This chapter focuses on the coping strategies adopted by crisis-affected households to protect their welfare following an income shock. The chapter presents findings from a unique set of CRSs carried out during mid-2009 and early 2010 in several Eastern European and Central Asian countries, including Armenia, Bulgaria, Latvia, Montenegro, and Romania (see box 1.1).

Crisis-affected households tried to cope with income shocks by increasing disposable income or by decreasing household expenditures. Remarkably, several key features in household responses to shocks are common across the countries surveyed, despite the range of differing characteristics among them:

- Households relied on a portfolio of strategies rather than a single strategy to cope with the crisis.
- Households adopted coping strategies even when they were not directly affected by the crisis; however, a larger proportion of crisis-affected households and poorer households adopted coping strategies relative to crisis-unaffected and nonpoor households.
- The most common set of strategies adopted during the crisis involved reducing household expenditures. Surveyed households reduced...
expenditures on a broad range of goods and services during the crisis. Durable goods purchases and food expenditures were reduced. Alarmingly, food purchases were reduced by the poor, whose nutritional status was at risk to begin with.

- Surveyed households tried to cope with the crisis by increasing labor supply, despite the challenges of a weak labor market, either by increasing the number of hours worked, or by sending nonworking members of the household into the labor market.
- Few surveyed households could rely on savings and many households were in fact indebted when the crisis struck.
- Crisis-affected households were particularly likely to adopt riskier strategies by cutting expenditures on health care, but at least thus far households have not pulled their children out of school.
- Crisis-affected households in the poorest quintile and in vulnerable groups were less able to respond by increasing their incomes, and thus were more likely to reduce expenditures. These expenditure cuts included those on basic welfare goods, such as health care and some educational expenditure.

This chapter presents the coping strategies discussed above, but leaves for chapter 4 the discussion of households tapping formal safety nets, such as unemployment insurance and social assistance.

**Crisis Impacts Prompt Steps to Increase Disposable Income and Reduce Expenditures**

In response to income shocks, households try to increase income and reduce expenditures (see figure 3.1). Crisis-affected households often attempt to *increase disposable income* by expanding their labor supply, either with nonworking members of the household joining the labor force or with working members increasing the number of jobs or hours worked; suspending saving and increasing borrowing; and relying on resources available through formal and informal safety nets. Households seeking to increase disposable income, however, may find it difficult to do so in a contracting economy. Consequently, most households also seek to reduce their household expenditures, sometimes cutting spending on durable and nondurable goods, but also on insurance, health, and education, which undermines welfare and creates vulnerability to any further shocks. After the initial shock, each household is forced to rely on a mix of responses that shifts over time as the household pool of options changes.
Evidence from CRSs shows that crisis-affected households were more likely than unaffected households to increase labor supply, increase agricultural production, reduce visits to health care professionals and stop buying prescribed medication in 2009 relative to 2008 (see figure 3.2).² Almost always, crisis-affected households were more likely to adopt a coping strategy that included reducing a “basic welfare” item, such as food, health care, or medicines. There are, however, two exceptions: in Montenegro, crisis-affected households were less likely to cut down on food consumption; and in Latvia, crisis-affected households were less likely to cut prescription medicine purchases. More positively, households did not reduce education consumption (not pictured) in 2009 relative to consumption in 2008 in all countries except Latvia, where the incidence of children from crisis-affected households withdrawing from school was slightly higher.

In five countries in which CRSs were analyzed, households that were not affected directly by the crisis also adopted defensive coping strategies along with households that were affected. This occurs partly because households adopt certain strategies independent of the economic cycle. These strategies might be adopted in the event of idiosyncratic shocks (for example, illness or death in the family, loss of income from the family business failing) that were not necessarily brought on by the economic downturn. However, these strategies also are dependent on overall optimism or pessimism about the economy, which might be affected by political, security, economic, or financial factors. For example,
The Jobs Crisis

Figure 3.2  Households Coped with the Crisis by Adopting Measures to Increase Incomes or Decrease Household Expenditures

Source: Azam 2010.
33 percent of households in Armenia and almost 50 percent of households in Latvia and Romania that were not affected directly by the crisis reported reducing food consumption in 2009 relative to 2008. These include large proportions of households and are unlikely to be explained by the general churning that might occur as a result of idiosyncratic shocks, and instead reflect pessimism about job stability, private business earnings, relative price fluctuations, or government service provision.

