws. Each has an independent effect on protection of rights, and international conventions act through domestic laws. Multiple levels of regulatory authority increase the likelihood that domestic mobilization in combination with international pressures increase actual respect for rights. Duplication of laws increases the probability that they will be enforced.

Ensuring that all segments of society have equal access to the tools of success is important for social justice and also for development. If a society develops only part of its human capital and prevents women and ethnic, religious, and indigenous minorities from achieving their potential, the society can never achieve its potential. Civil society groups, international governmental organizations, and other governments all have a role to play in ensuring that every government provides every member with the tools available to succeed.

Guarantee an Annual Income

This is an idea that has been circulating for a long time. It has been popular (and unpopular) in both liberal and conservative circles. There are a number of variations on the basic idea. One set of proposals would grant an annual cash amount to every adult. Another would limit it to those earning under a specified amount. For those plans that propose grants only for the poor, the amount is usually equivalent to a poverty income. Those proposals to offer grants to everyone are generally lower.

Switzerland held a referendum on a guaranteed basic income in June 2016. It was overwhelmingly defeated at the polls, with 77 percent against it to 23 percent in favor. It would have given about U.S. \$2,555 to each adult and about one quarter of that for each child. The Finns experimented with such a program from 2017 to 2019 as a solution to a high (10 percent) unemployment rate. The Finnish plan gave a group of 2,000 randomly selected unemployed persons about U.S. \$876 a month unconditionally and tax free. The trade-off is that it was to replace all of the social welfare programs. At the end of 2018, the Finns added a requirement that recipients work 18 hours within the first three months or enter a training program. The idea has not died. Sam Altman, a venture capitalist, is running his own experiment in the United States in Oakland, California (Donnelley 2018).

Provide Living Wage and Decent Work Positions

Work is the best poverty reduction program. Providing a minimum wage, or a living wage, can be part of an overall poverty reduction strategy. In developing societies, less than half of workers are covered by minimum wage policies (Grindling 2016). In many societies that have minimum wage laws, the minimum does not meet the standard to bring the worker or household to the poverty threshold.¹⁷

Minimum wage policies do not always affect the poorest workers. Increasing minimum wages will not help workers in the informal economy. In many countries, it does not cover workers in certain industries, certain sized companies, or other considerations. How many are employed in these sectors and the poverty rates among the self-employed have an impact on the effect of minimum wage increases. The effect of minimum wage increases on unemployment, whether there are losses and how significant they are, is also an important consideration.

While there is fear that increasing minimum wages might slow growth or employment, a number of studies show that modest increases in minimum wages need not do either. For example, in just 7 years in Brazil, the minimum wage was increased 80 percent (hardly modest). This was accompanied by a decrease in inequality, about 16 percent of it accounted for by the rise in minimum wage. In the case of Thailand, an increase in the minimum wage is expected to boost both employment growth and GDP growth (UNDP 2013).

In Brazil, while the minimum wage increase may have decreased poverty overall, the gap between the poorest and average workers increased. In Colombia, there were similar results, with minimum wage increases having little impact on the poorest. The conclusion of reforms in Nicaragua, Colombia, and Brazil is that when the minimum wage increase affects the heads of households, as opposed to secondary workers, poverty falls even if some secondary workers lose work (Grindling 2016).

Whether or not minimum wage increases have an impact on poverty and unemployment depends on country-level variables such as the nature of the labor market. To avoid increasing unemployment, some countries supplement employers to reduce their costs (OECD 2015).

Recognize Unpaid Labor

Work is a source of dignity for all of humankind. Recognizing the value of unpaid work could be a critical step in reducing poverty, particularly among women, who do

the largest share of unpaid labor and comprise, along with children, the greatest proportion of the poor. Most of this unpaid labor is in household production.

