CHAPTER TEN

Inequality, Poverty, and Social Policy in Mexico

In this chapter, we analyze the challenges Mexico faces in the social sector. This is a topic worthy of U.S. concern because economic reforms that promote growth but fail to reduce poverty, inequality, and regional disparities will not succeed in achieving sustainable economic growth and the objectives of these reforms, such as potentially reducing migration. Therefore, programs and policies that improve the well-being of the population need to be put in place in parallel with other structural reforms.

Inequality and Poverty

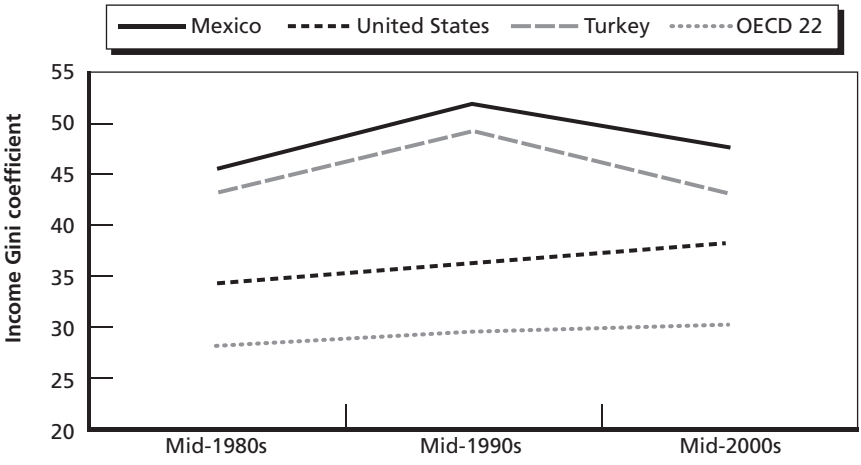
As we have discussed, many of Mexico's economic policies have focused on stabilizing the economy and promoting growth. Poverty and inequality are two important features of Mexico's society and are highly correlated. We begin this chapter by focusing on regional and social inequality.

Inequality

Although poverty rates declined from 1994 to 2006 (see Figure 6.4 in Chapter Six), the question remains whether this shift has translated into lower inequality, not only in income but also in wealth and human capital.[1] Figure 10.1 shows values of the income Gini coefficient for

[1] However, some of the gains in poverty reduction were reversed in 2008 (see Figure 6.4 in Chapter Six).

Figure 10.1
Inequality in Mexico and Other Countries in the Organisation for Economic Co-Operation and Development, 1980s–2000s



SOURCE: OECD, undated (b).

RAND *MG985/1-10.1*

Mexico, the United States, Turkey, and a group of 22 OECD countries at different points in time during the past three decades. The Gini coefficient is a measure of inequality; a value of 0 indicates "perfect equality," in which every person in an economy has exactly the same amount of, say, income, and a value of 100 indicates "perfect inequality," in which one person concentrates all income in the economy. As shown in the figure, income inequality in Mexico increased significantly from the mid-1980s and mid-1990s. Although inequality decreased from a Gini coefficient equal to 0.52 in the mid-1990s to 0.47 in the mid-2000s, it remains above the mid-1980s levels, and it is still significantly higher than in other OECD countries, including Turkey. The pattern of an initially increasing overall inequality from 1994 to 2000 and then a decrease in inequality until 2006 resulted in a combination of a steady decrease in inequality in urban areas during that period and an initial increase and then decrease in inequality in rural areas (Equivel, 2010). In 2008, inequality again rose (to a Gini coefficient of 0.52), as did poverty (World Bank, undated [c]).

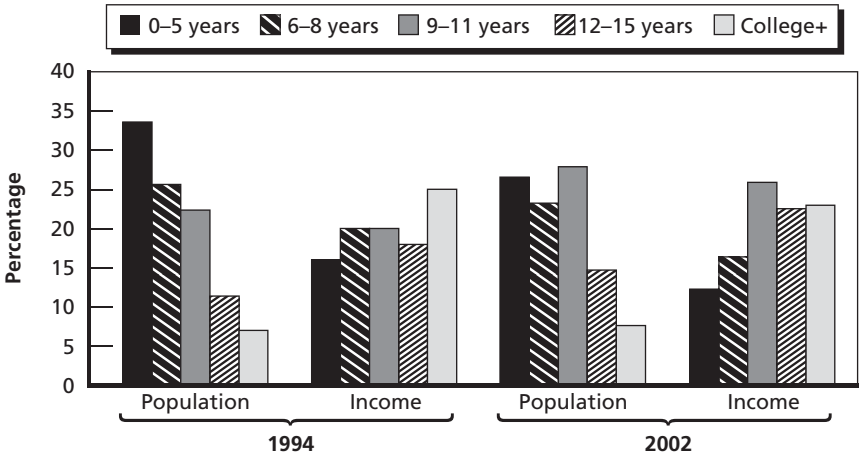
A 2008 report indicates not only that Mexico ranked last in income equality among all OECD countries but also that Mexico's inequality is strictly greater than that for all OECD countries across all deciles in the income distribution. That is, Mexico's income distribution from top to bottom is worse than that of any other OECD country, unlike, for example, the income distribution of the United States, which is, at all income deciles, worse than that of any OECD country except Mexico (see OECD, 2008, Table 1.A2.1).

De la Torre and Moreno (2004) explores Mexico's distribution of income, wealth, and human capital between 1994 and 2002.[2] The authors find that inequality remained mostly constant during this period, which suggests that the period of economic expansion between 1996 and 2000 did not result in a significant decrease in wealth or human capital inequality. In fact, between 1998 and 2000, a period in which Mexico's GDP grew at an average of 5 percent per year, the wealth Gini coefficient grew from 0.52 to 0.57. As De la Torre and Moreno (2004) point out, this might indicate that the groups with the highest income were the ones that obtained the best opportunities to accumulate wealth during the phase of economic growth. It is worth noting, however, that De la Torre and Moreno's analyses do not cover the entire period shown in Figure 10.1, so it is entirely possible that, as income inequality decreased toward the mid-2000s, wealth inequality might have also decreased in the years subsequent to 2002.

