



PART II

The role of key  
social systems

Three generations living together in Indonesia. Household members can increase their resilience by pooling individual energy and resources to manage risks, but internal and external obstacles limit their ability to do so efficiently.

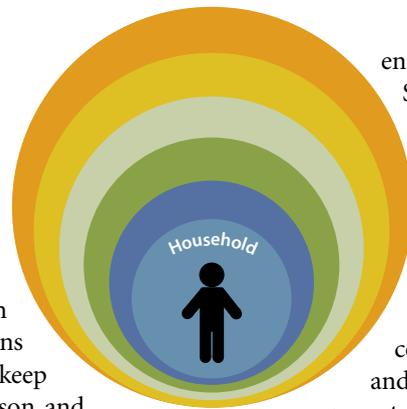


## Households are the first line of support to confront risk and pursue opportunity

### Sharing good times and bad times

Shamsun Nahar and her family have helped one another in good times and bad as they struggle to leave poverty behind. Shamsun is 44 years old and lives in a village in central Bangladesh with her 16-year-old daughter. Two sons live with their wives nearby but keep separate households; her eldest son and his family live in Dhaka.

Fifteen years ago, when Shamsun's husband, Mobarak Molla, was 35, he felt the first symptoms of tuberculosis. Unable to afford proper treatment, he died at age 40. The couple had owned about an acre of land and an ox. When Mobarak died, Shamsun had to sell their ox to cover funeral expenses and buy food. Her three sons continued to work in the field, but because they had no ox, they had to share the plot with another farmer, so they harvested a smaller crop. Slowly, Shamsun managed to improve her situation, thanks to a few loans she obtained from her village savings group and a local nongovernmental organization (NGO). This money enabled her to send her eldest son, Masud, to work for part of the year as a rickshaw driver in Dhaka—where he eventually stayed permanently—as well as to set up a very small shop, where she sells necessities such as soap and biscuits. Having two sons nearby and one in the city means Shamsun can get help in times of crisis. The steady income from her shop enables her to provide the basics for herself and her daughter. However, Shamsun worries about being able to save



enough for her daughter's marriage. She also feels vulnerable to illness and other negative shocks because of her limited assets.<sup>1</sup>

This story illustrates some of the risks that vulnerable families face and how they attempt to build resilience together. Large shocks can force poor people to use costly coping measures that set them back and undermine their ability to escape poverty. In contrast, families that are able to invest in human capital, accumulate financial and physical assets, and share risks among their members can become resilient to shocks and are better positioned to pursue opportunity.

Jean-Jacques Rousseau wrote in *The Social Contract* that “the oldest of all societies, and the only natural one, is that of the family.” Indeed, for most people, the members of their household constitute the main source of material and emotional support. A household is defined here as a group of individuals related to one another by family ties (kinship).<sup>2</sup> They might live under the same roof or not, and they might be a small nuclear family of parents and children, or a large extended family including grandparents and other relatives. In any event, households form a very strong and tightly knit community, where members often pool their resources to consume, invest, and care for the most vulnerable, among them children and elderly adults.

Many households, however, particularly poor ones, struggle to help individuals cope with shocks and are unable to support their search for opportunities. As units, they face the challenges both of pro-

protecting and insuring their members against common shocks, such as illness and income losses, and of accumulating sufficient assets and human capital to grow their income.<sup>3</sup> To meet these challenges, households need to have sufficient resources and to be closely connected to their community, to markets, and to good-quality public goods and services. In addition, family dynamics and social norms sometimes limit the extent to which members can collaborate effectively, increasing the vulnerability of certain individuals within the household—typically women, children, and elderly adults—in the face of shocks.

Government policies can strengthen households' ability to manage risk by facilitating their access to information, financial tools, and labor markets. Public policies should also ensure access to education and provide basic protection against health and income risk, especially for the poor. And they can address inequalities within the household through a mix of regulation and interventions to empower and protect the most vulnerable members.

This chapter focuses on the internal and external obstacles that prevent households from building adequate preparation and from sharing risk within the household; the implications of those obstacles for the vulnerability and resilience of households and

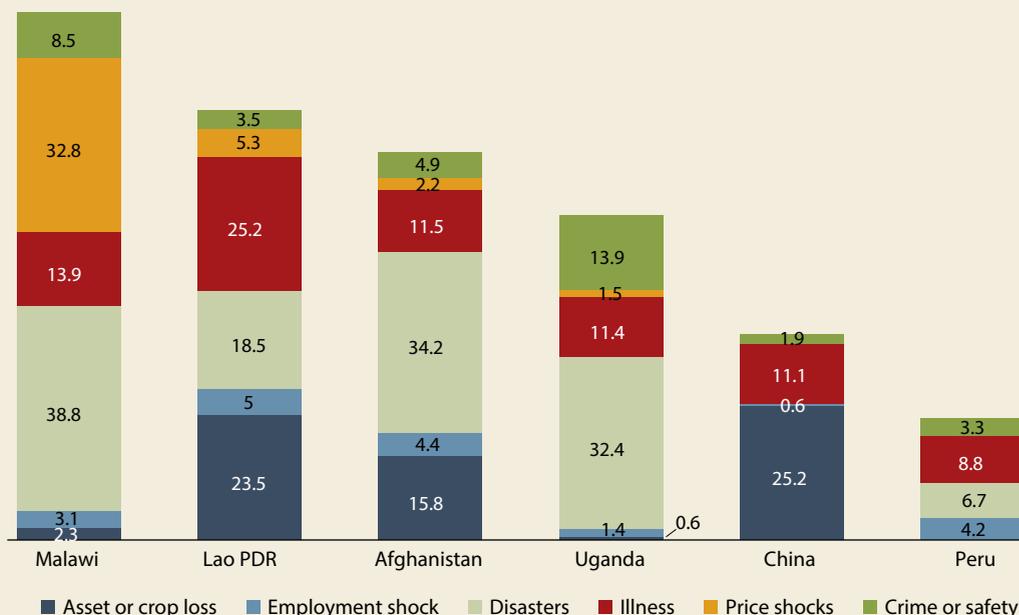
individuals; and the actions households can take to improve their preparation in the face of risk and opportunity. It also focuses on public policies to help households prepare for and cope with risk. It starts by describing the main shocks that affect households in developing countries, the different strategies that households use to manage risk, and the obstacles they encounter. It then discusses how a systemic approach to policy for risk management should consider the multiple risks that households face, and all the different instruments that they need to manage these risks effectively. This systemic approach has the benefit of highlighting complementarities and synergies across policies, in particular for protecting households against risk while enhancing their access to opportunity.

### What risks do households face and how do they cope?

Every day, millions of people all over the world fall sick, lose their jobs, fall victim to crime, or are hit by natural hazards. The wide variation in both the incidence and the nature of the shocks that affect household members is shown in figure 3.1, which reports survey data from six countries documenting shocks

**FIGURE 3.1** Shocks to households vary considerably across countries

Percentage of households reporting shocks in each category



Source: Heltberg, Oviedo, and Talukdar 2013 for the WDR 2014.

Note: Multiple answers per household were possible, so totals may add up to more than 100 percent. The recall period was 12 months.

that household members suffered over the previous 12 months. Disasters, illness, and asset losses are the most common shocks across countries, followed by price shocks. Rural and urban households are exposed to different risks: weather shocks typically affect rural households disproportionately, whereas urban households are more exposed to price shocks, crime, and unemployment (see chapter 1).<sup>4</sup>

### *Household members can help one another manage risk and pursue opportunity*

When household members share risks, they can increase their own resilience and that of the household. Economic theory suggests that individuals should be able to smooth consumption over their life cycle. As chapter 1 argues, they are better able to do so when protection and insurance mechanisms—either formal or informal—are available to help them absorb income shocks and maintain stable consumption. In particular, when perfect credit and insurance markets are not available, household members can increase their resilience by pooling individual energy and resources to invest in protection and insurance, and to cope with shocks—particularly with idiosyncratic shocks.

By and large, empirical research shows that households manage to protect their consumption from shocks, albeit not fully. Research in Bangladesh, Ethiopia, India, Mali, and rural Mexico has

found that households protect their consumption—at least in part—after illness shocks by using several strategies, including increasing labor supply within the household.<sup>5</sup> A recent study for Indonesia reveals that while households face significant income risk from several kinds of shocks, they manage to achieve a level of insurance representing at least 60 percent of this risk. On average, however, expected consumption represents 65 percent of the expected income, suggesting that households are willing to incur a large cost to insure their consumption.<sup>6</sup> Looking more closely at how the composition of the household affects shock responses, a study of households in Senegal shows that in urban areas, larger households that include extended family members experience smaller declines in basic consumption after being hit by a negative shock, compared with smaller households. At the same time, heads of household supporting extended families experience the largest relative declines in (food) consumption, to preserve the consumption of the other household members.<sup>7</sup>

Concern and attention to the most vulnerable members distinguish the household from other groups. Several factors, including altruism, reciprocity, and social norms, explain why household members care for one another (box 3.1). Whatever the motivation, abundant evidence shows that in all socioeconomic and cultural contexts, the family is seen as a key pillar of support to the individual. To cite an

#### **BOX 3.1** *Altruism, exchange, or social norms: What motivates family members to care for one another?*

Why do parents invest in their children's education? Why do adult children take care of their elderly parents? Why do spouses pool their resources, siblings lend money to one another, and extended family members check on their relatives? Economists and sociologists have long pondered these questions and have come up with three broad theories for why family members care for one another.

According to the theory of altruism, an individual's welfare depends on the welfare of others. Maximizing utility then involves transferring a portion of one's resources to others.<sup>a</sup> More recent research suggests that evolutionary forces such as genes or socio-cultural influences may be behind this altruism.<sup>b</sup> The second theory suggests that social norms define how family members should help one another.<sup>c</sup> The third theory, one emphasizing exchange, hypothesizes that familial support is rooted in reciprocal arrangements, which can (but need not) be reinforced by social norms:

people provide assistance now in the expectation that they might require assistance later.<sup>d</sup>

Empirical evidence suggests that each of these theories has merit.<sup>e</sup> For example, reciprocal arrangements such as time-for-money exchanges between parents and children are more common in countries where government support is weak and access to markets is limited, suggesting the presence of exchange motives. Kinship norms may explain why grandparents frequently care for their grandchildren in certain countries in Sub-Saharan Africa and in China. Altruism explains why parents have been found to transfer money to children on the basis of need, and children to devote greater amounts of time to parents with the worst health. Other evidence, however, reveals that motives are not always altruistic: the extent of parental investment in children has been shown to influence children's support for their parents.

Source: WDR 2014 team.

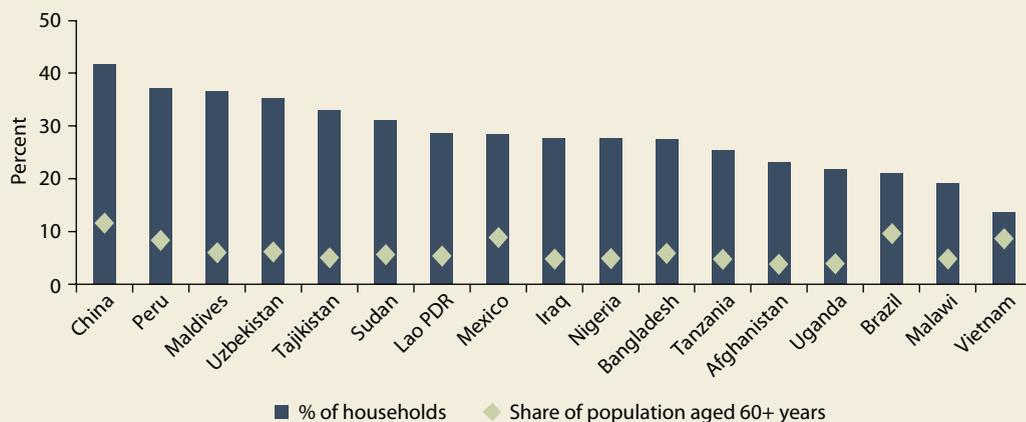
a. Becker 1974.

b. Alger and Weibull 2010.

c. Alesina and Giuliano 2013.

d. Bernheim, Shleifer, and Summers 1985.

e. Silverstein and Giarrusso 2010.

**FIGURE 3.2** *Elderly people frequently live with other family members**Share of households with at least one member aged 60+ years, and share of population aged 60+ years*

Source: WDR 2014 team based on data from household surveys (years range between 2002 and 2011) and United Nations 2009.

example, evidence on living arrangements in 17 developing countries shows that on average 28 percent of households have members over the age of 60, a significantly higher share than this age group represents in the total population (figure 3.2). In many circumstances, children and grandchildren take care of older relatives. For example, in China, 90 percent of elderly with disabilities living with their families have access to support, compared with 73 percent of elderly living alone.<sup>8</sup> In other cases, the elderly take care of younger relatives. In Sub-Saharan Africa and China, for instance, grandparents are often the main caregivers of their grandchildren.<sup>9</sup>

Obstacles internal and external to the household limit the ability of its members to manage risks efficiently, however. As chapter 2 describes in detail, financial constraints, information constraints, and an inability to translate information into knowledge and knowledge into action all limit the ability of individuals to manage risks effectively. Social obstacles such as missing markets and public goods, moral hazard, externalities, and social norms limit the range of instruments that households have at their disposal to manage risk. In this context, poor households in particular try to reduce their exposure to shocks by opting for low-risk, low-return activities and are forced to take costly measures to cope

with shocks once they hit—a strategy that increases their vulnerability to future shocks even more.