Households That Experienced a Shock Sought to Cope by Increasing Disposable Income

Households affected by the crisis were significantly more likely to take steps to increase disposable income available to the family. CRSs allow three separate categories to be investigated. First, household surveys in Armenia, Bulgaria, Montenegro, and Romania reveal that households tried to increase labor supply by finding work for nonworking family members and also by increasing the number of hours of work among working members. Second, only a few households had access to savings and, therefore, households had to increase borrowing to raise disposable income. Third, households tried to tap informal transfers (remittances, charitable donations, and so on), but this strategy, which ordinarily would depend on foreign migrant workers, was not very successful because the crisis was broad based and global.

Households Increased Labor Supply

Increasing labor supply was among the most important mitigation strategies for households—households that experienced an income shock were more than twice as likely to seek to increase labor supply as other households. Most crisis-affected households sent nonworking family members to find work, and working family members sought additional work, especially if their hours had been reduced at their primary jobs. However, the majority of those who sought formal sector employment were unlikely to find such jobs. Between 20 percent and 34 percent of crisis-affected households increased labor supply in response to the crisis in Armenia, Bulgaria, Montenegro, and Romania (see figure 3.3). Less than 10 percent of households in Latvia used the same coping strategy. The likely explanation is that the labor market in Latvia was significantly less likely to be able to absorb nonworking family members or workers who were looking to supplement their current jobs.
Evidence from Bulgaria reveals that while many crisis-affected households tried to increase their labor supply during the recession, this strategy was not always successful. As many as 29 percent of crisis-affected households tried to find additional work for nonworking family members and did not succeed; in contrast, only 8 percent of crisis-unaffected households tried the same strategy and did not find work (see figure 3.4, top panel). Further evidence from Bulgaria reveals that increasing labor supply as a coping strategy was more successful for wealthier households (see figure 3.4, bottom panel). Nearly 80 percent of poor crisis-affected households sought additional work, but only 20 percent were successful. In contrast, 50 percent of households in the wealthiest quintile sought additional work and more than half of them succeeded.

Attempts by households to increase labor supply at a time of low job vacancies are somewhat surprising. Findings from the CRS in Montenegro reveal that crisis-affected households were almost twice as likely to seek work during 2009 relative to 2008 (see figure 3.5). Similarly, twice as many crisis-affected households increased agricultural production in 2009 relative to 2008 than crisis-unaffected households. In Armenia,
Figure 3.4  In Bulgaria, Wealthy Households Were More Likely to Succeed in Finding Additional Work than Poor Households

instances of finding additional work as a coping mechanism, percent of households

- nonworker could not find additional work
- worker could not find additional work
- nonworker found a full-time job
- nonworker found occasional work
- worker found additional work

instances of finding additional work as a coping mechanism for crisis-affected households, by income quintiles

Source: Azam 2010.
workers shifted into agriculture as a sector of last resort. In more formalized economies, such as Bulgaria, shifts took place outside the agriculture sector. Although 35 percent of Bulgarians suffered a labor market shock during the crisis, others found work or increased their hours. These jobs were taken by households that experienced a shock, and because
these jobs are likely lower quality, it is not surprising that households also reported income declines.

**Evidence from Bulgaria Reveals That Few Households Could Rely on Savings**

Across the region, data are scarce on household-level borrowing and saving, but available data suggest that few households were able to rely on savings to cushion the income shock during the crisis. In Bulgaria, only 23 percent of all households—and only 7 percent of households in the poorest quintile—reported having savings to rely on during the crisis.

