In the comfortable urban life of today’s developed countries, most people have lost sight of the fact that a short time ago—very short in terms of the life span of the earth—people were nomadic food gatherers, garnering an existence as best they could from what nature threw their way. It has been only about 10,000 years since the Neolithic Agricultural Revolution, when people changed from food gatherers to food producers. Throughout most of subsequent human history, civilizations have been based on a comfortable life for a privileged minority and unremitting toil for the vast majority. Only within the past two centuries have ordinary people become able to expect leisure and high consumption standards, and then only in the world’s economically developed countries.

In this web-based chapter we review some of the challenges faced by the world’s developing countries—those countries that have not yet been fortunate enough to achieve the living standards that we, in Canada, all too often take for granted.

36W.1 The Uneven Pattern of Development

Over 6 billion people are alive today, but the wealthy parts of the world contain no more than 20 percent of the world’s population. Many of the rest struggle for subsistence. Many exist on a level at or below that endured by peasants in ancient Egypt or Babylon.

The richest countries with the highest per capita incomes are referred to by the United Nations as developed countries. These include the United States, Canada, most of the countries of Western Europe, South Africa, Australia, New Zealand, Japan, and a few others. The poorer states are referred to by the UN as the developing countries and include a diverse set of nations. Some, such as Vietnam, Argentina, and China, are growing very rapidly, while others, such as Haiti, Rwanda, and Sierra Leone are actually experiencing negative growth rates of real per capita income. Between these two is another group of nations, called the newly industrialized countries (NICs). They include South Korea, Singapore, Taiwan, and Hong Kong. These countries grew rapidly in the
four decades after 1960 and typically have per capita incomes close to 50 percent of those found in the developed nations. Several other countries in Southeast Asia are close behind the NICs. These include Indonesia, Malaysia, and Thailand.

Viewing the problem of raising per capita income in a poorer country as one of economic development recognizes that the whole structure of its economy often needs to be altered to create economic growth. This is a complex task; many countries remain undeveloped today despite decades of effort by their governments (often assisted with aid from developed countries) to get them on a path of sustained growth.

Data on per capita incomes throughout the world (as shown in Table 1) cannot be accurate down to the last $100 because there are many problems in comparing national incomes across countries. For example, homegrown food is vitally important to living standards in developing countries, but it is excluded from or at best imperfectly included in the national income statistics of most countries. Nevertheless, the data reflect enormous real differences in living standards that no statistical inaccuracies can hide. The development gap—the discrepancy between the standards of living in countries at either end of the distribution—is real and large.

Figure 1 provides another way of looking at inequality. It shows the geographical distribution of per capita income. The map reveals why modern political discussions of global income distribution often use the labels North and South to refer to the rich and the poor nations, respectively.

The consequences of low income levels can be severe. In rich countries like Canada and the United States, variations in rainfall are reflected in farm output and farm income. In poor countries, variations in rainfall are often reflected in the death rate. In these countries, many people live so close to a subsistence level that slight fluctuations in the food supply bring death by starvation to large numbers. Other, less dramatic characteristics of poverty include inadequate diet, poor health, short life expectancy, and illiteracy.

For these reasons, reformers in developing countries feel a sense of urgency not felt by their counterparts in rich countries. Yet, as Table 2 shows, some of the poorest countries in the world are among those with very low or negative growth rates of per capita GDP, with the following consequence:

The development gap has been widening for the very poorest countries.

**TABLE 1** Income and Population Differences Among Groups of Countries, 2000

<table>
<thead>
<tr>
<th>GNP Per Capita (US$)</th>
<th>(1) GNP Per Capita (US$ billions)</th>
<th>(2) Population (millions)</th>
<th>(3) GNP Per Capita (US$)</th>
<th>(4) Percentage of World Population</th>
<th>(5) Percentage of World GNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $755</td>
<td>63</td>
<td>997</td>
<td>2 460</td>
<td>410</td>
<td>40.6</td>
</tr>
<tr>
<td>$756 to $2995</td>
<td>54</td>
<td>2 324</td>
<td>2 048</td>
<td>1 130</td>
<td>33.8</td>
</tr>
<tr>
<td>$2996 to $9265</td>
<td>38</td>
<td>3 001</td>
<td>647</td>
<td>4 640</td>
<td>10.7</td>
</tr>
<tr>
<td>$9266 or more</td>
<td>52</td>
<td>24 994</td>
<td>903</td>
<td>2 690</td>
<td>14.9</td>
</tr>
<tr>
<td>World</td>
<td>207</td>
<td>31 315</td>
<td>6 057</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

There is considerable inequality in the distribution of world income. The unequal distribution of world income is shown in columns 5 and 6. The poorest three-quarters of the world’s population earns just over 10 percent of world income. The richest 15 percent earns almost 80 percent of world income.

There is a sharp geographical division between “North” and “South” in the level of income per capita. The nations of the world are classified here according to four levels of measured per capita GNP, as shown in Table 1. The poorest group, shown in brown, represents 40 percent of the world’s population and just over 3 percent of world GNP. The wealthiest group, shown in orange, includes North America, Europe, Japan, and Australia and represents 15 percent of the world’s population and almost 80 percent of world GNP.

The very poorest countries spend much of their increase in income on a rising population. Hence, their increase in income per capita is less than half that of the countries that are already richer. The gap in income between rich and many of the very poor countries is not closing.

As we shall see, this is a problem of both output and population. It is also an international political problem. What are the causes of underdevelopment, and how may they be overcome?

36W.2 Impediments to Economic Development

Per capita income grows when aggregate income grows faster than population. Many forces can impede such growth. Here we examine a number of possible impediments.

Resources

A country's supply of natural resources is important. A country with infertile land and inadequate supplies of natural resources will find income growth more difficult to achieve than one that is richly endowed with such resources.