Moreover, complex dynamics within the household may increase the vulnerability of some members. Empirical evidence shows that household members—who often have different preferences—allocate resources (labor, capital, and output) following a bargaining process that in many instances appears to be inefficient.<sup>10</sup> For example, in Burkina Faso, husbands and wives cultivate separate plots, following the traditional division of labor among rural couples. Plots run by wives are significantly less productive, which implies that household income could be increased with a different allocation of labor across plots. In Côte d’Ivoire, husbands and wives cultivate “gender-specific” crops in separate plots, and they strictly allocate the income of each crop to specific consumption categories, such as personal consumption, food, and education. Thus, as the income from one crop fluctuates, so do the consumption expenditures tied to that income. Consumption decisions based on pooled incomes would increase the stability of consumption for both spouses as well as for their children.<sup>11</sup> Experimental evidence from games comparing the behavior of husbands and wives also shows that in many cases their choices fail to maximize joint income.<sup>12</sup>

**Pooling risk within the family has been a basic form of insurance from time immemorial.**

### To respond to shocks, poor households use costly strategies, with unequal effects on household members

When shocks damage substantial proportions of households' assets and slash their income, households with limited savings or insurance mechanisms must take difficult steps to maintain a minimum level of consumption, mainly of food. The shock survey data mentioned earlier reveal that more than half of households affected by health and income shocks in Afghanistan, China, and Tajikistan, and almost half of households in Lao People's Democratic Republic and Uganda, reported having cut consumption.<sup>13</sup> Regression analysis of the data shows that in several countries, poor households tend to use costly coping mechanisms, including selling a productive asset such as livestock, cutting food consumption, or consuming lower-quality food (table 3.1). Selling productive assets is particularly harmful because it curtails the household's ability to generate adequate income for a long time after the shock. Strategies such as working longer hours, taking on more work, or migrating seem to be less clearly associated with

poverty. However, households with higher wealth and better access to infrastructure and services more frequently report using their savings or borrowing money, either formally or informally.

The impacts of the more costly coping strategies can be long term and even permanent, particularly for children. Empirical evidence from studies of the impact of large shocks (usually natural hazards) on economic and human development outcomes typically finds that while all household members experience hardship, adult outcomes tend to revert to their long-term trends eventually, whereas children can suffer permanent effects, especially during the critical development period of the first two years of life.<sup>14</sup> These effects, which tend to be more prevalent in poor households, translate into lower earnings and worse health in adult years. In some cases, larger negative impacts have been documented for girls than for boys.

Shocks can cause long-term damages to human capital when the nutrition of very young children is compromised. Children who are heavier and longer at birth tend to develop better cognitive skills that enable them to attain more education and get better

**TABLE 3.1** *Poorer households are more likely to report using costly mechanisms to cope with shocks*

Country	Type of household most likely to report coping strategy				
	Use savings/ credit/assets	Work more/ migrate	Assistance (government/family/ community/NGOs)	Sell productive assets	Reduce consumption quantity/quality
Afghanistan	Richer	Richer	Richer	Poorer	Poorer
China	—	Richer	—	Richer	Richer
Iraq	Richer	Richer	—	—	Poorer
Malawi	Richer	—	—	—	—
Mexico	Poorer (credit/asset sales)	—	—	—	Poorer
Nigeria	Richer	—	—	—	—
Peru	Richer	—	—	—	—
Sudan	Richer	Poorer	Poorer	Poorer	Poorer
Tajikistan	—	—	—	Richer	Poorer
Uganda	Richer (savings/sell assets), poorer (credit)	—	Richer	—	Poorer
Uzbekistan	Poorer (credit)	Poorer	—	Poorer	—

Source: Heltberg, Oviedo, and Talukdar 2013 for the WDR 2014.

Note: The table presents the results of regression estimations where socioeconomic indicators (either consumption quintile or asset-based measure of wealth) significantly affected the probability of reporting the corresponding coping strategy (significance at least 5 percent). Regressions include region and urban fixed effects, household size, gender, education and occupation of head (where available), dependency ratio, consumption quintile, and the principal factor of access to piped water, quality of roof/floor, having a cell phone, and distance to public services and main roads.

— = Socioeconomic indicators not significant. No data were available for the sale of productive assets in Peru.

jobs. Birth weight is closely related to the quality of the mother's nutrition during pregnancy. Therefore, reducing food intake during pregnancy can cause large and irreversible damage to the development of children in utero. Extreme shocks, such as the 1919 influenza pandemic and the great Chinese famine of 1959–61, caused losses in height, cognitive development (measured in years of schooling), and overall health outcomes for the generation born during those years. Shocks can also compromise the quality of nutrition available to children in their first two years, which is also essential to physical and cognitive development. The 1994–95 drought in rural Zimbabwe cut growth by 1.5 to 2.0 centimeters among children aged 12 to 24 months. Children who were 3 years old or younger during the 1998–2000 economic crisis in Ecuador had a significantly lower height-for-age score and a lower vocabulary test score than children of same age in noncrisis times.<sup>15</sup> Moreover, in a few countries, shocks have been found to hurt early nutritional and developmental outcomes for girls disproportionately.<sup>16</sup>

In the face of disaster, some households also sacrifice investments in education in exchange for having an additional member—usually a school-age child—enter the workforce. School attendance dropped by almost 7 percent among those households more heavily hit by two strong earthquakes in El Salvador in 2001, while children in these households were two and a half times more likely to be working after the earthquake than before (the share rose from 6.5 percent to 16.5 percent). Sometimes, the temporary use

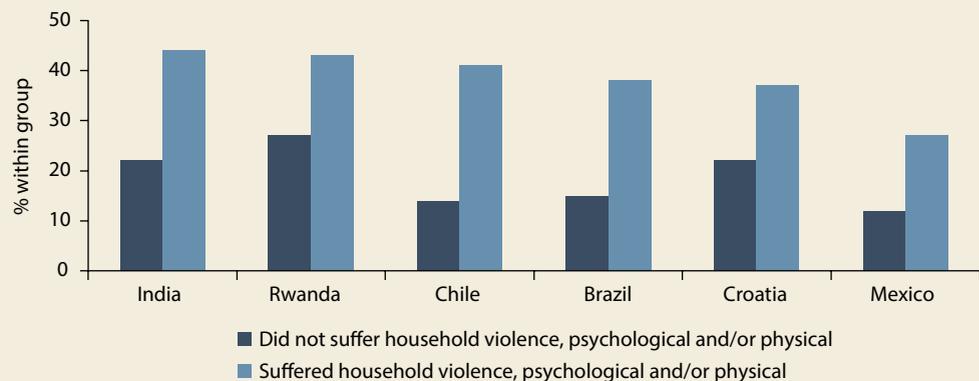
of child labor has permanent consequences for their human capital. In northern Tanzania, children who had to work an additional 5.7 hours a week after a rainfall shock attained one year less of school, compared with those who did not work more.<sup>17</sup>

Stress, fueled by shocks, can increase domestic abuse. Adult stress levels increase significantly with shocks. The Asian financial crisis of 1997 increased depression and anxiety in Indonesia and Thailand, particularly among the less educated, urban, and landless populations. In Kenya, farmers experience increased levels of cortisol (a hormone produced in times of stress) when rainfall is too low.<sup>18</sup> Focus group participants in Cambodia, Jamaica, and Mongolia reported that the hardship generated by the 2008 crisis had increased men's violence toward wives and children.<sup>19</sup> Shocks can also lead to increased abuse of elderly people. A study in rural Tanzania found that during years of low rainfall, the number of murders of elderly women—accused of witchcraft and killed by their family members—nearly doubles.<sup>20</sup>

Physical and psychological abuse experienced during childhood can have long-lasting effects on identity and behavior, not only undermining the self-esteem that is crucial for decisions regarding risk taking and pursuing opportunities but also increasing the likelihood of violent behavior in adulthood.<sup>21</sup> A survey of men in six countries found that those who had been victims of abuse during childhood were twice as likely to have been violent toward their partners (figure 3.3).

**FIGURE 3.3** *Men who experienced violence in the household when young are more likely to act violently as adults*

*Percentage of men who have perpetrated violence on an intimate partner as adults*



Source: WDR 2014 team based on data from Contreras and others 2012.

## How do households prepare to manage risks, and what obstacles do they face?

To confront risk and pursue opportunity, household members acquire knowledge and invest in protection and insurance. The quality of their risk management depends on their access to information, markets, public services, and infrastructure, as well as on the level of risk sharing within the household.

### *Acquiring and sharing knowledge about risk and opportunity*

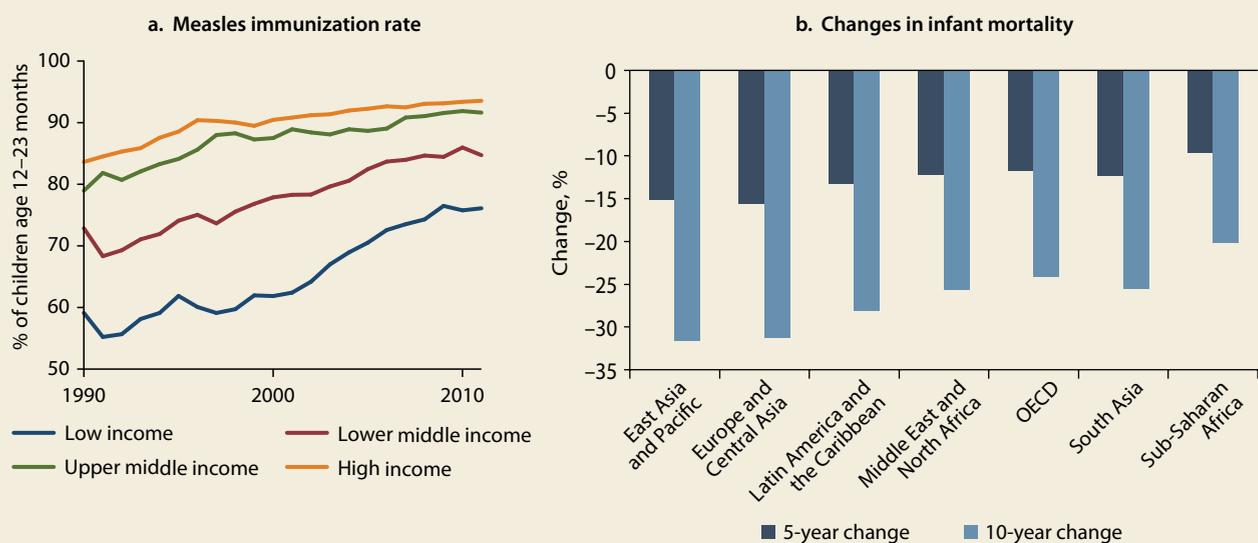
Obtaining information is crucial for managing risk. News about such matters as prices, weather risks, better agricultural technologies, and job openings can immediately improve the ability of a household to prepare for and respond to risk. Mobile phones have increasingly become indispensable tools to obtain and exchange information for many households in the developing world, which account for nearly two-thirds of the world's 4.77 billion users. First, by drastically reducing communication costs, mobile phones improve cohesiveness of disperse social groups and networks, enabling people to respond more quickly to the income shocks of other family members.<sup>22</sup> Second, readily available information on risks, such as weather updates and early warnings, can assist households in preparing for disasters.

Third, mobile phones can reduce information asymmetries and price uncertainties, enabling farmers to increase their surplus. Finally, mobile banking offers opportunities for household members to transfer money to one another and undertake other financial transactions in a safe and cost-efficient way.<sup>23</sup>

### *Investing in human capital to increase protection and access to opportunity*

Better nutrition, sanitation, and access to preventive health care increase productivity and reduce the risks of morbidity and mortality. Historically, one of the leading causes of premature death in the developing world has been the high risk of maternal mortality and the exposure of young children to malnutrition and disease. In recent years, however, more investment in prevention, better health services, and higher income have led to a significant decline in infant, child, and maternal mortality. Immunization rates for measles, for example, which were as low as 60 percent in South Asia and 64 percent in Sub-Saharan Africa in 1990, are now above 75 percent in every region of the world (figure 3.4a). Since 2002, infant mortality rates have declined significantly as well (figure 3.4b). On the other hand, dietary risks (leading to obesity) and smoking continue to increase, which has made noncommunicable disease a leading cause of death (figure 3.5).