**Informal Transfers Could Not Be Leveraged to Increase Disposable Income, They Were More often a Transmission Channel to Households during the 2009 Crisis**

Informal transfers, such as remittances, receipts from charities, and help from relatives can be a mitigation strategy for households. However, CRSs show that informal transfers were not among the most important mitigation strategies for most households during this crisis. For example, in Bulgaria, 6.7 percent of households reported unsuccessful attempts to gain informal support. Unsurprisingly, the effectiveness of informal transfers declines with the breadth of the covariate shock. With a truly global crisis, or more important, when the crisis also hits countries and sectors that might be the source of informal transfers, the likelihood of informal transfers playing a big mitigation role is small.

In Armenia, large numbers of migrants returned from Russia and other destinations, and migrants who normally would head to Russia during the spring did not leave. As a result, the lack of remittances from Russia likely transmitted the effects of the crisis to certain Armenian households. However, another informal transfer played an important role in cushioning the income shock on Armenian households. Nonimmediate family in the Armenian diaspora increased their assistance to Armenian households in the wake of the crisis, underscoring strong extended family ties of Armenians abroad (World Bank 2010a).

**Households That Experienced a Shock also Coped by Reducing Expenditures during the Crisis**

Many households reduced expenditures during the crisis (see box 3.1 for discussion of the methodology). However, households that did
Box 3.1

Methodology to Assess the Social Impacts of the 2009 Crisis

In a background paper for this report, Dasgupta (2010) evaluated the impact of the crisis on statistically identical households by applying a matching technique. The analysis was conducted in four Eastern European and Central Asian countries, namely, Armenia, Bulgaria, Montenegro, and Romania. The paper focuses on household coping behavior in health, education, and other social sectors to identify some early patterns in deteriorating human development investments.

The methodology adopted is similar to that which is used in impact evaluations. Household characteristics are expected to play a role in determining the impact of the crisis on households. For example, households that depend on income from the construction sector are more likely to be affected by the crisis than households dependent on income from other sectors. This causality between household characteristics and crisis impact leads to a selection bias, but to correct this selection bias, the methodology adopts a Propensity Score Matching (PSM) technique. PSM identifies similar households (household characteristics such as demographic characteristics, highest level of education, ethnicity, religion, native language, and location are compared) except that one set of households was affected by the crisis and the other set was unaffected by the crisis. More specifically, the study (i) uses a Probit model to estimate the predicted probability of being affected by the crisis and (ii) plots a kernel density for the households affected and unaffected by the crisis and a common support region between these two groups is identified.

The average impact is calculated as follows:

\[
\text{Average Treatment Effect on Treated} = \text{E}(Y_1 - Y_0|D = 1) = \text{E}(Y_1|D = 1) - \text{E}(Y_0|D = 1)
\]

Where, the first component on the right hand side is the expected value of outcome for households who are affected by the crisis and the second component is the same for a control group of households not affected by the crisis.

Source: Dasgupta 2010.

experience an income shock were significantly more likely to reduce major nonessential expenditures (such as vacations and durables) and expenditures with potential effects on basic welfare (such as food, health, and education). Focusing on what might be considered basic welfare items, CRSs indicate that (i) large numbers of households
reduced food expenditures; (ii) families continued education consumption, but the true test of the education commitment will be revealed when data from the beginning of the new school year is analyzed; and (iii) a significant portion of households reduced health care consumption, sometimes by reducing visits to the doctor, sometimes by reducing medication use, and sometimes by discontinuing health insurance coverage. Households in the poorest quintile and in vulnerable groups were more likely to reduce basic welfare goods expenditures in response to measured shocks.

**Households Reduced Food Expenditures**

CRSs in five countries indicate that food expenditures were cut during the 2009 crisis. It can be difficult to determine the extent to which reductions in food expenditures affect human welfare, but reductions in food expenditures can put the poorest households at risk. In Serbia, some people reported their struggles to afford all but the most limited staple foods, and in Bulgaria, 18 percent of poor households reported skipping meals. In all countries except Armenia, food expenditure cuts were driven primarily by poverty rather than measured income shocks. In Armenia, however, households with measured shocks were significantly more likely to reduce food expenditures than households without a measured income shock.