Household production has a slight correlation to income; high-income households have a slightly higher level. As fewer hours have been spent on household tasks over time, household production has decreased; nevertheless, incorporating household production into income would have increased personal income by 30 percent in 2010 (Bridgman et al. 2012). Some form of payment to households, perhaps based on the number of members, would elevate the income of poorer households by a greater percentage than that of wealthier households, decreasing the inequality gap.

Education, Education, Education

Competing in a global economy requires skill and knowledge. Lifelong learning and skill training need to be available to all people. Whether this is a function only of government or of the private sector and government might be different in every country but is essential for all.

While the quantity of education need not increase in developed countries, the quality of public education and opportunities for adults in many countries needs to be improved. Even in developed countries, educational outcomes are strongly linked to parental background. Training and adult education opportunities are more available to higher skilled workers than to medium-skilled workers, who have more opportunity than lower skilled workers, even in the more equal Scandinavian countries (Förster, Nozal, and Théveno 2017). Countries that subsidize private schools through tax and other means can transfer that money to public schools, many of which are underfunded such as those in the United States (Milanovic 2011).

Intergovernmental and Non-governmental Aid Organizations

Target Foreign Aid

Foreign aid programs of governments and intergovernmental organizations and agencies expanded following World War II. Western nations formed the Bretton Woods institutions, the IMF, and the World Bank for reconstruction, for loans, and to stabilize exchange rates. Although the initial targets of stabilization and reconstruction were in Europe, the goals of the institutions evolved to concentrate both their efforts on developing economies.

Foreign aid has a mixed record of success. It might seem counterintuitive that aid could hinder a country's



PHOTO 2.2 Locally grown food programs fight hunger and combat poverty. This pepper farmer has been able to provide more for his children, put a new roof on his home, and earn a profit to reinvest in farming.

Sara A. Fajardo, Catholic Relief Services.

development rather than accelerate it. Aid to developing countries comes from a variety of sources. Not much comes without conditionality, in other words, with no strings attached. During the Cold War, aid from international institutions and governments was targeted to the strategic advantage of global powers. Aid came with few guidelines relative to development outcomes and more to UN votes. Much of the aid went directly into the pockets of dictators and their "cronies" who were appointed to oversee projects and whose lack of expertise doomed the projects to inefficiency or failure.

In 1995, the UN World Summit for Social Development adopted a foreign aid goal for rich nations equal to 0.7 percent of a their GNI. Only a few nations have met this goal.¹⁸ The United States spent about U.S. \$35 billion for foreign economic aid in 2014. This is about 0.2 percent of GNI.

In addition to the "bilateral" aid agencies of individual countries such as USAID (U.S. Agency for International Development), there are multilateral agencies such as the IMF and World Bank, many regional development banks such as the Asian Development Bank, and a number of UN aid programs and funds such as UNICEF. According to a Brookings Institute report (Easterly and Pfutze 2007), U.S. \$103.6 billion in official aid was given to developing countries in 2006, for a total of about \$2.3 trillion over 50 years. In their study of years of reports and evaluations of aid agencies, the authors offered an analysis of what went wrong with foreign aid and best practices for aid.

The major shortcomings that emerged from the analysis were the following.

Transparency. Recipient government reporting needs to be transparent to ensure that money is reaching the intended beneficiaries and is not channeled through corrupt officials or to less poor countries. Administrative and other cost reports of the agencies must also be transparent. Easterly and Pfutze (2007) found five agencies that do not report any data on their employment or budget. Multilateral agencies tended to do better than bilateral agencies, with the development banks doing the best. A few programs, primarily UN ones, had weak reporting mechanisms.

Fragmentation. Unlike the specialized bureaucracies and private corporations that specialize, aid agencies tend to split their assistance among too many projects and too many sectors. Specialization would streamline processes and create efficiencies. There is little coordination, which would also improve efficiencies. Coordination would reduce overhead costs and concentrate focus. Regardless of size, donors split among many projects, and this leads to almost insignificant worldwide flows such as the \$5,000 to worldwide non-governmental organizations by Ireland in 2004. (This was not the total amount of foreign aid from Ireland.) Following the "trendy" projects is one mechanism that contributes to this (Easterly and Pfutze 2007).