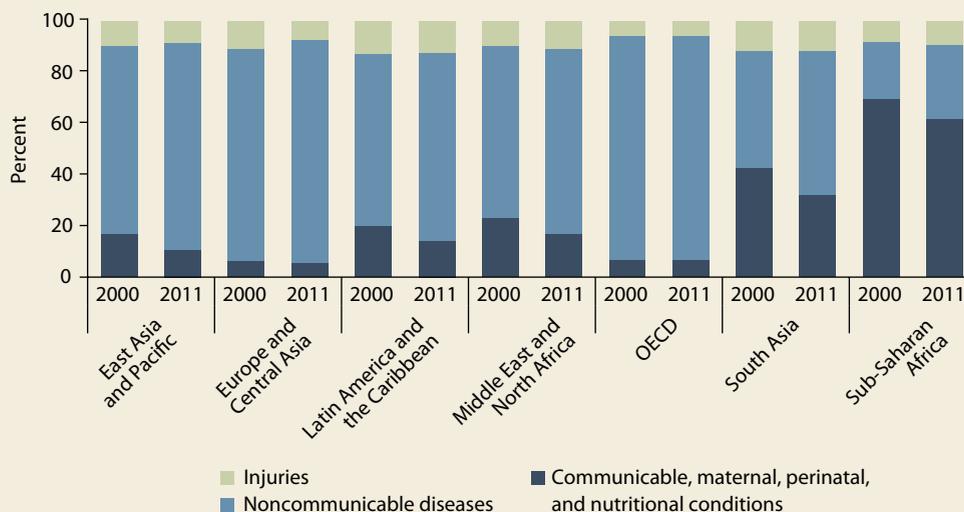
**FIGURE 3.4** *Immunization rates have increased and infant mortality has declined everywhere*



Source: WDR 2014 team based on data from World Bank World Development Indicators (database).

Note: The 5-year change indicates the change in the infant mortality rate between 2007 and 2011. The 10-year change indicates the change between 2002 and 2011. Organisation for Economic Co-operation and Development (OECD) countries in the panel b are high-income countries that have been members of the OECD for at least 40 years. All other countries are grouped into geographic regions.

**FIGURE 3.5** *The risk of death from noncommunicable disease is growing in all developing regions*



Source: World Health Organization Global Health Estimates Summary Tables: Deaths by Cause, Age and Sex, available at [http://www.who.int/healthinfo/global\\_burden\\_disease/en/](http://www.who.int/healthinfo/global_burden_disease/en/) (regional tabulation prepared specifically for the *World Development Report 2014*).

Note: Organisation for Economic Co-operation and Development (OECD) countries in the figure are high-income countries that have been members of the OECD for at least 40 years. All other countries are grouped into geographic regions.

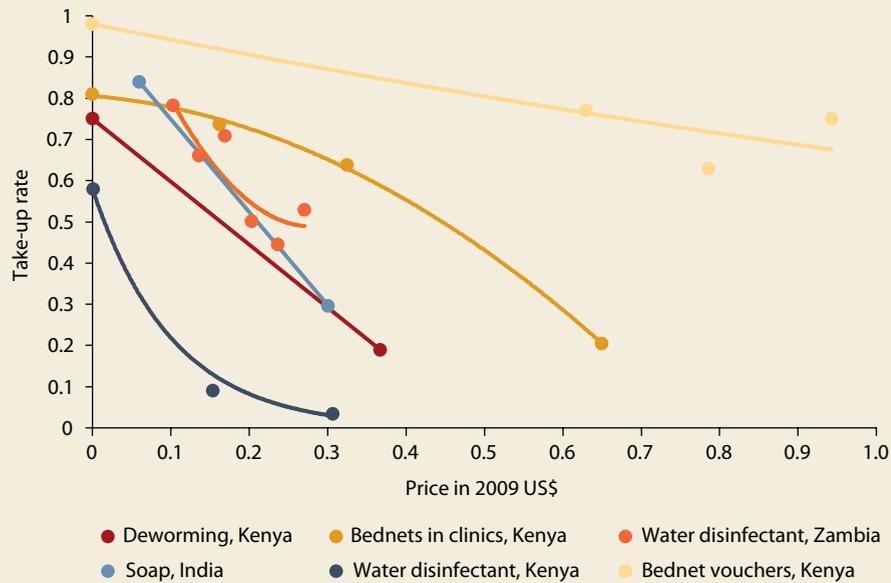
Despite the clear benefits of disease prevention in reducing risk and improving welfare, demand for tools to reduce the risk of disease can be surprisingly low among poor households.<sup>24</sup> For example, experimental trials that have provided several such tools—including insecticide-treated bed nets, water disinfectants, soap, multivitamins, and improved cookstoves—to poor households show that demand falls sharply in response even to small increases in price (figure 3.6). Resource constraints may not be the only explanation for this high price elasticity, however; as chapter 2 discusses, many behavioral and cognitive biases reduce investment in protection. Nonetheless, experiments in Guatemala, Kenya, India, and Uganda that tried to disentangle the factors behind this behavior found that cash constraints explain most of it, whereas education and peer effects have negligible effects. Differences in preferences and bargaining power can also hinder the ability of some household members to invest more in protection. In the case of improved cookstoves offered to households in Bangladesh, women—who benefit the most from this technology—were unable to purchase them because they have little say over financial decisions.

Households also invest in education to manage risks better and to take advantage of opportunity.

Education helps people achieve better health outcomes. For example, young people with more education are less likely to engage in substance abuse, violence, and unprotected sex.<sup>25</sup> In Taiwan, China, the 1968 expansion of compulsory education from six to nine years reduced the likelihood that girls of primary school age at the time of the reform would give birth to underweight babies as adults, compared with girls who were not affected by the reform.<sup>26</sup> Education also increases productivity and income.<sup>27</sup> The education system provides children with critical generic skills (literacy and math), as well as “soft” or socioemotional skills, such as effective communication, the ability to work in teams, and the ability to learn new concepts and methods. These skills are crucial in the transition from school to work, and they enable people to adapt to a rapidly changing work environment. Generally speaking, an additional year of education is associated with a 12 percent increase in earnings, although returns vary greatly across income levels.<sup>28</sup>

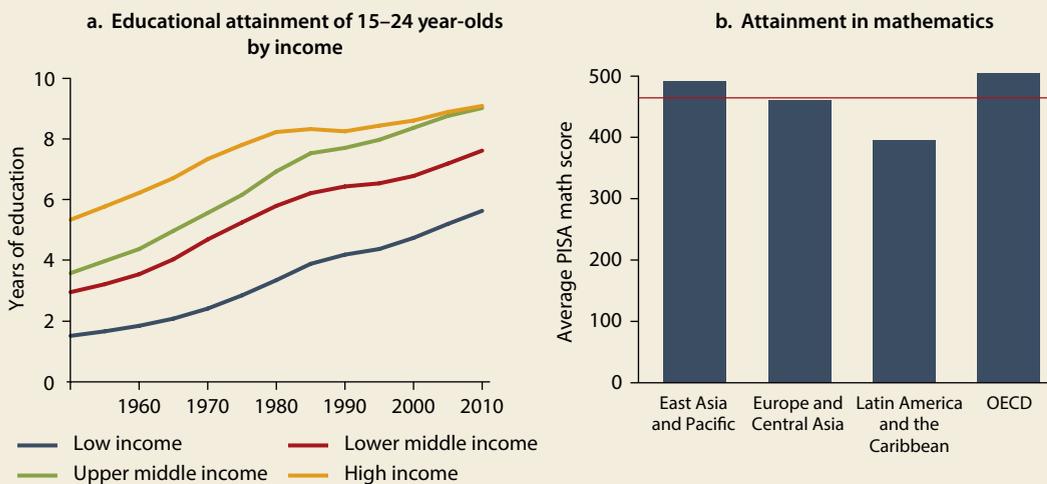
Educational attainment is rising, but low-income countries still lag behind. While much progress has been made toward the Millennium Development Goal of ensuring that all children complete primary school, less progress has been made for higher grades of attainment (figure 3.7a). The low attainment,

**FIGURE 3.6** Demand for preventive health care products falls steeply as the price increases



Source: Abdul Latif Jameel Poverty Action Lab (J-PAL) 2011.

**FIGURE 3.7** Low-income countries still lag in educational attainment, and some middle-income countries suffer from gaps in quality

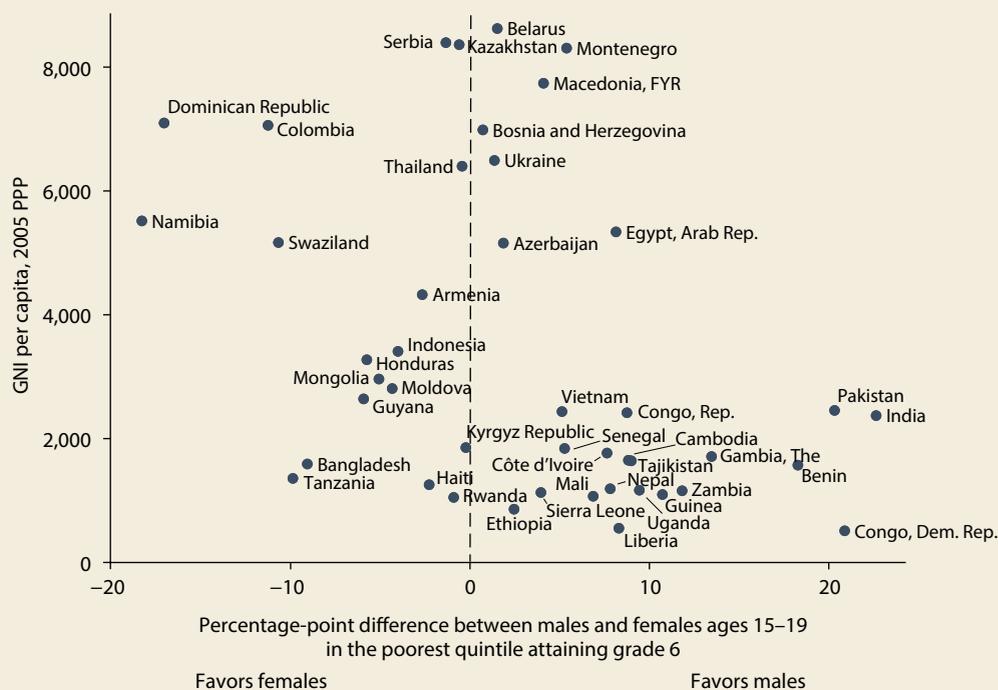


Source: WDR 2014 team based on data from Barro and Lee 2010 (panel a) and OECD Programme for International Student Assessment (database) (panel b).

Note: In panel b, the red line indicates overall average score. Organisation for Economic Co-operation and Development (OECD) countries in the figure are high-income countries that have been members of the OECD for at least 40 years. All other countries are grouped into geographic regions. PISA = Programme for International Student Assessment.

**FIGURE 3.8** *Educational attainment is still uneven for boys and girls from poor households, especially in lower-income countries*

*Gender gap in primary education by level of income*



Source: WDR 2014 team based on data from World Bank EdAttain (database).

Note: Positive differences denote a lower percentage of females attaining grade 6 relative to males. Household poverty is based on an index of assets and housing characteristics. Years are between 2005 and 2008. GNI = gross national income. PPP = purchasing power parity.

especially among the poorest, can be seen as a supply and demand problem. On the supply side, insufficient and inadequate infrastructure, lack of teacher training, and weak monitoring and enforcement of basic standards (such as teacher attendance) diminish the quality of education. On the demand side, resource constraints, lack of employment opportunities, or limited information about returns to education add to the low quality, reduce the perceived value of education, and increase dropout rates.<sup>29</sup> Research shows that conditional cash transfer (CCT) programs have been successful in increasing the demand for education. But better employment opportunities also act as a powerful incentive to invest in education, as research from Bangladesh and Mexico shows.<sup>30</sup>

While middle-income countries are catching up to high-income countries on attainment, there are still large differences in quality between countries, as shown by the average scores of 15-year-olds in the standardized Programme for International Student

Assessment (PISA) math test (figure 3.7b). These quality gaps reduce the potential effect of education on skill acquisition and job opportunities.

Moreover, gender gaps in education continue to exist within poor households in certain countries, limiting the opportunities for women to participate in the labor market years later. Gaps in education enrollment and attainment have narrowed impressively in the developing world, and they have even reversed in some groups, with women surpassing men in attainment in several countries.<sup>31</sup> However, among poor households, some parents are still reluctant to invest as much in education for girls as they do for boys. In many low-income countries, for example, fewer girls than boys in the poorest quintile achieve six years of education (figure 3.8). Low educational attainment also affects women's participation in the labor force; in Nicaragua, for example, women with complete tertiary education were almost twice as likely to participate in the labor force as women with only primary education.<sup>32</sup>

### ***Accumulating financial and physical assets to build insurance and investment opportunities***

The ability to maintain liquid savings and tap credit in safe and flexible ways is important for managing risks and investments. Even among the poor, saving rates and the number of financial instruments used (mostly informal) are high.<sup>33</sup> But many obstacles impede poor households from keeping significant amounts of liquid savings to manage risks more effectively or to undertake investment opportunities. First, for very poor households, satisfying immediate needs takes most of their income, making the opportunity costs of saving very high. Second, informal risk-sharing mechanisms and the associated pressure to share income might affect decisions about how much to save and what instruments to use.<sup>34</sup> Despite these obstacles, having access to saving and credit options is highly valued, which is evident from the substantial fees that some people are willing to pay to be able to save safely; these include rotating savings and credit associations, which do not pay interest and bear significant risk for loss, and deposit collectors, who *charge* fees, rather than pay interest, to keep the customers' savings. The growing number of clients—137.5 million in 2010—of microfinance providers is also a sign of the substantial demand and the potential benefits of expanding financial products among the poor.<sup>35</sup> As chapter 6 discusses, however, wider access to financial products for households, if not well-managed, can increase demand for credit beyond amounts these households can reasonably handle and lead to overindebtedness. That, in turn, can affect aggregate financial stability.