**Thus Far, Households Protected School Enrollments of Their Children**

CRSs in Armenia, Bulgaria, Montenegro, and Romania reveal that households protected education investments by continuing schooling (rather than withdrawing children from school) (see table 3.1). Households that did cut back on education spending increased their vulnerability to further shocks and potentially reduced long-term human capital accumulation—a particular concern for the already vulnerable because it could reduce lifetime earnings. The crisis did not lead to many households placing education attainment at direct risk. Children in crisis-affected households were not withdrawn from schools, nor were children moved from private schools to public schools in higher proportions when compared with households that were not affected by the crisis. This is consistent with household responses in other middle-income countries (see box 3.2). The cost of sending children to school tends to be low and the opportunity cost of sending them to school is likely to be low because child labor is less common in most Eastern European and Central Asian countries.
Table 3.1  Health and Some Education Coping Strategies Were Adopted by Households across Four Eastern European and Central Asian Countries

<table>
<thead>
<tr>
<th></th>
<th>Armenia</th>
<th>Bulgaria</th>
<th>Montenegro</th>
<th>Romania</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withdrew children from school</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>Postponed or canceled training</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>Cut education expenditure</td>
<td>N/A</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td>Dropped extracurricular activities</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td>Moved from expensive to cheaper schools</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced or canceled doctors visits</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Reduced or canceled medical care</td>
<td>N/A</td>
<td>Yes</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>Reduced medicine purchases</td>
<td>Yes</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Canceled medical insurance</td>
<td>N/A</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>


Box 3.2  
**The Impacts of Past Crises on Education Outcomes Were Mixed**

Experience from past crises demonstrates that the impact of a shock on education varies in scope depending on a number of factors. At the household level, if the substitution effect dominates, the labor market deterioration reduces the opportunity cost of education and more people use education services. If the income effect dominates, families feel poorer, raising the marginal value of each extra dollar of family income, which typically results in postponing school or reducing education consumption. Government policies also have an important impact on education outcomes, both during crises and even once the recovery begins as government undertakes fiscal consolidation measures.

*(continued next page)*
Box 3.2 (continued)

Effects of Previous Crises on Education Indicators Were Mixed

<table>
<thead>
<tr>
<th>Channel</th>
<th>Country examples</th>
</tr>
</thead>
</table>
| Behavior and Demand | **Argentina:** Reduced school supply purchases.  
**Indonesia:** Enrollment decline averaged 3 to 4 percent; up to 11 percent in secondary schools, especially private schools. In 1998, male student dropout rates increased by 5.7 percent and the proportion of 7 to 12 year olds not enrolled in schools doubled from 6 to 12 percent.  
**Malaysia:** Primary and secondary enrollment increased at 3.4 percent and 3.7 percent, respectively. Upper secondary increased by 13.7 percent. Tertiary enrollment increased because overseas students returned when the government sponsorship program was temporarily suspended.  
**Mexico:** Growth in gross primary enrollment fell from 0.44 percent in 1994 to 0.09 percent in 1995.  
**Turkey:** Households reduced education spending; children withdrawn from school. Some 35 percent of urban and 44 percent of rural households reported spending less on health and education. |
| Government Spending and Supply | **Argentina:** Decreased financing for school lunches and infrastructure. Discontinuity of classes because of labor conflicts with teachers triggered by delayed salary payments.  
**Indonesia:** Increased real basic education budget by 55 percent between 1996–97 and 1998–99, mainly for "Stay-at-School" scholarships and school block grants.  
**Malaysia:** Suspended higher education government sponsorship for studying abroad.  
**Philippines:** Deferred 1998 programs for school building and textbooks because of cutbacks.  
**Thailand:** Cut budget for education by 15 percent in 1998.  
**Indonesia:** Shift from private to public schools in poor and urban areas.  
**Malaysia:** Increased tertiary enrollment when students returned from abroad.  
**Russian Federation:** Worsening inequity in education status and outcomes across regions since 1998 crisis. |

Households that were affected directly by the crisis adopted responses that put education outcomes at indirect risk. In Bulgaria, households significantly reduced education-related expenditures, such as transportation, basic supplies, and tutoring. In Bulgaria and Montenegro, households canceled or postponed training, for example, in languages and information technology. These choices could affect lifetime earnings, but they are not as severe as withdrawing children from school, and it is difficult to assess the effects on long-term welfare because little is known about economic returns to training in the region. However, reduced spending on education-related items such as transportation and basic supplies can lead to lower educational outcomes (learning) and possibly increased dropouts, particularly among poor households.