Selectivity. It goes without saying that aid to countries that are not poor or to corrupt dictators does not stimulate inclusive growth. Countries that are not free (about one third) or partly free receive about 80 percent of aid. Easterly and Pfutze (2007) found that aid donors do not respond to changes in the level of corruption and aid goes to corrupt countries. On average, 68 percent of aid was going to corrupt countries. Aid to the least developed countries has increased over time, but at the expense of low-income countries rather than the middle-income countries. The share of aid going to least developed countries is 42 percent, and 22 percent goes to other low-income countries, leaving 36 percent to middle-income countries.

Aid agencies may be planning reforms in delivering aid to countries that are not free or have corrupt dictators. They may also be operating on the principle that beneficiaries in these countries need the aid the most. When aid is directed at middle-income countries, it may be perceived as nearing a tipping point where aid may make a significant difference in improving the quality of life. However, as Easterly and Pfutze (2007) noted, when aid is directed at "allies" who do not need it or are not spending it to benefit their poor, it is a misuse of aid.

Aid that requires recipients to buy goods and technical assistance from the donor country is a less effective form of aid. Aid that requires recipients to purchase food or goods from the donor country amounts to a subsidy to industries in the donor country. This frequently happened with food aid; the surplus product of the donor is "dumped" into the developing nation, often undermining local agricultural efforts. Many food programs now provide aid to support local producers. This spurs development and enhances inclusive growth. Technical assistance can pose a similar problem when given to promote the donor's interests. If it does not reap long-term benefits for the recipients, it is not aid (Easterly and Pfutze 2007).

Accountability and transparency, with respect to the benefits of aid, is the third response. Working closely with the beneficiaries, using aid to empower them is one of the most important criteria to affect long-term results. Accountability to the beneficiaries is different from that to donors. It entails constant feedback and participation of the beneficiaries in the development efforts. This is recognized by most aid agencies. However, adopting formal accountability measures has not kept pace with the intent. The Humanitarian Accountability Partnership (HAP) promotes standards for accountability, quality management, and transparency. About 100 aid agencies joined from its creation in 2003 to 2013 (Van Rooyen 2013).

Grant More Debt Relief

Debt has crippled many nations. For some countries, much of the debt incurred was seized through kleptocracy or crony capitalism. Like having a credit card where a person pays only the interest on the debt or only a minimal amount on the principal, the original debt grows far beyond the original loan. Servicing the debt consumes resources that could be better spent on human capital or physical capital improvements. This is a transfer of wealth from poorer to richer nations (or to the international institutions). Renegotiating the terms of the debt or some level of debt forgiveness is overdue.

In 1996, the IMF and World Bank launched a debt relief program for 39 Heavily Indebted Poor Countries (HIPCs). It is supplemented by the Multi-lateral Debt Relief Initiative (MDRI) funded by other lenders. The program does not include all of the heavily indebted countries. Nigeria, for example, is not on the list because it is not "poor" enough. Somalia is ineligible

CONSIDER THIS

PROVIDING ACCESS TO TECHNOLOGY - AS SIMPLE AS A MOBILE PHONE

In most of the developed world, we take mobile phones for granted. In the developing world, a mobile phone can make a world of difference. According to USAID (2015):

- An increase of 10 percent in mobile penetration can raise the GDP of a developing country as much as 1.2 percent.
- In Tanzania, mobile phones are used to deliver educational content to remote areas.
- Mobile phones are used by the Mobile Alliance for Maternal Action to deliver health information to pregnant and new mothers.