Physical assets—while less efficient than liquid savings—are another important resource for managing risk. Most poor households save in part by accumulating physical and productive assets such as livestock, jewelry, or appliances, all of which have low liquidity and uncertain returns. Physical and productive assets may be exposed to risk from disasters, crime, or expropriation, and some forms of assets, such as land, may not be transferable. Asset price fluctuations can also hurt the ability of households to use assets effectively as insurance mechanisms.<sup>36</sup>

Moreover, the ability to own and accumulate assets is unequal within many households. Laws in most of the world allow women to own assets, but several countries—particularly in South Asia and Sub-Saharan Africa—still have gender-specific ownership rights that limit women's ability to acquire, sell, transfer, or inherit property. Such laws weaken the bargaining position of the woman in the house-

hold, leaving her and her children more vulnerable to shocks and less able to pursue opportunities.<sup>37</sup> For instance, in southern Ethiopia, where divorces are rare and divorced wives get no share of joint assets, women from poor households—but not their husbands—reduce their food consumption when they get sick and are unable to work.<sup>38</sup>

Few households in developing countries rely on market insurance products. As noted in chapter 1, the risks that concern people the most relate to insurable events: illness, loss of income, and loss of assets. Although these events can be difficult to insure against when they affect large numbers of people, as in the case of an epidemic or a natural disaster, insurance products are widely available in high-income countries. Health, property, and unemployment insurance are common, and in some cases even mandatory. Yet in developing countries, only about 1 percent of total asset losses from natural hazards were formally insured between 1980 and 2004, compared with 30 percent in high-income countries.<sup>39</sup> The low penetration of market insurance products in developing countries results from high transaction costs (for assessing claims), which translate into high premiums. Instead, most people rely on informal risk-sharing arrangements with their extended family and community members (see chapter 4).

A low supply of formal insurance only partly explains low coverage. Demand for insurance tends to be low among many households even when people repeatedly suffer from or are exposed to shocks such as illness or disasters. Several explanations have been advanced for this low observed demand. First, resource constraints often restrict people's ability to purchase insurance. Second, people with limited education and low numeracy skills might find the concept of insurance complex and therefore prefer informal reciprocity arrangements. Third, subscribers must trust that the provider will deliver the payment if the shock occurs. Building trust becomes more challenging if the institutional environment offers few avenues to enforce the contract. Finally, the high noncovered risk (or "basis" risk) of many insurance schemes reduces the expected payment and undermines the value of the insurance policy and the trust associated with it.<sup>40</sup>

### ***Building insurance informally through family formation, fertility, and marriage***

In places where social protection and access to financial markets are limited, the process of family formation can be highly related to risk.<sup>41</sup> Agreements for

mutual support among family members can be one of the limited options available in contexts where access to other forms of support are missing, either from the market or the state (see box 3.1). In Andhra Pradesh and Maharashtra in southern India, for example, many parents marry their daughters into households in distant villages to diversify income risks among households exposed to different climatic shocks. In these cases, a daughter's marriage becomes an informal insurance mechanism to protect consumption. In countries where parents must provide a dowry to their daughters, the financial pressure can lead them to marry their daughters at younger ages or to other members of the extended family (family ties act as a form of credit because parents can commit to later payments). These practices limit the potential for investing in daughters' human capital and expose them to risk of abuse by their spouses, as well as increasing health risks for future children when girls marry biological relatives.

Parents may also have to rely on their children to confront the risk of income loss.<sup>42</sup> For example, rural households in Bangladesh with higher risk exposure, fewer credit sources, and weaker ties to their community have higher rates of fertility than similar households in India. One of the driving factors behind this difference is that women in rural Bangladesh, unlike women in rural India, lack job opportunities outside the home. Women who cannot participate in the labor market face more difficulties in responding effectively to large shocks—such as widowhood—and hence must rely more heavily on support from their children. High fertility has negative consequences for human capital accumulation in developing countries, where children from larger families receive fewer vaccinations and have lower school attainment. This quantity-quality trade-off suggests that these families have less leeway to make adjustments in their resource allocation as the number of children increases.

### *Diversifying income sources and increasing labor supply*

In developing countries, where exposure to income shocks is large and formal insurance is unavailable, households often diversify their sources of income. Throughout the developing world, household income often comes from more than one sector (for example, farming and services), location (urban and rural, domestic or foreign), or product. For example, 10 to 20 percent of households in Mexico, Nicaragua, Panama, and Timor Leste; 50 percent in Indonesia; 72 percent in Côte d'Ivoire; 84 percent in

Guatemala; and 94 percent in Udaipur, India, report earning income from more than one type of activity.<sup>43</sup> Having a diversified income portfolio including farm and nonfarm activities might reduce income fluctuations, but it does not always do so—in part because incomes from different activities tend to be more correlated during crises.<sup>44</sup> In addition, because household effort is divided into many different activities, diversification often leads to lower average incomes. Greater access to markets and safety nets reduces the need for people to diversify their income activities to lower their exposure, as a recent study in Bangladesh found, and it also opens possibilities for them to enter higher-income activities.<sup>45</sup>

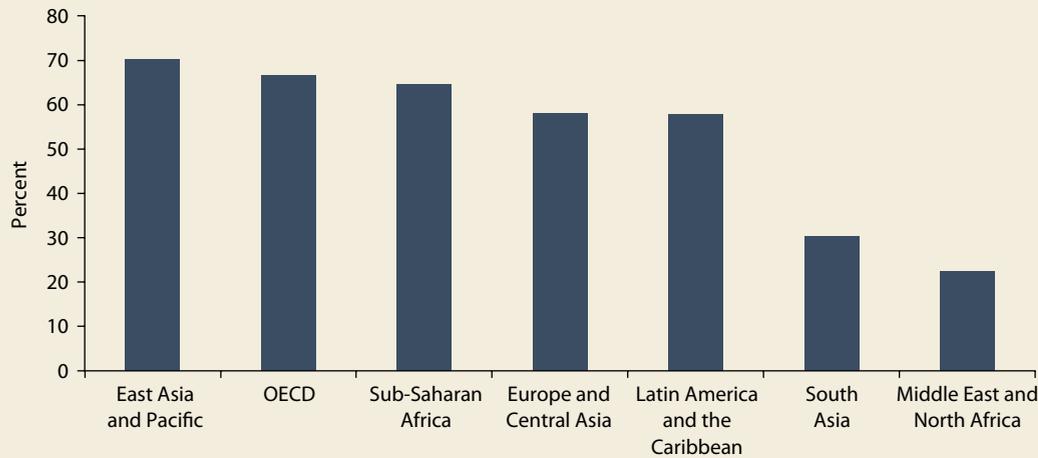
Other households—typically those with no access to credit markets, formal or informal—opt for activities that have low risk exposure but also have low returns, such as drought-resistant crops, which tend to have low yields. Households with very few assets cannot self-insure against shocks, either by selling these assets or by using them as collateral for credit. At the same time, diversifying income sources often requires a minimum amount of starting capital (say, for purchasing an animal). As a result, many asset-poor households have no other option but to opt for activities where income risk is minimal. Studies in India, Tanzania, and other countries have found that poor rural households grow disproportionately more low-risk, low-return crops, such as sweet potatoes.<sup>46</sup>

Increasing their labor supply can help households cope with shocks, provided that household members can work and that sources of employment are available. In such cases, households with excess labor supply, which can be readily tapped as needed, can protect consumption more effectively. Regression analysis shows that, for example, members of larger households in China, Iraq, Peru, and Uzbekistan respond to shocks by increasing the hours they work, taking on more jobs, or working in a different location.<sup>47</sup>

The ability of a household to increase its labor supply either temporarily or permanently depends critically on the ability of women to participate in the labor force. Female participation has increased significantly in recent decades, but a large share of the female population still remains outside the labor force. Only one in five women in the Middle East and North Africa and less than one in three in South Asia were either working or looking for work in 2011 (figure 3.9). Economic factors including higher labor demand, better infrastructure, and higher educational attainment play a pivotal role in increasing female labor market participation. However, because women tend to be the main providers of child care, lack of good-quality child care alternatives can create a trade-off between

**FIGURE 3.9** *Female labor force participation is still limited in some regions*

Percentage of females in the labor force



Source: WDR 2014 team based on data from World Bank World Development Indicators (database).

Note: Data are as of 2011. Organisation for Economic Co-operation and Development (OECD) countries in the figure are high-income countries that have been members of the OECD for at least 40 years. All other countries are grouped into geographic regions.

female participation in the labor force and child development. In addition, social norms that limit the participation of women in economic activity may slow down gains in female participation in the regions with historically low participation.<sup>48</sup>

Migration is also an effective way to diversify risk and can be a coping response to a shock. Although migration can weaken social ties within the family and with the rest of the community, its net economic effect is still likely to be positive for the entire household—a fact reflected in the growing movement of people within and across countries and in the volume of remittances worldwide. Temporary migration for work from rural to urban areas is the dominant form of migration; there are 740 million internal migrants worldwide, nearly four times the number of international migrants.<sup>49</sup> Most studies on migration, which focus on international migration, find positive and substantial contributions to migrant income, although the effects on family members who remain behind are less clear. Still, in the Philippines for example, an unexpected increase in a migrant's income leads to higher educational expenditures, enhanced entrepreneurship, and lower poverty rates at the origin. A growing body of literature finds that remittances are an informal insurance against consumption shocks at the origin. For instance, in the Philippines, Tanzania, and Thailand, migrant workers are more likely to send remittances to members of their family who are hit by a shock.<sup>50</sup>

Experimental evidence shows that poor households fail to take advantage of migration opportunities that would improve their response to shocks. A study in a famine-prone rural area of Bangladesh found that people are not willing to migrate temporarily to the city during the lean season, despite the harsh conditions. For them, the cost of migrating and the possibility of not finding a job opportunity in the city make it too risky an enterprise, even if expected returns are positive. As part of the study, a small cash incentive was offered to farmers to migrate. Those who took the incentive and migrated increased the consumption of their family members by 30 percent, increased the calorie intake by 550–700 calories a person a day, and were also more likely to migrate again in following years, when the incentive was no longer offered.<sup>51</sup>

### How can government strengthen protection and foster better opportunities for households?

Households face multiple risks every day, and they use as many tools as they have available to manage them. Poor households, however, tend to have only limited access to protection and insurance mechanisms provided by markets and public services. These limitations increase vulnerability, particularly for risks that are not equally shared within the household. Government policies can substantially improve

**TABLE 3.2** *A systemic approach for policies to address multiple risks using multiple instruments*

Goal	Types of policy instruments						
	Facilitate savings	Social insurance	Cash transfers	Information/training	Wage subsidies	Access to services	Access to credit/grants
Preparing and coping with:							
Illness	X	X	X	X		X	
Disability	X	X	X	X	X	X	X
Old age	X	X	X	X		X	X
Death	X	X	X				
Unemployment	X		X	X	X	X	X
Weather shocks/disasters	X	X	X	X		X	X
Investment in human capital			X	X		X	
Poverty reduction			X	X	X	X	X

Source: WDR 2014 team based on Robalino, Rawlings, and Walker 2012.

household risk management and increase households' access to better opportunities by taking a systemic approach to risk management. Such an approach implies a sound understanding of the risks that households face, the interactions between them, the range of obstacles to better risk management, and the right combination of instruments that can strengthen risk management while increasing access to opportunities. Table 3.2 shows how various kinds of policy instruments address multiple sources of risk and suggests how they might be used from a systemic perspective; for example, providing health services in combination with other instruments, such as insurance and information on preventive practices, can deliver better outcomes in protecting people against the risk of disease and the financial burden it causes. Some tools, such as cash transfers, also contribute to investment in human capital and poverty alleviation.

Taking a systemic approach to policy making for risk management also implies that instruments need to be put in place before shocks take place and that coordination is essential. In practice, different programs and policies are the responsibility of different government agencies; institutional mechanisms are thus needed to coordinate these programs and policies to align goals, set monitoring and performance standards, and establish common infrastructure that enables risk management tools to function seamlessly. Moreover, just as households need to prepare in anticipation of shocks, governments need to have these systems in place before shocks hit, incorporat-

ing features that enable a quick response to changes in households' needs. The following recommendations describe different policy instruments that can help households address barriers to building better protection, insurance, and coping strategies, as well as instruments that can improve risk sharing within the household, keeping in mind that single-instrument solutions are rare and that the most successful policies involve a combination of them.