How these resources are managed also matters. When farmland is divided into many small parcels, it may be much more difficult to achieve the advantages of modern agricultural techniques than when the land is available in huge tracts for large-scale farming. Fragmented land holdings may result from a dowry or inheritance system or may be politically imposed. One of the populist policies following the Mexican Revolution early in the twentieth century was the redistribution of land from large landowners to ordinary peasants. Today, however, fragmented land ownership prevents Mexican agriculture from producing at costs low enough to compete in international markets. The Mexican government now faces an agonizing choice between allowing its populist land reforms to be reversed or continuing to protect a large agricultural sector whose inefficiency is increasing relative to competing suppliers.

Although abundant supplies of natural resources can assist growth, they are neither sufficient to ensure growth nor necessary for it. Some countries with large supplies of natural resources have poor growth performance because the economic structure encourages waste. Prime examples are the former Soviet Union, Argentina before the 1990s, and Uganda. In contrast, other countries have enjoyed rapid rates of economic growth based on human capital and entrepreneurial ability despite a dearth of natural resources. Prime examples are Switzerland in earlier centuries, Japan over the past 100 years (until its significant current economic malaise, beginning in the early 1990s), and Singapore, Hong Kong, and Taiwan since the end of the Second World War.

Inefficiency

When we discuss inefficiency in resource use, it helps to distinguish between two kinds of economic inefficiency, which are studied in microeconomics. Allocative inefficiency occurs when factors of production are used to make an inefficient combination of goods. There are too many of some goods and too few of others, and thus the society is at the wrong point on its production possibilities boundary. If resources are reallocated to produce less of some and more of other types of goods, some people can be made better off while no one is made worse off.
Productive inefficiency occurs when factors of production are used in inefficient combinations. Given the prices of capital and labour, some production processes use too much capital relative to labour, while others use too little. Productive inefficiency implies that the society is inside its production possibilities boundary. If factor combinations are altered, more of all goods can be produced.

Monopolistic market structures, as well as taxes, tariffs, and subsidies, are some important sources of the distortions that lead to both allocative and productive inefficiencies.

A third kind of inefficiency, called X-inefficiency, occurs when firms do not seek to maximize their profits or when owners of the factors of production do not seek to maximize their well-being. Like allocative and productive inefficiency, X-inefficiency also puts the economy inside its production possibilities boundary.

Professor Harvey Liebenstein of the University of California, the economist who developed the concept, has studied X-inefficiency in developing countries. He cites psychological evidence to show that non-maximizing behaviour is typical of situations in which the pressure that has been placed on decision makers is either very low or very high. According to this evidence, if the customary living standard can be obtained with little effort, people are likely to follow customary behaviour and spend little time trying to make optimal decisions that would improve their well-being. When pressure builds up, so that making a reasonable income becomes more difficult, optimizing behaviour becomes more common. Under extreme pressure, however, such as very low living standards or a rapidly deteriorating environment, people become disoriented and once again do not adopt optimizing behaviour.

**Human Capital**

Numbers of people matter, and so does their training and experience. A well-developed entrepreneurial class, motivated and trained to organize resources for efficient production, is often missing in poor countries. The cause may be that managerial positions are awarded on the basis of family status or political patronage rather than merit, it may be the prevalence of economic or cultural attitudes that do not favour acquisition of wealth by organizing productive activities, or it may simply be an absence of the quantity or quality of education or training that is required.

In today’s world, much production is knowledge-intensive, thus putting a premium on a well-educated workforce. The abilities to read, to do basic calculations, to operate electronic equipment, and to follow relatively complex instructions are important requirements for much modern labour. Failure to develop such essential labour skills can be an important cause of lack of growth.

Poor health is another source of inadequate human resources. When the labour force is healthy, less working time is lost, and more effective effort is expended.

**Agriculture**

A developing country whose labour force is mainly devoted to agriculture has little choice but to accept this basic allocation of resources. It can build up its industrial sector, and if its efforts are successful, the proportion of the population devoted to urban pursuits will rise. But the change will come slowly, leaving a large portion of the country’s resources in rural pursuits for a long time to come.

It follows that policies to help the agriculture sector raise productivity are an important part of the development strategy in any agriculture-based poor country. These can
fill the dual purposes of raising incomes of rural workers and reducing the cost of food for urban workers.

A developing country’s government may choose to devote a major portion of its resources to stimulating agricultural production, say, by mechanizing farms, irrigating land, using new seeds and fertilizers, and promoting agricultural research and development. Modern developments of new crops and new growing techniques put a premium on agricultural research and development (R&D) so that a country can adopt, and usually adapt, other country’s agricultural innovations. Also, nonfood agricultural and forest products are becoming increasingly important, and R&D expenditures are often needed if these are to become established products. If successful, the country will stave off starvation for its current population, and it may even develop an excess over current needs and thus have a crop available for export. A food surplus can earn foreign exchange to buy needed imports.

The gains from this strategy, while large at first, are subject to diminishing returns. Further gains in agricultural production have an ever-higher opportunity cost, measured in terms of the resources needed to irrigate land and to mechanize production. Critics of reliance on agricultural output argue that developing economies must start at once to develop other bases for economic growth.

Many developing countries (as well as many developed ones) suffer from misguided government intervention in the agriculture sector. In India, for example, the government—motivated by a desire to diversify agricultural production by increasing the number of crops under cultivation—has encouraged crops such as oilseeds and sugarcane, in which India has a comparative disadvantage, and discouraged crops such as rice, wheat, and cotton, in which India has a strong comparative advantage. It has subsidized food prices, thus giving large benefits to the urban population.