- When used to pay employees, mobile phones can cut out graft and corruption, as demonstrated in Afghanistan.
- Mobile phones provide access to markets, delivering important and timely information to farmers and buyers.
- Mobile phones can be used for financial services to people not served by the regular banking industry.
- By providing polling and voting information, mobile phones strengthened democracy in Haiti and Tunisia.

because it is too far in arrears. As of September 2015, 36 countries had met the criteria for debt reduction. A potential U.S. \$76 billion in relief over time is provided for the HIPCs, and \$41.6 billion by the MDRI is promised for relief for these countries. To qualify, countries needed to make and sustain progress toward achieving the Millennium Development Goals. The debt relief allows them to put more money into poverty reduction efforts (International Development Association [IDA] and IMF 2016). Expanding relief to the countries approved for relief and the criteria for which countries can qualify would make more money available for development.

The Private Sector

The private sector recognizes the importance of the "bottom of the pyramid" for corporate growth and profit in the new millennium. Although poor, that segment of the wealth pyramid has the most potential for market growth. Results of an online search of "bottom of the pyramid" brings up myriad business articles and books such as "The Fortune at the Bottom of the Pyramid." They contain money-making strategies for producing for and selling to the billions of the world's poor living on less than U.S. \$2 a day—the last remaining untapped market. Whether or not the poor can be served in partnership with global capital—meeting genuine needs at reasonable cost—is an important question.

Secure Financial Services: Microfinance

Whether in developing or developed countries, the poor do not have access to the same financial services and opportunities as middle and upper classes. Without banks, checking accounts, or credit—the basics of finance—moving beyond the lowest levels of economic activity is difficult.

Not everyone needs thousands of dollars to start a successful business. One or two hundred dollars may be all that a person needs to get a business off the ground. Without collateral or a credit history, getting even a few hundred dollars can be impossible. Grameen Bank, for which its founder Muhammad Yunus received a Nobel Prize, provides loans, savings plans, checking accounts, and financial education to people who cannot qualify for conventional loans and in areas that are poorly served by conventional financial institutions.

Since its founding in 1976, Grameen Bank has loaned more than U.S. \$19 billion to millions of people, primarily women, to start "cottage" industries, entrepreneurial activities that can lift a family out of poverty. The microloans range from about \$100 to no more than about \$1,500. While most people consider the poor as too huge a default risk to loan to them, Grameen Bank has a repayment rate close to 99 percent. The total month-to-month default rates¹⁹ at conventional banks range from about 2 to 7.5 percent (Federal Financial Institutions Examination Council 2016).

Grameen Bank began with donor funds but halted donations in 1995 and is self-reliant. Its operations and loans are paid for by the interest received on the repayment of loans. It is not a commercial bank but has shown a profit in all but three years of its operation.

The Grameen "family" expanded to include related services: The trust's mission is to replicate the Grameen microfinance institutional model. By 2007, it was operating in 37 countries, including some developed countries. The fund expands its operations to small and medium-sized enterprises in Bangladesh. Grameen Telecom and Grameenphone make cellular service and mobile phones more available to the poor and in villages in Bangladesh. These are critical tools for conducting business. The Grameen Foundation, based in Washington, D.C., works with partner microfinance institutions around the world.

Checking and savings accounts and financial literacy are important components of the Grameen Bank. Loan recipients attend financial literacy classes. A checking account and deposits into a savings account are compulsory. The Grameen Banks become community enterprises, and member-borrowers assume ownership.

Most important, the banks are effective. Microloans buy everything from sewing machines, to livestock, to chickens, to refrigerators, to trucks—whatever people need to turn their business plans into reality. People receiving the loans create jobs for themselves and usually for their families, with a spillover into the larger community. For example, a study of 40 women clients of a microbank in South Asia found that the women employed their husbands. This took their husbands out of the local job market, making jobs available to others. This caused wages to increase. As a result, 40 microloans created 80 new jobs and resulted in 120 people being employed (UN Population Fund 2006).