### *Designing policies with a risk management lens*

Policies often have indirect effects on people's behavior, and understanding these effects can be useful for improving incentives to invest in protection at the household level. Property rights are a telling case. Secure property rights increase the value of the asset to the owner, because the asset can be safely transferred and also used as collateral, increasing access to credit. Beyond that, secure land tenure rights increase the value of investments in land conservation and infrastructure, which reduce risk exposure and increase productivity. Secure land tenure rights have also been found to increase labor market participation and reduce child labor.<sup>52</sup> Another example is cash transfers. They are a very direct way to help households overcome financial constraints to invest in human capital, but incentives to invest are even greater when the transfers are conditioned on making the investments. A recent experimental comparison of conditional and unconditional cash transfers for

girls in Malawi shows that conditioning plays an important role in improving school attendance and even learning outcomes.<sup>53</sup>

### *Leveraging technology and partnering with the private sector*

Systemic policies addressing multiple risks require not only close coordination among different government agencies but also partnering with other actors in the society. The ability to share data and to track beneficiaries across programs is one example—simple in theory—that many countries struggle with in practice. The availability of affordable technologies to collect biometric data is opening opportunities for governments to identify beneficiaries and deliver services to them, in particular for the poor, who are often “invisible” populations for lack of proper proof of identity. India’s pioneering identification project aims to issue a unique identification number, or *Aadhaar*, to every resident of the country, linked to basic demographic information and biometrics, as a formal proof of identity. The scheme has assigned more than 300 million *Aadhaars* so far, at a cost of less than \$3 per capita. The *Aadhaar* is a gateway to both public and private services: the government uses it to deliver public benefits directly to individuals with fewer leakages, and the private sector—particularly financial services providers—can use the *Aadhaar* to expand access to financial services.<sup>54</sup> More generally, public service delivery can benefit from public-private partnerships in many areas, from health to social assistance (box 3.2).

### *Addressing disparities within households*

Public policies can also redress the balance of power and reduce inequities within the household. In many cases, a combination of regulatory reforms, targeting of public programs, and social norms that empower women to take greater control over decisions regarding family planning, work, and financial management can increase their bargaining power in the household, while reducing the vulnerability and improving opportunities for children.

Many women in poor households—particularly in poor and rural areas—have little control over fertility decisions, in part because good-quality family planning information and services are not available. Women in these areas should have reliable access to these services through health care providers, together with a range of contraceptive options. This task requires putting in place an efficient supply chain. In addition, providers need to communicate effectively and transparently with their patients about the benefits and potential side effects of different contraception methods, while respecting women’s preferences and privacy.<sup>55</sup> To be truly effective, however, family planning services need to be accompanied by other interventions to increase women’s bargaining power in the household, notably those that increase their economic clout and legal standing.

Access to labor markets for women is particularly important because it allows households to diversify their sources of income and improve the risk management of entire households.<sup>56</sup> But women’s access to the labor market is extremely limited in some

#### **BOX 3.2** *Improving service delivery by partnering with the private sector*

Public-private partnerships are an increasingly important component of efficient and effective service delivery. In India, government-sponsored health insurance schemes—which aim to expand access to health insurance to half the country’s population by 2015—have engaged private sector firms as both administrators and health care providers. In São Paulo, Brazil, private nonprofit operators were permitted to run new hospitals based on a performance-based contract model. While implementation was not without challenges, impact evaluations have found that the nonprofit hospitals have been more efficient than for-profit ones, without sacrificing quality. Improvements in human resources and management practices seem to be responsible. In education, public-private partnerships can cut costs and improve student achievement. Colombia’s Programa de Ampliación de Cobertura de la Educación Secundaria (PACES) provided 125,000 children with vouchers to attend private secondary aca-

demical and vocational schools. The program was cost-effective and increased student achievement.

The private sector can also play an important role in government transfer programs. In Brazil, banks now pay the government for the valuable right to distribute social security benefits; this is a reversal from the past, when the Brazilian government would pay banks. In making the transition, the government has saved money, beneficiaries have gained more places to obtain their benefits, and banks have acquired additional customers for their credit products. Conditional cash transfer (CCT) programs in Ecuador and South Africa also partner with private financial institutions to deliver payments. CCT programs in Bangladesh, Chile, and Colombia allow beneficiaries to use private providers to fulfill their education and health commitments. The private sector may be critical for meeting the increased service demands stimulated by CCTs in many countries.

Source: WDR 2014 team based on La Forgia and Nagpal 2012; Lewis and Patrinos 2012; Fiszbein and Schady 2009; La Forgia and Harding 2009; and Ortiz d’Avila Assumpção 2012.

places. Public policies can help, starting by ensuring that girls, in particular in poor households, complete their education. Providing child care alternatives and promoting family-friendly workplace policies can encourage women to stay in the labor force when they have children. Public action (through the media, for example) can also help counter social norms that keep women at home (see chapter 2).

Giving women more voice in household decision making has positive consequences for risk management and investment in human capital.<sup>57</sup> Women’s empowerment can be achieved not only by enhancing access to the labor market but also by making women the beneficiaries of cash transfer and other social programs. Moreover, regulatory reforms that increase women’s land tenure and inheritance rights, such as the reforms to the Hindu Succession Act, have been found to increase women’s bargaining power as well as human development outcomes for girls.<sup>58</sup>

Legal action against domestic violence is necessary to counter social norms that tolerate violence against women and children. In East Asia and the Pacific, the Middle East and North Africa, and Sub-

Saharan Africa, more than 20 percent of women believe that a husband is justified in hitting or beating his wife for commonplace reasons such as going out without telling him and arguing with him (figure 3.10). As argued earlier, domestic violence can be both the outcome of an environment dominated by risk as well as a source of risky behavior. Better risk management tools can reduce the incidence of violence by reducing the stress factors associated with risk. Beyond that, legal sanctions against violent behavior provide a strong signal that, regardless of social norms, domestic violence has serious consequences.

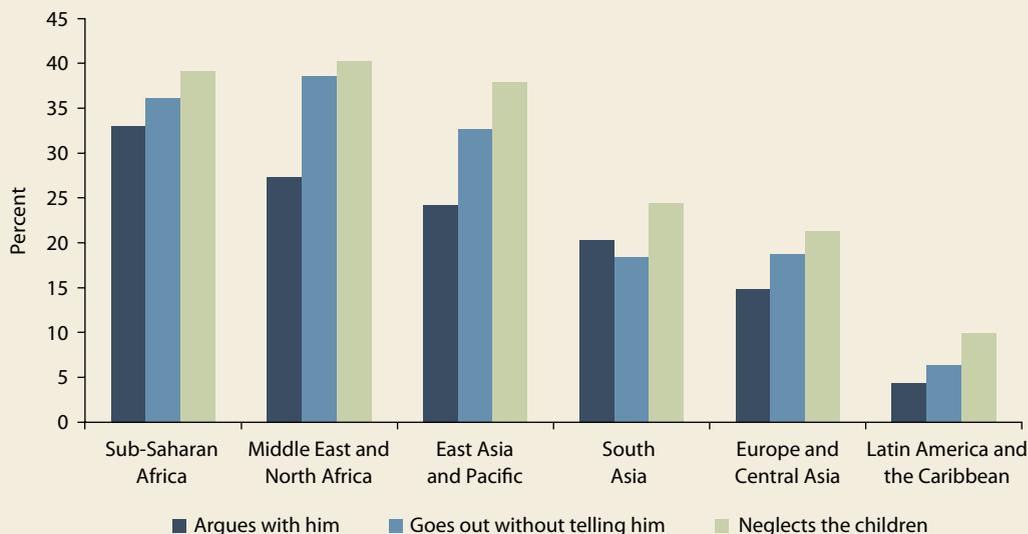
**Abuse and discrimination within the family makes it a source of, rather than a solution to, risk.**

**Enhancing access to labor markets**

To increase investment in skills, interventions should tackle demand and supply constraints. The first step is providing information about job opportunities and returns to education. Research from the Dominican Republic shows that receiving information on returns to education significantly reduces the likelihood that students will drop out of school before completion. In India, providing recruitment services

**FIGURE 3.10 Social norms in many regions tolerate domestic violence**

Percentage of women who say that a husband is justified in hitting or beating his wife



Source: WDR 2014 team based on data from demographic and health surveys, for the most recent year available 2000–11.

for jobs to women delayed their decision to marry and have children and increased their reported desire to obtain training and work more steadily.<sup>59</sup>

Second, education and training systems should help students develop the skills that employers want, which include soft skills, such as communications ability, in addition to reading and numeracy skills, according to employer surveys throughout the world. Evaluations of training programs for out-of-school youth that combine soft skills with technical training have shown positive results in increasing beneficiaries' chances of job placement and the quality of their jobs. Evidence also suggests that the delivery model that works best involves partnering with (accredited) private providers. Finally, many people need specific assistance to navigate the labor market and find the best opportunities available. Countries with sufficient implementation capacity can establish employment services to facilitate the matching process of employers and employees; these services have proven highly effective in high-income countries, particularly for unskilled workers.<sup>60</sup> These skill-enhancement strategies can deliver better job opportunities, however, only if there is an accompanying demand for these skills. For that, a dynamic enterprise sector is crucial (see chapter 5).

### *Facilitating migration and remittances*

Lowering barriers to domestic and international migration also helps households diversify incomes and respond to shocks. As discussed, domestic migration provides millions of families with alternative income opportunities outside farming. But for poor households, even temporary migration is a risky venture that many are not willing to pursue. In many cases, indirect policies that, for instance, lower transportation costs, can encourage temporary migration. International migration also presents people with better income opportunities, but increasing movements of undocumented migrants across countries have increased social tensions and violence and even cost lives. To mitigate these risks, sending countries can play a more proactive role in facilitating legal migration, protecting the rights of migrants abroad, and respecting migration policies of receiving countries. A few countries have implemented programs of regulated migration. While these programs might not always be able to ensure proper treatment of migrants, they offer an avenue to migrate legally. Programs in Morocco, the Philippines, St. Lucia, and Tonga, for example, offer workers the opportunity to migrate temporarily to countries that demand labor

in specific sectors, such as agriculture, construction, or health care. Receiving and sending countries establish agreements on quotas, wages, and duration of stay. If workers fulfill the requirements, they can migrate legally for a preestablished period, with a fixed contract and wage. Workers can reapply to the program upon their return, which lowers their incentive to stay illegally once their contract expires.<sup>61</sup>

Lower transaction costs for remittances can improve households' ability to mitigate income losses, while opening the door to better income opportunities. Worldwide in 2011, migrants sent approximately \$372 billion in remittances to their families in developing countries (see chapter 6). Migrants often pay hefty transaction costs to send small amounts of money through large carriers. Lowering transaction costs by encouraging competition and promoting transparency can increase the benefits of remittances significantly for receiving countries. Simply providing information about fees for different carriers can help. The project *Envía CentroAmérica*, financed in part by the World Bank and the Inter-American Development Bank, provides detailed information about the fee variation across carriers for sending money to seven Central American countries. For example, fees for sending \$200 from Washington, D.C. to Guatemala ranged from 1.29 percent to 17.42 percent, depending on the institution and the modality of payment. Mobile phones have also enabled many migrants, especially in countries like Kenya, to send remittances in a safe and affordable way.<sup>62</sup>

### *Increasing access to financial products*

Financial products are a crucial component of a household's risk management strategy, and governments can facilitate access to formal financial products in several ways. As discussed earlier, poor households face significant barriers to access formal financial services. In addition to promoting the financial inclusion of the poor through an appropriate regulatory framework (such as consumer protection laws) and by expanding financial literacy (see chapter 6), governments can leverage social programs to connect beneficiaries with the financial sector through payment systems. This link has been made successfully in Brazil, Ecuador, and South Africa, where beneficiaries of pensions and cash transfer programs receive their payments electronically through the financial system (see box 3.2). In addition, carefully designed public subsidies can help expand the supply of certain commercial financial products, such as index insurance, that significantly

### **BOX 3.3** *Index-based insurance: The potential and the challenges*

Index-based insurance can be a viable instrument to manage agricultural risk. Index-based, or parametric, insurance provides payments based on physical triggers (such as variation in rainfall) rather than loss claims. This type of insurance is less subject to moral hazard and has significantly lower transaction costs. Although some farmers bear significant “basis risk” because their risk is imperfectly correlated with the risk insured by the index contract, several studies show that index-based insurance increases investment and improves yields. In Tamil Nadu in India, for example, offering farmers index-based insurance made them more likely to plant higher-yield (but riskier) rice varieties and less likely to plant lower-yield but drought-tolerant ones. And when basis risk is large, having an informal network can help by providing insurance against basis risk. Thus the presence of informal risk sharing actually increases demand for index-based insurance in the presence of basis risk.

Still, the coverage of index-based insurance remains low. In particular, providers need to find better ways to market it by taking into account the context in which farmers operate, the variety of risks that they face, and their lack of experience with formal financial products. For instance, the studies for India show that selling insurance to landless laborers, not just land owners, provided significant protection to their income and their ability to invest, because they bear a disproportionate share of agricultural risk. In Kenya and Rwanda, Kilimo Salama, an index-based insurance program for

small farmers, has managed to increase its client base by insuring inputs instead of harvests, using “aggregators” such as cooperatives to insure groups rather than single farmers, creating premium-sharing arrangements between farmers and agribusinesses, selling through local businesses that are frequented by the farmers, and paying claims immediately using mobile phones.