Population Growth

Population growth is one of the central problems of economic development. Some developing countries have population growth rates in excess of their GDP growth rates and therefore have negative growth rates of per capita GDP. Many developing countries have rates of population growth that are nearly as large as their rates of GDP growth. As a result, their standards of living are barely higher than they were 100 years ago. They have made appreciable gains in aggregate income, but most of the gains have been literally eaten up by the increasing population.

The critical importance of population growth to living standards was perceived early in the nineteenth century by Thomas Malthus (1766–1834). He asserted two relations concerning rates of increase. First, food production tends to increase in an arithmetic progression (e.g., 100, 103, 106, 109, 112, where the increments in this example are 3 units per period). Second, population tends to increase in a geometric progression (e.g., 100, 103, 106.09, 109.27, 112.55, where the increase in this example is 3 percent per period). Consequently, Malthus argued that under conditions of natural growth, population will always tend to outrun the growth in food supply. The difference in our example may not seem like much after only five periods. But after 20 periods, the arithmetic progression in food supply has increased it to 160, whereas the geometric progression in the population has increased it to 181.

Malthus’s prediction helped to earn economics the label “the dismal science.” And, in some poor areas of the world, the predictions ring all too true, even today. Where agricultural methods are fairly traditional so that food production increases only slowly, population tends to increase at more rapid rates. The result is subsistence living, with population held in check by low life expectancies and periodic famines.
Fortunately, over most of the world, Malthus’s predictions have been proven false. Two reasons are paramount. First, Malthus underestimated the importance of technological change, which has increased agricultural productivity at a geometric rate in many countries, a rate far higher than the rate at which the demand for food has been growing in most advanced countries. Second, he underestimated the extent of voluntary restrictions of population growth due both to the widespread use of birth control techniques and other changes in behaviour such as delayed marriages. As a result, population has grown more slowly than has the production of food (and most other things) in developed countries. In these places, living standards have been rising rather than falling.

For the developed countries, Malthusian pressures are not a problem today. For many poor countries, where people subsist on what they grow for themselves, the tendency for the growth in population to outstrip the growth in the food supply makes Malthusian pressures a current threat.

Figure 2 illustrates actual and projected world population. By now, the population problem is almost completely limited to developing countries. About 97 percent of the expected growth in the world’s population between now and 2050 will be in the developing countries of Africa, Asia, and Latin America.

**FIGURE 2** World Population Since 1 A.D.

*Projection*

World population was just over 6 billion in 2000 and is projected to rise to 10 billion within 50 years. The population of industrialized countries has nearly stabilized. But, in developing countries, population is skyrocketing. Up to 97 percent of population growth between now and 2050 will occur in developing countries. By that time, total world population will have reached 10 billion. Birth and death rates among present populations allow estimates to be made up to about the middle of the next century with reasonable accuracy. The projection to 11.6 billion by 2150 is much more conjectural and highly uncertain.  
(Source: United Nations Population Fund.)
Cultural Barriers

Traditions and habitual ways of doing business vary among societies, and not all are equally conducive to economic growth. In developing countries, cultural forces are often a source of inefficiency. Sometimes personal considerations of family, past favours, or traditional friendship or enmity are more important than market incentives in motivating behaviour. In a traditional society in which children are expected to stay in their parents' occupations, it is more difficult for the labour force to change its characteristics and to adapt to the requirements of growth than in a society in which upward mobility is a goal itself.

The fact that existing social, religious, or legal patterns may make growth more difficult does not imply that they are undesirable. Instead, it suggests that the benefits of these patterns must be weighed against the costs, of which the limitation on growth is one. When people derive satisfaction from a religion whose beliefs inhibit growth or when they value a society in which every household owns its own land and is more nearly self-sufficient than in another society, they may be quite willing to pay a price in terms of foregone growth opportunities.

Many critics argue that development plans, particularly when imposed by economists coming from developed countries, pay too little attention to local cultural and religious values. Even when they are successful by the test of increasing GDP, such success may be at too great a cost in terms of social upheaval for the current generation.

A country that wants development must accept some alteration in traditional ways of doing things. However, a tradeoff between speed of development and amount of social upheaval can be made. The critics argue that such a tradeoff should be made by local governments and should not be imposed by outsiders who understand little of local customs and beliefs. An even more unfavourable possibility is that the social upheaval will occur without achieving even the expected benefits of GDP growth. If the development policy does not take local values into account, the local population may not respond as predicted by Western economic theories. In this case, the results of the development effort may be disappointingly small.

Domestic Saving

Although modern development strategies call in many instances for a large infusion of imported foreign capital, the rise of domestically owned firms, which will reap some of the externalities created by foreign technology, is one key to sustained development. This requires a supply of domestic saving to finance their growth.

If more domestic capital is to be created at home by a country's own efforts, resources must be diverted from the production of goods for current consumption. This reallocation of resources implies a reduction in current living standards. If living standards are already at or near the subsistence level, such a diversion will be difficult. At best, it will be possible to reallocate only a small proportion of resources to the production of capital goods.

Such a situation is often described as the vicious circle of poverty: Because a country has little capital per head, it is poor; because it is poor, it can devote few resources to creating new capital rather than to producing goods for consumption; because little new capital can be produced, capital per head remains low, and the country remains poor.

The vicious circle can be made to seem an absolute constraint on growth rates. Of course, it is not; if it were, we would all still be at the level of the early agricultural civ-
The grain of truth in the vicious-circle argument is that some surplus must be available somewhere in the society to allow saving and investment. In a poor society with an even distribution of income, in which nearly everyone is at the subsistence level, saving may be very difficult. But this is not the common experience. Usually there is at least a small middle class that can save and invest if opportunities for the profitable use of funds arise.

**Infrastructure**

Key services, called *infrastructure*, such as transportation and a communications network, are necessary for efficient commerce. Roads, bridges, railways, and harbours are needed to transport people, materials, and finished goods. Phone and postal services, water supply, and sanitation are essential to economic development.