**Households Reduced Health Investments and Increased Risk Exposure**

CRSs in Armenia, Bulgaria, Montenegro, and Romania show that households consistently reported reducing health expenditures and utilization across a range of indicators (see table 3.1). This finding is consistent with findings from other countries (see box 3.3). Typically, crisis-affected households and poor households were significantly more likely to reduce health care during the crisis. Crisis-affected households in Armenia, Bulgaria, and Montenegro reduced doctor visits or reduced medical care much more frequently than crisis-unaffected households. However, the long-term impact on people who adopt such responses will vary widely; the impacts of reducing preventative health care may show up in the longer term, and foregoing medical appointments could have immediate and devastating effects for some but relatively little impact for most people.

**Poor and Minority Households Coped by Adopting Riskier Coping Strategies than Rich Households**

In Bulgaria and Montenegro, poor households are more likely than rich households to adopt riskier coping strategies, increasing their vulnerability to future shocks (see figure 3.6). Controlling for a range of household characteristics, poor households were more likely than nonpoor households to (i) reduce health care consumption; and (ii) reduce food expenditures by cutting quality or quantity (Azam 2010). Among
Most Impacts of Past Crises on Health Outcomes Were Negative

The literature on the impact of crises on health outcomes differs according to country wealth. In several low-income countries, crises have led to infant mortality and malnutrition increases. In many cases, girls suffer disproportionately. Evidence from high-income countries suggests that economic downturns are surprisingly “good for health.” The examples below present selected evidence from middle-income countries, where most findings indicate overall negative impacts of economic crises on health. Evidence is stronger, however, for immediate indicators such as government health spending and utilization of services than for key health outcomes. The positive policy responses in Argentina and Thailand are noteworthy examples.

For Eastern Europe and Central Asia, past experiences reveal two important themes. First, studies suggest that nutrition was not significantly affected by economic turmoil during the transition in the early 1990s, suggesting that most households protected themselves during hard times. Evidence from past crises in 22 countries associates poor macroeconomic performance with rising male suicide rates, especially in the Baltics, Belarus, and Russia.

Effects of Previous Crises on Health Indicators Were Mostly Negative

<table>
<thead>
<tr>
<th>Channel</th>
<th>Country examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior</td>
<td>Turkey: Cutbacks in fruit and vegetable consumption.</td>
</tr>
<tr>
<td></td>
<td>Eastern Europe in the 1990s: Diet and nutrition remained fairly stable during economic turmoil of transition.</td>
</tr>
<tr>
<td>Demand</td>
<td>Turkey: Demand fell for health services.</td>
</tr>
<tr>
<td></td>
<td>Argentina: Health insurance coverage declined; utilization of care fell, including children’s preventive visits to health centers.</td>
</tr>
<tr>
<td></td>
<td>Indonesia: Utilization declined for primary care, including children’s visits, but not for hospitals; household spending on health declined faster than overall spending.</td>
</tr>
<tr>
<td></td>
<td>Thailand: Utilization increased for public health services because of expansion of targeted programs; household spending on health declined faster than overall spending.</td>
</tr>
<tr>
<td></td>
<td>Malaysia: Utilization shifted from private to public facilities.</td>
</tr>
</tbody>
</table>

(continued next page)
Box 3.3 (continued)