Governments also have a role to play. The Mexican Catastrophe Climate Contingency Insurance Program provides state governments with funding for the purchase of insurance, most of which is index-based and targeted at subsistence producers below the threshold for commercial agricultural insurance. India’s Weather Based Crop Insurance Scheme has significantly expanded the use of index-based insurance by subsidizing premiums. However, government premium subsidies create tensions in the market that are difficult to resolve. For example, selling subsidized index-based insurance to landless agricultural laborers (who technically do not possess an insurable interest) opens the market to others (such as urban residents) to gamble with the product because the subsidized premiums make the insurance product, in effect, look like an attractive lottery ticket. Government resources might be better targeted to covering the up-front cost of installing weather stations needed to monitor rainfall at high density (to reduce basis risk), and to scaling up these investments, rather than subsidizing the price of the premiums.

*Source:* WDR 2014 team based on Brown, Mobarak, and Zelenska 2013 for the WDR 2014; Alejandro de la Fuente for the WDR 2014; “Fact sheet: Kilimo Salama (“Safe Agriculture”),” available at <http://kilimosalama.files.wordpress.com/2010/02/kilimo-salama-fact-sheet-final11.pdf>.

improve risk management for the poor but that face scaling-up challenges (box 3.3).

#### ***Building health and social protection systems that protect the most vulnerable***

Because health and income shocks can be particularly destructive for the poor, protecting them against these risks is a priority. This section discusses how countries can expand the coverage of health and social protection, starting with the most vulnerable populations, while striving to improve service delivery and results and still maintain fiscal sustainability.

Health insurance reforms are increasingly improving protection for the most vulnerable. In many developing countries, public health systems are fragmented, inefficient, and inequitable. Typically, health insurance systems are available to a minority of people, usually workers in the formal sector, while everyone else has access to lower-quality national health care systems financed by general revenues. Such duplication puts financial pressure on health systems, creates tiered-quality services, and may be

regressive.<sup>63</sup> As a result, poor people receive substandard treatment while bearing large out-of-pocket costs. Many countries have undertaken efforts to reform their health care systems to deliver better services to the poor—while maintaining sustainability—by moving toward a model of universal health insurance (see the cases of Turkey and the Kyrgyz Republic in spotlight 3). A growing consensus is focusing on three basic goals for reform: enhancing risk pooling to ensure that health expenditures do not overwhelm the household’s saving capacity; ensuring financial sustainability and equitable access by defining specific benefit packages and providing insurance at a low cost (or free) for the poor; and improving efficiency by delinking financing from service provision.

Table 3.3 summarizes some recent efforts in different countries to expand access to health insurance. While many features respond to the unique context of each country, a few patterns are apparent. First, these efforts provide subsidies so that poor and vulnerable populations can obtain access to insurance. For example, China’s rural health insurance program subsidi-

**TABLE 3.3** Common features of programs to expand coverage of health insurance

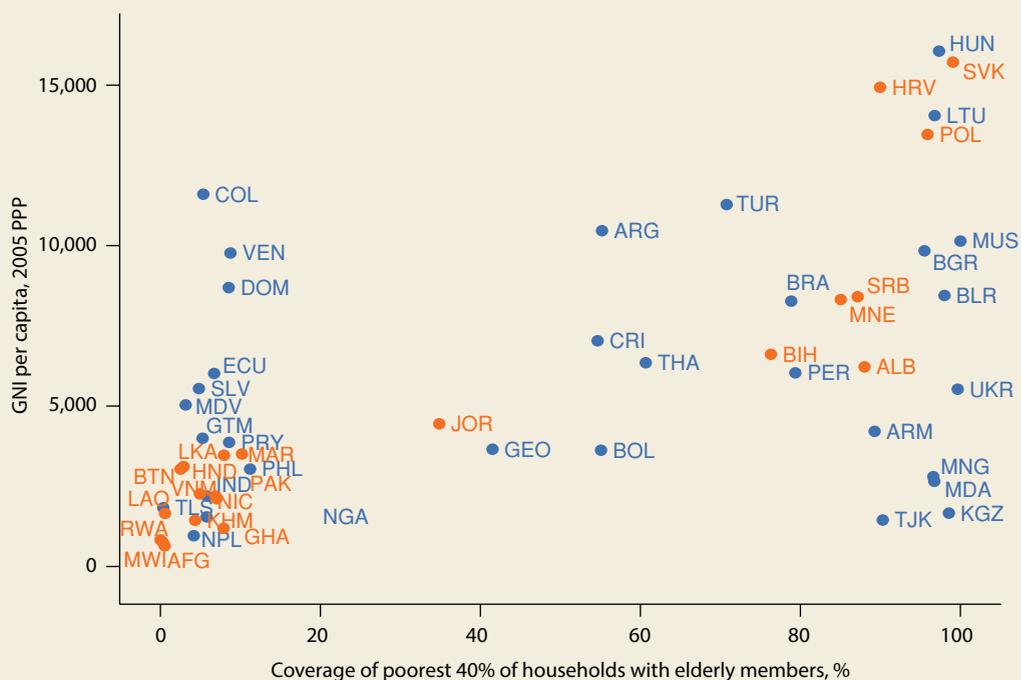
What	Who	How
Use of general revenue financing to include the poor	Colombia	The Régimen Subsidiado health insurance program offers free and heavily subsidized health care to the poorest.
	India	The Rashtriya Swasthya Bima Yojna (RSBY) insurance program requires payment of a small nominal fee (5 percent of the combined registration fee and premium).
	Indonesia	The Jamkesmas program covers the poor and near-poor population at no cost.
	Mexico	The Seguro Popular program offers a full subsidy to informal sector households.
	Thailand	Any person outside the formal/civil service sector is covered for a nominal fee.
	Turkey	Premiums of the poor are covered by the state.
	Vietnam	Those below the poverty line and other selected groups are fully subsidized; the near-poor receive partial subsidization.
Higher quality and efficiency	India	Authorizations and case management in RSBY and Rajiv Aarogyasri are fully electronic.
Defined service package	Brazil	The Sistema Único de Saúde (SUS) offers a comprehensive package that includes essential drugs and dental care.
	Mexico	Package includes coverage of catastrophic illness.
	South Africa	The Antiretroviral Program provides testing, monitoring, and treatment for HIV/AIDS, based on a financial sustainability study.
	Turkey	Comprehensive basic benefits package includes diagnostic services, inpatient treatment, and hospitalization for emergency care.
Incentives on the supply side	Brazil	SUS transfers to municipal governments depend on meeting performance and coverage targets.
	Colombia	Capitation (per capita fees) and fee-for-service are commonly used in the Régimen Subsidiado.
	India	Private insurers are selected through competitive bidding and paid on the basis of enrollment.
	Indonesia	Providers are paid capitation at the primary level, and negotiated fees at the secondary level.
Services tailored to vulnerable populations	Brazil	The Family Health Strategy uses outreach activities to expand use of primary care and to identify and treat common diseases.
	Ethiopia	The Health Extension Workers program trains households to adopt best practices and to become role models in their community.
Data-driven	India	Biometric data collected at enrollment are used for monitoring use and outcomes.
	Kyrgyz Republic	Payment and utilization are analyzed to identify outliers and barriers to access and to forecast needs and costs.
	South Africa	Expenditures on personnel, drugs and supplements, lab services, and information systems are actively monitored.

Source: WDR 2014 team based on Cotlear, forthcoming, for Brazil, Colombia, Ethiopia, India, the Kyrgyz Republic, Mexico, South Africa, Turkey, and Vietnam. For India, Indonesia, and Thailand, see Adam Wagstaff 2011, "Health reform: A Consensus Emerging in Asia?" *Let's Talk Development* (blog), April 12. <http://blogs.worldbank.org/developmenttalk/>.

dizes at least 80 percent of the premium cost, and it aims to cover the entire rural population. In India, the Rashtriya Swasthya Bima Yojna scheme requires beneficiaries to pay only a nominal registration fee to join; the premium is paid by taxpayers. Indonesia's Jamkesmas scheme also covers the poor and near-poor at taxpayers' expense. In Thailand, the Universal Coverage scheme provides insurance for a nominal

fee to everyone who is not in the civil service or the formal sector. Second, most insurance programs cover only a defined range of services, which can vary widely from country to country. Some countries have focused on covering primary care, while others cover only catastrophic illness, and still others offer a mix. Finally, several countries include the private sector in service delivery and make innovative uses of technol-

**FIGURE 3.11** *Noncontributory pension programs have expanded coverage in developing countries, especially for the poorest*



Source: WDR 2014 team based on data from Evans, forthcoming.

Note: Years vary between 2003 and 2010. Countries marked in blue have noncontributory pensions. GNI = gross national income; PPP = purchasing power parity.

ogy to improve efficiency. It is still too early to pass definitive judgment on the impact of these trends on health outcomes and household health expenditures, as well as their fiscal sustainability. But learning from these cases will be crucial as more countries move toward universal health insurance.

### *Providing income support for old age*

Life-cycle transitions such as old age reduce the ability of individuals to earn sufficient income to remain out of poverty. In addition, time-inconsistent behaviors discussed in chapter 2 justify policies to encourage people in their earning years to save for the future. In many countries, however, social insurance systems (mostly for pensions and health) cover a minority of the population, usually the nonpoor. This exclusion occurs because so-called contributory insurance systems are financed by payroll taxes and contributions levied on employers and employees, typically only in the formal sector—which effectively denies access to the large proportion of self-

employed and agricultural workers who work in the informal sector. In other countries, where contributory pension systems are supporting a rapidly growing elderly population, declining ratios of workers to retirees and a higher life expectancy make the current model unsustainable.

As a result, more and more countries are expanding coverage of basic pensions by introducing noncontributory pensions financed by general revenues. For example, 13 countries in Latin America and the Caribbean now have noncontributory pensions for those not covered by the contributory system.<sup>64</sup> Others, like Mauritius, South Africa, and several high-income countries, have historically relied on noncontributory pensions. As figure 3.11 shows, aside from the former socialist countries in Eastern Europe and Central Asia, all developing countries that cover more than half of the poorest 40 percent of households with elderly members have noncontributory systems.<sup>65</sup> Several studies show that noncontributory pensions have increased coverage and reduced poverty among the elderly.<sup>66</sup>

When contributory and noncontributory systems coexist, however, incentives to participate in mandatory contributory systems may diminish. That occurs because contributory systems may be ill-designed or because contributory and noncontributory systems may not be well integrated. Workers who move between formal and informal jobs or in and out of the labor force might not contribute sufficiently to be eligible to receive benefits or might achieve very low income-replacement rates.<sup>67</sup> Workers in rapidly aging countries might contribute toward increasingly uncertain benefits, creating a perception of contributions as a pure tax on labor and encouraging them to underreport wages or opt for informal employment.

To ensure that social insurance systems are equitable, fiscally sustainable, and minimize distortions in the labor market, countries should reconcile the need to expand coverage with the need to encourage private savings. Specifically, noncontributory systems that provide a basic level of benefits should be financed through general revenues just like any other basic government function. But not all countries are in a position to provide adequate benefits universally in a fiscally sustainable manner. In practice, many developing countries may be able to provide only a minimum level of benefits and possibly to only a targeted population. That is true in particular for countries where the old-age dependency ratio is growing fast. Thus countries need to consider their long-term fiscal capacity in relation to their future commitments to decide what the appropriate levels of coverage and benefits are. Importantly, they need to consider the different options to collect the necessary tax revenues (see the “Focus on policy reform” at the end of this Report).

Contributory systems can help to increase the adequacy of insurance benefits, but they need to be designed in a way that does not create distortions in the labor market. In some contexts, distortions will be avoided only if contributions are made voluntary and open to all, regardless of work status or if the mandatory contribution rates are reduced. In all cases, contributory systems should provide benefits that are clearly linked to contributions. Further, incentives to save—automatic enrollment, matching contributions, simplifying processes, and lowering information barriers through financial literacy—can have a significant impact. New Zealand’s KiwiSaver scheme is an interesting example of an automatic enrollment program (with an “opt-out” option) that increased retirement savings for about half the population.<sup>68</sup>

### *Offering safety nets for bad times*

Safety nets are also crucial to help the most vulnerable households manage risk and protect consumption in the face of shocks. Studies show that safety net programs such as public works and cash transfers help people build assets, take more risk in their productive activities, and accumulate human capital. Beneficiaries of programs in Bangladesh, Brazil, India, Mexico, Nicaragua, and other countries have invested more resources in high-risk, high-return ventures (such as fertilizer), have diversified their income away from agriculture, and have gained access to credit.<sup>69</sup>

For example, public works programs provide labor income while contributing to local economic development. These programs are particularly beneficial in countries with large rural populations, like those in Sub-Saharan Africa. Indeed, the region has more than 150 public works programs and more than 120 cash transfer programs.<sup>70</sup> Public works programs protect households’ consumption in the face of income losses, while enabling them to build crucial growth-enhancing assets; examples include building water infrastructure and improving land management at the local level. Moreover, public works programs have positive local economic spillovers, similar to other safety nets. For instance, the Extended Public Works program in South Africa boosted local economies, because 67 percent of the beneficiaries purchased food from local shops.<sup>71</sup> Most of these programs are targeted geographically, and beneficiary selection is done through self-targeting (by offering low wages, the programs attract those who most need the income, while encouraging them to continue to seek other work). These programs also have the flexibility to respond to specific adverse conditions in certain households; for instance, the Ethiopian Productive Safety Net Program uses family targeting, which allows the program to adjust the quota of days that a family can benefit from the program to the size of the family.