Another feature revealed by De la Torre and Moreno is that human capital accumulation in Mexico is subject to less inequality than income and wealth, probably because the first nine years of school are freely provided by the Mexican government. Their analysis suggests that human capital inequality remained stable between 1994 and 2002. However, there were important changes in the distribution of educational achievement in that period that are not captured by changes in their model. Figure 10.2 reports the share of the population with

[2] De la Torre and Moreno's estimates of Mexico's income Gini coefficient differ somewhat from those computed by the OECD. This is probably due to the use of different definitions of income because the OECD uses disposable income (after taxes and transfers) to measure inequality.

Figure 10.2
Population and Income Shares, by Education Group, 1994 and 2002



SOURCE: De la Torre and Moreno, 2004.
RAND *MG985/1-10.2*

different levels of education and the income share of those education groups in 1994 and 2002. A positive trend in educational achievement is suggested by this figure because the percentage of individuals in the two least-educated groups (zero to eight years of schooling) decreased from 59 to 50 percent of the population, while the percentage of individuals in the three most-educated groups (nine years of schooling or more) increased from 41 percent to 50 percent. By 2010, the percentage of individuals in the two least-educated groups had fallen further to 41 percent (INEGI, undated [a]).

On the other hand, the figure also shows that significant income inequalities still exist between education groups. Although the two least-educated groups constituted 50 percent of the population in 2002, they accounted only for 28 percent of total income, while the highest-educated group accounted for only 8 percent of the population but 23 percent of total income.

Regional Disparities

Regional disparities have been exacerbated in the past due to an increase in population dispersion. The number of rural communities increased by more than 100 percent from 1970 to 1995, while the total population in those communities increased by only 21 percent during the same period, which indicates that the increase in the number of rural communities was driven mostly by out-migration to urban areas.[3] INEGI defines a locality with a population of 2,500 or less as rural and those with populations larger than 2,500 as urban (INEGI, undated [a]).

In 2000, Mexico had 197,930 rural localities and 1,461 urban localities. Almost 30 percent of the population lived in the rural localities. The states that had the highest number of rural localities are Oaxaca, Chihuahua, Yucatan, Sonora, and Puebla. The dispersion of rural communities represents a challenge to the Mexican government because these areas are predominantly poor and it is difficult to provide them with infrastructure and services.

Rural Poverty

Most Mexicans living in rural areas are indigenous. The indigenous population in Mexico ranges between 12 percent and 30 percent of the population. The 30-percent estimate includes indigenous population that might have been assimilated into the Mexican mestizo culture, losing their original language and traditions (Instituto Nacional Indigenista, 2002). By 2005, the proportion of the indigenous population reported by the census was 15.01 percent (INEGI, 2010). CONAPO (2005b) projections estimated that the proportion of the total population that would be indigenous peoples would be 12.8 percent in 2010. There are 62 official indigenous languages, each with multiple dialects, and each is considered a national language with the same status as Spanish (Instituto Nacional Indigenista, 2002).

[3] Therefore, as people migrate out of medium-sized communities toward large urban areas, the total population of many previously urban communities falls below 2,500—and thus those communities become rural by definition—and the number of rural communities increases, but the overall sum of their population decreases.

The concentration of indigenous groups is mainly in the central and southeastern states. The states with the greatest percentage of indigenous population using data from 2000 are Yucatan (65.5 percent), Oaxaca (55.7 percent), Quintana Roo (45.6 percent), Chiapas (30.9 percent), Campeche (30.9 percent), Hidalgo (25.9 percent), Puebla (20.9 percent), Guerrero (18.6 percent), Veracruz (16.9 percent), and San Luis Potosí (16.8 percent) (CONAPO, 2005b).

Life Expectancy

According to the World Bank, the indigenous population faces extreme poverty in Mexico (Psacharopoulos and Patrinos, 1994; World Bank, 2004). The life expectancy for indigenous peoples in 2000 was 69.4 years for men and 74.7 for women; for the rest of the population, it was 71.5 and 76.5 years, respectively. By 2010, life expectancy for indigenous men was expected to be 72.5 and 77.7 for women, in comparison with the total population for men 74.2 and for women 79.0 (CONAPO, 2005b). The gap between the life expectancy of indigenous population and that of the total population has been very similar across time. The main causes of mortality for this population are contagious diseases: influenza and pneumonia. In 1995, child mortality among the indigenous population was 54 deaths per 1,000 live births, almost twice that of the rest of the population, but significant progress has been made since then: By 2006, that figure had been reduced to 27 deaths per 1,000 live births (Pan American Health Organization [PAHO], 1998, 2007). CONAPO (2005b) projected that, in 2010, child mortality would decline to 22.8 deaths per 1,000 live births in the indigenous population, in contrast to 14.0 deaths per 1,000 live births for the rest of the population.

Crop Production

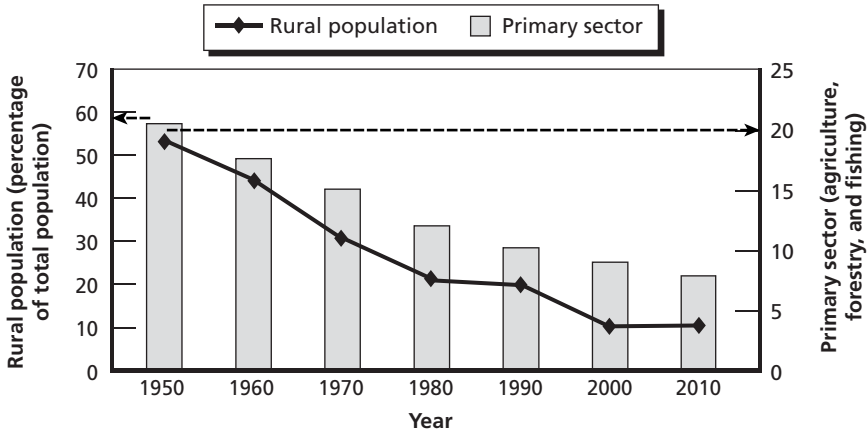
The main crops in Mexico are corn, wheat, beans, other grains (such as rice), and sesame seeds. Mexico also produces cotton, barley, soybeans, sorghum, and safflower. Other crops include sugarcane, tomatoes, bananas, chilies, green peppers, oranges, lemons, limes, mangoes, avocados, other tropical fruits, blue agave, and coffee.

