

# **INCOME GENERATION AND SOCIAL PROTECTION FOR THE POOR**

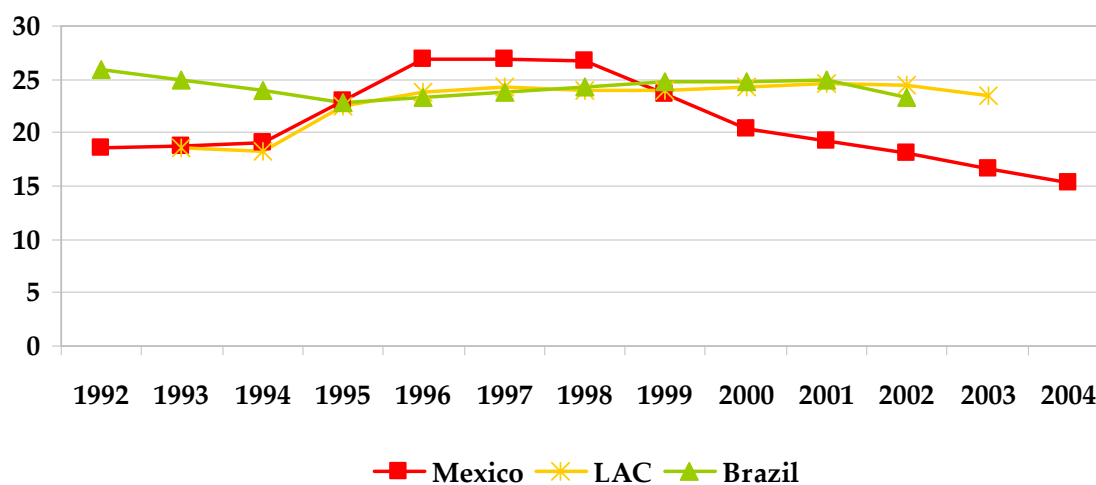
## **Executive Summary**

# INCOME GENERATION AND SOCIAL PROTECTION FOR THE POOR

## Introduction

The first phase report, *Poverty in Mexico: an Assessment of Conditions, Trends, and Government Strategy* (World Bank, 2004), was a poverty diagnostic which found that poverty is still a challenge in Mexico. Looking at the last decade, the severe 1994-95 crisis reduced real wages and sharply increased both extreme and moderate poverty. Poverty has subsequently fallen, but national and rural poverty rates have only recovered in 2002 to pre-crisis levels. As for the urban poverty rates, Cortés (2005) finds significant evidence of the recovery of poverty. Mexico has made considerable progress in achieving poverty reduction since the end of the nineties, with a performance superior to the Latin American average (Figure 1). More recent trends are encouraging, with extreme poverty falling by almost seven points in the 2000-2004 period. This reduction can be explained by positive developments in rural areas, where poverty fell from 42.4 to 27.9 percent, while urban poverty rates fell to a much lesser extent during the same period (Table 1 and *Comité Técnico para la Medición de la Pobreza, CTMP, 2005*).

Figure 1. Share of Population living on less than 2 USD a day



Source: WB staff estimates based on household surveys.

**Table 1. Share of Population in Poverty**

	2000	2002	2004	Change 2000-2002	Change 2002-2004	Change 2000-2004		
<i>National</i>								
Food Poverty	24.2	20.3	17.6	-4.0	***	-2.7	-6.6	***
Capacities Poverty	32.0	27.4	25.0	-4.6	***	-2.4	-7.0	***
Assets Poverty	53.8	50.6	47.7	-3.2	**	-2.9	-6.1	***
<i>Rural</i>								
Food Poverty	42.4	34.8	27.9	-7.6	***	-6.8	*	-14.5
Capacities Poverty	50.1	43.9	36.1	-6.2	**	-7.7	*	-14.0
Assets Poverty	69.3	65.4	57.4	-3.9		-8.0	**	-11.9
<i>Urban</i>								
Food Poverty	12.6	11.4	11.3	-1.1		-0.2		-1.3
Capacities Poverty	20.3	17.4	18.1	-3.0	**	0.8		-2.2
Assets Poverty	43.8	41.5	41.7	-2.3		0.1		-2.2

Note: The food-based poverty line is an estimate of the income required to purchase a food basket satisfying minimum nutritional requirements. The capacities poverty line includes non-food income for spending on education and health services. The assets poverty line also considers expenditures in housing, clothing, and transport.

\* Significant at the 10% level; \*\* Significant at the 5% level; \*\*\* Significant at the 1% level.

Source: WB staff estimates based on ENIGH applying the methodology of the Technical Committee for Poverty Measurement.

As discussed later in the text, factors that have contributed to the reduction of rural poverty since 2000 include sustained macroeconomic stability, increased transfers, and income diversification into non-agricultural activities. *Oportunidades*, *Procampo*, and, to a lesser extent, remittances have contributed to this reduction. On the other hand, poverty rates in the urban sector have not improved as much as in rural areas. The main challenge in the urban sector is to increase access to productive employment opportunities for the poor.

This document summarizes the findings of three reports: *Urban Poverty in Mexico, Mexico: a Study of Rural Poverty*, and *Mexico: an Overview of Social Protection*, and focuses on (i) the generation of income opportunities for the urban and rural poor and (ii) social protection for the poor. The main messages can be summarized as follows:

- The poor are a very heterogeneous group and, among other dimensions of poverty, location matters in the design of appropriate poverty alleviation interventions. Importantly, long-term income-generating opportunities and coping strategies differ significantly between urban and rural areas, among different regions, between small and larger cities, and even within neighborhoods.

- **The urban poor are limited to low-quality jobs marked by low productivity and with limited social protection.** Labor market trends are not encouraging for the urban poor who are in low-productivity sectors marked by little income security and with few prospects for income growth. The urban poor are increasingly confined to the informal sector and as such have limited access to social protection. More good jobs are needed in Mexico and the poor need to be able to access them. As extensively argued in World Bank 2004, this requires policies and reforms that favor productivity growth in the economy as well as policies that help the poor to become more productive. Access to quality education is central to increasing the productivity of the poor. However, there are other factors that influence the productivity of the poor such as health financing, childcare systems, improved labor market regulations, access to transport, active labor market programs (ALMPs), and extending the coverage and the deepening of finance systems to the urban and rural poor in order to encourage savings for investment.
- **To continue supporting the rural poor to move out of poverty, it is important to increase agricultural productivity, especially for small- and medium-sized farmers, and facilitate their diversification into rural non-farm activities (RNF) of higher agricultural value-added.** The rural poor are trying to move away from agriculture as the key source of income and employment and towards RNF activities, particularly in services and construction. In part, this is the result of the poor performance of agriculture for small-scale farmers, who have not been able to increase their productivity over time. Nor have poor farmers been able to reap the benefits of RNF activities. Appropriate government support in areas such as education, health, and finance could help the poor to move more easily towards RNF activities, and also increase the productivity of agriculture. However, efficiency gains in agricultural and rural support programs are essential, given the high level of resources already spent in these activities.
- **Since its inception in the 1940s, Mexico's social protection system has not been well-suited to respond to the risks that the poor face.** With a few notable exceptions, most prominently and recently *Oportunidades*, Mexico's social protection system has historically been insufficient and regressive in its coverage. This reflects its design, which is linked to the worker's status in the labor market (i.e. formal or informal). The vast majority of the working poor have not been covered by social insurance. A new program, *Seguro Popular*, aims to increase health coverage for the poor, but still many are left with only informal short-term mechanisms for safeguarding their income, protecting themselves against old-age poverty, and managing health risks. Although these mechanisms in some cases can be effective in coping with income shocks, they are costly in the long run since they have a negative impact on human capital accumulation. A reform of the social security system is needed in order to make it less regressive and expand its coverage. In parallel, other measures such as facilitating self-insurance

through asset building in urban and rural areas could also help the poor to cope with shocks. This points to the need to complement social security reforms with reforms in other areas including the land, financial and housing sectors.

## Heterogeneity

**A key conclusion of this report is that geographical location must be taken into account in order to design adequate poverty interventions.** The poor are heterogeneous, and poor people may differ markedly in their socioeconomic characteristics, sources of incomes, spending patterns, and coping mechanisms. This heterogeneity occurs at many levels. There are important differences between urban and rural areas, for instance, but also among regions, between different urban settings, and even within urban areas, pointing to “pockets” of poverty. Understanding these differences is key in designing an effective poverty reduction strategy. Geographical location is one key variable in explaining differences among the poor. Income generation opportunities and social protection needs vary depending upon the poor’s location.

### *Heterogeneity between and within rural and urban areas*

**The urban and rural poor differ in their economic characteristics, sources of income, and spending patterns.** The rural/urban dichotomy<sup>1</sup> can be misleading, as geographical settings are really a continuum of settlements by population size. However, if we use this somewhat arbitrary dichotomy, there are important differences that are still informative for poverty analysis. In 2004, one out of three rural residents was living in extreme poverty, compared to one out of ten of the urban population. The high urbanization rate in Mexico implies that the majority (close to 63 percent) of the moderately poor live in urban settlements. Table 2 shows some of the key characteristics of the poor that differ between rural and urban settings. The rural poor depend mainly on self-subsistence agriculture, self-employment, and non-agricultural activities, and have typically not completed primary education. Conversely, the urban poor depend on access to salaried employment, on non-agricultural activities mainly as employees in manufacturing or services, and have not completed lower secondary education.

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<sup>1</sup> The urban vs. rural classification refers to settlements with populations of more than 15,000 people, using CONAPO’s (*Consejo Nacional de Población*) definition.

**Table 2. Poverty Profile of the Household Head, by geographical location, 2004**

	Extreme Poor			Moderate Poor			Non-Poor		
	<i>All</i>	<i>Urban</i>	<i>Rural</i>	<i>All</i>	<i>Urban</i>	<i>Rural</i>	<i>All</i>	<i>Urban</i>	<i>Rural</i>
Rural-urban composition	100	39.3	60.7	100	62.5	37.5	100	69.0	31.0
<b>Profile by education</b>									
No Education – Primary Incomplete	63.6	50.0	71.8	48.5	39.4	61.9	33.0	25.6	45.7
Primary Complete	21.2	27.6	17.4	24.9	27.1	21.7	23.6	23.2	24.3
Lower Secondary Complete	12.6	17.6	9.7	21.4	26.1	14.5	22.2	23.4	20.1
Upper Secondary Complete	2.2	4.0	1.1	4.0	5.6	1.7	10.5	13.3	5.5
University Complete	0.3	0.9	0.0	1.2	1.9	0.1	10.8	14.4	4.5
<b>Profile by employment</b>									
Agricultural Laborer	27.0	13.4	35.1	14.2	5.8	28.0	4.9	1.7	11.8
Non-agricultural Laborer	32.0	55.6	18.0	57.8	69.3	38.6	65.5	70.3	55.3
Employer	2.4	0.6	3.4	3.1	2.5	4.0	6.9	7.6	5.6
Self-Employed	38.0	29.7	43.0	24.5	21.8	29.0	21.9	19.8	26.6
Non-remunerated Workers	0.6	0.7	0.6	0.5	0.6	0.4	0.8	0.7	0.8
<b>Profile by sector of activity</b>									
Agriculture	45.8	7.7	68.4	16.6	4.0	37.5	9.4	2.1	25.0
Extraction and Utilities	0.1	0.1	0.1	0.6	0.6	0.5	1.4	1.6	1.0
Manufacturing	9.6	15.3	6.2	19.5	22.1	15.2	19.6	19.3	20.1
Construction	12.1	20.5	7.2	15.0	15.1	14.8	8.2	8.0	8.7
Commerce	12.7	19.2	8.8	17.8	19.8	14.5	17.4	18.8	14.4
Transportation	4.2	6.8	2.7	6.3	7.8	3.8	8.6	7.5	10.8
Services	15.5	30.4	6.7	24.2	30.5	13.6	35.5	42.7	20.1

Note: Extreme poverty is the share of the population under the food poverty line. Moderate poverty is the share of the population between the food and assets poverty line. Non-poor are those with income over the assets poverty line.

Source: WB staff estimates using ENIGH 2004. All panels except the first one add to 100 vertically.

**There are some notable differences between the rural and urban poor in both consumption patterns and income structures.** The urban poor spend relatively more on housing, transport, and education. Conversely, the rural poor spend more on food and clothing (see Table 3). However, the expenditures in health are similar for urban and rural areas.