The absence of a dependable infrastructure can impose severe barriers to economic development.

Many governments feel that money spent on a new steel mill shows more impressive results than money spent on such infrastructure investments as automating the telephone system. Yet private, growth-creating entrepreneurial activity will be discouraged more by the absence of good telephone communications than by the lack of domestically produced steel.

**Foreign Debt**

The 1970s and early 1980s witnessed explosive growth in the external debt of many developing nations. Since the mid-1980s, most of these countries have experienced difficulties in making the payments required to service their debt. “Debt rescheduling”—putting off until the future payments that cannot be made today—has been common, and many observers feel that major defaults are inevitable unless ways of forgiving the debt can be found.

The trend toward increased debt started when OPEC quadrupled the world price of oil in 1973. Because many developing nations relied on imported oil, their trade balances moved sharply into deficit. At the same time, the OPEC countries developed massive trade surpluses. Commercial banks helped to recycle the deposits of their OPEC customers into loans to the developing nations. These loans financed some necessary adjustments and some worthwhile new investment projects. However, a large part of the funds were used unwisely; wasteful government spending and lavish consumption splurges occurred in many of the borrowing countries.

A doubling of energy prices in 1979 led to a further increase in the debt of oil-importing developing nations. The severe world recession that began in 1981 reduced demand for the exports of many of these countries. As a result, they were unable to achieve many benefits from the adjustments and investment expenditures that they had made. Furthermore, sharp increases in real interest rates (caused in part by the widespread fight against inflation) led to increased debt-service payments; as a result, many countries could not make their payments.

The lending banks had little choice but to reschedule the debt—essentially lending the developing nations the money to make interest payments while adding to the principal of the existing loans. The International Monetary Fund (IMF) played a central role in arranging these reschedulings by making further loans and concessions conditional.
on appropriate policies of adjustment and restraint. These conditions were intended to limit wasteful government expenditure and consumption and thus to increase the likelihood that the loans would eventually be repaid. Critics of the IMF’s role argued that much of the restraint resulted in reduced investment and hence that the IMF’s conditions were counterproductive.

During the mid-1980s, the world economy recovered, inflation fell, and real interest rates fell. As a result, the developing countries’ export earnings grew, their debt-service obligations stabilized, and the crisis subsided. A sharp fall in the price of oil, which started in late 1985, further eased the problems of the oil-importing nations, but it also created a new debt problem.

Throughout the period of rising energy prices in the 1970s, a number of oil-exporting developing nations—including Mexico, Venezuela, and Indonesia—saw in those high prices new opportunities for investment and growth. Based on their high oil revenues, their ability to borrow improved. Their external debt grew, and they were able to avoid many of the adjustments that the oil-importing developing nations had been forced to undertake. When oil prices fell in the 1980s and 1990s, however, these oil exporters found themselves in difficult positions.

By the late 1990s, attention had focused on the so-called highly indebted poor countries (HIPC). Figure 3 shows for 2001 the external debt for the 10 most indebted of the HIPC.

### Figure 3

**External Debt in the Highly Indebted Poor Countries, 2001**

<table>
<thead>
<tr>
<th>Country</th>
<th>Debt (in billions of U.S. dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>10</td>
</tr>
<tr>
<td>Cameroon</td>
<td>12</td>
</tr>
<tr>
<td>Congo</td>
<td>13</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>15</td>
</tr>
<tr>
<td>Ghana</td>
<td>16</td>
</tr>
<tr>
<td>Kenya</td>
<td>17</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>18</td>
</tr>
<tr>
<td>Sudan</td>
<td>19</td>
</tr>
<tr>
<td>Tanzania</td>
<td>20</td>
</tr>
<tr>
<td>Vietnam</td>
<td>21</td>
</tr>
</tbody>
</table>

The Highly Indebted Poor Countries (HIPC) had external debts equal to $179 billion in 2001. The data shown here are the external debts of the 10 most indebted of the HIPC, measured in billions of U.S. dollars.

(Source: These data are available on the World Bank’s website: www.worldbank.org. Go to “Data and Statistics” and then click on “Data by Topic” and “Debt.” International Bank for Reconstruction and Development/The World Bank.)

### 36W.3 Development Policies

The past two decades have seen a remarkable change in the views of appropriate policies for economic development. The views that dominated development policies during the period from 1945 to the early 1980s have given way to a new set of views that reflect the experience of the earlier period.

#### The Older View

The dominant approaches toward development strategies from 1945 to the early 1980s were inward-looking and interventionist.

The policies were inward-looking in the sense that replacing imports was the primary goal of fostering local industries. These local industries were usually protected with very high tariffs and supported by large subsidies and favourable tax treatment. The exchange rate was almost always pegged, usually at a level that overvalued the currency (that is, the exchange rate was pegged below its free-market value). As we explain in detail in Chapter 35, fixing the exchange rate below its free-market level raises the domestic currency...
prices of exports and lowers the prices of imports, which leads to an excess demand for foreign exchange. The argument for keeping export prices high was that foreign demand for traditional exports was inelastic so that (as we saw in Chapter 4) raising their prices would raise the amount received by their sellers. The excess demand for foreign exchange caused by the overvaluation of the currency led to a host of import restrictions and exchange controls such as import licences and quotas issued by government officials.

Many governments were hostile to foreign investment and made it difficult for multinational firms to locate in their countries. For example, many had local ownership rules requiring that any foreign firm wanting to invest must set up a subsidiary in which local residents would own at least half of the shares. Much new investment was undertaken by government-owned industries, while subsidization of privately owned local industries was often heavy and indiscriminate. Industrial activity was often controlled, with a licence being required to set up a firm or to purchase supplies of scarce commodities. Much investment was financed by local savings, which were sometimes made voluntarily and sometimes forced by the state.