There are more than 7,000 microfinance institutions around the world today. In the United States, there were six Grameen branches in New York and five in other cities. Grameen America had 18,000 members in 2013. Of more than U.S. \$100 million loaned, most went to finance small businesses—tailoring clothes or selling flowers, baked goods, or clothing accessories—or to expand existing businesses. Grameen America is run on the Bangladesh borrower-member model, providing savings accounts, financial literacy education, and business consultation. Loans are less than U.S. \$50,000,

require weekly repayments, and post a 15 percent annual interest rate. Data collected by the Aspen Institute show that Grameen America creates jobs and increases income (Dewan 2013).

Patient Capitalism

Can capitalism accomplish what philanthropy tries to accomplish? Capitalism traditionally means getting the biggest return on investment in the shortest time possible. This can lead to disastrous results such as stock trades that create money for stock brokers and maybe the investor but create no value. This ethic has also led to "hot money" flowing quickly into developing countries and out again, speculating on currency exchange rates and leaving chaos in its wake.

Patient capitalism is an investment strategy developed by Jacqueline Novogratz. In 2001, she founded the Acumen Fund on the conviction that investing in worthwhile projects was better than fast cash that produced no value. She looks for investments that will make a profit and contribute social value to their communities. Rather than the short-term horizon of traditional investing, the Acumen Fund has a long-term horizon. Profit might take some time to realize, hence the need for patience.

In contrast to simple charity, the Acumen Fund finds long-term solutions to empower the poor. The fund provides long-term loans or takes an equity interest in early-stage companies. Where traditional investors avoid projects for the poor or anticipate a long-term rather than short-term profit, Acumen looks for them. Acumen focuses on specific areas that correspond to the critical goods and services needed by the poor—agriculture, housing, health care, education, energy, and clean drinking water. When a project has demonstrated success, it is scaled up and applied in more areas. Acumen does not fund unsustainable projects, a problem of traditional aid and philanthropy.

Unlike the microloans of Grameen Bank and other microfinance institutions, the Acumen Fund investments range from about U.S. \$300,000 to \$2.5 million. Acumen does not expect a high return, but it does expect a return, financial as well as social, in about 7 to 10 years. Acumen does take donations and will partner with governments, corporations, or agencies as long as doing so will benefit its clients.

In 2004, Acumen invested U.S. \$600,000 in a startup called "WaterHealth International" to provide clean water to rural Indians. In the first year, Water-Health opened two new systems, but neither met its deadline and both went over budget. With help from experts at Acumen, WaterHealth redesigned and found more efficient methods and built 10 new systems a year later. This caught the attention of other investors, and WaterHealth raised U.S. \$11 million from private investors. It now operates more than 500 safe water systems and more than 5 million people have safe water because of its systems. WaterHealth is partnering with Coca-Cola, the American soft drink company, and Diageo, a British alcoholic beverage company, with a venture called "Safe Water for Africa."

Hundreds of Acumen Fund investments affect millions of lives, including teacher training for low-cost primary and secondary schools in India, data analytics so that the poor can access financial services through cell phone technology, small holder organic farmers who now bring organic produce into cities, and dairy farmers who now access markets through a dairy company.

Corporate Social Responsibility

Corporations responded to criticisms related to their exploitation of people and the environment by developing a variety of strategies to keep them mindful of social and environmental sustainability in their activities. The "Global Compact" facilitated by the UN is the largest corporate responsibility initiative, with more than 5,000 corporate members and more than 2,000 members from civil society, labor, philanthropy, and academia.

In signing the compact, businesses agree to 10 principles: to uphold human rights; recognize the right to collective bargaining; eliminate forced labor, child labor, and discrimination in labor; be cautious concerning environmental challenges; promote environmental responsibility and environmentally friendly technologies; and work against corruption, including bribery and extortion.

Member corporations submit annual progress reports detailing their efforts on behalf of the 10 principles, and groups such as civil society organizations report on their engagement activity—how they helped to advance the initiatives. Companies are rated as advanced, meaning that they are implementing "advanced" criteria and best practices; active, meaning that they meet minimum requirements; or learners, meaning that they do not meet one or more minimum requirements. As of early 2017, there were

more than 2000 advanced companies, 25,839 active companies, and 4,053 learners rated by a panel of peer companies, multiple stakeholders, and an independent auditor.