Rural Population and Agricultural Reform

The primary sector's contribution to total GDP declined from 19 percent in 1950 to less than 4 percent in 2009, as shown by the continuous line in Figure 10.3.[4] The decreasing economic importance of the primary sector has disproportionately affected rural areas. Despite the fact that those rural areas contain 25 percent of the country's population, they accounted for only 2 percent of GDP in 2000 (OECD, 2007b). It is not surprising, then, that living standards in rural areas are considerably lower than in the rest of the country (OECD, 2007a; Yúnez-Naude, Barceinas, and Ruiz, 2004).

In the second half of the 1980s, the Mexican government began a series of reforms that sought to liberalize the agricultural sector. These reforms, as well as others that aimed at increasing legal certainty in land ownership, culminated with the signing of NAFTA in 1992. The government hoped that competition and market forces would result in a shift in farming supply away from products in which Mexico was less

Figure 10.3
Rural Population Share of Total Population and Primary-Sector Share of Total Gross Domestic Product, 1950–2010



SOURCES: INEGI, undated (a); OECD, undated (c).
RAND *MG985/1-10.3*

[4] The primary sector is made up of agriculture, forestry, and fishing.

competitive (such as grains and oilseeds) and toward those that could be exported and in which Mexico was more competitive (such as fruits and vegetables). This would eventually lead to increased productivity and higher income for farmers, preparing them for the eventual effects of NAFTA: convergence of the prices of imports and exports with international prices, increase in the importance of agricultural trade, and a reduction in the production of importable goods, accompanied with an increase in the production of exportable goods (Yúnez-Naude, Barceinas, and Ruiz, 2004).

Some of these goals have indeed been achieved. By 2004, the value of Mexican tomato exports had doubled to US$1 billion per year, and exports of other fruits and vegetables increased substantially as well (Pérez, Schlesinger, and Wise, 2008). In addition, prices of several agricultural products—including corn and beans—have decreased considerably, allowing consumers to buy food at lower prices (OECD, 2006a). There is no consensus, however, regarding whether the overall effect of trade liberalization has been positive or negative. Pérez, Schlesinger, and Wise (2008) argue that NAFTA has (1) failed to generate adequate employment for those displaced from traditional agriculture, (2) not stimulated greater efficiency and productivity in Mexican agriculture, and (3) worsened Mexico's trade balance because import growth has outpaced export growth. A recent study of the effects of agricultural trade liberalization on poverty in 15 countries concludes that only two of them will experience an increase in poverty as a result of liberalization, one of them being Mexico (Hertel et al., 2007).

In addition, Yúnez-Naude and Barceinas Paredes (2004) conducted an econometric analysis of NAFTA's effect on Mexican agriculture. They find that the productivity and total land use in the production of most importables (such as corn and beans) did not experience major changes; on the other hand, they do find evidence that some exportables (tomato, broccoli, cantaloupe, and watermelon) experienced significant productivity increases as a result of NAFTA. They conclude that a trend of convergence of Mexican crop prices—both imports and exports—toward U.S. prices already existed before NAFTA and that the implementation of NAFTA might have accelerated convergence for exportable agricultural prices.

On the other hand, such institutions as the World Bank and the OECD continue to promote the liberalization of trade of agricultural products. The OECD (2006a) suggests needed agricultural reforms in Mexico, which include the elimination of market price support and a reform of the energy regime that facilitates the elimination of energy subsidies. The World Bank's 2008 World Development Report also points out market distortions as hampering greater efficiency in the agricultural sector (World Bank, 2007b). The report concludes that Latin American countries stand to benefit the most from further trade liberalization, as long as such liberalization is coupled with broader economic reforms that improve market infrastructure, institutions, and support services.

Social Policy

With that overview of inequality, regional disparities, and rural poverty, we proceed to a deeper analysis of the main social policies that could be influencing these patterns. We concentrate on education, health, health insurance and social security coverage, public social programs designed to alleviate poverty, and public programs designed to capture remittances from Mexican immigrants to the United States.

Education

Measured by the number of students, Mexico has the second-largest education system both in the OECD and in Latin America (behind only the United States and Brazil, respectively). Furthermore, the total number of students has steadily increased in the past three decades, more than doubling between 1970 and 2000, and growing by 9 percent just from 2000 to 2005. In 2002, there were more than 30 million students in the entire Mexican education system; almost 80 percent of them were enrolled in the basic education level, which covers preschool to lower secondary (Secretaría de Educación Pública [SEP], undated).[5]

[5] The education system is divided into four levels: Preschool provides education for children aged three to five; primary education includes grades 1 through 6; lower secondary

Certain educational levels have experienced faster growth than others, which is largely by explained the already-high enrollment rates in the primary and lower secondary levels, for which attendance is compulsory. Table 10.1 shows that the number of students in primary school remained essentially unchanged between 2000 and 2008, while both the number of students and enrollment rates experienced significant increases at the preschool and high school levels in the same period. Although the enrollment rates of both lower and upper secondary school have increased, there is still a significant number of youth who either never enroll in or drop out of upper secondary school. According to Santibañez, Vernez, and Razquin (2005), enrollment and dropout figures imply that, out of every 100 students who enter primary school, around 68 complete the first nine years of education and 35 graduate from upper secondary. Only 8 percent of Mexicans hold bachelor's degrees.