<table>
<thead>
<tr>
<th>Channel</th>
<th>Country examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Spending and Supply</td>
<td><strong>Mexico</strong>: Decline in out-of-pocket spending and utilization.</td>
</tr>
<tr>
<td></td>
<td><strong>Thailand, Indonesia, and Argentina</strong>: Drug prices increased because of sharp exchange rate depreciation.</td>
</tr>
<tr>
<td></td>
<td><strong>Russian Federation</strong>: Decline in government spending.</td>
</tr>
<tr>
<td></td>
<td><strong>Thailand</strong>: Decline in government spending but expansion of programs targeted to the poor.</td>
</tr>
<tr>
<td></td>
<td><strong>Argentina</strong>: Increase in public health spending, particularly for maternal and child health.</td>
</tr>
<tr>
<td></td>
<td><strong>Indonesia</strong>: Decline in government spending, increased donor spending.</td>
</tr>
<tr>
<td></td>
<td><strong>Mexico</strong>: Decline in government spending.</td>
</tr>
<tr>
<td>Outcomes</td>
<td><strong>Latin America in the 1980s</strong>: Decline in government health budgets.</td>
</tr>
<tr>
<td></td>
<td><strong>Russian Federation</strong>: Life expectancy declined; suicides increased.</td>
</tr>
<tr>
<td></td>
<td><strong>Mexico</strong>: Mortality among children and elderly was about 5–7 percent worse than precrisis trends.</td>
</tr>
<tr>
<td></td>
<td><strong>Indonesia</strong>: Infant mortality rose; reports on nutrition impacts varied among studies.</td>
</tr>
<tr>
<td></td>
<td><strong>Republic of Korea</strong>: Suicides increased.</td>
</tr>
</tbody>
</table>


crisis-affected households in Montenegro, 25 percent of households in the bottom quintile reduced preventative care visits to doctors; only 13 percent of households in the top quintile adopted this strategy. Similarly, poor households were considerably more likely to respond to the crisis by canceling health insurance. In Bulgaria, 36 percent of crisis-affected households in quintile 1 (poorest 20 percent) stopped buying regular medications, while 7 percent of households in the richest quintile resorted to this coping strategy. Similarly, 22 percent of poor crisis-affected households and 5 percent of rich crisis-affected households did not visit the doctor after falling ill.
In Bulgaria, Roma and Turkish Minority Households Adopted Riskier Coping Strategies

In Bulgaria, Roma and Turkish minorities were more likely to adopt risky coping strategies during the crisis (see figure 3.7). During 2009, 62 percent of Roma and 41 percent of Turkish households stopped regular purchases of medicine, but only 33 percent of majority households did the same. Similarly, 33 percent of Roma and 18 percent of Turkish households reported skipping preventative care visits, but among majority households, only 7 percent did. In response to illness, 29 percent of Roma households and 19 percent of Turkish households did not visit a doctor, but only 9 percent of majority households chose not to. Furthermore, 17 percent of Roma households canceled insurance, as did 9 percent of Turkish households, but among majority households, only 3 percent canceled insurance. Finally, Roma and Turkish minorities also withdrew their children from preschools, reduced other educational expenses, and stopped social contributions in much larger proportions than majority households. See also box 3.4 for a discussion of Roma coping strategies revealed by qualitative analyses.
Figure 3.7 In Bulgaria, Roma and Turkish Minority Households Adopted Riskier Coping Strategies than the Majority

Source: Azam 2010.
Notes

1. A household is defined as crisis-affected if it reported a decline in total income because of (or during) the crisis. By this definition, around 33 percent of households in Armenia, 28 percent of households in Bulgaria, 71 percent of households in Latvia, 22 percent of households in Montenegro, and 18 percent of households in Romania were affected by the crisis.

2. During a crisis, households may consider behavioral adjustments determined by observable and unobservable factors. That is, although some households react to income reductions, others may prepare themselves for an income reduction in the future based on their perceptions about being affected by a shock in the future.

3. This implies that, for crisis-affected households, the income effect dominated the substitution effect. The income effect suggests that a drop in wages would

Box 3.4

Serbia Roma Crisis Assessment

To assess the impact of the crisis on Roma in Serbia, focus group discussions were undertaken. All Roma groups in Serbia revealed that the crisis had led to a deteriorated economic condition at the household level. The Roma also revealed that the impact of the crisis was transmitted through the labor market through fewer job opportunities, lower wages, and increased discrimination against the Roma. The Roma also identified increased food prices, increased debts (utility bills, loans), increased health care costs, and increased uncertainty as key correlates of the crisis. As a consequence of economic hardships, the Roma pointed to deteriorating intrahousehold relationships, especially manifesting through disputes between spouses.