World Economic Forum on Africa: Big Business and the Bottom of the Pyramid

In 2008, Bill Gates delivered a strong message to the World Economic Forum: "There are two great forces—self-interest and caring for others;" serving the poor is not always profitable, he argued, but it was in the self-interest of corporations to do good work. It enhances their companies' reputations, curries them goodwill with the public, and attracts better employees. The world is not getting better fast enough and is not getting better for everyone, he admonished. They, the corporate leaders, should do something about it (Figure 2.30).

That year, there was one overriding concern at the World Economic Forum—the recession of 2007–2008. With a global economic crisis, the people at the bottom of the pyramid looked attractive to corporate giants as the most rapidly growing market (recall the rapid rise of many from extreme poverty to low income) in the world. People who had what they needed would not be buying for a while because consumer demand was depressed. But the poor needed everything. It was clearly in the interest of big business that year to "do good," not just for the public relations and positive press that it would bring, as Gates suggested, but also for profit.

Thinking differently about opportunities among the poorest means thinking differently about them. First, the poor are to be treated with respect. The poor want high-quality goods, not stripped-down versions of goods served to others. Researchers report people commenting that "we have to look good. Otherwise, people will not take us seriously. . . . The teachers will write my children off as poor and not worthy of a good education" (World Economic Forum 2009). Thinking in terms of providing access, such as renting rather than buying goods, monetizing assets such as a good reputation to get a loan, and educating about products rather than acting as authorities, can help to leverage the capital of the poorest (World Economic Forum 2009).

Closing the Gap Through Fair Trade

Goal 17 of the Sustainable Development Goals is to "promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization." Global trade has lifted many

CONSIDER THIS

A CORPORATION FOUNDED TO DO GOOD WORK

FIGURE 2.30

Newman's Own Logo



Source: Courtesy of Newman's Own Foundation.

"Newman's Own" wasn't started as a corporation in the usual sense. In 1982, it began when movie star Paul Newman began giving his homemade secret salad dressing to friends. It was a hit. He started a mass market food company. The intent was to make good food available at ordinary prices. The intent was also to make a profit and employ lots of people. The company, decades later, has grown to produce more than 200 products. It created jobs for thousands of people. All of the profits, more than U.S. \$450 million, have gone to charities. While not everyone has the resources to start a company with the intent of giving away the profit, it does make one wonder how much profit, as opposed to wages, is really necessary to motivate people to do a good job.

people out of poverty. It has closed the gaps among some countries, decreasing world inequality. Trade can bring societies into the global economy, allowing for growth. Different countries or regions within countries have different capacities to take advantage of trade to boost growth. A World Bank study (Farole 2013) of 28 countries found that regional inequalities within countries were growing in 18 of the countries, incomes were converging in only 3 countries, and inequality was holding steady in 7 countries.

Free trade is not always fair trade. Fair trade is essential for developing societies to thrive. The fair trade movement is global with grassroots organizations, federations of organizations, and suppliers, producers, importers, and exporters the world over. The World Fair Trade Organization is a global network of such actors. Its membership includes regional fair trade organizations, more than a million small-scale producers, and 3,000 grassroots organizations. It is the main monitoring and certifying organization. There are thousands of fair trade stores throughout the developed world selling their products. They connect with every step along the supply chain.