This whole set of measures is often referred to as being inward-looking and based on import substitution. Strictly, import substitution refers to the attempt to build local industries behind protectionist walls to replace imports. Often, however, the term is used more generally to refer to the entire battery of related measures just described.

These interventionist measures gave great power to government officials and, not surprisingly, corruption was rife. Bribes were needed to obtain many things, including state subsidies, licences, and quotas. As a result, many resources were allocated to those who had the most political power and were willing to pay the highest bribes, rather than to those who could use the resources most efficiently.

Heavy subsidization of private firms and state investment in public firms required much money, and the tax structures of many poor countries could not provide sufficient funds. As a result, such expenditures were often financed by borrowing from the central bank, which, as we explain in Chapters 27 and 28, ultimately leads to inflation. Persistent inflation was a major problem in many of these countries. Inflation was almost always in the double-digit range and quite often soared to several hundred percent per year.

Most of the economies in which these policies were employed fell short of full central planning and full state ownership of resources. As a result, there was still some private initiative and some profit seeking through normal market means. But the overall policy thrust was inward-looking and interventionist.

The Rise of the New View

During the 1980s, four important events contributed to a reappraisal of this development model. First, developing countries that had followed these policies most faithfully had some of the poorest growth records. Second, the GDP growth rates of the more industrialized countries of Eastern Europe and the Soviet Union that had followed interventionist approaches to their own growth were visibly falling behind those of the market-based economies. Third, Taiwan, Singapore, South Korea, and Hong Kong, which had departed from the accepted model by adopting more market-based policies, were prospering and growing rapidly. Fourth, the globalization of the world’s economy led to an understanding that countries could no longer play a full part in world economic growth without a substantial presence of multinational corporations within their boundaries. Given the sizes of developing countries, this meant the presence of foreign-owned multinationals. We now discuss each of these four events in more detail.
Experience of the Developing Countries

Highly interventionist economies fared poorly in the 1950s, 1960s, and 1970s. Economies as varied as Argentina, Myanmar (then Burma), Tanzania, Ethiopia, and Ghana were all interventionist and all grew slowly, if at all. In Ethiopia, the emperor was overthrown and the new government adopted rigid Soviet-style policies. Attempts to collectivize agriculture led, as they had 50 years previously in the Soviet Union, to widespread famine. Some countries, such as Ghana, Nigeria, and Myanmar, started from relatively strong economic positions when they first gained their independence but later saw their GDPs and living standards shrink. Other countries, such as India and Kenya, sought a middle way between capitalism and socialism. They fared better than their more highly interventionist neighbours, but their development was still disappointingly slow.

Experience of the Socialist Countries

In the years following the Second World War, many observers were impressed by the apparent success of planned programs of “crash” development, of which the Soviet experience was the most remarkable and the Chinese the most recent. Not surprisingly, therefore, many of the early development policies of the poorer countries sought to copy the planning techniques that appeared to underlie these earlier socialist successes.

In recent decades, however, the more developed socialist countries began to discover the limitations of their planning techniques. Highly planned government intervention seems most successful in providing infrastructure and developing basic industries, such as electric power and steel, and in copying technologies developed in more market-oriented economies. However, it is now seen to be much less successful in providing the entrepreneurial activity, risk taking, and adaptivity to change that are key ingredients to sustained economic growth and technological change.

The discrediting of the Soviet approach to development was given added emphasis when the countries of Eastern Europe and the former Soviet Union abandoned their system en masse and took the difficult path of rapidly introducing market economies. Although China, the last major holdout, posted impressive growth figures in the 1990s, two “nonsocialist” reasons are important in explaining its performance. First, over 90 percent of the population is engaged in basically free-market agriculture—because that sector has long been free of the central-planning apparatus that so hampered agriculture in the former Soviet Union. Second, while the state-controlled industries suffer increasing inefficiencies, a major investment boom took place in China’s southeast coastal provinces. Here foreign investment, largely from Japan and the Asian NICs, introduced a rapidly growing and highly efficient industrialized market sector.

Experience of the NICs

South Korea, Taiwan, Hong Kong, and Singapore—the so-called Asian Tigers—have turned themselves from relative poverty to relatively high income in the course of less than 40 years. During the early stages of their development, they used import restrictions to build up local industries and to develop labour forces with the requisite skills and experiences. In the 1950s and early 1960s, however, each of the four abandoned many of the interventionist aspects of the older development model. They created market-oriented economies with less direct government intervention than other developing economies, which stuck with the accepted development model.

Korea and Singapore did not adopt a laissez faire stance. Instead, both followed quite strong policies that targeted specific areas for development and encouraged those areas with various economic incentives. In contrast, Hong Kong and Taiwan have had somewhat more laissez faire attitudes toward the direction of industrial development.
After local industries had been established, all four adopted outward-looking, market-based, export-oriented policies. This approach tested the success of various policies to encourage specific industries by their ability to compete in the international marketplace. With industries designed to serve a sheltered home market, it is all too easy to shelter inefficiency more or less indefinitely. With export-oriented policies not based on subsidies, the success of targeted firms and industries is tested in international markets, and unprofitable firms fail.

Not far behind the NICs is a second generation of Asian and Latin American countries that have also adopted more market-oriented policies and have seen substantial growth follow. Indonesia, Thailand, the Philippines, Mexico, Chile, and Argentina are examples. Even Vietnam and Laos are liberalizing their economies as communist governments come to accept that a market economy is a necessary condition for sustained economic growth.