**Table 3. Expenditure patterns, by geographical location and poverty status, 2004**

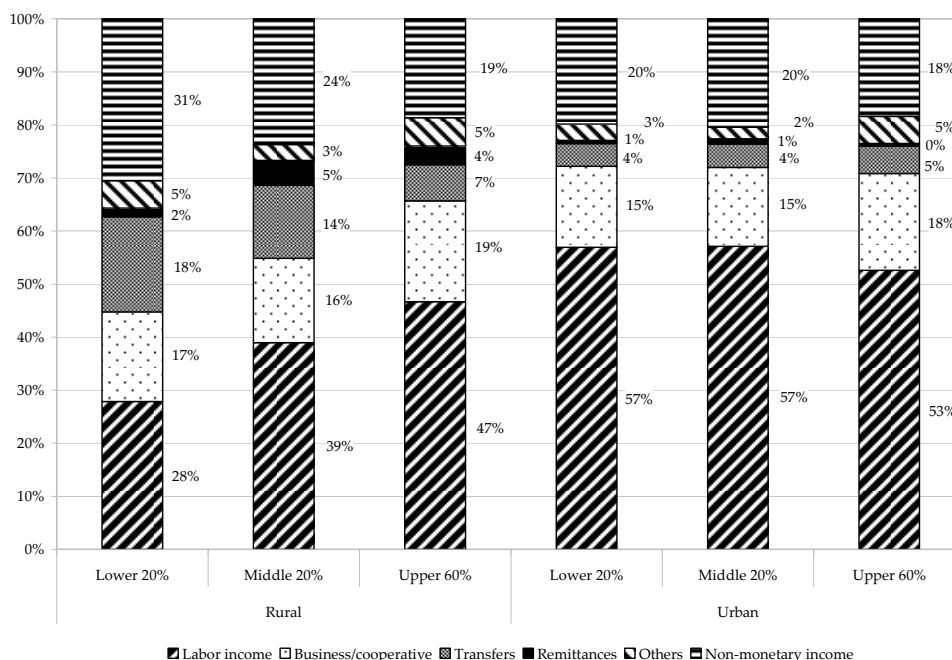
	Urban			Rural		
	<i>Extreme Poor</i>	<i>Moderate Poor</i>	<i>Non-Poor</i>	<i>Extreme Poor</i>	<i>Moderate Poor</i>	<i>Non-Poor</i>
Food, Beverage and Tobacco	42%	39%	24%	52%	48%	32%
Clothing	4%	5%	5%	6%	6%	5%
Housing	18%	20%	23%	13%	14%	17%
Health	5%	4%	5%	5%	5%	7%
Transport and Communications	10%	13%	16%	7%	9%	16%
Education and recreation	8%	9%	14%	7%	7%	9%
Other	13%	10%	13%	10%	11%	14%

Source: WB staff estimates using ENIGH 2004.

**More importantly, the urban poor depend almost exclusively on the labor market for income while transfers are significant among rural workers.** A remarkable difference is the surprisingly low share of urban income that is derived from transfers (see Figure 2). In fact, this is the only dimension in which the situation of Mexico's urban poor is substantially different from the rest of Latin America (Table 4). The high share of labor income in urban areas contrasts sharply with the high share of in-kind income and transfers in rural Mexico.<sup>2</sup> Since the share of rural poor income that is derived from transfers is higher than the regional average, we cannot attribute the lower importance of transfers in urban income to low overall expenditure on social safety nets, but rather to the heightened importance of other sources of income. The expansion of *Oportunidades* to urban areas, however, is starting to change this pattern, due to the progressiveness of this program's transfers.

<sup>2</sup> However, the actual amounts of transfers (in absolute terms) received by the urban poor remain higher than those for the rural poor, although they receive considerably less (in absolute and relative terms) from *Oportunidades*. Transfers received by urban households, whether poor or non-poor, tend to consist much more of pensions, scholarships, and gifts from other households. Transfers (as calculated above) do not include subsidies such as the electricity subsidy, which are highly regressive and benefit mainly the urban population. See *Poverty in Mexico*, World Bank, 2004.

**Figure 2. Sources of income, by location, 2002**



Source: *Urban Poverty in Mexico*, World Bank, 2005.

**Table 4. Income Sources for Poorest Quintile**

	Labor income	Capital income Rents and profits	Pensions	Transfers
<b>Urban</b>				
Mexico	91.8	0.8	3.9	3.5
LAC average	74.2	1.5	4.0	14.6
LAC median	82.5	1.1	3.2	12.8
<b>Rural</b>				
Mexico	81.4	0.5	0.8	17.2
LAC average	80.6	0.6	0.9	12.9
LAC median	87.2	0.6	0.6	10.2

Note: Table 3 is not strictly comparable to Figure 1 because there is no allowance for imputed income, and labor income includes what is referred to as “business/cooperative” income in Table 3.

Source: *The Urban Poor in Latin America*, World Bank, 2004.

Factors including population size, location, and labor market characteristics are all key determinants of well-being and the types of policy interventions needed for rural and urban areas. Keeping this, and the fact that semi-urban areas are more similar to rural areas than to urban ones, in mind, the urban-rural distinction is nonetheless informative for policy making, as the challenges facing the poor in the “average” rural vs. urban areas show many differences:

- **Income sources, forms of employment, and opportunities differ:** In urban areas, the poor must generate cash for survival, either through self-employment



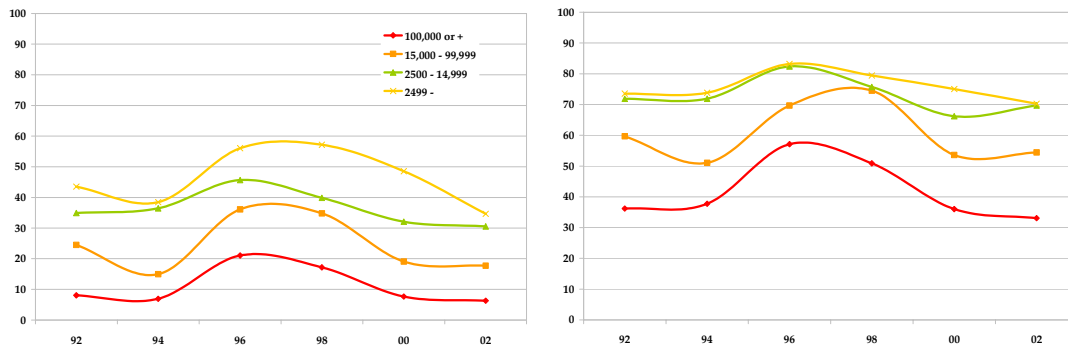
or wage-paying jobs. Urban poor may face difficulties in securing decent-paying employment in the formal sector due to lack of skills, childcare, or transportation, or because of stigma associated with where they live. The rural poor are much more dependent on agriculture than the urban poor or the rural non-poor and have been less able to access high-return occupations in the RNF sector because of low human capital.

- **The urban and rural poor face different risks and use different coping mechanisms:** Because of different income sources, economic shocks affect the urban and rural populations differently; thus, their coping strategies vary from one setting to another and appropriate policy responses should differ. Urban poor incomes are more responsive to growth, implying the ability to take advantage of more jobs in good times, but, conversely, are more sensitive to macroeconomic shocks in terms of structural employment. While labor markets constitute the main source of income shocks for the urban poor, they also provide a key coping mechanism to such shocks, as households resort to sending additional household members to work in times of crisis. The rural poor benefit from safety nets such as transfers, subsistence agriculture and other in-kind income, access to forest resources, and local community ties not available to the urban poor.
- **The urban poor generally have better access to services than the rural poor, but low quality and crowding-out reduce the effectiveness of these services:** On average, the urban poor have better access to infrastructure, education, and health services than the rural poor. However, outcomes related to these services do not vary greatly: infectious diseases are equally common among poor urban and rural children, and school enrollment rates and test scores are low among poor rural and urban children. This suggests that while coverage has expanded in urban areas, quality is not keeping up, limiting the impact of improved access. Another important issue is that the specific demands for infrastructure services, the cost of providing the services, the engineering, the organization and management systems, and the forms of community participation are usually different between rural and urban areas, making comparisons of access to running water or public sanitary systems somewhat inaccurate.
- **Environmental hazards differ:** In urban areas, risks include air pollution, collection and disposal of domestic and hazardous waste, water scarcity and water quality, and occupation of fragile/risky areas for residential purposes. In rural areas, they include deforestation, soil degradation, oil contamination, fertilizer and pesticide contamination of soil and aquifers, and health hazards in their application. In both cases they are important determinants of well being.
- **Marginality and violence:** Urban marginality and violence are linked to family breakdown, drug use and trafficking, degraded neighborhoods, opportunities for specific types of robbery, close contact between the destitute and the well-off, and tribal youth cultures. Rural marginality is related to income, employment,

geographical constraints, and often ethnic characteristics. While rural violence exists, it is typically linked to land conflicts and the fight of rural organizations for human or economic rights, making it different from the individual and mob criminality of the cities.

**Poverty incidences and the characteristics of the poor also vary with the size of the urban agglomeration.** Income levels and other indicators of well-being are, on average, lower in smaller urban settlements, showing the existence of a rural-urban continuum. It is evident that the difficulties faced by the poor in a settlement of 15,000 people may more closely resemble those faced by rural dwellers than those living, for example, in any of the large Mexican cities. Indeed, extreme poverty incidence in medium-sized urban areas (with a population between 15,000 and 99,000 people) is about three times higher than that of agglomerations with more than 100,000 inhabitants (see Figure 3).<sup>3</sup> Semi-urban areas (2,500 to 15,000 inhabitants) can be seen as transition regions between the large urban settlements and the dispersed rural areas (less than 2,500 inhabitants).

**Figure 3. Poverty trends by agglomeration size, 1992-2002**  
**Extreme poverty incidence (left) and moderate poverty incidence (right)**



Source: *Urban Poverty in Mexico*, World Bank, 2005.

**But even within urban areas, there is great heterogeneity in well-being, even down to the neighborhood level.** Notably, the levels of well-being in different geographic areas that belong to the same city differ greatly; this holds true even for Mexico's largest cities. SEDESOL's own survey of poor *barrios* reveals inequality to be higher within these *barrios* than between them. And these types of inequalities seem to persist over time, as unequal cities may grow disjointedly, with different sub-areas improving at very different speeds.

<sup>3</sup> The ENIGH – the household survey used to compute poverty levels and correlates – is not designed to be representative at a disaggregated stratum level, nor at regional level. As a result, there is risk for measurement errors which must be kept in mind when interpreting these disaggregated statistics.

*Regional Heterogeneity is also important*

Beyond the rural/urban distinction, Mexico is characterized by great diversity within and across regions and states in terms of socioeconomic outcomes, assets, and ethnicity. Regional characteristics have a significant impact on the incidence of poverty. In Mexico's poorest regions, urban areas are poorer than elsewhere – and not necessarily because they are smaller in size on average.<sup>4</sup> There is a clear geographic (both regional and urban/rural) effect on income poverty and other indicators of well-being – literacy rates, housing conditions, access to basic services. For example, as seen in Table 5, the incidence of extreme poverty in rural areas in the richer Northern regions has consistently been lower than the incidence of extreme poverty in the urban areas in the Gulf, South, Center-North, or Center regions.<sup>5</sup> For many aspects of well-being, the national urban-rural gaps are in fact smaller than the regional differences between urban areas. Even for the two poorest regions, the Pacific and the South, the urban-rural literacy gaps are smaller within the regions than between urban areas in the Pacific states and those in the South.

**Table 5. Extreme Poverty Trends, by Region**

	Regional				Rural				Urban			
	1992	1996	2002	2004	1992	1996	2002	2004	1992	1996	2002	2004
North	9.4	22.0	6.4	7.7	13.3	30.9	13.8	13.2	8.2	19.7	4.8	6.5
Mexico*	9.9	25.8	8.6	9.3	26.7	49.9	15.9	11.9	6.9	20.1	7.1	8.3
Gulf	23.7	45.1	34.7	25.8	30.5	52.6	43.7	34.2	14.3	34.7	24.2	15.8
Pacific	12.6	26.7	13.7	11.8	18.5	32.3	21.8	27.0	8.5	23.0	9.4	6.4
South	41.1	60.0	39.9	32.8	45.6	66.7	47.9	40.3	30.9	45.7	24.4	22.8
Center-North	28.5	44.5	21.1	18.1	40.4	52.6	27.2	23.7	18.2	36.7	16.4	13.8
Center	44.7	49.5	30.1	24.1	53.0	57.9	41.6	29.4	34.5	37.0	15.4	17.2

\* Mexico includes the Federal District and the State of Mexico.

Note: Rural localities are defined as those with less than 15,000 inhabitants. ENIGH is only designed to be representative at the national, urban and rural levels. As a result, there is risk for large measurement errors which need to be kept in mind for these disaggregated statistics.

Source: *Mexico: A Study of Rural Poverty*, World Bank, 2005.

**In sum, geographic location matters for the characteristics of the poor, the types of deprivation they face, and for designing appropriate policy responses.** There are significant differences among the poor depending on where they live. Labor market characteristics, sources of income, ways in which they cope with shocks, and access to infrastructure vary with geographical location. This makes the rural/urban distinction useful for policy-driven analysis. The regional dimension is also very important, and

<sup>4</sup> One possible exception is the South Pacific, where there are fewer large urban agglomerations than elsewhere.

<sup>5</sup> Refers to income poverty and follows INEGI's classification into seven regions. See *Mexico: A Study of Rural Poverty*, World Bank, 2005.

rural and urban poverty rates are in fact more closely correlated within regions than across regions (e.g. South vs. North). Moreover, inequality can be high within urban and rural areas, and even within specific neighborhoods. Understanding these patterns is important to designing an effective poverty reduction strategy.