The principles of fair trade are inclusive in ensuring that all potential effects of trade are addressed. They include creating better opportunities for disadvantaged producers, fair price, capacity building, gender equity, environmental protection, better working conditions, and transparency and accountability (Ruben, Fort, and Zúñiga-Arias 2009). Although most studies have shown only a modest or insignificant impact on disadvantaged people's incomes, other benefits, such as better access to credit, increases in the value of agricultural assets, and higher levels of animal stock, were found (Ruben and Fort 2012). In addition to those benefits, Ruben et al. (2009) found that fair trade improved farmers' organizations. Farmers' attitudes toward risk and investment improved, and farmers adopted a longer time horizon. Overall conditions for wage labor in the locality improved because the fair trade context provided a regional "floor" for working conditions and wages and other employers needed to come up to the standard. In the case of fair trade bananas, the fair trade production led to an overall increase in the price of bananas.

Although the effect on income at this point appears to be negligible, other improvements are worthwhile. With respect to "premiums" making only slight or negligible improvements in incomes, they may be put to use in increasing micro-credit programs, community loans, school fees, health insurance, technical assistance, and other ways that can have greater impact.

SUMMARY

Inequality, both among and within nations, limits people's capacity to fulfill their life chances. The consequences of inequality harm the entire society. They undermine trust and confidence in government, and a society cannot thrive without allowing all of its members to achieve their physical, intellectual, recreational, and occupational potential. At the level of the individual, inequality erodes the health of even those at the upper end of the economic hierarchy.

The roots of inequality go back hundreds of years but can be significantly mitigated by reforms in the institutional structures that shape daily life. International governmental and non-governmental agencies and organizations, national governments, and philanthropies all have the potential and responsibility to create the changes to establish a just world. Increasing inequality is undermining the stability of societies and the world. More equal societies benefit everyone.

Fighting poverty and inequality also depends on advances in the other problems discussed in this book. Climate change and water shortages, environmental destruction, conflict and discrimination, and lack of adequate food and health care are among the myriad issues that contribute to inequality and poverty and are made worse by poverty and inequality.

DISCUSSION

- How would you describe inequality in the world to a person who has not studied this? What are the most important facts and concepts for him or her to understand? Try to answer this question in less than 200 words.
- 2. Complete a case study of the life chances of children in a poor country. Describe their daily life. What are their prospects for the future? How might this vary for children of different social classes in the society?
- 3. What is the foreign aid budget of the United States or your home country? To which countries does most of the money go? Can you determine for what purposes? For data on the United States, you can refer to the website ForeignAssistance.gov.
- 4. Which proposals do you think would have the most impact on increasing people's life chances and decreasing poverty?
- 5. What level of inequality is acceptable within and among countries? What criteria do you use to decide this?

ON YOUR OWN

- 1. Find the Gini ratio for a random selection of countries—10 from each category from very high, high, medium, and low levels of development. Plot them on a scatterplot or a cross-tabulation table. Do you see a relationship between level of development and inequality? If you can use Excel or another statistical package such as SPSS or STATA, run a statistical analysis using the entire dataset to test your observation and the significance of the relationship you observe.
- Examine the lives of children globally. How do infant and child mortality rates vary across countries? Educational

- levels? Health problems from preventable illnesses? You can use the "Human Development Index" or "State of the World's Children" report for your research.
- 3. What provisions does the UN Declaration of Human Rights make concerning work? What constitutional provisions for work-related matters are specified in constitutions? The Constitute Project also allows for thematic investigations. It locates constitutions and the specific articles related to specific provisions.

https://www.constituteproject.org/ Click on "Explore Constitutions." Type "work" into the search box, and provisions related to work will appear.

Find constitutional provisions related to each of the items.

Which do you find particularly important?

The Comparative Constitutions Project enables thematic explorations of national constitutions.

http://comparativeconstitutionsproject.org/

Under "Data and Analysis," find "Data Visualizations."

Here you can find the number and percentage of constitutions that mention work.

Move the slider to the most recent date and scroll through the items to select those related to work.