Because education in Mexico is provided primarily by the public sector, the increase in the demand for education services implied by the growth of the student population has placed significant budget pressures on the government.[6] For example, between 1995 and 2001, public spending on basic education grew by 36 percent, among the steepest increases in the OECD (Santibañez, Vernez, and Razquin, 2005). In 2003, public expenditures on education represented 5.6 percent of Mexico's GDP, higher than the OECD average of 5.2 percent. In 2007, Mexico's public expenditures on education as a percentage of the GDP declined to 4.8 percent (World Bank, undated [c]). Moreover, Mexico is the OECD country with the largest public expenditure on education as a share of total public expenditure—more than 20 percent, well above the OECD average of 13.3 percent (OECD, 2006b).

Although these expenditure figures correctly indicate that education is a high policy priority in Mexico, they disguise a very important

education covers grades 7 to 9; and upper secondary education covers grades 10 to 12. Both primary and lower secondary are compulsory, and preschool is in the process of becoming compulsory as well.

[6] The share of students enrolled in public schools is more than 90 percent in basic education, 80 percent in upper secondary, and about two-thirds in higher education (Guichard, 2005).

Table 10.1
Enrollment and Enrollment Rates in Mexico, by Education Level, 2000 and 2008–2009

	Students			Enrollment Rate (%)	
Education Level	2000 (thousands)	2008–2009 (thousands)	Change (%)	2000	2008–2009
Basic education					
Preschool	3,423	4,608	35	50	78
Primary	14,793	14,861	0	93	97
Lower secondary	5,349	6,128	15	82	95
Upper secondary					
Technical	362	373	3	—	—
High school	2,594	3,682	42	47	62
Higher education					
Teacher's college	201	104	–48	—	—
University	1,718	2,547	48	—	—
Graduate school	129	196	52	—	—
Total	29,621	33,876	14	—	—

SOURCES: SEP, undated; Robles Vásquez and Martínez Rizo, 2006.

NOTE: The enrollment rate is defined as the number of students enrolled in each level divided by the total population of theoretical age in that level (that is, the number of students who would normally be at that school level at that age).

issue: Almost 80 percent of public education expenditures go toward teacher compensation; when all education workers are considered, this figure is 91 percent (OECD, 2006b).[7] This is high not only by OECD

[7] These percentages are for primary, secondary, and postsecondary nontertiary (i.e., vocational training or educational programs for students who tend to be older than those enrolled at the upper secondary level) education. For tertiary education, teacher compensations account for 56 percent of total expenditures and compensation of all staff for 73 percent.

standards but also when compared with expenditures in other Latin American countries.

There is then little left to invest in other educational resources that might also be critical to improving educational quality. Given historical trends and the significant power and organization of the national teachers' union, any effort to change the structure of expenditure might prove to be a difficult one to undertake. Nevertheless, since 2001, Mexico started creating programs that focus on allocating resources to nonwage expenditures.[8] Furthermore, as Guichard (2005) discusses, some opportunities might arise in the medium and long runs: As the cohorts attending basic education get smaller and those attending upper secondary education increase in size, the government could make more-efficient use of resources by not replacing retiring teachers in basic education and not increasing the teacher workforce proportionally to the number of students in secondary education, allowing class sizes to grow at least slightly.

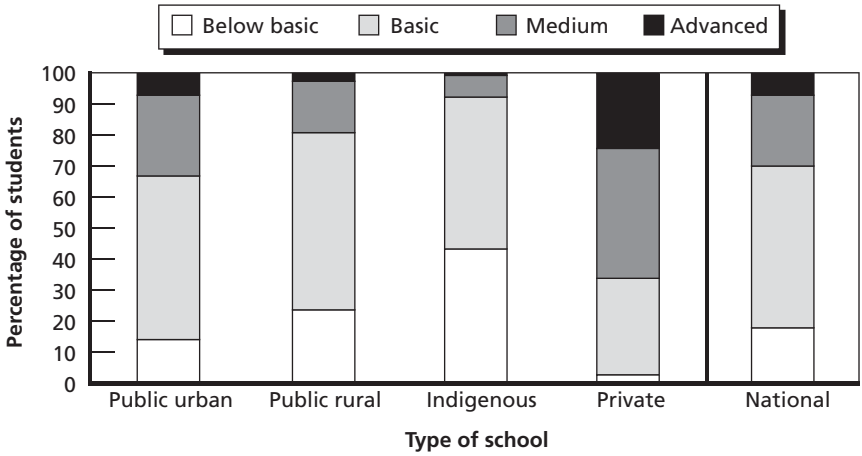
Mexican students generally score low in international studies of academic achievement, not only when compared with developed nations but also within Latin America. Mexico placed last in the 2003 OECD Programme for International Student Assessment (PISA) mathematics scale (OECD, 2006b) and scored below the mean in a Latin American student assessment in 1997 (United Nations Educational, Scientific and Cultural Organization [UNESCO], 1998). These and other indicators—such as repetition and dropout rates—show that the overall quality of education in Mexico is very low (Andere, 2003; Guichard, 2005; Santibañez, Vernez, and Razquin, 2005).

National assessments of student learning, conducted in 2005 by the National Institute for Education Evaluation (Instituto Nacional para la Evaluación de la Educación, or INEE), also reflect the largely low achievement of Mexican students. Moreover, they highlight important disparities in achievement across different types of

[8] Some examples are Escuelas de Calidad, which gives competitive grants mainly for infrastructure improvement and encourages local decisionmaking; Enciclomedia, which digitizes primary-education textbooks so students can learn by using computers; and Red Escolar, a program that seeks to promote the participation of teachers and students in the use of new technologies by applying them to education (Santibañez, Vernez, and Razquin, 2005).

schools. Figure 10.4 shows that, in 2005, public urban schools had higher percentages of students in the medium and advanced levels of mathematics achievement than public rural schools and that public schools in general have significantly lower achievement than private schools.[9] Often overlooked, indigenous schools have by far the lowest achievement of all schools in Mexico, with less than 1 percent of their students getting placed in the advanced achievement level.[10] Between

Figure 10.4
Percentage of Mexican Sixth-Grade Students, by Mathematics Achievement Level and Type of School, 2005



SOURCE: Robles Vásquez and Martínez Rizo, 2006.
RAND *MG985/1-10.4*

[9] Significant disparities can also be observed across Mexico's 32 states. Poor states, such as Chiapas and Michoacán, have almost 30 percent of students below basic achievement, while Distrito Federal has less than 9 percent of students in this level and more than 45 percent in either the medium or advanced level. For more information, see Robles Vásquez and Martínez Rizo (2006).