### **Long-term income growth, productivity, and poverty reduction**

**The poor suffer the consequences of low labor productivity and lack opportunities to move to higher productivity employment, which limits their potential for income growth.** In urban areas, real wages for the poor have declined since 1991, and even though pay levels have recovered since 1996, the improvement was not sufficient enough by 2003 to regain the value lost since 1991; the share of self-employed who work without any own capital (informal, salaried workers without own capital, IWOC) has increased. In rural areas, lack of sufficient dynamism in the agricultural sector, particularly in small-scale farms, concentration of growth in the more commercial sector, and limited access to high-return jobs in the RNF sector are key factors in explaining stagnant income growth for the rural poor. Slow productivity growth is a general problem for the Mexican economy and is the main factor behind the slow growth in labor earnings. Slow productivity growth affects Mexico's ability to compete internationally, especially in the US, affecting both the poor and the non-poor.

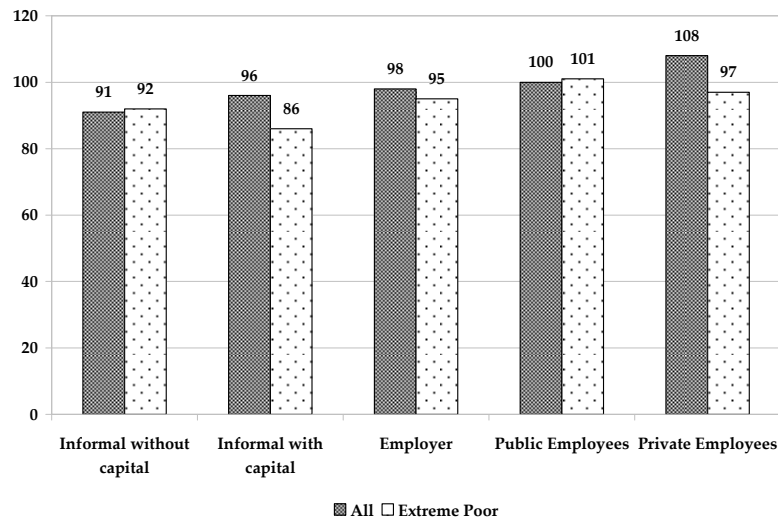
**Slow productivity growth has meant that fewer good jobs are available in the labor market.** From the supply-side, the poor have less access to good jobs. Mexico's ability to compete in international markets, especially in the US, has not improved. This is reflected in the country's poor performance in improving total factor productivity (TFP). Loayza, Fajnzylber, and Calderón (2005) find that TFP growth in Mexico was among the lowest in Latin America, substantially below the 1.1 percent annual growth average for the seven largest Latin American countries during the 1971-2000 period. This was particularly true in the 1990s, when productivity grew at a low 0.4 percent per year. Since 1998, unit labor costs have increased as productivity growth has lagged in comparison with the U.S. Productivity growth since the nineties has been particularly slow outside the industrial sector, i.e. in sectors where the poor tend to work.

#### *The Urban Poor – working more for less pay*

**Employment is the main and frequently the only source of income for the urban poor.** This is especially true in Mexico, where 92 percent of the income of the poorest urban quintile comes from labor, compared to an average of 74 percent for Latin American urban areas as a whole and 81 percent for Mexico's rural poor families. Although there has been improvement in wage levels since 1996, **the evidence shows that the urban poor were still working more but for lower wages in 2003 as compared to 1991.** Over the past fifteen years, labor market trends have not been encouraging. In general, work opportunities have shrunk in sectors with "higher-quality jobs" – such as

the manufacturing sector – and the poor have resorted to low-productivity jobs in the informal or self-employment sectors. The participation rate of the poor has increased by 10 percentage points in the last decade. Higher employment rates, reflecting increasing participation rates, have eased extreme poverty, but many urban inhabitants still find themselves unable to escape moderate poverty. Despite the increases in participation, the poor remain less able to access the labor market than the non-poor – only 48 percent of the working-age poor have a job, compared to 70 percent for the non-poor. Real wages for the urban poor are down 5 percent since 1991, despite the economic recovery after the *Tequila Crisis*.<sup>6</sup> Real wages have fallen mainly in the self-employment sector where the poor are very highly represented, and within each category wages have fallen more for the poor than for other groups (Figure 4). Indeed, real wages for the extreme poor who are IWOC fell by 22 percent. The fact that the share of employment in IWOC increased so markedly in combination with falling wages suggests an increase in involuntary informality and a potential segmentation in the Mexican labor market.<sup>7</sup>

**Figure 4. Urban Areas: The poor have seen the sharpest cuts in real wages (Real wages in 2003 as percentage of real wages in 1991)**



Source: Adapted from *Urban Poverty in Mexico*, World Bank, 2005. Private employees stand for formal private employees

**The decline in real wages reflects the low quality of jobs available to the poor.** The formal private sector has been unable to generate jobs at a high enough rate to absorb poor workers, which would allow them to increase their earnings and move out of poverty. In 2003, the poor were predominantly employed by smaller firms in the private non-tradable sector (formal and informal), especially commerce, personal services, and construction. For example, firms with less than 5 employees accounted for

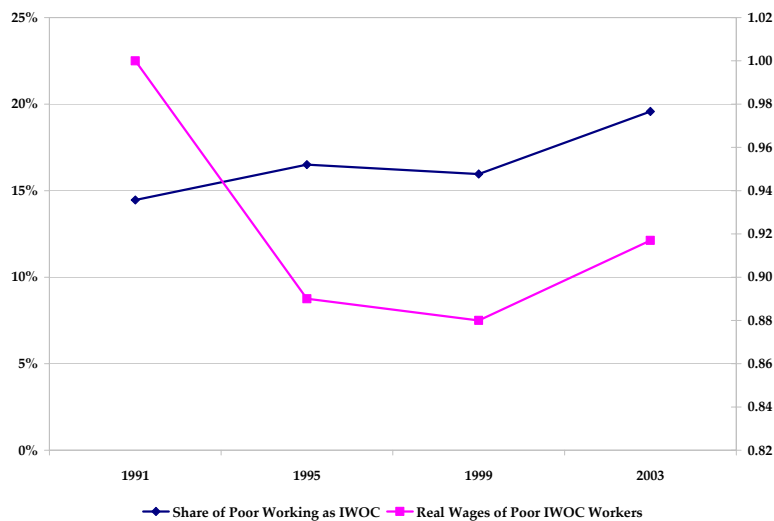
<sup>6</sup> Bank staff calculation based on 2003 ENEU.

<sup>7</sup> The analysis on this section (for more details see Chapter 4 of *Urban Poverty in Mexico*, World Bank, 2005) is based on the ENEU, which only includes data about labor incomes coming from an individual’s main job.

65 percent of the very poor's employment, as opposed to 40 percent of total employment. Small firms are less productive<sup>8</sup> and less likely to comply with employment regulations or provide benefits or stable longer-term jobs. They also pay less than larger firms, even to comparable workers. In addition, wages in these firms have fallen: in 2003, for example, wages in firms with fewer than 10 workers paid below 1991 levels, whereas wages for workers in larger firms rose about 4 percent.

**The poor have tended to move towards low-productivity self-employment.** As public sector jobs shrank after the *Tequila Crisis*, the formal private sector was unable to create more job opportunities. As shown in Figure 5, the share of the working poor who were informal without capital – typically low-productivity activities – grew from 14.5 percent to 19.6 percent between 1991 and 2003. Moreover, this share continued to grow after the *Tequila Crisis*, even as the economy recovered. The decline in public sector employment from 12.5 percent in 1991 to 7.2 percent in 2003 was mainly matched by increasing self-employment, not private formal salaried employment. The urban poor have turned more to informal self-employment where real wages are still below 1991 levels.<sup>9</sup>

**Figure 5. The urban poor have turned to IWOC where real wages have declined**



Source: *Urban Poverty in Mexico*, World Bank, 2005.

**The poor have also tended to move towards low-quality jobs in the non-tradable sector, outside the manufacturing sector.** The share of the poor employed in manufacturing, where jobs are of higher average quality, also declined from 26 to 19 percent between 1991 and 2003. As a result, an increased share of poor workers now work in construction, commerce, and personal services – sectors characterized by lower-than-average wages, high informality, slow growth, and a tendency to decline sharply in

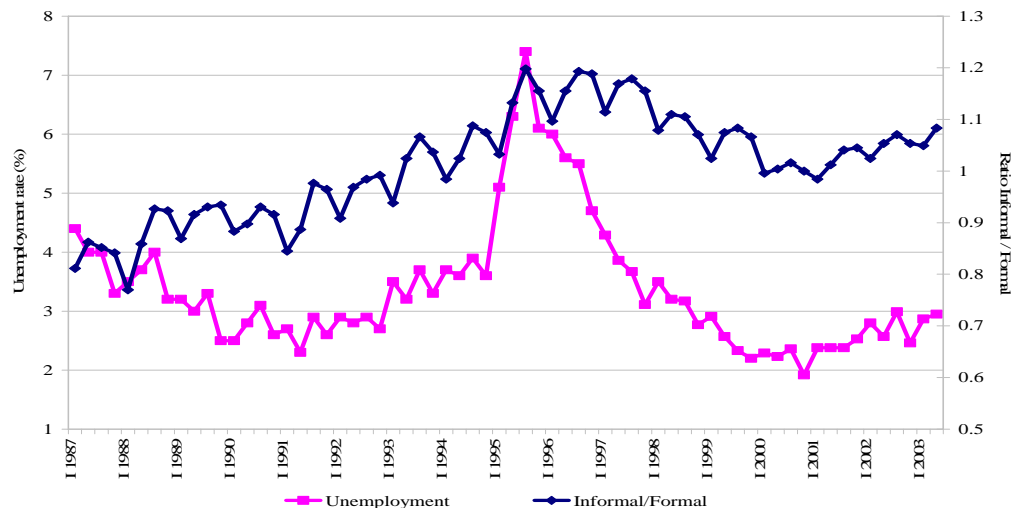
<sup>8</sup> Tan and López-Acevedo, 2003, and Fajnzylber, Maloney, and Montes, 2005.

<sup>9</sup> Chapter 4 of *Urban Poverty in Mexico*, World Bank, 2005, shows the trends in the composition of employment.

recessions. Concurrent with the decline in manufacturing employment, the share of the working poor employed in export industries declined from 39 percent to 30 percent between 1992 and 2002.

**The poor are increasingly choosing work in the informal sector because of a lack of alternatives (World Bank, 2004).** Push factors, rather than pull factors, explain the increase in the share of the poor in the informal sector. Rather than seeking informal sector work because of convenience (e.g. flexibility to work from home or combine with childcare or desire to work as an entrepreneur), the poor are restricted to the informal sector because of a lack of opportunities elsewhere. Until the early 1990s, unemployment and informality in Mexico were negatively correlated, suggesting that the majority of workers were voluntarily choosing the informal sector, rather than being pushed into it by a lack of formal opportunities. Maloney (1999) also found that during the first half of the 1990s the shift toward self-employment was mainly driven by profit maximization. The trend appears to have reversed (at least partially) after 1992, as informality began to follow a somewhat similar trend to unemployment, more compatible with a conventional pro-cyclical view in which a decline in labor demand results in a growing informal sector (Figure 6). It may be then that there are an increasing number of workers joining the informal sector because of deterioration in the demand for formal labor.

**Figure 6. Since 1991, informality has risen with unemployment**



Note: Informality includes both salaried informal workers and self-employed.  
Source: *Poverty in Mexico*, World Bank, 2004.

Recent research suggests that workers with little education, labor market experience, and capital are unlikely to move voluntarily into the informal sector. Therefore, high rates of self-employment in poor households may also be considered involuntary or induced by labor market distortions (Fajnzylber, Maloney, and Montes, 2005). The fact that significant increases in IWOC were accompanied by a large fall in wages also supports the push-factor hypothesis.

**Why are the poor unable to compete? First, there is an important educational gap between the poor and the non-poor.** Although the educational level of the poor has increased, they continue to lag behind the non-poor. Between 1991 and 2003, the average years of schooling for urban poor household heads increased from 6.6 to 8, but remained 30 percent lower compared to the non-poor. Despite progress on some fronts, this poor/non-poor education gap has not substantially improved in the last decade, and 55 percent of the labor force still does not even have complete secondary education (ENEU 2003). Likewise, the quality of education has not improved markedly in recent years. **But inferior social capital, information, and resources and a lack of transportation and childcare are also likely to hamper the competitiveness of the poor in the labor market.** Education does not fully explain the lower income of the poor. An exercise conducted to evaluate the returns to education found that, conditional on having the same level of education and experience, poor households still receive lower wages, and the gap over time increased for all educational categories – in 2003, the wage gap between poor and non-poor workers with secondary education is close to 40 percent.<sup>10</sup> The lower quality of education for the poor is one possible explanation. The non-educational factors that explain this differential include: inferior social capital, information, and resources; the stigma often associated with slums and other poor areas; a lack of access to affordable childcare facilities; and institutional factors, such as labor market rigidities.