Interactive site: maps and tables, http://www.conferenceboard.ca/hcp/hot-topics/worldinequality.aspx

NOTES

- The Worst Forms of Child Labor Convention.
- There is also income inequality among countries within regions. Regional inequality is shown here to give a general idea of the extent of inequality.
- 3. The Palma ratio is another measure of inequality. It is the ratio of the top 10 percent's share of income or wealth divided by the share of the bottom 40 percent. The smaller the ratio, the more equal the society. The inequalityadjusted HDI reports both Gini coefficients and Palma ratios. See http://hdr.undp.org/en/composite/IHDI.
- 4. The wealth pyramid shows a general increase in inequality from 2015 to 2016. In 2015, there were 71 percent of adults globally at the base and 21 percent in the middle (China had 36 percent in the middle band and India had 3.4 percent). The share of income of the bottom two tiers decreased from 15.5 to 13.8 percent of income. There are slightly more people in the top two tiers, up from 8.1 to 8.2 percent. They hold a greater percentage of the wealth, from 84.6 to 86.2 percent (Stierli et al. 2015;24).
- 5. Income trends are important in understanding the fluctuations between economic progress and decline that are more readily apparent in income figures before in wealth. But wealth is the more important figure in terms of overall inequality and development.
- 6. Wilkinson and Pickett (2009) used income data from the UN. They measured inequality by the ratio of income of the richest 20 percent of the population to the poorest 20 percent. They also compared data for states within the United States and found the same relationships between inequality within states and social problems.

- 7. Although no one knows the precise number of slaves, and it is difficult to even estimate, The UN Office on Drugs and Crime (2014:9-11) reported that among detected trafficking victims, 53 percent are sex slaves, mostly women, but the number of children is increasing. As many as 33 percent of trafficking victims are likely children, two girls for every boy.
- 8. Target 1B of the Millennium Development Goals was to "achieve full and productive employment for all, including women and young people." Despite growth in the number of jobs, the percentage of people unemployed in the developing world has not changed significantly. Similarly, there has been a significant drop in the percentage of people in vulnerable employment—from more than 56 percent in 1992 to about 52 percent in 2000, the beginning of the Millennium Development Goals, to about 45 percent. The number in vulnerable employment increased in number from about 1.26 billion to 1.45 billion in 2015.
- Societies with robust social programs to ease workers through these transitions make them with less difficulty. Where social safety net programs are weak, hardships abound.
- 10. Pritchett (1997) built on the groundwork laid by Maddison (1995), among others, in estimating early incomes, growth, and income gaps. Some economic historians, Pritchett noted, argue that the gap in incomes of the now developed and developing countries was smaller in the 1800s (Hanson 1988, 1991) or that there was not a gap (Bairoch 1993).

- 11. The website "Our World in Data" has an interactive chart on which different timelines may be displayed: https://www.maxroser.com/roser/ graphs/WorldIncomeDistribution1820to2000/ WorldIncomeDistribution1820to2000.html
- 12. In developed societies, some primary industry jobs, such as miners and workers in oil fields, make relatively high salaries. For example, in Australia a 25-year-old gold miner and high school dropout earned \$200,000 drilling for gold (Miller 2011). This is unusual, but salaries in the upper middle-class ranges are not. In developing societies, as in the story that starts this chapter, it is quite different.
- 13. This does not include bribery in the developed world involving bribes between firms and public officials and politicians.

- 14. If China is excluded from the calculations, the transfers are U.S. \$1.1 trillion and \$10.6 trillion.
- 15. This is based on 2005 pricing.
- 16. Taking the East and Southeast Asian economies out of the equation for this group raises the median to 52 years.
- 17. Relative poverty wage is defined by the OECD as 50 percent of the median wage.
- 18. Those nations were Norway (1.05 percent),
 Luxembourg (0.93 percent), Sweden (1.4 percent),
 Denmark (0.8 percent), the Netherlands (0.8 percent),
 and the United Arab Emirates (1.4 percent) in 2015.
 The source of the OECD data is https://data.oecd.org
 (accessed June 21, 2016).
- 19. These data include real estate, consumer, and agricultural loans and leases written by commercial banks.

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