Globalization

At the heart of globalization lies the rapid reduction in transportation costs and the revolution in information and communication technology that has characterized the past two decades. One consequence has been that the internal organization of firms is changing to become less hierarchical and rigid and more decentralized and fluid. Another consequence is that the strategies of transnational corporations (TNCs), which span national borders in their organizational structures, are driving globalization and much of economic development. Because most trade, and much investment, is undertaken by TNCs, no country can develop into an integrated part of today’s world economy without a substantial presence of TNCs within its borders. The importance of TNCs is now recognized, and most aspiring developing countries generally put out a welcome mat for them.

Historically, only a few countries, notably Japan and Taiwan, have industrialized without major infusions of foreign direct investment (FDI). Moreover, these cases took place before the globalization of the world’s economy. It is doubtful that many (or any) of today’s poor countries could achieve sustained and rapid growth paths without a substantial amount of FDI brought in by foreign-owned transnationals. Without such FDI, both the transfer of technology and foreign networking would be difficult to achieve.

Developing countries have gradually come to accept the advantages of FDI. First, FDI often provides somewhat higher-paying jobs than might otherwise be available to local residents. Second, it provides investment that does not have to be financed by local saving. Third, it provides training in worker and management skills that come from working with large firms linked into the global market. Fourth, it can provide advanced technology that is not easily transferred outside of the firms that are already familiar with its use.

The Washington Consensus

As a result of these various experiences, a new consensus on development policy emerged in the closing decades of the twentieth century. The revised model calls for a more outward-looking, international trade-oriented, and market-based route to development. It calls for accepting market prices as an instrument for the allocation of resources. This means abandoning both the heavy subsidization and the pervasive regulations that characterized the older approach. But it also calls for a careful use of government policy in providing basic infrastructure, public goods, and dealing with market failures.
This consensus is often referred to as the “Washington Consensus.” It describes the conditions that are believed to be necessary for a poorer country to get itself on a path of sustained development. These views are accepted by a number of international agencies, including the World Bank, the IMF, and several UN organizations. The main elements of this consensus are as follows:

1. Government should adopt sound fiscal policies that avoid large budget deficits. In particular, persistent structural (or cyclically adjusted) deficits should be avoided.

2. Government should adopt sound monetary policies, with the goal of maintaining low and stable inflation rates. Exchange rates should be determined by market forces rather than being pegged by central banks.

3. The tax base should be broad, and marginal tax rates should be moderate.

4. Markets should be allowed to determine prices and the allocation of resources. Trade liberalization is desirable, and import licensing, with its potential for corruption, should be avoided.

5. Targeted protection for specific industries and a moderate general tariff, say, 10 to 20 percent, may provide a bias toward widening the industrial base of a developing country. But such protection should be for a specified period that is not easily extended.

6. Industrial development should rely to an important extent on local firms and on attracting FDI and subjecting it to a minimum of local restrictions that discriminate between local and foreign firms. (Of course, restrictions will be required for such things as environmental policies, but these should apply to all firms, whether foreign-owned or locally owned.)

7. An export orientation (as long as exports do not rely on permanent subsidies) provides competitive incentives for the building of skills and technologies geared to world markets, permits realization of scale economies, and provides access to valuable information flows from buyers and competitors in advanced countries.

8. Education, health (especially for the disadvantaged), and infrastructure investment are desirable forms of public expenditure. Because future demands are hard to predict and subject to rapid change, a balance must be struck between training for specific skills and training for generalized and adaptive abilities.

9. Finally, emphasis needs to be placed on poverty reduction for at least two reasons. First, poverty can exert powerful antigrowth effects. People in poverty will not develop the skills to provide an attractive labour force, and they may not even respond to incentives when these are provided. Malnutrition in early childhood can affect a person’s capacities for life. Second, although economic growth tends to reduce the incidence of poverty, it does not eliminate it.

Debate Beyond the Washington Consensus

The basic Washington Consensus on outward-looking, market-oriented economic policies provides what many people believe are necessary conditions for a country to achieve a sustained growth path in today’s world.
Sufficient or Just Necessary?

There is substantial debate around one crucial issue: Are the conditions of the Washington Consensus sufficient to encourage the kinds and volumes of both domestic and foreign investment needed to develop comparative advantages in higher-value-added industries, or are they merely necessary?

Some observers believe that these conditions are sufficient. In their view, all a country needs to do is to meet these conditions. Domestic saving will finance domestic investments, FDI will flow in, and a sustained growth path will be established. Other economists worry that many countries may have only limited ability to attract FDI, to benefit from it, and to create sufficient domestic investment, even after fulfilling the conditions of the Washington Consensus. The latter set of economists points to the experience of some African countries where TNCs operated extractive industries that despoiled the countryside and produced little permanent benefit for the host country; they merely extracted the available resources and then left. Others point out that there is a major difference between pure extractive enterprises and manufacturing enterprises, the latter having more potential spillovers to the local economy than the former.

What does happen after the conditions of the Consensus are fulfilled will depend in part on the existing endowments of the country in question. If large supplies of natural resources or cheap, well-educated labour are available, fulfilling these conditions may be sufficient. Commentators who call for policies beyond those of the Washington Consensus argue that for some countries, a past history of nongrowth, plus the absence of positive externalities that go with a reasonably developed industrial sector, may require that the government adopt a more active set of integrated trade, technology-transfer, and innovation policies. This set of policies would be aimed at encouraging the development of human and technological capabilities.

Implications of Modern Growth Theory

What is at issue in the debate just described is related to the newer views on economic growth that are discussed in Chapter 26. The key new view is that endogenous technological innovation is the mainspring of economic growth. Things emphasized by economists for centuries, such as aggregate saving and investment, are still essential, but technological change is now considered to lie at the core of the growth process.

As we saw in Chapter 26, technological change is a costly process that is undertaken mainly by firms in pursuit of profit. Research and development are by their nature risky and uncertain activities. The technological path followed by firms and industries is evolutionary in the sense that it develops as experiments and errors are made.