**Institutional factors such as stringent firing regulations, hiring modalities, promotions, and provisions for shutdowns and downsizing may be distorting Mexico's labor market.** International evidence suggests that excessive or very rigid regulations, even if well-intended, curtail the creation of formal employment, as employers seek to circumvent costly and complicated requirements by hiring workers informally. This particularly affects young and less-educated workers. Labor market regulations may impede the filling of vacancies on merit and deter formal employment, to the disadvantage of the poor. However, the 1997 Social Security reform, which replaced the pay-as-you-go pension system with one based on privately managed individual accounts and overhauled the health financing system, appears to have stimulated formal employment generation, mainly because of two reasons. On the one hand, the reform increased public contributions to the financing of both systems (as a basic pillar), effectively reducing the burden on employers and employees and introducing clearer incentives for them to make contributions “on top” of this basic pillar. In line with this, contributions in general were made more uniform across wage levels, scrapping the existing “levy” on human capital under the former system. On the other hand, the reform strengthened the link between contributions and benefits. For example, the portability of benefits across jobs increased in the pension system, which raised the incentives to contribute to the system and, thus, to become formal. Statistical analyses conducted for this report (Santamaría and Montes, 2005; Kaplan, 2004) show that the formal sector grew more than the informal sector in the period right after the

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<sup>10</sup> Montes, Santamaría, and Bendini, 2004.



reform, which provides evidence that the reform may have had a positive impact on formal employment generation. Other studies conducted in the country, however, do not find such evidence.

*The Rural Poor need to explore opportunities in the RNF sector*

Since the 1990s, Mexico’s rural economy has seen a decline in the importance of agriculture and its prominence as a source of income for rural families has decreased. The share of the rural workforce employed in agriculture declined from 63 to 56 percent between 1995 and 2003. The share of income that rural households derive from agriculture dropped by half, falling from 51 to 24 percent between 1992 and 2002, largely due to a sharp reduction in income from independent farming. Instead, the rural workforce became more dependent on the RNF sector: income share from RNF wage labor increased from 20.4 to 36.1 percent, and mostly in high-return sectors.

But the rural poor remain more dependent on agriculture and low-return activities in the RNF sector than the non-poor, and the gaps have increased over time. The poor have participated in the transformation of the rural economy, but to a lesser degree than non-poor households. For example, from 1992 to 2004, income from non-agricultural labor increased from 19.6 to 23.9 percent for the poor, while it increased from 28.6 to 46.4 percent for the non-poor. The share of extreme poor households’ income derived from agriculture fell significantly, from 67.7 to 38.7 percent. But *relative to the average household*, very poor households experienced a smaller increase in income from RNF wage labor, especially in high-return activities, which was compensated by a larger increase in transfers.

**Table 6. Income Shares in Rural Mexico**

Income Shares	1992		2002	
	All Households	Extreme Poor	All Households	Extreme Poor
Independent Farming	38.5	38.1	12.6	16.8
Agricultural Wage Labor	12.3	19.6	11.3	21.9
<i>Sub-total Agriculture</i>	<i>50.8</i>	<i>57.7</i>	<i>23.8</i>	<i>38.7</i>
Independent Non-Farm Activities	8.1	4.8	5.7	6.8
Non-Farm Wage Labor	20.4	15.9	36.1	17.2
High return	4.9	1.3	23.8	4.4
Low return	15.5	14.6	12.3	12.8
Transfers	8.0	6.0	16.5	25.4
Other Sources	12.6	15.5	17.8	11.9
<i>Sub-total Non-Agriculture</i>	<i>49.2</i>	<i>42.3</i>	<i>76.2</i>	<i>61.3</i>

Note: Occupations providing average earnings below the moderate poverty line are classified as “low return”, those above as “high return.”

Source: *Mexico: A Study of Rural Poverty*, World Bank, 2005.

**The poor have been unable to take full advantage of the process of agricultural modernization and increasing productivity.** Both land and labor productivity rose in the 1990s at a rate above 2 percent, a reasonable if not impressive performance. But agricultural growth has favored the Northern states, where commercial farming and crops are concentrated and farm sizes are larger. Average gross profit per hectare, after deducting family labor, is increasing in farm size, with negative gross profit for farms less than 2 hectares and positive gross profit for larger farms. This suggests that Mexico's agricultural sector is also becoming increasingly dualistic. On the one hand, large, commercial, irrigated farms appear to experience increasing productivity. On the other hand, the productivity of subsistence farmers in marginal or isolated areas is stagnant, as these farmers are unable to switch to export crops and modern agricultural techniques.

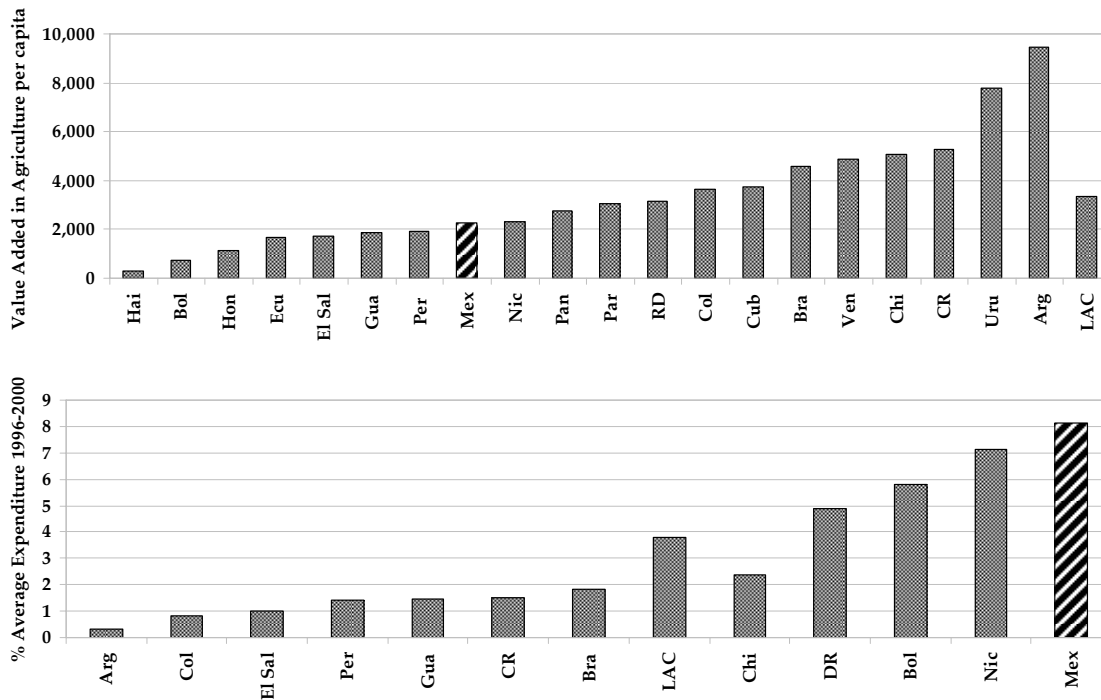
**Agriculture needs to continue to play an important role in poverty reduction.** International evidence suggests that high-productivity agriculture goes hand in hand with growth in higher-productivity RNF activities. Among other things, higher agricultural income results in higher demand for RNF products, stimulating the rural economy, and there can be strong linkages between agriculture and non-agricultural industries and services.

**There is a need to increase the efficiency of resources spent on upgrading and supporting the agricultural sector.** However, Mexico's public expenditures in rural development in production-related areas is high by any standards and, as a share of public spending, the highest in Latin America (see Figure 7). The average 1996-2000 public expenditure in agriculture as a share of total public expenditure is over 8 percent, way above Argentina (less than 0.5 percent), Chile (above 2 percent), or Brazil (2 percent)<sup>11</sup>. The *Programa Especial Concurrente*, which includes agriculture, social, environment, and infrastructure spending by federal agencies in rural areas, is equivalent to some 30 percent of agricultural GDP. The lack of dynamism in the agricultural sector cannot be attributed to lack of public resources but rather to the need to increase their effectiveness and targeting, along with other structural reforms.

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<sup>11</sup> *Mexico: A Study of Rural Poverty*, World Bank, 2005.

**Figure 7. Labor Productivity and Public Expenditure in Agriculture**



Note: Labor productivity defined as agricultural value added divided by the agricultural labor force and measured in US Dollars of 1995. Average expenditure figures refer to expenditure in production-related programs for agriculture only, not to all rural development expenditures. They are in current US dollars.

Source: *Mexico: A Study of Rural Poverty*, World Bank, 2005.

**Low levels of education and lack of access to physical assets hamper the rural poor’s ability to apply technical upgrading in agriculture and to diversify into RNF activities.** Research shows that additional schooling promotes technical change in crop production, participation in RNF activities, and increased household income. However, average levels of schooling achievements are still low, especially for the poor. While only 55 percent of the extreme rural poor aged 12-14 were enrolled in lower secondary in 2002, almost three-quarters of the non-poor were enrolled.<sup>12</sup> Physical capital assets tend also to be associated with higher income from agricultural activities.

**The poor are still unable to access higher-quality jobs in the formal sector or in higher-yielding agricultural activities.** The functioning of the labor market is key to understanding the sources of poverty. The situation of the urban poor in Mexico deteriorated in the 1990s, as evidenced by falling real wages compared to the early 1990s. As a consequence of falling incomes – and growing unemployment during the *Tequila Crisis* – the poor moved to very precarious informal jobs in sectors and occupations that offer low salaries, grow slowly, and are highly vulnerable to recessions. By 2003, poverty had declined slightly because the poor were working more, but mostly

<sup>12</sup> *Poverty in Mexico*, World Bank, 2004. Note, however, that the definition of rural for these estimates was based on INEGI’s classification with populations of less than 2,500 people.

in those “low-quality” jobs. The economy of rural Mexico, on the other hand, is undergoing a significant transformation, with important implications for the rural poor. The labor force has experienced modernization and agriculture is declining in importance, even for the poor. Agriculture, of course, remains important, but its development has been uneven. Large, commercial, irrigated farms experience increasing productivity, whereas the productivity of small or subsistence farmers in marginal or isolated areas may be stagnant, as these farmers are unable to switch to export crops and modern agricultural techniques. An increase in transfers allowed the rural poor to compensate for this negative development, but there appear to be opportunities that the rural poor can seize, if helped by adequate government interventions. These opportunities, by and large, are in the RNF sector. Thus, raising the productivity in the economy as a whole (in order to increase the amount of “good” jobs available) and raising the productivity of the poor (in order to increase their chances of accessing a good job) must be cornerstones in the poverty reduction strategy.

### Vulnerability

**While important progress has been made in helping certain groups to manage risks, there are still vulnerable groups who have limited access to safety nets, such as the elderly poor and low-income groups facing unemployment or major health risks.** Mexican individuals and households face a diverse set of income risks. The analysis shows that Mexico has made important progress in reaching certain at-risk groups, particularly the young rural poor population. However, several key vulnerable groups can be identified for whom the frequency of risk and severity of loss compels a reexamination of government policy. Among these are the elderly living in poverty – a problem of considerable scope in Mexico, especially when assessed in a regional comparison – and the low-income population, which potentially faces very high costs associated with health care and unemployment risks.

**In addition to these idiosyncratic (individual) risks, Mexicans are also periodically exposed to aggregate shocks, which include economic shocks and natural disasters.** The evidence suggests that the overall variation of the households’ consumption in the face of these risks is small because significant consumption smoothing is taking place.<sup>13</sup> Adjustment to macroeconomic shocks has largely taken place via falling wages, such that income losses are diffused across the working population, as opposed to resulting in sector-specific unemployment. Private risk management is an important component of households’ responses to the above risks, but its limits are also apparent.

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<sup>13</sup> Overall, there is some evidence of successful (but perhaps otherwise costly) consumption smoothing – large drops in income do not translate into large drops in consumption. Certain coping strategies, such as running down health or the fact that mothers cannot stay at home to take care of their children, may protect present consumption levels but can have negative effects on the consumption path in the longer run.

**Household characteristics – education, family composition, and self-employment – affect the distribution of shocks in urban and rural areas in similar ways.** Coping mechanisms such as loans, donations, sale of assets, and increased labor market participation appear common in both urban and rural areas. But these responses may not be very useful vis-à-vis covariate (aggregate) shocks, when risk pooling is not possible due to the possibility of general equilibrium effects on labor markets. Moreover, as mentioned above, the importance of coping mechanisms might differ between urban and rural areas because of the different economic context: the labor market affects the urban poor more; conversely, the rural poor benefit from safety nets such as subsistence agriculture.

**Despite recent progress, the Mexican social protection system has historically been – and still is – inequitable and leaves many vulnerable citizens unprotected.** High rates of poverty among the elderly coexist with a very high fiscal burden for public pension systems, which points to a serious mismatch between programs and needs. The Mexican protection system for private workers is, after the 1997 IMSS reform, healthier and financially sound in the long run. However, the challenge of increasing coverage to large segments of the population remains. While health costs constitute a major risk for low-income households, formal health insurance is limited and regressive across income deciles. By not covering the poorest households, public social security institutions have failed to mitigate the inequity that persists in Mexico’s society. As a result, a great majority of the poor have few means of managing risks.

*Individual shocks, risks, and vulnerability – old age and health risks*

**Poverty rates have been higher among the elderly in Mexico than among the general population.** At 38 percent, the poverty rate among older adults is much higher among the elderly than the national average and at a level close to that seen in countries of lesser economic development than Mexico, much higher than in countries such as Brazil, Chile, or Colombia, and considerably higher than the national average. This gap in poverty rates is particularly pronounced, but not unique to Mexico (Table 7).