Most Roma households reported that they coped with the income shocks by decreasing household expenditures. These measures included delaying payments on utility bills, reducing the quality of food consumed, and in extreme cases scavenging for food in rubbish containers. Parents also reported cutting back on textbooks and other school supplies for children.

Some Roma households also coped with income shocks by attempting to increase household incomes. These measures included accepting jobs that they did not accept previously (lower pay or harder work conditions) and increasing begging (also by children).

result in increased labor supply; the substitution effect implies that lower wages reduce leisure costs, thereby reducing the labor supply.

4. During the 1997 Asian economic crisis, labor force participation (including unpaid work) increased among women in Indonesia. However, upper-income classes benefited the most in the urban areas and poorer people in the rural areas (Fallon and Lucas 2002). Following the 2001 crisis in Argentina, 13 percent of households tried to add a new member of the household to the labor market, especially among low-income households. In 50 percent of the cases, it involved the son or daughter, and in 25 percent, the spouse of the head of the household. However, most of those previously inactive often ended up unemployed, and those who did find work were not necessarily from the poorest groups (World Bank 2003). In contrast, during the Peso Crisis, Mexican households did not seem to pursue the strategy of working longer hours or inserting new household members into the labor force. In fact, growth in labor force participation decreased (McKenzie 2003).

5. In the aftermath of the 1994–95 Peso Crisis, remittances from friends and family in the United States mitigated the impact of the downturn on Mexican households (McKenzie 2003, 1197).

6. The importance of informal transfers is determined by social networks, which vary in intensity across countries and communities in the region. See Lokshin and Ravallion (2000) for an analysis of the 1998 crisis in Russia.

7. In contrast, during the Asian financial crisis in 1997–98, informal assistance from family and friends played an important role in Indonesia, where around 25 percent of households received informal assistance, the median value of which was considerably higher than that from the formal public sector (Frankenberg, Thomas, and Beegle 1999, v). During the 2001 crisis in Argentina, around 8 percent of households relied on informal credit at neighborhood stores to delay payment for purchases; nearly 15 percent of the poorest households resorted to this coping strategy, but less than 1 percent of those in the upper quintile did (World Bank 2003, 23).

8. After the 1998 crisis in Russia, total expenditures on food dropped sharply, especially in fruit and vegetable consumption that led to deterioration in the nutritional status for children from poor households (Stillman and Thomas 2004). Gottret (2009) summarizes nutritional outcomes in countries affected by crises as follows: the incidence of anemia among pregnant women increased by 22 percent during the East Asia crisis in Thailand; micronutrient deficiencies (especially vitamin A) in children and women (of reproductive age) increased, and the incidence of dangerously low Body Mass Indexes rose 25 percent in Indonesia.

9. Past work suggests that the question of whether economic crises and disasters lead to decreased schooling for children remains to be settled (Skoufias 2003). Jacoby and Skoufias (1997) find that child school attendance decreases as a
consequence of the shocks experienced by poor households in rural India. Duryea (1998) for Brazil and Skoufias and Parker (2002) for urban Mexico, both find similar negative effects on school attainment. In contrast, McKenzie (2003) finds that school attendance rates actually rose among 15–18 year olds during the Mexican crisis. One possible explanation for such a finding is that aggregate shocks give rise to opposing income and substitution effects. On the one hand, decreases in income (negative income effect) lead households to withdraw children from school. On the other hand, wage decreases or poor labor market conditions during the crisis lower the opportunity cost of schooling, inducing households to keep their children in school. Within this framework, the final outcome on schooling depends on whether the negative effect of income or the positive effect of declining opportunity costs is bigger.

10. After the 1997 crisis hit in Malaysia, private hospitals and clinics reported a drop of 15–50 percent in the number of patients seeking treatment (Ramesh 2009). Following the crisis in Argentina, 12 percent of hospitals reported that they had lost or changed their health coverage; and 57 percent of hospitals reported a decrease in the frequency of preventive controls for children (Fiszbein et al. 2002).

11. As discussed earlier, the Bulgaria CRS is the only one that also contained a Roma booster sample and hence contained sufficient observations for Roma-specific analysis.