[10] Supplying education in indigenous communities represents a challenge to the public education system. According to the Comisión Nacional para el Desarrollo de los Pueblos Indígenas (CDI, or National Commission for the Development of Indigenous Peoples), in 2005, about 9.8 percent of the country's population was indigenous (0.7 percent lower than in 2000); moreover, the indigenous population often resides in the hardest-to-reach areas because only 17 percent of them live in one of Mexico's major cities (CDI, 2006). Primary education is provided to them in 43 different languages (Guichard, 2005).

2005 and 2007, the percentage in the categories signifying below basic achievement fell for all types of schools, with improvements in terms of percentage declines being particularly marked in public rural and indigenous schools (INEE, undated).

Mexico faces several challenges in its education system. Improving educational quality is obviously a major policy objective that requires improvements in infrastructure and teacher preparation. Another challenge is to increase enrollment and retention rates beyond basic education. Any policies that seek to address these issues must also take into account the existing achievement disparities across indigenous, public, and private schools, taking special care to prevent the most disadvantaged from being left behind.

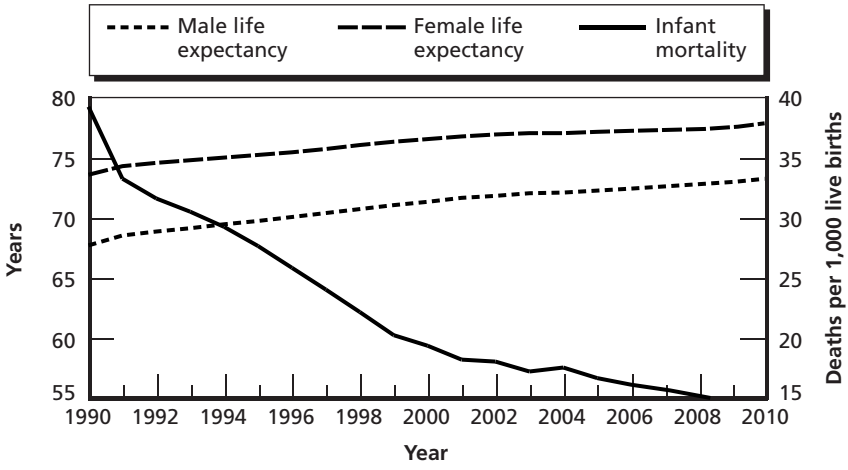
Health

There has been a notable improvement in Mexican health standards during the past half-century; this is both a cause and a result of a changing demographic profile. However, inequality is still evident in health status and in access to health-care services, especially among those in poverty and those in rural communities. Mexican levels of spending in health are low when measured per capita or as a percentage of GDP, even compared with levels in other Latin American countries, and the health system appears to be significantly less efficient than those of other countries (OECD, 2005). Reforms during the 2000s sought to address these issues, but their impact and feasibility are yet to be evaluated.

Between 1950 and 2005, life expectancy in Mexico increased by almost 27 years; women can now expect to live almost 78 years and men almost 73 (Fundación Mexicana para la Salud [FUNSALUD], 2006). Infant mortality rates have steadily declined in the past five decades. Figure 10.5 shows that infant mortality in the general population declined from 40 deaths per 1,000 live births in 1990 to 16 in 2006.

Infectious diseases and malnutrition, which were among the main causes of death, have given way to nontransmissible diseases—such as cardiovascular diseases and diabetes—which, in 2009, accounted for more than 70 percent of all deaths (see Figure 10.6). This epidemio-

Figure 10.5
Life Expectancy and Infant Mortality, 1990–2010

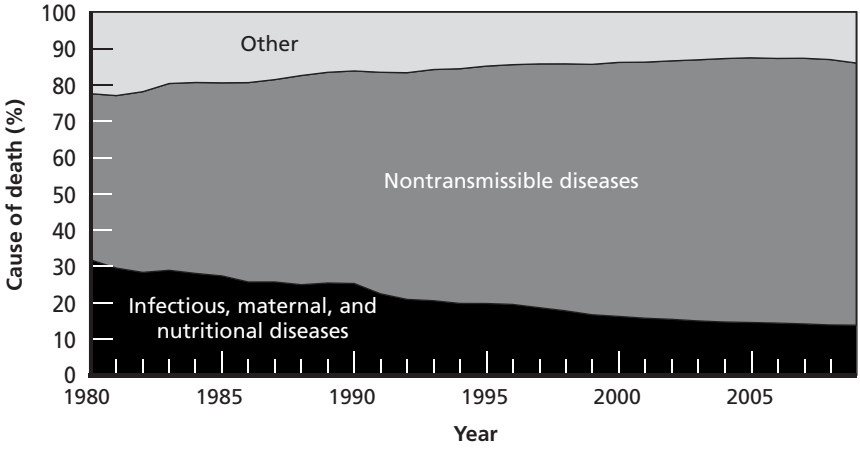


SOURCE: CONAPO, 2007.
NOTE: Figures beyond 2006 are projections.
RAND *MG985/1-10.5*

logical shift can largely be explained by—and is a cause of—Mexico's demographic transition: Although Mexico is still young compared with other OECD countries, the structure of the population has been aging rapidly as a result of decreases in fertility and mortality rates, and this trend is expected to continue for the next 50 years (OECD, 2005).