**Table 7. Poverty Rates among the Elderly in Latin America**

	Entire Population	65 and older
Bolivia	30.5%	47.5%
Brazil	24.6%	18.5%
Chile	20.8%	23.9%
Colombia	24.0%	32.9%
Costa Rica	21.7%	29.1%
Guatemala	19.1%	27.1%
El Salvador	27.4%	38.0%
<b>Mexico</b>	<b>22.1%</b>	<b>37.6%</b>

Source: Gill, Packard and Yermo (2004).

Although public pension programs absorb a large share of public expenditures, the elderly poor lack significant coverage. Whereas over 20 percent of the urban population over age 65 receives a pension, only 7 percent of the urban elderly poor have access to a pension. The rural poor are virtually uncovered, with pension incidence among the elderly at less than 1 percent (Table 8). An immediate result of lacking income security at old age is that a large share of the elderly poor continues to work, particularly in rural areas. A range of social assistance programs and transfers reach the elderly poor, including *Procampo*, *Oportunidades* (600,000 households), *Liconsa*, *Programa para Adultos Mayores* (covers 98 percent of people aged 70 and over in Mexico City), *Acuerdo Nacional para el Campo*, and *Programa Alimentario*.<sup>14</sup> In fact, as shown above, transfers have been a major source of income growth for the rural poor. Yet high poverty rates among the elderly are in and of themselves evidence of the limited reach of the public social protection system.

**Table 8. Pension coverage and labor force participation among the elderly**

	Urban		Rural	
	<i>Extreme poor</i>	<i>All</i>	<i>Extreme poor</i>	<i>All</i>
<b>Receives pension</b>				
1996	7.9	21.2	0.9	5.5
2002	6.7	22.1	0.8	5.3
<b>Works and does not receive a pension</b>				
2002	29.8	24.9	57.9	49.7

Source: *Mexico: An Overview of Social Protection*, 2005.

**Informal risk management strategies rely on extended families (social networks), private transfers (remittances), and accumulation of assets (savings or investments).** Accumulated assets tend to increase with age, which would tend to make the elderly better off relative to other groups. However, the value of assets held by the elderly depends critically on two institutions where much progress is still needed in Latin America, in particular in their limited reach to the poor population: (i) legal institutions that protect property rights; and (ii) financial institutions that allow households to convert illiquid assets into income for consumption in old age. In addition, it is important to better understand the existing informal risk management and private transfers (inter-generational) in place and to understand how these are affected by socio-demographic changes.

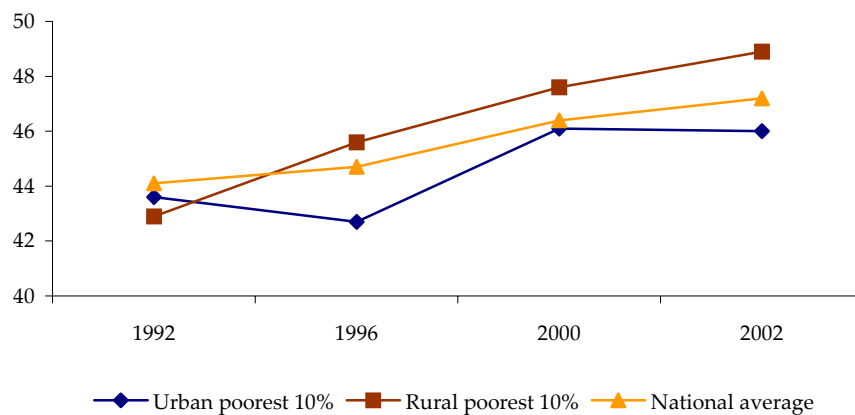
**Private strategies to cope with income-risk in old age may have adverse long-term effects.** One example is the effect on land inheritance patterns in rural areas. The main risks perceived by old land-owning men, whose possibilities of migration or participation in the labor market are highly diminished by their age, are being left alone, and being unable to earn enough income to survive. Common responses to this situation observed in *ejidos* and *comunidades* are: (i) old owners cling to their land, resisting any

<sup>14</sup> Coverage of pensions systems and other forms of income support among Mexico's elderly is discussed in more detail in *Mexico: An Overview of Social Protection*, World Bank, 2005.

pressures to pass it on in life, (ii) sons or daughters stay with parents in the household, looking after them and helping tilling the land, often with the promise that they will inherit it; (iii) parents instill uncertainty about inheritance rights as a means to maintain family unity and thus ensure that transfers keep flowing from distant children. As such, the resistance of small landholders of advanced age to pass on their lands to the young generation is part of a broader survival-cum-risk management strategy identified in field studies. However, it results in reduced agricultural productivity, youth exodus, and demographic imbalances.

**The ageing of the population means that old-age poverty poses one of the major social protection challenges facing Mexico.** A recent study of demographic trends in Mexico found that the percentage of the population above 60 years of age rose from 6.6 in 1989 to 8.6 in 2002.<sup>15</sup> As shown in Figure 8, the increase in the average age of the household head is particularly pronounced in rural areas. Higher life expectancy is increasing the proportion of elderly relative to young, putting pressure on private risk management strategies – like extended families and inter-generational transfers – and formal pension systems alike.

**Figure 8. Age of Household heads, 1992-2002**



Source: *Mexico: An Overview of Social Protection*, World Bank (2005).

**Exposure to health shocks combined with insufficient capacity to manage them is a major risk associated with poverty.** The low-income population in Mexico – a majority of which does not have access to health insurance – faces very high costs associated with health care. More than 5 million Mexican citizens face catastrophic health expenditures each year, causing at least 2 million of them to fall into poverty.<sup>16</sup> In addition, the distribution of out-of-pocket expenditure is regressive, as the poor show much higher levels of out-of-pocket expenditure than the rich. This translates into a

<sup>15</sup> Ariza and de Oliveira, 2004.

<sup>16</sup> *Poverty in Mexico*, World Bank, 2004. Catastrophic health shock defined as more than 50 percent of household income net of basic nutritional consumption.

higher frequency of catastrophic health shocks and suggests that available risk-pooling mechanisms do not reach the poor and/or do not offer efficient protection.

**There are significant inequalities in public health expenditure, and the poor are in general uninsured or, in the best of cases, partially insured.** Consequently, they frequently pay out-of-pocket for health services. Households in the lowest decile directly spend around 11 percent of income on health care while the richest spend less than 4 percent, pointing to important problems of efficiency and equity of public health subsidies.<sup>17</sup> A recent study found that while only 9 percent of insured households fall below the poverty line after catastrophic health care expenditures, 40 percent of uninsured households are impoverished when suffering a health shock.<sup>18</sup> In 2002, 73 percent of households impoverished from health expenses were not insured. There is also an urban-rural gap, as 60 percent of rural households fall below the poverty line as a result of catastrophic health care expenditures, while 17 percent of urban households face the same problem. There is some evidence that *Oportunidades*, which combines cash transfers with free access to health clinics, can have an important role in protecting rural household *income* from health shocks (Box 1). However, some consumption smoothing mechanisms that protect household *consumption* from health shocks are in place, even if uncovered by *Oportunidades*. The recent introduction of *Seguro Popular* – which is targeted at poor families – is therefore a positive development. A forthcoming impact evaluation will shed light on the extent of the program’s effectiveness.

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**Box 1. Vulnerability to Health-Related Risks in Rural Mexico and the Impact of *Oportunidades***

*Oportunidades*, which combines cash transfers with free access to health clinics, plays an important role in protecting income from falling when household heads experience short-term illness, even though it was not designed as a social protection mechanism. In a recent empirical analysis of vulnerability in rural Mexico, Skoufias (2004) found that in communities not covered by *Oportunidades*, a household head falling ill caused an average income growth rate that was between 20.4 percent and 21.7 percent lower than for households with healthy head. This implies that households are unable to protect their income from the effects of short-term illness.<sup>19</sup> In communities covered by *Oportunidades*, the growth rate of income did not vary much as household heads experienced short spells of illness. More serious illnesses (measured by duration in days and inability leave the bed) turned out to have a smaller negative effect on income (not significantly different from zero). There were also no apparent differences between households covered and not covered by *Oportunidades*.

The study concludes that vulnerability could be more effectively tackled with an insurance-type program that ensures that household welfare (consumption or income) does not fall below a socially acceptable norm. Skoufias also argues that the absence of strong effects of health shocks on consumption does not imply that households will not

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<sup>17</sup> *Universal Health Insurance Coverage in Mexico: In Search of Alternatives*, World Bank, 2003.

<sup>18</sup> *Ibid.*

<sup>19</sup> Defined as being confined to bed for at most 3 days out of the last 30 days.



get any welfare benefit from health insurance. Improved health itself is an increase in welfare, but this effect cannot be measured directly with the information available.

Source: Emmanuel Skoufias, 2004.

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**Unemployment has not been a major risk to income because of adjustment through wages and the existence of private coping mechanisms (Box 2).** Unemployment rates in Mexico are very low when compared to both the most developed economies and to other economies in the region, such as Colombia and Chile, which experienced similar or stronger episodes of growth than Mexico. The urban poor display a slightly higher unemployment rate than the non-poor but the rates are still very low (5.7 percent for extreme poor males and 1.7 percent for extreme poor women). So far, unemployment duration has also been low, with most skilled and unskilled workers finding a job within a six-month period. Wage flexibility may explain part of these features. In addition, informal coping mechanisms, especially those that involve increased labor force participation of spouses, effectively protect the incomes of households faced with unemployment shocks for household heads, yet do not translate into increased school non-attendance or reduced educational performance (year-to-grade) among children. Skoufias (2004) finds that it was only during the *Tequila Crisis* of the mid-1990s (i.e. an aggregate shock) that the loss of a job by the household head was associated with an increase in income risk.

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### **Box 2. Informal Household Risk Management Strategies in Mexico**

Households engage in a number of informal risk management strategies that need to be understood in order to craft effective formal, public social protection policies. A recent study suggests that families in urban Mexico employ consumption smoothing mechanisms, including both household self-insurance techniques and risk pooling techniques at the local level, when faced with shocks.

*Spouse added worker strategies* are a substantial form of informal self-insurance. There is evidence of the “added worker effect,” where non-working wives enter the workforce when confronted with the loss of a spouse’s income. The research found substantial reductions in household work when a woman entered the labor market, suggesting that there may be hidden costs to this type of risk management, such as less time with children and losses to social capital.

*Child added worker strategies* are limited. Putting children in the labor force can be seen as transferring future family income to the present and is another self-insurance strategy with potentially high private and social costs. However, only certain groups of poor girls appear to drop out of school when a father or mother loses his or her job. As found in studies elsewhere, child labor in Mexico appears to be pro-cyclical.

*Extended families* are probably efficient insurers and may offer protection not easily observed in the data. The sociological and anthropological literature suggest that extended families provide possibilities for pooling risks while maintaining the correct “self-protection” incentives at the household level.

*Migration* is a form of income diversification that many resort to, and remittances play an important role in risk management in Mexico. Incomes of foreign workers are uncorrelated with their home economy and exchange rate devaluations increase the value of transfers in pesos. However, the costs of this self-insurance strategy tend to be high, resulting in lower education attainment.

*Informal labor markets* are not effective safety nets that offer readily available jobs. Most of those entering unemployment enter from the informal sector and the duration of their unemployment is only 22 percent less than for formal sector workers.

*Informal capital markets*, which include rotating credit associations, reciprocal loans, *guelaguetza*, or relations of *compadrazgo*, may offer consumption smoothing and risk pooling possibilities.

The informal risk management strategies of rural households depend on two additional activities: diversification into RNF occupations and subsistence farming.

*Diversification of income sources*: Diversifying income through RNF economic activity has been an important way for Mexican rural households to concurrently increase income and mitigate risk. In reaction to the *Tequila Crisis* in 1994-95, rural households in Mexico increased their involvement in RNF occupations, particularly ones with low returns, which are easier to access.

*Subsistence economy*: The subsistence economy is commonly understood to be the agricultural production of food crops carried out by farmers on one or several small plots of land for self-consumption, using family labor. Subsistence farming is rarely practiced alone but rather as a supplement to other production such as coffee or other cash crops, and it is not exclusive to poor farmers. The importance of the subsistence economy has been declining rapidly but it is still the number one safety net in rural areas

Source: *Income Risk, Household Coping Strategies and Income Security Policy in Mexico*, World Bank based on analysis of ENEU, and *Mexico: A Study of Rural Poverty*, World Bank, 2005.

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### ***Aggregate shocks, risks, and vulnerability – macroeconomic crises, natural disasters, droughts, and floods***

Historically, Mexican households have faced two major types of shocks: (i) macroeconomic downturns and crises, and (ii) natural disasters.

**The *Tequila Crisis* had a considerable impact on poverty, and national and rural poverty rates in Mexico returned to pre-crisis levels in 2002 (see *Poverty in Mexico*, World Bank, 2004).** In 1995, prices rose by 35 percent and output fell by 6.2 percent. As wages remained fixed in nominal terms, real wages declined by 25-35 percent. Unemployment, while low by global standards, almost doubled from 3.9 percent to 7.4 percent.<sup>20</sup> Welfare outcomes were dismal: household incomes declined by roughly 30 percent, extreme poverty more than doubled between 1994 and 1996 (going

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<sup>20</sup> Maloney, Cunningham, and Bosch, 2003.

from 10.1 to 26.5 percent), and moderate poverty increased from 43 to 62 percent.<sup>21</sup> Since 1995, Mexico has not experienced a major economic crisis, and successful macroeconomic policies have stabilized fundamentals such as exchange and interest rates. However, increased trade liberalization and exposure to international competition are also occurring, signaling at once major trade opportunities as well as exposure to potential future macroeconomic shocks with differential effects across the Mexican population and economy.