For developing countries, one of the most important of the many new insights stemming from research into the growth process is that adopting someone else’s technology is often not a simple, costless task. Substantial R & D capacity is needed to adapt other people’s technology to one’s own purposes and to learn how to use it—except where the technology uses only very simple machines that can be operated by unskilled labour. For one reason, much of the knowledge required to use a technology is tacit; it can be obtained only from learning by doing and by using. This creates difficulties in imitating the knowledge, as well as uncertainty regarding which modifications will work in any new situation. It is true even when technology moves from one firm to another in the same industry and the same country. The problems are greater when technology moves across industrial or national borders. The difficulties of adopting new technologies also become more difficult the more complex and information-intensive the technology becomes.
It follows that all knowledge is not freely tradable. Neither a firm nor a government can go out and buy it ready-to-use. Acquiring working technological knowledge requires both investment and the experience that allows workers and management slowly to acquire the needed tacit knowledge.

**What May Be Needed**

The foregoing view of technological change suggests to some economists a major reason why active government policies that go beyond the Washington Consensus may be needed.

**Protection of the Domestic Market.** Such policies can work at the early stages by establishing a protected domestic market through tariffs and other import restrictions. Virtually every country that has moved to a sustained growth path in the past, including the United States, Canada, Japan, and all of the NICs, has used import substitution in its early stages of industrialization. A protected home market provides a possible solution to the problem of coping with the enormous externalities involved in building up an infrastructure of physical and human capital as well as the required tacit knowledge and abilities. Even if all the specific young industries that are protected by the import substitution policy do not grow into self-sufficient mature industries, the externalities may still be created and become available for a second generation of more profitable firms.

Protection of the home market from international competition can, however, pose serious problems unless it is selective and temporary. Investment may occur mainly in areas where comparative advantage never grows. High costs of protected industries may create a lack of competitiveness in other domestic industries whose inputs are the outputs of the protected industries. Some potential comparative advantages may not be exploited because of the distorting effects of existing tariffs, and—as always—consumers bear much of the cost in terms of high prices of protected outputs.

**Innovation Policies.** Trade restrictions do not provide the only route to building industrial and R&D capacity by encouraging technological diffusion and creating structural competitiveness. Other methods include the much-needed public investment in infrastructure and in human capital and many other things such as the provision of adequate financial schemes to favour investment in physical and intangible assets, procurement and tax incentives, provision of technical and marketing information, consulting services for assisting firms in industrial restructuring and in the adoption of new technologies and organizational techniques, support services in design, quality assurance and standards, schemes for training and retraining personnel, and facilities for start-up companies.

Advocates of such a policy package stress the importance of having these incentives as part of a more general innovation and competition policy in order to encourage technological transfer to the local economy (such transfers are riddled with market failures arising from their externalities). Linkages among firms, and among firms and universities and research institutions, both within the country and with the rest of the world, are also important.

Policies that encourage the development of small- and medium-size enterprises are important to any development strategy. These tend to be locally owned and tend to be the vehicle by which know-how and best practices are transferred from TNCs to the local economy. They are also the sector most vulnerable to excessive red tape, rules and regulations, profit taxes, and other interferences that raise the cost of doing business.

**A Cautionary Note.** There is no doubt that the governments of many poor countries have been highly interventionist—and some still are. Hence, a good first strategy is often
to diminish the government’s place in the economy. There is no point in adopting a new, relatively rational technology-promotion strategy if existing government interventions are irrational and heavy. The unproductive interventions must be cleared away first. This does not mean, however, that if a government were starting from scratch, the best objective would be to minimize its place in the economy.

Whatever methods are chosen, selective intervention is a delicate instrument, highly dangerous in inept hands; in fact, even when in practised hands, much damage can be done. The intervention needs to be carefully tailored to get specific results and to reduce the opportunities for small groups to gain at the expense of others. To meet these objectives, most assistance should, as a rule, be terminated after specified periods of time. It is also important to leave room for the market to generate, and support, unforeseen opportunities.

Conclusion

According to the World Bank, approximately 1.2 billion of the world’s people subsist on less than one dollar (U.S.) per day. Despite the fact that one U.S. dollar buys much more in Addis Ababa than it does in New York, Toronto, or Paris, there is still a significant fraction of the world’s population that is—by any reasonable standard—very poor.

What can be done? The World Bank’s prescriptions fall into two broad categories:

1. Create new economic opportunities for the poor. Because the poor’s main source of income is what they are paid for their labour, this means promoting labour-intensive economic growth.

2. Equip the poor to grasp these opportunities. This step calls for adequate provision of basic social services such as primary education, health, and family planning.

The World Bank also points out that one of the most damaging economic distortions in many developing countries is excessive taxation of farming. This hits the very part of the economy on which most of the poor depend for their livelihood.

The World Bank suggests that a major reduction in poverty is possible worldwide. What is needed is the acceptance of the new consensus on the importance of market determination and of reducing state control and state ownership of business activity. This, in addition to a large dose of enlightened policies to bring education, health, and jobs to ordinary people and improved technology to the nations’ firms, could pay enormous dividends in reducing poverty and suffering. Only time will tell how much of that hopeful potential will be realized over the coming years.

SUMMARY

36W.1 The Uneven Pattern of Development

- About one-quarter of the world’s population still exists at a level of bare subsistence, and nearly three-quarters are poor by Canadian standards. Although some poorer societies have grown rapidly, the gap between the very richest and very poorest appears to be increasing.
36W.2 Impediments to Economic Development

- Impediments to economic development include excessive population growth; resource limitations; inefficient use of resources; inadequate infrastructure; insufficient domestic saving; high foreign debt; excessive government intervention; and institutional and cultural patterns that make economic growth difficult.