Despite the global decrease in mortality due to infectious and nutritional diseases, important inequalities exist in this epidemiological transition: Communicable diseases are still an important cause of death in rural and poor communities. For example, although noncommunicable diseases represent 77 percent of death causes in low-poverty areas, they account for only 57 percent of deaths in areas of high poverty. Similarly, the risk of death due to transmissible diseases or malnutrition is more than 30 percent higher in rural areas than in urban communities (Sistema Nacional de Información en Salud [SINAIS, or National Health Information System], 2008). A likely cause for these disparities is the unequal access to health-care services; rural areas have weaker access to health care, either because no services exist or because

Figure 10.6
Main Causes of Death in Mexicans, 1980–2009



SOURCE: SINAIS, 2008.
NOTE: Figures beyond 2007 are projections.
RAND *MG985/1-10.6*

they are difficult to reach. Inequalities in access to health care also exist across states, with the richer northern states being much better served than states in the south (OECD, 2005).

Another cause for concern is the relatively low level of resources being allocated to the Mexican health system (FUNSALUD, 2006). Table 10.2 shows how Mexico's allocation of resources to health, measured by total health expenditure and government health expenditure, compares with resource allocations in other North American and Latin American countries. Clearly, there is a significant gap in health investment in Mexico when compared with these countries. Not only is expenditure on health low; some estimates suggest that resources are used less efficiently than in other countries. For example, administrative costs in Mexico represent a far bigger share of total health expenditure than in any other OECD country; this share is almost 40 percent larger than that of the United States, known for its high administrative costs (OECD, 2005).

The increasing importance of noncommunicable diseases, insufficient investment on health care, and the apparent need to redistrib-

Table 10.2
Total Expenditure and Government Expenditure on Health, Selected Countries, 2009

Country	Total Expenditure on Health as Percentage of GDP	Government Expenditure on Health as Percentage of Total Government Expenditure	Per Capita Total Health Expenditure ($) (PPP)	Per Capita Government Expenditure on Health ($) (PPP)
Mexico	6.5	11.9	846	408
United States	16.2	18.7	7,410	3,602
Canada	10.9	17.1	4,196	2,883
Argentina	9.5	14.6	1,387	921
Brazil	9.0	6.1	943	431

SOURCE: World Health Organization (WHO), undated.

ute health-care spending to improve efficiency motivated a reform to the general health law in 2003 (FUNSALUD, 2006). The main result of this reform was the creation of the System for Social Protection in Health, which is part of the ongoing effort to move the Mexican health-care system from a structure of vertically organized providers targeting specific populations toward a horizontally structured system closer to universal coverage (OECD, 2005).[11] Another effect of this reform is an increase in health spending, which was expected to reach 7 percent of GDP by 2010. This would represent an almost 8-percent increase over the 2005 level but still remains far from the spending levels of other countries in the region with similar national income (FUNSALUD, 2006).

These and other reforms to the general health law were implemented gradually between 2004 and 2007, so it is too early to evaluate their results. However, some researchers are already questioning the feasibility of the new regulations and pointing out their limited impact

[11] OECD (2005, Chapter Eleven) provides a comprehensive description of the Mexican health-care system and its structure. Chapter Three of that publication gives a detailed discussion of health system reforms and their objectives.

during the first year after the law was passed (Homedes and Ugalde, 2006). Moreover, even if the reforms were implemented successfully, the health system would still remain far from the government's long-term vision of a horizontal structure, delivering efficient health services with high quality (OECD, 2005).

Health Insurance and Social Security Coverage

Health insurance and social security coverage in Mexico are not universal and are highly fragmented. Workers in the private and public sectors are covered mainly by two social security agencies, IMSS and ISSSTE. These two institutions, combined with health services agencies for the armed forces and the national oil company (PEMEX), cover between 50 and 55 percent of the Mexican population. The rest of the population—the uninsured, self-employed, and workers in the informal sector—receive health-care services from the Ministry of Health and, in rural areas, a health services program for the population in extreme poverty called IMSS-Oportunidades (OECD, 2005). Another poverty-alleviation program that provides health care for the uninsured implemented by the federal government is called Seguro Popular. Seguro Popular has expanded substantially since its creation in 2001. The aim of this program is to provide access to health-care coverage for all Mexicans. Seguro Popular targets families in the lowest six deciles of the income distribution. In 2008, the program covered 20 million Mexicans (Aguila et al., 2011). Private insurers cover only about 3 percent of the population. Finally, the poorest segment of the population (about 3 percent) does not have geographic access to formal health-care facilities and relies mostly on traditional medicine for its health-care needs (OECD, 2005). For those individuals with no social security benefits, noncontributory pension programs have been available in Mexico since 2001. These programs provide a minimum flat pension for older persons, but they are still not universal (Aguila et al., 2011).

Among the main concerns for the government in terms of health-care provision and social security coverage are individuals in the informal sector—that is, those who pay neither taxes nor social security contributions. According to the OECD (2006c), the informal sector

represents around 43 percent of total employment in Mexico. This constitutes a challenge in the labor market not only because of the reduced tax base and low productivity but also because health and social security provision are not guaranteed. The aim of Seguro Popular and noncontributory pensions is to provide coverage of health-care and social security benefits particularly for those in the informal sector. However, these programs are not yet universal; due to the aging population in Mexico, they could represent a high proportion of government budget in the near future. More policies to move workers from the informal to the formal sector should be promoted to lessen poverty in old age and increase available coverage of health-care and social security benefits through safety-net programs (Aguila et al., 2011). Some policies have been implemented to generate incentives for individuals to move from the informal to the formal sector. Among them is the 1997 Mexican pension reform, in which the traditional PAYG system was substituted by a fully funded system with PRAs. Mexican policymakers have argued that the PRA system is easier to monitor and that individuals perceive the individual account as their own saving (Aguila, 2011).

In economies with high labor turnover and migration between the formal and informal sectors, it is important to understand employment patterns. Marrufo (2001) finds movement from the informal to the formal sector as a result of the pension reform. Individuals with short spells in the formal sector might not achieve the minimum requirements to obtain a pension, so it is also important to understand working life in the formal sector. Aguila, Aguilera, and Velázquez (2008) find that the pension reform increased periods of contribution to the social security system in the formal sector. The latter might indicate that the pension reform provides incentives to move to the formal sector and remain in it. The reform had a greater impact in urban areas because most individuals in the formal sector reside in such areas. Therefore, this policy was most valuable in decreasing poverty levels in urban areas. Additional policies are needed to generate further movement to the formal economy in rural and urban areas.