**The urban population in Mexico is particularly vulnerable to macroeconomic instability and labor market adjustments, as most of their income derives from labor. At the same time, risk-coping strategies depend heavily on the labor market.** Both rural and urban poverty increased dramatically as a result of the macroeconomic crisis in 1994-95, although the effect was particularly strong in urban areas.<sup>22</sup> The urban poor also rely more on labor market strategies as informal coping mechanisms, via the adjustment of the labor supply of household members or added-worker strategies, thus illustrating the dual role of labor markets as both a source of income risk and a means of ex-post income protection. The dependence of the rural poor on labor income is lower, which implies that even if wages and employment are affected in a similar way as urban areas, the income shocks transmitted via labor market developments are smaller.

**The rural poor, on the other hand, face risks of large cuts in public and private transfers in response to macroeconomic shocks.** As discussed earlier, rural households depend to a larger extent on transfers, both public and private. They are therefore vulnerable to how the public sector in turn copes with aggregate shocks: if shocks induce large budget cuts in public transfers to rural areas, low-income households are hard hit. However, the new *Ley General de Desarrollo Social* – which limits cuts in real spending on social development, including some transfers to rural areas – will limit future expenditure decreases in this area. In Mexico, the crisis affected rural households not only via lowered real wages, but also in terms of a reduction of private transfers as income shocks in urban areas were transmitted to rural areas through lower remittances from internal migrants. Transfers did, however, provide assistance when originating from abroad, which points to the potential prominent role of international remittances (and, by extension, migration). During the *Tequila Crisis*, increased transfers from friends and relatives outside of Mexico (largely in the US), who avoided the impact of the crisis, mitigated the shock to some extent (see Box 3).

**The most common private risk management strategies during the *Tequila Crisis* were emigration to the US and increased income diversification.** After 1995, migration to the United States increased alongside greater diversification of rural incomes. In both rural and urban areas, however, poorer households may lack savings and other means to smooth consumption, resulting in higher consumption shocks than

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<sup>21</sup> Montes, Santamaría, and Bendini, 2004.

<sup>22</sup> *Ibidem*.

those households better able to mitigate (ex-ante) and cope (ex-post) with shocks to income.

**In Mexico, macroeconomic shocks have not implied major increases in unemployment; this may change, however, and wage flexibility may cease to be a safety net.** To date, macroeconomic crises in Mexico tend to have resulted in labor market adjustment via a lowering of real wages as opposed to unemployment – the result of fixed nominal wages combined with inflation. Mexico’s historic wage flexibility, by preventing extensive and durable massive unemployment, has proven to be a relatively efficient safety net during crises. In the 1995 *Tequila Crisis*, GDP per capita fell by 5 percent and the labor market adjusted with a 25 percent fall in wages, but relatively little unemployment. This had the effect of spreading losses relatively evenly across the population, rather than concentrating the losses on a particular group. As discussed above, the poor suffered from lack of access to good jobs rather than from lack of jobs per se. With increased competition, low inflation rates, and continued low TFP growth, the low unemployment rates that characterized Mexico until the late 1990s will be more difficult to sustain.<sup>23</sup> Formal mechanisms such as workfare programs can potentially be useful instruments in mitigating covariate employment shocks.

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**Box 3. Remittances as a source of private risk management for Mexican households**

The increasing importance and magnitude of remittances:

- Remittances from Mexican workers abroad reached a record 13.3 billion dollars in 2003. It exceeded foreign direct investment as a source of foreign income and amounted to some 2 percent of the country’s GNI in 2003.
- Although migration is not a recent phenomenon, much of the capital flow from remittances seems to be. In general, about half of the recipients included in a study of remittances in Mexico said they had received remittances for 3 years or less.<sup>24</sup>
- Remittances played an important role in the recent growth of rural incomes, especially poor incomes.
- The highest proportion of households receiving remittances is found among the poorest 20 percent of the population. In 2002, 11.2 percent of households in the poorest quintile received remittances, compared to a national average of 1.2. For the poorest 20 percent of rural households this number rises to one-fifth.

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<sup>23</sup> The ability of wages to adapt to changes in economic activity and absorb shocks in times of recessions seems to have declined since the late 1990s in Mexico. While the country experienced a decline in its growth rate between 2000 and 2001, mean real remunerations kept increasing through 2002. This indicates that wage flexibility may have undergone a structural change when inflation reached single digits in the late 1990s, which is now limiting the ability of the labor market to keep unemployment as low as during the previous decade. Further evidence is provided in the Okun relationship between output and wages which suffered a “structural” break around 1999 (for details see *Urban Poverty in Mexico*, World Bank, 2005).

<sup>24</sup> *Receptores de Remesas en México*, Pew Hispanic Center & MIF, 2003.

- While 'coverage' of remittances is progressive and pro-rural, it is also limited. Only a minority of the extreme poor has access to remittances and 86.5 percent of the poorest households do not receive remittances.
- Using post-transfer income, the share of households receiving remittances is lower for the poorest 20 percent of the population than for any other income group. The different conclusions arrived at using post- versus pre-transfer income simply reflect the fact that transfers (including remittances) are an important driver of income growth among the households fortunate enough to have access to these transfers.

Sources: *Poverty in Mexico*, World Bank, 2004, and *Receptores de Remesas en México*, Pew Hispanic Center & MIF, 2003. However, it is important to clarify that in Mexico, no consensus exists among the authorities concerning the amount of remittances.

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**The workfare program *Programa de Empleo Temporal (PET)* in rural areas provides some insurance against loss of income.** PET was designed to promote the employment of poor people, particularly the extreme poor, in public works in rural areas. Although its primary function was absorbing seasonal unemployment in rural areas affecting especially the very poor, it did have an insurance function since incremental funds were usually made available for additional employment in areas that have been affected by systemic shocks due to natural disasters or other causes, following an agreement between the federal and state governments. These two functions are entirely compatible and even synergic, because the experience and capability gained in the implementation of the regular program are very valuable in emergency situations. Under the ordinary program, works were carried out during the agricultural low season.

**Crises within particular sectors, such as the collapse in real agriculture prices experienced in the 1990s and the even more concentrated coffee crisis, can represent an important shock to household income.** Agricultural price incentives remain low. This is largely the result of the openness of the economy, which is increasing under NAFTA, and the conditions of unequal competition faced by Mexican farmers in most crops vis-à-vis their Northern neighbors, given their poorer endowments coupled with extensive agricultural subsidy programs in the United States and Canada. While Mexico also operates a comparatively small agricultural subsidy program, *Procampo*, in practice it is functioning more as a rural safety net (with moderately pro-poor targeting, though a sizeable portion of benefits also flow to farmers in higher income deciles). Impact evaluations indicate positive consumption effects on small farmers as well as some income multiplier effects on medium and large-scale farmers. However, *Procampo* has been less successful in achieving its stated goals of helping domestic producers of basic staples to adjust to international competition under NAFTA and helping farmers switch to more competitive crops.

**Public and private risk management strategies regarding income or consumption seem largely effective in managing the effects of natural disasters and weather-related shocks.** In a recent study of vulnerability in Mexico, Skoufias (2004) finds that for all rural households, aggregate risks, mostly related to weather shocks, significantly affect household incomes and consumption, although households carry out

income smoothing practices that partially protect their incomes from such risks. Systemic shocks, however, were of secondary importance compared to idiosyncratic ones. Also, panel data show that systemic shocks related to weather and other natural disasters can have very different impacts on households, and that shocks affecting income do not necessarily lead to consumption changes. Successful practices of consumption smoothing make consumption more protected than income. Most agricultural insurance in Mexico is oriented to mid-sized and large commercial farmers, and, as such, crop and livestock insurance is not relevant for very poor farmers.

**Fonden provides insurance against covariate shocks in the form of natural disasters.** The *Fondo de Desastres Naturales (Fonden)* is a Federal Government insurance fund against natural disasters. It covers all major natural disasters, financing the reconstruction of public infrastructure and compensating, in part, the rural poor for their losses following large aggregate shocks. Small farmers and other rural poor are protected in four ways: (a) they receive support to rebuild their houses if affected by the disaster, (b) they receive compensation for crop and livestock losses for a maximum of 5 hectares and 25 heads of cattle at a rate of some USD 33 per hectare and USD 23 per head, (c) they may also qualify for temporary income and employment support over and above that provided by PET, and (d) they benefit from the reconstruction of local public infrastructure (*Secretaría de Gobernación, 2003*). *Fonden* is a useful instrument to absorb part of the income impact of large covariate shocks of natural origin but it compensates only part of the losses and depends on a number of procedures and discretionary actions, such as the declaration of emergency, that limit its impact.

**Yet natural disasters and other weather-related phenomena remain important determinants of inefficiencies in crop production.** The high incidence of realized shocks among farmers in rural Mexico can be seen as a reflection of the risk inherent in (uninsured) agricultural production. Weather-related shocks are very frequent among farmers, especially droughts or excessive rains. Efficiency analysis suggests that shocks of natural origin (rains, frosts, droughts, hail, pests) are a major determinant of inefficiency in crop production. The average inefficiency in 2002 – measured as the distance to the efficiency frontier – for farmers with natural shocks was 1.05, as opposed to 0.8 for those without shocks.<sup>25</sup>

### ***The Social Protection System – progress still needed in order to help the poor cope with shocks***

**The social protection system in Mexico has historically been expensive, fragmented in structure, and rather regressive in coverage, reflecting at least in part the inequality of Mexican income distribution.** As a result, a large proportion of the population, in particular low-income households and those in the informal sector, still have little or no protection against the risks outlined above. The social security system,

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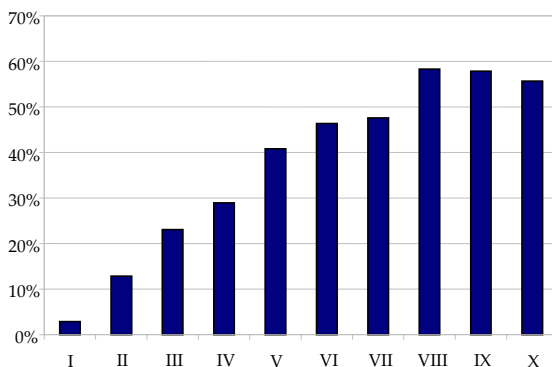
<sup>25</sup> See Chapter 4, *Mexico: A Study of Rural Poverty*, World Bank, 2005, for more details of this analysis.

financed by employer and employee contributions and by fiscal transfers, provides healthcare and pension benefits to workers in the formal sector (see Figure 9a). In parallel, a fragmented network of smaller programs provides limited benefits to those uncovered by social security institutions.

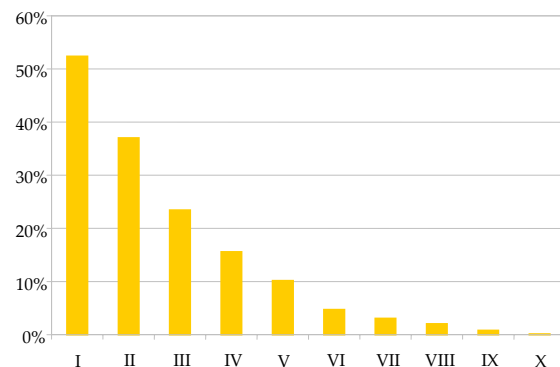
**Mexico has demonstrated its capacity to design and implement innovative social policy reforms, but the challenge remains to move from isolated successes in cash transfer delivery to an integrated, fiscally sound risk management strategy.** Mexico's flagship social assistance program, *Oportunidades*, is a widely cited best practice program in social protection, is very progressive in design, and has extensive coverage (see Figure 9b). *Oportunidades'* commendable focus is on building human capital accumulation among people in extreme poverty or just above. As such, it does not have the flexibility to respond in times of crisis since it was not designed for this purpose. Research suggests that *Progresa* (*Oportunidades* in rural areas) does not provide additional insurance above that of existing formal and informal institutions (Skoufias, 2004), which is to be expected as insurance is not the purpose of the program. As such, other risk management mechanisms are needed. More generally, there is a need in Mexico for a more comprehensive social protection strategy which tackles both the distributional and fiscal challenges.

**Figure 9. Formal health and pension insurance is regressive in coverage, *Oportunidades* is highly progressive**

**a. Social Security\* Coverage across income deciles**



**b. *Oportunidades* coverage across income deciles**



\* IMSS, ISSSTE, PEMEX.

Source: *Mexico: An Overview of Social Protection*, World Bank, 2005, based on ENIGH, 2002.