36W.3 Development Policies

- The older model for development policies included: heavy tariff barriers and a hostility to foreign direct investment (FDI) to protect the home market for local firms; many government controls over, and subsidization of, local activities; and exchange rates pegged at excessively low values (overvalued currencies) with imports regulated by licences.

- The new view is given in the Washington Consensus, which calls for: sound fiscal and monetary policies; broad-based taxes levied at moderate rates; market determination of prices and quantities; discriminating use of infant industry protection for moderate time periods; an acceptance of FDI and the presence of TNCs; active government provision of education, health care, and infrastructure; and antipoverty programs to help in human resource development and to aid citizens who are left behind by the growth process.

- An active debate turns on whether the conditions of the Washington Consensus are sufficient, or just necessary, to establish a country on a sustained growth path. Analysts who regard it as sufficient feel that once unleashed, natural market forces will create sustained growth.

- Analysts who regard the conditions of the Washington Consensus as necessary but not sufficient point to substantial externalities and pervasive market failures in the diffusion of technological knowledge from developed to developing nations. These economists call for active government innovation policies to augment investment and to assist the transfer of technological know-how and practice to the local economy.

KEY CONCEPTS

The development gap
Impediments to economic development
The vicious circle of poverty
The NICs
TNCs and FDI
The Washington Consensus
Externalities and market failures in the diffusion of technology

STUDY EXERCISES

1. Go to the website for the United Nations (www.un.org). From the home page go to “Economic and Social Development.” Then click on “Statistics” and search for “Social Indicators.” Then answer the following questions.

   a. List the average rate of population growth for:
      - Albania
      - Canada
      - Iceland
      - Angola
      - Czech Republic
      - India
      - Bangladesh
      - Guatemala
      - Rwanda
   
   b. Explain why, ceteris paribus, high rates of population growth make it more difficult for a country to increase its average living standards. What role in your answer is played by the diminishing marginal returns to labour?

2. Go to the website for the United Nations (www.un.org). From the home page go to “Economic and Social Development.” Then click on “Statistics” and search for “Social Indicators.” Then answer the following questions.

   a. List the level of per capita GDP (US$) for the same group of countries as in Question 1, part (a).

   b. Which country listed by the U.N. has the highest per capita GDP?
c. Which country listed by the U.N. has the lowest per capita GDP?

3. Go to the World Bank’s website (www.worldbank.org). Search for “Data” and then select “Data by Topic.” Choose “Growth in Consumption and Investment” and then answer the following questions.

a. List the amounts of gross saving and gross investment (as percentages of GDP) for:
   - Algeria
   - Côte d’Ivoire
   - Malaysia
   - Bolivia
   - Ecuador
   - Nigeria
   - Canada
   - Latvia
   - Tanzania

b. On a scale diagram, with the investment rate on the horizontal axis and the saving rate on the vertical axis, plot the data for each of the chosen countries. Do you see any relationship?

c. Based on what you have learned (perhaps especially from Chapter 26), explain why high investment rates are typically associated with high growth rates of GDP.

d. In this chapter, we argued that some countries face a growth challenge because of their small pool of domestic saving. Based on your diagram from part (a), explain the importance of domestic saving.

4. Go to the World Bank’s website (www.worldbank.org). Search for “Data” and then select “Data by Topic.” Choose “Agricultural Output and Productivity” and then answer the following questions.

a. List the agricultural value added per worker for the following countries:
   - Algeria
   - Côte d’Ivoire
   - Malaysia
   - Bolivia
   - Ecuador
   - Nigeria
   - Canada
   - Latvia
   - Tanzania

b. Can you offer some possible explanations for the greater productivity in agriculture in the developed countries?

5. In the text we discussed that an adequate infrastructure is important to economic development. Go to the website for the United Nations (www.un.org). From the home page go to “Economic and Social Development.” Then click on “Statistics” and search for “Social Indicators.” Then answer the following questions.

a. List the percentage of the population with access to safe water and sanitation (both urban and rural populations) for:
   - Afghanistan
   - Norway
   - Bahrain
   - South Africa
   - Colombia
   - Thailand
   - Indonesia

b. According to the “Washington Consensus,” should the public or the private sector be providing water and sanitation in developing countries?

c. Can you provide a reason why public expenditures in sanitation (and health care, more generally) may lead to increases in long-run productivity?

**DISCUSSION QUESTIONS**

1. In his Essay on the Principle of Population as it Affects the Future Improvement of Society, first published in 1789, Thomas Malthus wrote:

   This natural inequality of the two powers of population and of production in the earth . . . [forms] the great difficulty that to me appears insurmountable in the way to perpetuity of society. All other arguments are of slight and subordinate consideration in comparison of this. I see no way by which man can escape from the weight of this law which pervades all animated nature. No fancied equality, no agrarian revolutions in their utmost extent, could remove the pressure of it even for a single century.

   Discuss Malthus’s “insurmountable difficulty” in view of the events of the past 100 years.

2. To what extent does the vicious circle of poverty apply to poor families that are living in the richest developed countries? Consider carefully, for example, the similarities and differences facing a poor family living in Vancouver and one living in Ghana, where per capita income is less than $400 per year. Did it apply to Canadian immigrants who arrived at the turn of the twentieth century with $10 in their pockets?

3. Would removing all restrictions on immigration into the advanced countries help to improve living standards in the developing nations? How might such a policy affect living standards in the advanced countries?

4. “High coffee prices bring hope to impoverished Latin American peasants,” reads the headline. Mexico, Kenya, and Burundi, among other developing countries, have the right combination of soil and climate to increase their coffee production greatly. Discuss the benefits and risks to them if they pursue coffee production as a major avenue of their development.

5. History has shown that rapid development of poor countries is often accompanied by some measure of devastation of the country’s natural resources. Can you provide some examples? Must this outcome always occur? How can the developing countries help to stem the devastation? Why don’t they help more than they do at present?