Public Social Programs

Secretaría de Desarrollo Social (SEDESOL) is the Mexican ministry responsible for planning and coordinating the social policies of Mexico's federal government. SEDESOL's programs can be classified according to the goals outlined in the National Social Development Plan 2001–2006 (SEDESOL, 2001): (1) to reduce extreme poverty, (2) to create equal productive opportunities for the most-vulnerable populations, (3) to support the development of the capabilities of those in poverty, and (4) to strengthen social safety nets. Table 10.3 summarizes Mexico's social programs.

As of 2011, the largest poverty-alleviation program in Mexico is Oportunidades, which integrates education, health, and nutrition interventions while encouraging the active participation of all members of the family in improving their youth's education completion and the

Table 10.3
Objectives and Descriptions of Mexico's Social Programs, 2011

Objective	Program	Description
Reduce extreme poverty	Oportunidades	Largest poverty-alleviation program in Mexico Integrates education, health, and nutrition interventions while encouraging the active participation of all members of the family in improving youths' education completion and the health and nutritional status of the family Covers practically all Mexican households living in extreme poverty in both rural and urban communities A conditional cash-transfer program in which families receive monetary transfers conditional on their fulfilling their obligations, which include keeping their children in school and attending clinics for health education and clinical evaluations Well-known internationally due to its rigorous and independent evaluation system, which has highlighted the positive results in several areas and has encouraged other countries to implement similar programs
	Other programs	Subsidize milk for poor households Provide free and subsidized food and medicines in marginalized rural communities Give monetary support for higher-education students to engage in projects to increase development in marginalized communities

Table 10.3—Continued

Objective	Program	Description
Create equal productive opportunities	Opciones Productivas	Main program seeking to provide opportunities for Mexicans to engage in income-generating activities Allows individuals in the most-marginalized regions to develop their own productive projects and opportunities for self-employment, helping them increase their income and their families' well-being, as well as to have access to financial services, such as saving and lending
	Other programs	Provide beneficiaries in rural areas with transitory employment opportunities and training Support Mexican craftsmanship through (1) direct acquisition of products, (2) organization of regional crafting contests, (3) training of craftspeople, and (4) financing craft production Provide day care for mothers who work, study, or seek employment or for single parents with children 1–3 years old
Support capability development	Tu Casa	Reduces family vulnerabilities by increasing their wealth Combines families' own savings with subsidies for housing acquisition or improvement
	Other programs	Focus on rural and indigenous communities, providing families with subsidies to build, buy, or improve a home Advance the legalization of land ownership by expropriating land and either selling it to those who have illegally been living in it or making it available for urban or housing developments
Strengthen social safety nets	Program to Support Farming Laborers	Provides multiple benefits—housing, drinking water, social security, food, education, employment and training, safety, traveling assistance, and support during unexpected events and disasters—to farming laborers and their families Currently operates in 18 states
	Other programs	Support the poor elderly who are not beneficiaries of other federal programs, through cash transfers and nutritional education Serve all adults 60 or older, providing them with multiple services and support to contribute to their economic, health, and social development

SOURCE: Data on all programs, by ministry, from Presidencia de la República, undated.

health and nutritional status of the family. Oportunidades now covers practically all Mexican households living in extreme poverty, in both rural and urban communities. Oportunidades is a conditional cash-transfer program in which families receive monetary transfers conditional on their fulfilling their obligations, which include keeping their children in school and attending clinics for health education and clinical evaluations. The program is also well known internationally due to its rigorous and independent evaluation system, which has highlighted the positive results in several areas and has encouraged other countries to implement similar programs. In addition to Oportunidades, other poverty-reduction programs provide subsidized milk to poor households, free or subsidized food and medicines in marginalized rural communities, and monetary support for university students to engage in development projects in marginalized communities (review of data from Presidencia de la República, undated).

The main program seeking to provide opportunities for Mexicans to engage in income-generating activities is Opciones Productivas, which allows individuals in the most-marginalized regions to develop productive projects and opportunities for self-employment, helping them increase their income and their families' well-being. It also provides access to financial services, such as saving and lending. Another program provides beneficiaries in rural areas with transitory employment opportunities and training if it is required. Mexican craftsmanship is supported by the Fondo Nacional para el Fomento de las Artesanías, which manages four different programs to market crafts, organize contests, train craftspeople, and finance craft production (review of data from Presidencia de la República, undated).

Tu Casa's goal is to reduce family vulnerability by increasing their wealth, combining families' own savings with subsidies for housing acquisition or improvement. A different program focuses on rural and indigenous communities, providing families with subsidies to build, buy, or improve a home. The Comisión para la Regularización de la Tenencia de la Tierra operates two other programs to advance the legalization of land ownership by expropriating land and either selling it to those who have illegally been living in it or making it available for

urban or housing developments (review of data from Presidencia de la República, undated).

The first of the programs that focus on vulnerable populations provides multiple benefits—housing, drinking water, social security, food, education, employment and training, safety, traveling assistance, and support during unexpected events and disasters—to farming laborers in 18 states. Two other programs focus on the older population; the first of them supports the poor elderly (those who are not beneficiaries of other federal programs) through cash transfers and nutritional education. The other serves all adults 60 or older, providing them with multiple services and support to contribute to their economic, health, and social development (review of data from Presidencia de la República, undated).