**Mexico invests less in social protection and in the social sectors in general, as a consequence of a very small overall fiscal envelope, reflecting a thin tax base and low tax revenue.** Mexico's expenditures in social programs, both social assistance programs aimed at reducing poverty as well as in social insurance are low given the level of development of the country. However, as a percentage of public expenditures, the share of public social expenditures is not low by international standards. This reflects a major

challenge for the country, as public resources needed to continue improving and expanding poverty reduction programs and increase social insurance coverage, in particular among vulnerable groups, is currently too limited. This implies that a fiscal reform which can expand this limited fiscal space is critical. While countries like Chile and Brazil devote 16 and 19 percent of GDP respectively to total social spending, Mexico's allocation to the social sector remains at about 10 percent, and translates to relatively low levels of per capita spending as well. Differences between countries in how social expenditure categories are defined and recorded account for some, but far from all, of the difference. The largest differences between Mexico and countries such as Argentina, Brazil, Chile, and Uruguay occur in social protection (pensions, health and targeted transfers), while expenditure on education, housing, and other basic services are closer to regional averages. The low expenditure levels shown for Mexico are a direct reflection of a thin tax base and low tax revenue. Finally, the priority given to social spending within the total public expenditure envelope is as high in Mexico as in other upper-middle income countries (above 60 percent of total public spending is allocated to the social sector).

**A large share of social protection spending does not reach the poorest population because of the dual structure of the system.** A large share of social protection spending is channeled through institutions directed at providing health and pension benefits for workers in the formal private and public sectors, thus excluding most of the poor. The social security system for government workers (ISSSTE) has not been reformed and has a flow of funds deficit and is actuarially insolvent. Together, the IMSS (those employed by IMSS) and ISSSTE represent a significant contingent liability amounting to some 82 percent of GDP. This structure poses a threat to maintaining, let alone expanding, other social spending programs better targeted at the poor.

**A new initiative, *Seguro Popular*, has been introduced to protect poorer Mexicans against health risks.** In illness, the poor have access to health services through the public health system. By changing the incentive system and accountability mechanisms faced by the states and state-level suppliers, *Seguro Popular* aims at improving the quantity and quality of these services. However, achieving the proposed quality and coverage targets of this relatively new program involves significant implementation challenges and an impact evaluation, already under way, will measure its success.

**In sum, although Mexico has made important progress in reaching low-income households, the bulk of the poor remain uninsured in bad times.** The most vulnerable groups are the elderly poor and low-income households facing catastrophic health expenditures. While Mexico spends considerable resources on pensions and health care, the distribution of resources are skewed to the better off. *Oportunidades* is not primarily designed nor intended to help the poor to cope with various shocks; hence the need to complement it with programs designed to help the poor cope with risks. Previously, job loss did not constitute a major catastrophic risk to households as the flexibility of wages, while resulting in lower household income, kept unemployment low (e.g. during the



*Tequila Crisis*). However, as discussed above, the labor market may be absorbing output shocks through employment rates rather than through wages. There is therefore a need to design adequate safety nets to help the poor to mitigate risks in case of shocks.

### Policy Options

The analysis above has important implications for policy design. First, heterogeneity implies that there is no program blueprint that can be applied, but that all programs – at least to some degree – have to take into account urban/rural, regional, and ethnic differences. *Hábitat*, a program focused on urban upgrading, is one step in the right direction to take into account urban heterogeneity. Second, the government can play an important role in increasing the productivity of the poor – and thus the prospects for income growth over the longer term. Third, the social protection system needs wide-ranging reforms to be able to provide effective coverage to the poor and vulnerable groups.

But above all, an implementation of investment climate type of policies that favor productivity growth is most needed in Mexico for sustainable poverty reduction. Policies that foster the expansion of exporting sectors together with targeted interventions to favor productivity growth in small- and medium-sized firms could increase poor workers' access to better job opportunities. However, for any such policy to work, it is instrumental to address the issues that constrain productivity growth in order to safeguard the country's competitiveness abroad and increase the demand for labor, consequently enhancing the possible access of poor workers to better quality jobs.

#### *Heterogeneity and policy design and implementation*

**Program design needs to adapt to rural vs. urban contexts and include self-targeting mechanisms.** The distinction between urban and rural cannot be overemphasized, as population size and location are key determinants for well-being and the types of policy interventions that are necessary. Keeping this continuum in mind, the distinction is also useful for policymaking, as the opportunities and challenges facing poor people in the “average” rural vs. urban areas are indeed different. For example the expansion of *Oportunidades* into urban areas has highlighted some issues related to different location contexts. One important difference between rural and urban areas is that urban women exhibit greater participation rates in paid labor outside the home – a key element of coping strategies in bad times. The conditions women face in the urban labor markets make it difficult to comply with the *corresponsibilidades* requirements of *Oportunidades*. Similarly, with the current setup, the impact of *Oportunidades* has been smaller in urban than in rural areas. The hypothesis is that while grants are the same amount in rural and urban areas, the opportunity cost of staying in school might be higher in the urban setting. Thus, program design must take into account the different circumstances and priorities of the poor in different locations.

One caveat is that the needs and even income levels vary considerably, and this heterogeneity exists even *within* poor neighborhoods. Thus, geographical targeting may involve high error rates for both inclusion and exclusion. Programs that leave room for self-targeting may improve program effectiveness.

**A territorial approach to rural development is a way to achieve local economic development through territorial, rather than sectoral, economic coordination.** This approach focuses on multi-sectoral development and economic coordination through participatory territorial planning. Economic diversification and the commercial exploitation of territorial assets are key aspects of a multi-pronged approach to increase the value-added of goods and services already produced, use territorial advantages through the introduction of new commercial products, and establish synergies between different sectors of activity. The European Union Leader Program, based on a territorial approach, offers many examples of these modalities that could further enhance the functioning of the *Microrregiones* program.

#### *Policies to promote productivity increases and long-term income growth for the poor*

**For sustainable poverty reduction, the poor need to be able to access better jobs with better pay.** Given the importance of the labor market for urban poor households, poverty will only fall if the poor can receive higher wages. Productivity growth, both for the poor and the Mexican economy as a whole, is therefore key. For real wage increases to be sustainable, the poor must become more productive. On the other hand, economy-wide productivity growth is necessary to make more quality formal sector jobs available to the working population.

**Building human capital is essential to improving the poor's chances in the job market. From a policy perspective, this means that the poor must have better access to quality education services.** Education is an essential lever for improving productivity and employability in the labor market and certainly remains a key factor in explaining poverty. In rural areas, there is a strong link between education and RNF activities, which can offer a way out of poverty. Relative to the non-educated, workers with education are generally more likely to find employment in the non-agricultural sector. As education levels rise, so does the probability of being employed in the non-agricultural sector both in low-return and high-return occupations (see Table 9). As shown above, poor household heads have more education today than 15 years ago, but the education gap, vis-à-vis non-poor households, has not narrowed. The fact that the poor are more educated means that both the quantity (years of schooling to catch up relative to the non-poor) and quality of education must increase. A challenge is to improve quality at the secondary level, especially since it will facilitate entrance for the poor to higher education levels and deepen the efforts already in place to increase access for the poor to tertiary education. This holds true for both urban and rural areas.

**Table 9. Increase in Probability of Being Employed in the Non-agricultural Sector by Educational Attainment, Rural Mexico 2002**

	<b>Non-Agricultural Employment</b>	<b>Low-Productivity Non-Agricultural Employment</b>	<b>High-Productivity Non-Agricultural Employment</b>
Primary Complete+	11%	6%	8%
Lower Secondary Complete+	20%	9%	14%
Upper Secondary Complete+	23%	7%	22%
University Complete+	28%	-21%	54%
Technical Education+	24%	-9%	37%

Note: Rural area defined as localities with less than 15,000 inhabitants. The worker is employed in a low-productivity non-agricultural job if her monthly labor income is below the average non-agricultural labor income. All results are statistically significant.

Source: *Mexico: a Study of Rural Poverty*, 2005.

**While improved access to education is an appropriate initiative for the long term, correctly designed and implemented occupational training and labor intermediation services can be instrumental in helping the poor access decent jobs in the short to medium term.** Mexico has a vast array of active labor market policies (ALMP) and programs in place, mostly offered by STPS. These include occupational training programs, labor intermediation services, and direct and indirect job creation programs. It will be important to review in more depth the coverage and cost-effectiveness of these programs. This should serve as a basis for determining which programs should be expanded to assist the poor in upgrading their skills and finding jobs, and which programs should be reformed. There is comprehensive international experience in the area of ALMPs which could provide guidance on how to improve the Mexican system (see Box 4). In rural areas, upgrading skills through vocational training can be particularly important in helping the young rural poor compete for jobs in RNF activities.

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**Box 4. Impact of ALMPs: A review of international evidence from evaluations**

*Job Search Assistance:* Job search assistance (through provision of information, counseling, or placement help) may be the most successful and cost-effective ALMP. However, targeting is important for services to be effective – like other interventions, they do not seem to help all types of workers equally. These programs have had relatively little impact on youth but have been more effective for women. Finally, the effectiveness of job search assistance depends significantly on economic conditions and the availability of new jobs.

*Training and Retraining:* Training programs can be targeted towards many different groups, including the long-term employed, those laid off in mass layoffs, and youth.

- The success of programs for the long-term unemployed tends to be heavily dependent on the business cycle, with outcomes generally better when the economy is expanding. Evaluations show that tightly targeted on-the-job training programs offer the best returns. Costs tend to be high, however.
- The effectiveness of programs for retraining workers after mass layoffs is less clear, and the evidence suggests that these programs should not be the principal source of support to assist individuals in large-scale retrenchments.
- Evaluations of youth training programs tend to focus on young workers who have had previous schooling difficulties. The evidence suggests that training, which is usually short in duration, is rarely effective in overcoming previous education problems.

*Workfare:* Unlike other ALMPs, workfare is often primarily intended to provide current benefits rather than improve longer-run employability. These programs, when carefully targeted and implemented, can provide an important short-term safety net. However, in many studies, participants tend to have a smaller probability of being employed in a quality job after participation in the program, and are likely to earn less than their counterparts. Consequently, some programs present concerns about the future private sector employability of the beneficiaries.

*Self-Employment Assistance:* Overall, evaluations suggest that these programs work for only a small subset of the unemployed population. As in the case of many other interventions, assistance targeted at particular groups – in this case, older and better-educated individuals, and often women – seems to have a greater likelihood of success. While employment outcomes are positive, they do not necessarily translate into higher earnings.

Source: Dar and Tzannatos, 2000.

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**Deepening the 1997 social security reform in areas where there is still room for action could further smooth labor market rigidities and facilitate formal employment.**

Despite the positive impact of the 1997 reforms, major changes are still needed to reduce Mexico's high non-wage labor costs (the tax wedge is 31 percent above OECD countries) and further tighten the link between contributions and benefits, so as to promote formal employment. In addition, labor provisions that hinder productivity growth, such as hiring modalities, promotion-related provisions, dispute settlement mechanisms, and termination of employment and severance payments (both individual and collective), should be addressed to increase flexibility in the labor market.

**Investment climate reforms that favor productivity growth could increase the number of good jobs available to poor workers.** Policies that foster the expansion of export sectors together with targeted interventions to favor productivity growth in small and informal firms could increase the number of good jobs available to poor workers. In line with international best practice such reforms would include addressing labor market rigidities as described above, raising the quality of institutions and services for business, and simplifying the regulations and procedures for company start-up, operation, and expansion.

**It is important to implement actions to help households escape from moderate poverty through productive activities, notably participation in formal markets.** Actions could include promoting greater accumulation of assets (human capital, financial assets, housing and infrastructure, and assets for production), improved productive knowledge (by increasing labor competence or technology), better access to markets (through the expansion of formal employment opportunities and the reduction of entry barriers in formal product markets), and reduced risks and uncertainty (through increased access to insurance, incentives for enrollment in social security, property rights recognition, and simplification for fiscal compliance).

**Better align housing with social policy.** Housing subsidies should be better targeted to the poor and the types of housing products they demand (home improvement, serviced lots). While the current programs of land reserves provide a stopgap measure for increasing urban land for housing, they do not address the fundamental bottlenecks obstructing land markets. The government could develop a comprehensive land policy addressing issues of urban and land regulation, land titling, property registries, and urban infrastructure. The current systems drive up land costs and complicate transactions.

**Improved access to finance systems for credit, savings and insurance is a key priority in both urban and rural areas.** The poor save for many reasons: to reduce exposure to shocks or minimize their consequences, for bequests for family and friends, to meet future needs, and improve their lot. Presently, the poor lack alternatives for building an asset base, which in turn limits their potential for investing, for example, in business start-ups or expansion. There is also evidence that small-scale farms operate below their potential productivity because of lack of access to credit. As such, policies that encourage asset building and help the poor accumulate secure assets that maintain their value over time indirectly help increase the productivity of the poor. Such options will be discussed more in relation to the role of assets as insurance in both rural and urban areas, but there really is a common solution to these two issues.

**Research and extension efforts are needed to make a technological leap in rural areas.** In particular, a strong policy effort is required to help producers move from low- to high-value crops, with a special focus on the poorly endowed farmer. This requires research and extension systems whose results are accessible to the rural poor.