A systemic approach to social protection is helping governments exploit synergies across instruments and deliver better service to all those who need it.<sup>72</sup> For instance, several programs have recently implemented strategies that combine protection with access to opportunity.<sup>73</sup> These programs seek to “graduate” beneficiaries sustainably by building pathways to better income through self-employment or wage employment opportunities. In most cases, these strategies require combining a range of instruments beyond simply providing cash transfers, such as providing links to financial services or training. Safety

net beneficiaries in Côte d'Ivoire, Rwanda, and Tanzania are encouraged to save part of their earnings by obtaining access to bank accounts and community saving groups. Public works programs in El Salvador, Sierra Leone, and South Africa also provide some basic and technical skills training.<sup>74</sup> In Cameroon, beneficiaries of the new cash transfer program attend financial literacy and business training activities. Evaluation from pilot programs that provide cash and training to beneficiaries in Ethiopia, Ghana, and Nicaragua show that the combination of instruments leads to entry into higher-income activities in the short to medium term.

**Both policies that empower households as a unit and policies that empower individuals within households are necessary.**

into two complementary groupings: policies to *empower households*, and policies to *empower individuals within households* to better manage their risks.

The first set of policies addresses obstacles that households face as units, such as lack of information, lack of resources, and limited access to labor and financial markets. The second group addresses challenges to risk sharing within the household and impediments that increase the vulnerability of certain members, including underinvestment in human capital, using children to manage risk, excluding women from financial decision making, and exposure to domestic violence. Table 3.4 presents a summary of the policy recommendations discussed in this chapter, highlighting how combining different instruments may contribute to strengthening risk management, and the possible complementarities between them. This systemic approach requires strong coordination across government institutions

**Putting it all together: Guidelines for policy implementation**

The policy recommendations to improve households' risk management can be roughly categorized

**TABLE 3.4** Policy priorities to improve risk management at the household level

	POLICIES TO SUPPORT RISK MANAGEMENT	
	FOUNDATIONAL	ADVANCED
<b>Knowledge</b>	Basic literacy and training	Secondary education and training
	Media and community campaigns	Higher education and training
	Facilitating informed fertility decisions	Teaching preventive health in schools
<b>Protection</b>	Sanitation infrastructure and preventive health care (including women's health)	
	Migration assistance/access to labor and other markets (especially for women)	
	Regulation to guarantee equal property rights for women	Policies to promote gender parity in leadership positions
	Promulgation and enforcement of domestic violence and abuse laws	
<b>Insurance</b>	Index insurance	Financial inclusion of the poor
	Lower remittance costs	
	Health insurance	Pensions (old age, disability, death)
<b>Coping</b>	Self- and community-targeted income support	Unemployment insurance
	Transfers targeted to women	Means-tested income support

Source: WDR 2014 team.

Note: The table presents a sequencing of policies based on the guidance of chapter 2 for establishing policy priorities: *be realistic* in designing policies tailored to the institutional capacity of the country, and *build a strong foundation* that addresses the most critical obstacles sustainably and that can be improved over time.

as well as between the government and the other economic and social actors, and depends on the country's institutional capacity.

A country's initial conditions also affect the use and effectiveness of each policy instrument. Hence, policies in table 3.4 are grouped according to a country's initial conditions and follow the guidelines presented in chapter 2: first, to be realistic, with policies adapted to the country's capacity; and second, to build a strong foundation, with policies that address the most important obstacles first and upon which more advanced policies can be designed and implemented over time. Thus countries with limited resources and low institutional capacity can begin by focusing on the most foundational policies: ensuring access to basic services, while also improving the efficacy of informal mechanisms, for example, by facilitating migration and remittances. Countries that have laid the foundations for risk management can go beyond the basics and focus on expanding access to services and raising productivity to foster the ability of households to take advantage of opportunity—by improving access to formal risk management products, and expanding coverage of social insurance.

In most countries, and in particular in those with limited capacity, implementing coordinated policies using multiple instruments can be very difficult. As discussed in chapter 2, obstacles inherent in public policy undermine the effectiveness of many government actions in helping people manage risk. These obstacles include limited capacity and resources, coordination failures within the government and with other actors, political economy constraints, and deep uncertainty. A few basic principles—following the guidelines to be realistic and build a strong foundation—can help policy makers overcome these obstacles as they design and implement policies.

### *Keep a long-run perspective*

To ensure their long-run sustainability, governments should make sure that policies are fiscally sustainable and that institutional arrangements transcend the political cycle. Often, governments come into office eager to establish ambitious “flagship” programs, which turn out to be unaffordable, especially during economic downturns. Moreover, many of these programs are operated in isolation, rather than in coordination with similar and complementary programs run by other agencies. Instead of taking this short-term approach, governments should focus on building a legacy through stable institutional arrangements that improve coordination and efficiency

across agencies, such as unified registries and data-sharing protocols, and by building strong technical capacity among civil servants. In addition, key programs that help people manage risk, such as social assistance programs, need to be properly funded when they are needed the most: that is, during downturns. To do that, governments should exploit good times to set up safety nets that can be scaled up to cover more people and offer more benefits in bad times, when more households face illness, unemployment, and other losses.

### *Promote flexibility*

Within the institutional framework proposed above, government policies and programs should also be sufficiently flexible to adapt to changing circumstances. One example is the labor market. Demographic and economic changes can cause deep changes in the labor market; thus labor market policies, including education and training policies, should be flexible enough to adapt to such changes. Similarly, safety net programs require both effective instruments to identify the most vulnerable households and individuals when crises hit and the necessary infrastructure to deliver services in a timely manner. They should also be able to scale back their coverage when the crisis passes.

### *Provide the right incentives*

Increasing incentives for members of the household to take personal responsibility is an important part of empowering households to manage risk. Many social assistance programs are now taking incentives into account: for instance, by establishing benefits and setting time limits on receipt to avoid discouraging beneficiaries from working. Public policy should also aim to change incentives within the household so that members decide to pool their resources for the benefit of all. This goal might require a mix of regulation reforms and specific design features in public programs (such as targeting of beneficiaries, combined with legal reforms). For instance, targeting women in cash transfer programs can empower them economically, but can also have negative repercussions (such as an increased risk of domestic violence) if their legal protection is not guaranteed.<sup>75</sup>

### *Protect the vulnerable*

The first priority for policies to improve risk management should be those households that face the

largest barriers to preparation. Too often, however, the definition of vulnerability is determined by interest groups. In the United States, the government spends 2.2 times as much on the elderly as on children, yet 22 percent of children under 18 live in poverty, compared with 9 percent of adults aged 65 and older.<sup>76</sup> Similarly, Brazil has practically eradicated poverty among the elderly, but not among children. Transparent policies with clearly defined priorities and goals, but with the flexibility to reallocate public funds when these goals are not met or when they change, can help.

*Do not generate uncertainty or unnecessary risks*

Policies should not create new obstacles to risk management. Most of the policies discussed in this chap-

ter seek to overcome obstacles to risk management for households. In some cases, however, design flaws may create new barriers. For example, private saving incentives can be undermined if governments use the funds in public saving programs to finance current expenditures. Price caps imposed on food staples to keep them affordable to the poor often result in massive shortages and speculation, making people worse off. In more extreme cases, governments enact regulations that legitimize social norms that may weaken household risk management, such as those that limit the economic and social participation of women. Anticipating the additional risks and other unintended consequences for risk management that policies might generate should help governments avoid implementing policies where “the medicine is worse than the disease.”

## Notes

1. This story is adapted from Davis 2011.
2. See Hoff and Sen 2005.
3. Dercon 2002.
4. Heltberg, Oviedo, and Talukdar 2013 for the WDR 2014.
5. See references in Oviedo and Moroz 2013 for the WDR 2014.
6. Genicot and Ligon 2013 for the WDR 2014.
7. De Vreyer and Lambert 2013 for the WDR 2014.
8. Giles, Guo and Zhao 2013.
9. Silverstein and Giarrusso 2010.
10. See literature discussion in Alderman and others 1995.
11. Udry 1996 for Burkina Faso; Duflo and Udry 2004 for Côte d'Ivoire.
12. See, for example, Iversen and others 2011.
13. Heltberg, Oviedo, and Talukdar 2013 for the WDR 2014.
14. Oviedo and Moroz 2013 for the WDR 2014.
15. See references in Friedman and Sturdy 2011; Oviedo and Moroz 2013 for the WDR 2014.
16. Dercon 2002; Friedman and Sturdy 2011.
17. See references in Oviedo and Moroz 2013 for the WDR 2014.
18. Haushofer, de Laat, and Chemin 2012; Friedman and Sturdy 2011.
19. Heltberg, Hossain, and Reva 2012.
20. Miguel 2005.
21. World Bank 2011.
22. See Kusimba and others 2013, for example.
23. See discussion and references in Brown, Mobarak, and Zelenska 2013 for the WDR 2014.
24. See references in Brown, Mobarak, and Zelenska 2013 for the WDR 2014.
25. Heckman, Stixrud, and Urzua 2006; Grossman 2006.
26. Chou and others 2010.
27. For instance, see Card 1999.
28. Barro and Lee 2010. Returns to an additional year range from 6 percent in Sub-Saharan Africa to close to 14 percent in high-income economies.
29. See the discussion on this topic in Banerjee and Duflo 2011.
30. See references in Brown, Mobarak, and Zelenska 2013 for the WDR 2014.
31. World Bank 2011.
32. World Bank 2012.
33. Collins and others 2009.
34. See Di Falco and Bulte 2011 and Baland, Guirkinger, and Mali 2011 for examples.
35. Ledgerwood 2013.
36. Dercon 2002.
37. World Bank 2011.
38. Dercon and Krishnan 2000.
39. Linnerooth-Bayer, Mechler, and Hochrainer-Stigler 2011.
40. See references in Brown, Mobarak, and Zelenska 2013 for the WDR 2014.
41. See references in Cáceres-Delpiano 2013 for the WDR 2014.
42. See references in Cáceres-Delpiano 2013 for the WDR 2014.
43. See references in Brown, Mobarak, and Zelenska 2013 for the WDR 2014.
44. Dercon 2002.
45. Bandyopadhyay and Skoufias, forthcoming.
46. Dercon 2002.
47. Heltberg, Oviedo, and Talukdar 2013 for the WDR 2014.
48. See in-depth discussion in World Bank 2011.
49. See references in Brown, Mobarak, and Zelenska 2013 for the WDR 2014.
50. Paulson 2000; De Weerd and Hirvonen 2013.
51. See references in Brown, Mobarak, and Zelenska 2013 for the WDR 2014.
52. Field 2007; World Bank 2003.
53. Baird, McIntosh, and Özler 2011.
54. Nilekani 2013.
55. World Bank 2011.
56. See, for example, Basu 2006.
57. World Bank 2011.
58. Deininger, Goyal, and Nagarajan 2013.
59. Jensen 2010; Jensen 2012.
60. Brown, Mobarak, and Zelenska 2013 for the WDR 2014; Almeida, Behrman, and Robalino 2012; Almeida and others 2012.
61. Ruiz 2008.
62. Kusimba and others 2013.
63. Ribe, Robalino, and Walker 2012.
64. See Holzmann, Robalino, and Takayama 2009.
65. Evans, forthcoming; Levy and Schady 2013.
66. See, for instance, Holzmann, Robalino, and Takayama 2009; Levy and Schady 2013; Frölich and others, forthcoming.
67. Ribe, Robalino, and Walker 2012.
68. Hinz and others 2013.
69. Alderman and Yemtsov 2012.
70. Premand 2013 for the WDR 2014.
71. Alderman and Yemtsov 2012.
72. Robalino, Rawlings, and Walker 2012.
73. See references in Premand 2013 for the WDR 2014.
74. See spotlight 2 on promoting food security in El Salvador.
75. World Bank 2011.
76. Isaacs and others 2012.