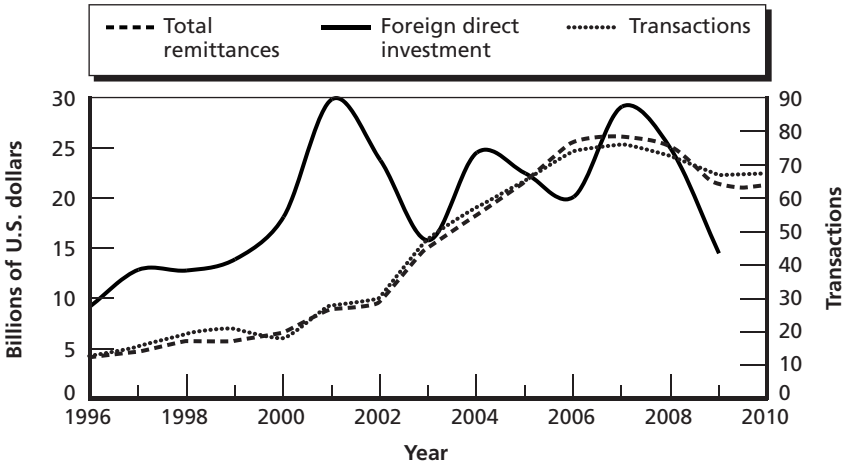
Mexico has a long tradition of instituting social policy programs. Poverty remains an important problem in Mexico; therefore, the design of social programs, as well as evaluation of their effectiveness, is important. The evaluation of programs, such as Oportunidades, has allowed better targeting of social policies. However, the effectiveness of many other programs remains largely unknown.

Remittances

Three types of financial flows are generated from international migration: pension benefits to previous migrants now residing in Mexico, wages to Mexican border residents who work in the United States, and money flows transferred to Mexico by Mexicans residing abroad, also known as remittances (Shaffer, 2004). Of these, remittances are by far the most important to Mexico, the second-largest remittance recipient in the world after India (Orozco, 2003). Figure 10.7 shows BANXICO's estimates of total remittance flows and number of remittance transactions; both increased considerably in the late 1990s through the mid-2000s. Remittances grew from $4 billion in 1996 to more than $26 billion in 2007 before dropping to $21 billion in 2010 (BANXICO, undated).

In the past, remittances and FDI were considerably lower than FDI (traditionally, the most important source of external funding for developing countries). However, remittances and FDI were virtually

Figure 10.7
Remittance Flows to Mexico and Number of Transactions, 1996–2010



SOURCE: BANXICO, undated.

RAND *MG985/1-10.7*

identical in 2005 and 2007, and remittances actually surpassed FDI in 2006 and 2008. Nevertheless, the explosive growth in remittances has slowed down in parallel with the global economic crisis, exhibiting virtually no change between 2006 and 2007, declining slightly between 2007 and 2008 and more drastically between 2008 and 2009, after which it stabilized until 2010 (BANXICO, undated).

Although these figures underscore the swift increase of remittance flows between 2000 and 2006, it should be noted that remittance estimates from other sources differ considerably from official reports. For example, remittance estimates obtained from survey instruments are as much as 50 percent lower than those from BANXICO. Some attribute at least part of the difference to the fact that survey data are collected during the periods of the year when remittance flows are smaller, while others argue that official figures overestimate remittance flows because they do not correspond to remittances and include other sources of transfers, perhaps even illegal activities, such as money laundering (Zárate-Hoyos, 2005; García Zamora, 2005a; Tuirán Gutiérrez, Santibáñez Romellón, and Corona Vázquez, 2006).

On the other hand, it has also been argued that official estimates might not include a significant portion of total remittance flows because as many as 30 percent of Mexicans who receive them do so through informal channels, such as messengers, ordinary mail, or directly when migrants visit their home communities (Inter-American Development Bank [IADB], 2003).[12] In short, any estimates of remittance flows must be interpreted with caution. Regardless of these shortcomings, the BANXICO estimates are the only time-series data available for remittances in Mexico and the only ones that allow for international comparisons.

In addition to estimates of total remittances, household surveys provide information on the number of households receiving remittances and their characteristics. These studies indicate that only between 4 and 6 percent of households in Mexico receive remittances. Although this represents only a small fraction of all Mexican households with migrants, remittances appear to be extremely important to these households for several reasons, including the following: (1) Remittances represent, on average, almost 40 percent of their income and more than 50 percent in the top three recipient states; (2) four out of ten remittance-receiving households do not receive income from other household members; (3) seven out of ten remittance recipients are female; and (4) receiving households have a higher ratio of economically inactive to economically active people than households that do not receive remittances (Canales, 2004; Zárate-Hoyos, 2005; Shaffer, 2004).

In recent years—mainly because of increased awareness of the economic magnitude of remittance flows to developing countries—governments and international organizations have become more interested in remittances' potential to be a tool for economic development (Moctezuma, 2006), and it has been suggested that migration and remittances reduce poverty in developing countries (R. Adams and Page, 2005). Institutions, such as the World Bank and the IADB, have organized studies and conferences exploring policies to channel

[12] Zárate-Hoyos (2005) points out that nonmonetary transfers in the form of goods and services sent or brought to Mexico by migrants represent a possibly significant source of remittances that is not included in BANXICO's definition.

remittances to productive projects and promote the economic development of the communities that receive them.[13] Federal, state, and local governments have also paid more attention to remittances after some states' positive experiences creating programs to channel remittances from migrant organizations toward financing infrastructure, public services, recreation facilities, and other community-related projects.

An important example is the Tres por Uno (Three-for-One) program, which began in the state of Zacatecas in 1993. In this program, migrant organizations send remittances, and each dollar sent is matched by the federal, state, and municipal governments. In 2002, Tres por Uno officially became a federal program available to all states in the country but with a limited yearly budget for which states compete. In 2005, for example, Tres por Uno invested a total of MXN$857 million—around US$78 million—in projects. Although 26 states participated in the program in 2005, there is clearly an advantage to being a traditional migrant-sending state because Jalisco and Zacatecas accounted for more than half of the financed projects between 2002 and 2005 (Soto Priante and Velázquez Holguín, 2006).

Another recent line of research is the examination of how families use the remittances they receive and how the remittances affect their well-being. For example, Amuedo-Dorantes, Sainz, and Pozo (2007, p. 23) find that remittances have a greater impact on health-care expenditures than other sources of income do, indicating that remittances might "play a crucial role in supplementing any deficiencies in the public provision of medical services."

[13] A good starting point to learn more about these publications and projects is IADB (undated).