**Young rural inhabitants need assistance in accessing land and building other assets.** Young rural inhabitants, with better education and more familiarity with modern ways of production, need to be the driving force in rural development. The transfer of land from old to young rural inhabitants can be facilitated, for example, through social security benefits to older farmers who decide to transfer their lands. Continued efforts on education were mentioned above, but access to assets is also essential. One policy option is to set up a land fund for young workers which would give them access to the financial means necessary to acquire land or to rent it in on a medium- or long-term basis. An investment fund giving young farmers access to the investments and technology necessary to get started as successful farmers would complement the land

fund. Indeed, the SRA has initiated a program in the social sector to facilitate the entrepreneurial development of young farmers.

### *Government programs to address vulnerability*

**Mexico is facing a crucial social policy challenge: how to provide better access to risk management instruments for major vulnerable groups based on a reformed, integrated, and fiscally sound social protection system.** Until now initiatives have been proposed and implemented with little coordination to the existing overall structure of the social protection system, which is inherently dualistic with separate regimes for formal and informal sector employees. *Seguro Popular*, while rightly addressing coverage issues, exemplifies this dualism. The elderly poor are largely unprotected, and low-income households cannot shield themselves from the potentially disastrous effects of health shocks or job losses.

**Combating old-age poverty requires a reformed public pension system.** High poverty rates among the elderly and a rapidly aging population highlight the need for developing safety nets for the elderly as an integral part of the social protection system. Again, the considerable international experience in this area provides different models for Mexico. Most systems operate with a combination of contributory social insurance and non-contributory social assistance structured around minimum benefits. Giving more weight to the latter can increase coverage. International evidence shows that very few countries maintain a minimum national and universal pension benefit (New Zealand and the Netherlands are two). These systems have the advantage of being unified and equitable, but they also impose a heavy burden on the general tax system, and it is not clear that Mexico could sustain this with its current tax base.

**Non-contributory and/or minimum pension guarantees targeted to the poor can provide a more efficient use of funds by funneling scarce resources to the elderly poor.** Non-contributory and/or minimum pension guarantees are often more akin to social assistance than insurance, and have been implemented in many Latin American countries. Minimum pension guarantees can be nested within existing contributory social security systems, as in the Chilean case, and typically target poor workers whose low contributions have resulted in a post-retirement income that falls short of some pre-defined minimum level. Non-contributory pensions often function outside the formal social security system; others are nested in existing formal pensions systems, such as Brazil's rural pension program. From a coverage and sustainability point of view, targeted non-contributory programs have both strengths and weaknesses; these are summarized in Box 5 below.

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**Box 5. Some pros and cons of introducing a targeted, non-contributory benefit program into the social protection system:**

The **major strengths** of introducing a targeted non-contributory benefit program include: (i) Covering the risk of poverty among the elderly with a **system that is "blind"**

to labor market history; and (ii) “Erasing” the distinction between “formal” and “informal,” at least with respect to poverty in old age.

The **major weaknesses** of introducing a targeted non-contributory benefit program are: (i) The system, depending on the benefit levels it provides, can introduce **disincentives** for people to participate in and contribute to the contributory system, which they need to do to help them smooth consumption, and which is desirable because the more participants, the better the system works (this is true whether public pooling or private individual savings); (ii) **Fiscal costs could quickly get out of hand since at least one of the eligibility criteria (old age) will be met by most people; this is no small “con” and there are plenty of examples worldwide where, because of poor targeting, the non-contributory component ends up creating enormous fiscal outlays.**

**In what ways can these weaknesses be addressed?**

- The incentive issue can be addressed by making the non-contributory benefit modest (the Chilean benefit is 30 percent of the minimum wage).
- Fiscal and incentive issues can be addressed by adopting an “insurance” concept of coverage, i.e. only those that suffer the bad state (poverty in old age) actually get the benefit, but all are “covered” (just as in any insurance program, participants are covered though the risk of the eventuality occurring is small).
- Fiscal problems can also be minimized by making the non-contributory benefit taxable, along with all other sources of income (this also encourages participation in the tax system – to receive the benefit, one must file a tax claim).
- Costs can also be minimized – particularly targeting costs – by piggybacking on an existing, well-targeted poverty program, like *Oportunidades*. Chile has done this by designing a special version of the *Puente* program (see below) for elderly households
- Large savings can arise from creating time-flexible parameters around age criteria for eligibility, as life-expectancy changes, both for the contributory and the non-contributory systems. Many fiscal problems arise simply because old-age benefit programs are not designed at their inception to take into account the reality of changes in life expectancy over time.

Source: *Mexico: An Overview of Social Protection*, World Bank, 2005.

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**Health system reform must tackle both expanded coverage and inefficiencies in the provision of services.** Mexico has introduced new and promising initiatives in the health sector – *Seguro Popular* – which have expanded coverage among the poor. But as noted, the dualistic structure of the social protection system for health remains intact, as formal sector workers are covered by IMSS and ISSSTE. Also, a high degree of vertical segmentation (different providers covering distinct population groups with different categories of service) characterizes the Mexican Health System, resulting in higher administrative costs and lower efficiency than necessary. Again, other countries offer interesting examples for streamlining the service provision in order to expand coverage while tackling institutional problems such as overlap and inefficiencies among providers with the benefit of better coordination and lower administrative costs.

**A more inclusive labor protection scheme should be developed, one which covers the most vulnerable and does not distort the functioning of the labor market.** The current system of unemployment protection (severance payments) does not protect informal workers and needs to provide adequate service to formal workers. A reformed program could be jointly funded by employers, workers, and the government through individual accounts to provide supplemental income during job-search periods, thus facilitating easier labor market adjustments. If eligibility is well-defined and costs are reasonable, this type of system may encourage employers and employees to register contracts that they might not otherwise.

**Workfare programs could help workers cope with the impact of macro-economic shocks.** Increased liberalization and structural changes in labor markets mean that job loss may become an important source of shocks in the future. In line with the social protection system in existence, only formal sector employees currently have unemployment protection, leaving the poor without safety nets. In addition to general unemployment protection, programs that specifically target the poor in times of crisis could be designed. Workfare programs, such as the above-referenced PET program, can play an important role in mitigating macro-economic shocks, if appropriately designed (Box 6).

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**Box 6. Designing workfare programs to alleviate poverty and cope with risks**

The following are the key features that need to be included in a workfare program for it to realize its full potential as a poverty-reducing and risk-coping instrument and avoid the generation of incorrect incentives or inefficient use of resources:

- *Wage level:* The wage rate should be set at a level which is no higher, and preferably slightly lower, than the prevailing market wage for unskilled manual labor in the setting in which the scheme is introduced.
- *Eligibility:* Restrictions on eligibility should be avoided; the fact that one wants work at this wage rate should ideally be the only requirement for eligibility. In particular, eligibility should not be restricted to the head of household, as it constrains families' own adjustment mechanisms (Ravallion, 1999) and reduces workfare's effectiveness in cases where the shock is felt as a decline in real wages rather than unemployment. In cases where resources are limited, some clear secondary targeting or rationing rule might be needed. Options include limiting eligibility to one person per family (but still allow the family to pick the person), limiting the duration of the job; limiting jobs to families with dependents; community-based targeting for who gets the jobs; periodic lotteries.
- *Labor intensity:* The labor intensity (share of wage bill in total cost) should be as high as possible. The level of labor intensity will depend on the relative importance attached to immediate income gains versus (income and other) gains to the poor from the assets created. This will vary from setting to setting. Generally speaking, unskilled labor costs account for 40 to 60 percent of total project costs on a large and



diverse portfolio of high value works (the balance being skilled and semi-skilled workers, equipment and materials, and administrative costs). It is possible to raise this ratio, but this usually implies restricting the portfolio of works and/or limiting the return on the work.

- *Female participation:* Provision of childcare or preschool services can improve participation by women (as well as provide employment opportunities for them). Also, women tend to benefit from piece rates or task-based wages, since that allows them to combine the work with their responsibilities in the home.
- *Targeting of projects:* The projects should be targeted at poor areas, and the assets created should be of maximum value to poor people in those areas. Any exceptions – in which the assets largely benefit the non-poor – should require co-financing from the beneficiaries, and this money should go back into the budget of the scheme.
- *Timing:* In larger municipalities projects design needs to take into account the fact that municipal and master plans are annually determined and include fairly complex works that municipal authorities preferred to contract out. Options to address these issues were developed in the Argentine *Trabajar* program and included changing the workfare cycle to allow the municipalities to work with a projected financial envelope of *Trabajar* funds and developing a series of small stand-alone projects that could be part of a larger infrastructure project (Fay, Cohan and McEvoy, 2004).
- *Sustainability:* Sustainability of the assets created requires the program to include an asset maintenance component.

Source: *Urban Poverty in Mexico*, World Bank, 2005.

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**Complementary policies which lie beyond the scope of a social protection system – such as financial sector reforms and macroeconomic management – are also essential in helping the poor mitigate risks.** Social protection reform needs to be supported in other areas which may help the poor deal with income shocks and poverty risk in old age. These include creating the framework conditions through better housing and financial services, research and dissemination of agricultural know-how and technology which promotes more shock-resistant crops, and macroeconomic policies which prevent the repetition of an economic crisis like the *Tequila Crisis*.

**Helping the poor improve their asset portfolio encourages self-insurance – this includes more liquid housing markets and reforms of the financial system.** Building assets is critical for the poor who lack access to insurance and credit instruments yet remain constrained not only by limited resources but also by the limited savings mechanisms available to them. Beyond social insurance, public policy needs to help the poor accumulate assets that retain their value over time and that can be divested in times of need without high transaction costs, thus helping low-income households cope with risks on their own. With respect to housing – often the most important asset in a low-income household's portfolio – more liquid housing markets are needed. An important step would be to develop housing finance schemes for the poor that allow for a used housing market to develop (Chile and Costa Rica provide good examples).

Micro-credit for home improvement and expansion also allows low-income households to increase the value of their asset.

**Improvements in rural finance need to be followed up to ensure a self-sustainable rural micro-finance system capable of matching existing needs for saving instruments, personal and production loans, and other financial services.** Since the poor have little access to the formal financial system, they rely on other, often sub-optimal, informal mechanisms for savings and loans. Positive developments have been taking place in rural finance with the 2001 *Ley de Ahorro y Préstamo*, the constitution of BANSEFI, and the creation of the *Financiera Rural* in substitution of BANRURAL. Much, however, remains to be done. Policy reforms could entail: (i) expanding BANSEFI operations with the resources used for ad hoc credit programs; (ii) using the *Financiera Rural* to assist in the development of a rural micro-finance system; and (iii) assessing the specific regulatory needs of rural micro-finance institutions with a view to making the norms of the *Ley de Ahorro y Préstamo* more flexible for these institutions without sacrificing financial soundness.

**In urban areas, policies can be implemented to bridge the gap between the formal financial sector and the poor.** Urban areas are not sufficiently covered by BANSEFI, yet the recent success of a private financial institution geared towards low-income households shows an important pent-up demand for financial services. Efforts to improve the reach of the formal banking sector include approaches to improve the financial infrastructure for financial intermediation (credit information registries, legal and regulatory framework for secured transactions) and approaches that encourage banks to offer low-cost financial products to poor households. This entails greater use of information technology (PDAs, smart cards, and handheld computers) and encouraging banks to offer “lifeline” accounts with low or no minimum balance requirements. In addition, efforts to reduce the lack of familiarity between poor households and banks include financial literacy programs, publication of research on the profitability of providing bank services to the poor, programs to encourage large employers to pay through electronic transfers rather than by checks, and relying on banks for direct income transfers to the poor through the formal banking sector (the effort to rely on BANSEFI for *Oportunidades* transfers is an excellent program of this kind).

**Assistance to subsistence farming strengthens the primary safety net for poor agricultural households.** Support to the subsistence economy will help rural households build up their most important safety net, but also favors increasing productivity in agriculture and environmental improvement. Examples of actions which help upgrade subsistence farming are technological transfers through soil management programs and environmentally friendly yield-increasing technical packages for traditional crops.

**In order to mitigate the risks for natural disasters and weather-related shocks, it is important to promote the use of technologies that are less vulnerable to prevalent risks in particular regions through appropriate research and extension.** This includes promotion of crop varieties more resistant to water stress or to pests, or crops maturing

at a good time according to local weather patterns. Pest control and sanitary measures in general constitute additional measures to reduce natural shocks.

**Access to financial and insurance services could also play a crucial role in self-insurance strategies against natural disasters and weather-related shocks.** Formal crop insurance schemes are not particularly useful for the rural poor whose main income is not from independent farming and for whom the insurance is too expensive. Parametric insurance systems linked to weather parameters offer an interesting alternative. Finally, a well-developed financial system and rural financial services could play a crucial role in self-insurance and risk management strategies among the rural poor, mostly by facilitating savings and personal loans.

**The surge in poverty during the *Tequila Crisis* and its aftermath points to the critical importance of maintaining macroeconomic stability to avoid negative effects on the poor in times of crises.** Since 1995, Mexico has maintained low inflation and stable, albeit moderate, economic growth. It is important to keep in mind that macroeconomic stability (lowered inflation) and less rigid labor markets are both key in reaping the full benefits of increased trade liberalization and economic integration. Given the disastrous impact of the *Tequila Crisis*, macroeconomic stability is probably the single most important risk and vulnerability-reducing policy of the post-crisis period.

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