## References

- Abdul Latif Jameel Poverty Action Lab (J-PAL). 2011. "The Price Is Wrong: Charging Small Fees Dramatically Reduces Access to Important Products for the Poor." *J-PAL Bulletin* April 2011.
- Alderman, Harold, Pierre-André Chiappori, Lawrence Haddad, John Hoddinott, and Ravi Kanbur. 1995. "Unitary Versus Collective Models of the Household: Is It Time to Shift the Burden of Proof?" *World Bank Research Observer* 10 (1): 1–19.
- Alderman, Harold, and Ruslan Yemtsov. 2012. "Productive Role of Safety Nets." Social Protection and Labor Discussion Paper 1203, World Bank, Washington, DC.
- Alesina, Alberto, and Paola Giuliano. 2013. "Family Ties." Working Paper 18966, National Bureau of Economic Research, Cambridge, MA.
- Alger, Ingela, and Jörgen W. Weibull. 2010. "Kinship, Incentives, and Evolution." *American Economic Review* 100 (4): 1725–58.
- Almeida, Rita, Juliana Arbelaez, Maddalena Honorati, Arvo Kuddo, Tanja Lohmann, Mirey Ovadiya, Lucian Pop, Maria Laura Sanchez Puerta, and Michael Weber. 2012. "Improving Access to Jobs and Earnings Opportunities: The Role of Activation and Graduation Policies in Developing Countries." Social Protection and Labor Discussion Paper 1204, World Bank, Washington, DC.
- Almeida, Rita, Jere R. Behrman, and David A. Robalino. 2012. *The Right Skills for the Job? Rethinking Training Policies for Workers*. Human Development Perspectives. Washington, DC: World Bank.
- Baird, Sarah, Craig McIntosh, and Berk Özler. 2011. "Cash or Condition? Evidence from a Cash Transfer Experiment." *Quarterly Journal of Economics* 126 (4): 1709–53.
- Baland, Jean-Marie, Catherine Guirking, and Charlotte Mali. 2011. "Pretending to Be Poor: Borrowing to Escape Solidarity in Cameroon." *Economic Development and Cultural Change* 60 (1): 1–16.
- Bandyopadhyay, Sushenjit, and Emmanuel Skoufias. Forthcoming. "Rainfall Variability, Occupation Choice, and Welfare in Rural Bangladesh." *Review of Economics of the Household*.
- Banerjee, Abhijit V., and Esther Duflo. 2011. *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. New York: PublicAffairs.
- Barro, Robert J., and Jong-Wha Lee. 2010. "A New Data Set of Educational Attainment in the World, 1950–2010." Working Paper 15902, National Bureau of Economic Research, Cambridge, MA.
- Basu, Kaushik. 2006. "Gender and Say: A Model of Household Behaviour with Endogenously Determined Balance of Power." *Economic Journal* 116 (511): 558–80.
- Becker, Gary S. 1974. "A Theory of Social Interactions." *Journal of Political Economy* 82 (6): 1063–93.
- Bernheim, B. Douglas, Andrei Shleifer, and Lawrence H. Summers. 1985. "The Strategic Bequest Motive." *Journal of Political Economy* 93 (6): 1045–76.
- Brown, Julia K., Mushfiq A. Mobarak, and Tetyana V. Zelenska. 2013. "Barriers to Adoption of Products and Technologies That Aid Risk Management in Developing Countries." Background paper for the *World Development Report 2014*.
- Cáceres-Delpiano, Julio. 2013. "Literature Review: Family Formation and Fertility as Risk Coping Mechanisms." Background paper for the *World Development Report 2014*.
- Card, David. 1999. "The Causal Effect of Education on Earnings." In *Handbook of Labor Economics*, vol. 3A, 1801–63. Amsterdam: Elsevier.
- Chou, Shin-Yi, Jin-Tan Liu, Michael Grossman, and Ted Joyce. 2010. "Parental Education and Child Health: Evidence from a Natural Experiment in Taiwan [China]." *American Economic Journal: Applied Economics* 2 (1): 33–61.
- Collins, Daryl, Jonathan Morduch, Stuart Rutherford, and Orlanda Ruthven. 2009. *Portfolios of the Poor*. Princeton, NJ: Princeton University Press.
- Contreras, Manuel, Brian Heilman, Gary Barker, Ajay Singh, Ravi Verma, and Joanna Bloomfield. 2012. "Bridges to Adulthood: Understanding the Lifelong Influence of Men's Childhood Experiences of Violence." International Center for Research on Women, Washington, DC.
- Cotlear, Daniel. Forthcoming. "The Challenges of Implementing Universal Health Coverage in Developing Countries: Lessons from 25 Countries from around the World." Unpublished manuscript. World Bank, Washington, DC.
- Davis, Peter. 2011. "Patterns of Socio-Economic Mobility in Rural Bangladesh: Lessons from Life-History Interviews." Working Paper 197, Chronic Poverty Research Center, Bath, U.K.
- Deininger, Klaus, Aparajita Goyal, and Hari Nagarajan. 2013. "Women's Inheritance Rights and Intergenerational Transmission of Resources in India." *Journal of Human Resources* 48 (1): 114–41.
- Dercon, Stefan. 2002. "Income Risk, Coping Strategies, and Safety Nets." *World Bank Research Observer* 17 (2): 141–66.
- Dercon, Stefan, and Pramila Krishnan. 2000. "In Sickness and in Health: Risk Sharing within Households in Rural Ethiopia." *Journal of Political Economy* 108 (4): 688–727.
- De Vreyer, Philippe, and Sylvie Lambert. 2013. "Household Risk Management in Senegal." Background paper for the *World Development Report 2014*.
- De Weerd, Joachim, and Kalle Hirvonen. 2013. "Risk Sharing and Internal Migration." Policy Research Working Paper 6429, World Bank, Washington, DC.
- Di Falco, Salvatore, and Erwin Bulte. 2011. "A Dark Side of Social Capital? Kinship, Consumption, and Savings." *Journal of Development Studies* 47 (8): 1128–51.
- Duflo, Esther, and Christopher Udry. 2004. "Intrahousehold Resource Allocation in Côte d'Ivoire: Social Norms, Separate Accounts and Consumption Choices." Working Paper 10498, National Bureau of Economic Research, Cambridge, MA.
- Evans, Brooks. Forthcoming. "An Examination of Pension Coverage of Elderly in the Developing World." Social Protection and Labor Policy Note, World Bank, Washington, DC.
- Field, Erica. 2007. "Entitled to Work: Urban Property Rights and Labor Supply in Peru." *Quarterly Journal of Economics* 122 (4): 1561–602.
- Fiszbein, Ariel, and Norbert Schady. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*. Washington, DC: World Bank.
- Friedman, Jed, and Jennifer Sturdy. 2011. "The Influence of Economic Crisis on Early Childhood Development: A Review of Pathways and Measured Impact." In *No Small Matter: The Impact of Poverty, Shocks, and Human Capital Investments in Early Childhood Development*, edited by Harold Alderman, 51–83. Washington, DC: World Bank.
- Frölich, Markus, David Kaplan, Carmen Pagés-Serra, Jamele Rigolini, and David Robalino. Forthcoming. *Social Insurance and Labor Markets: How to Protect Workers While Creating Good Jobs*. Washington, DC: World Bank, Inter-American Development Bank, and Institute for the Study of Labor.
- Genicot, Garance, and Ethan Ligon. 2013. "Risk and the Extent of Insurance." Background Paper for the *World Development Report 2014*.
- Giles, John, Junjie Guo, and Yaohui Zhao. 2013. "Community, Family and Household Support for the Elderly in the Wake of Rapid Urbanization: Evidence from Rural China." Research in

- progress supported by the Knowledge for Change Program, World Bank, Washington, DC.
- Grossman, Michael. 2006. "Education and Nonmarket Outcomes." In *Handbook of the Economics of Education*, vol. 1, edited by Eric Hanushek and Finis Welch, 578–633. Amsterdam: Elsevier.
- Haushofer, Johannes, Joost de Laat, and Matthieu Chemin. 2012. "Poverty Raises Levels of the Stress Hormone Cortisol: Evidence from Weather Shocks in Kenya." Unpublished manuscript. J-PAL, Cambridge, MA.
- Heckman, James J., Jora Stixrud, and Sergio Urzua. 2006. "The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior." *Journal of Labor Economics* 24 (3): 411–82.
- Heltberg, Rasmus, Naomi Hossain, and Anna Reva, eds. 2012. *Living through Crises: How the Food, Fuel, and Financial Shocks Affect the Poor*. Washington, DC: World Bank.
- Heltberg, Rasmus, Ana Maria Oviedo, and Faiyaz Talukdar. 2013. "What Are the Sources of Risk and How Do People Cope? Insights from Household Surveys in 15 Countries." Background paper for the *World Development Report 2014*.
- Hinz, Richard, Robert Holzmann, David Tuesta, and Noriyuki Takayama. 2013. *Matching Contributions for Pensions: A Review of International Experience*. Washington, DC: World Bank.
- Hoff, Karla, and Arijit Sen. 2005. "The Kin System as a Poverty Trap?" Policy Research Working Paper 3575, World Bank, Washington, DC.
- Holzmann, Robert, David A. Robalino, and Noriyuki Takayama. 2009. *Closing the Coverage Gap: The Role of Social Pensions and Other Retirement Income Transfers*. Washington, DC: World Bank.
- Isaacs, Julia, Katherine Toran, Heather Hahn, Karina Fortuny, and C. Eugene Steurle. 2012. "Kids' Share 2012: Report on Federal Expenditures on Children through 2011." Urban Institute, Washington, DC.
- Iversen, Vegard, Cecile Jackson, Bereket Kebede, Alistair Munro, and Arjan Verschoor. 2011. "Do Spouses Realise Cooperative Gains? Experimental Evidence from Rural Uganda." *World Development* 39 (4): 569–78.
- Jensen, Robert. 2010. "The (Perceived) Returns to Education and the Demand for Schooling." *Quarterly Journal of Economics* 125 (2): 515–48.
- . 2012. "Do Labor Market Opportunities Affect Young Women's Work and Family Decisions? Experimental Evidence from India." *Quarterly Journal of Economics* 127 (2): 753–92.
- Kusimba, Sibel, Harpieth Chaggar, Elizabeth Gross, and Gabriel Kunyu. 2013. "Social Networks of Mobile Money in Kenya." Working Paper 2013-1, Institute for Money, Technology, and Financial Inclusion, Irvine, CA.
- La Forgia, Gerard M., and April Harding. 2009. "Public-Private Partnerships and Public Hospital Performance in São Paulo, Brazil." *Health Affairs* 28 (4): 1114–26.
- La Forgia, Gerard, and Somil Nagpal. 2012. *Government-Sponsored Health Insurance in India: Are You Covered?* Washington, DC: World Bank.
- Ledgerwood, Joanna. 2013. *The New Microfinance Handbook: A Financial Market System Perspective*. Washington, DC: World Bank.
- Levy, Santiago, and Norbert Schady. 2013. "Latin America's Social Policy Challenge: Education, Social Insurance, Redistribution." *Journal of Economic Perspectives* 27 (2): 193–218.
- Lewis, Laura, and Harry Anthony Patrinos. 2012. "Impact Evaluation of Private Sector Participation in Education." Research Report, CFBT Education Trust, Reading, U.K.
- Linnerooth-Bayer, Joanne, Rainhard Mechler, and Stefan Hochrainer-Stigler. 2011. "Insurance against Losses from Natural Disasters in Developing Countries: Evidence, Gaps and the Way Forward." *Journal of Integrated Disaster Risk Management* 1 (1): 1–23.
- Miguel, Edward. 2005. "Poverty and Witch Killing." *Review of Economic Studies* 72 (4): 1153–72.
- Nilekani, Nandan. 2013. "The Aadhaar Project." Presentation at Development Economics Lecture Series, World Bank, Washington, DC, April 24.
- OECD (Organisation for Economic Co-operation and Development). Programme for International Student Assessment (PISA) (database). OECD, Paris, <http://www.oecd.org/pisa>.
- Ortiz d'Avila Assumpção, Rodrigo. 2012. "How Brazil Stopped Paying the Banks: A Brazilian Perspective on Social Security Payments." Presentation at Social Protection and Labor Sector Seminar Series, World Bank, Washington, DC, October 26.
- Oviedo, Ana María, and Harry Moroz. 2013. "The Impacts of Risk." Background paper for the *World Development Report 2014*.
- Paulson, Anna L. 2000. "Insurance Motives for Migration: Evidence from Thailand." Kellogg Graduate School of Management, Northwestern University, Evanston, IL.
- Premand, Patrick. 2013. "From Risk Coping to Risk Management: Productive Safety Nets in Africa." Background paper for the *World Development Report 2014*.
- Ribe, Helena, David A. Robalino, and Ian Walker. 2012. *From Right to Reality: Incentives, Labor Markets, and the Challenge of Universal Social Protection in Latin America and the Caribbean*. Washington, DC: World Bank.
- Robalino, David A., Laura Rawlings, and Ian Walker. 2012. "Building Social Protection and Labor Systems: Concepts and Operational Implications." Social Protection and Labor Discussion Paper 1202, World Bank, Washington, DC.
- Ruiz, Neil G. 2008. "Managing Migration: Lessons from the Philippines." Migration and Development Brief 6, World Bank, Washington, DC.
- Silverstein, Merrill, and Roseann Giarrusso. 2010. "Aging and Family Life: A Decade Review." *Journal of Marriage and Family* 72 (5): 1039–58.
- Udry, Christopher. 1996. "Gender, Agricultural Production, and the Theory of the Household." *Journal of Political Economy* 104 (5): 1010–46.
- United Nations. 2009. "World Population Prospects: The 2008 Revision." Department of Economic and Social Affairs Population Division, United Nations, New York.
- World Bank. 2003. *Land Policies for Growth and Poverty Reduction*. Washington, DC: World Bank.
- . 2011. *World Development Report 2012: Gender Equality and Development*. Washington, DC: World Bank.
- . 2012. "Better Jobs in Nicaragua: The Role of Human Capital." Policy Note, World Bank, Washington, DC.
- . Educational Attainment and Enrollment around the World (EdAttain) (database). World Bank, Washington, DC, <http://iresearch.worldbank.org/edattain/>.
- . World Development Indicators (database). World Bank, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators>.