DIRECTIONS IN DEVELOPMENT
Human Development

The Jobs Crisis

Household and Government Responses to the Great Recession in Eastern Europe and Central Asia

THE WORLD BANK


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Cover photo: Unemployment office in Kurgan, Russia. Photo by ITAR-TASS / Alexander Alpatkin.
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Foreword

The financial crisis and the ensuing economic downturn, the worst since the Great Depression in the 1930s, went hand in hand with tightening of credit markets, bank failures, firm closures, and high demand for social safety nets. In no region of the world were such consequences more pronounced than in the countries of Eastern Europe and Central Asia.

This report, *The Jobs Crisis: Household and Government Responses to the Great Recession in Eastern Europe and Central Asia*, brings together evidence that World Bank teams have collected on the impact of the crisis on households and families in Eastern Europe and Central Asia. The multiple monitoring tools employed in this study range from qualitative studies to the fielding of Crisis Response Surveys, and from extensively using administrative data to collecting information on policy responses from many client governments in the region.

This report shows how the crisis was felt by Eastern European and Central Asian households. Not only did unemployment rise sharply but it also lasted longer. The report also shows that the pain of the recession was broader, with workers taking home smaller paychecks as firms offered lower wage rates and fewer hours of work to their workers. *The Jobs Crisis* finds that households used a variety of ways to cope with the crisis. In some cases, those strategies put households at a higher long-term risk, for

example, by reducing spending on health care. Thankfully, most households kept their children in school, but the longer crisis conditions continue, the higher the chances are that education investments will be reduced in favor of short-term survival.

The Jobs Crisis presents an account of how governments reacted to the crisis through social policy reforms and initiatives—and how such responses could be improved in the future. Unemployment insurance benefits played a particularly important cushioning role, but coverage of the unemployed tended to be limited. Poverty-targeted social assistance programs often reacted only with a lag and suffered from low coverage in some countries. Despite severe fiscal pressures, however, governments tended to protect education budgets, and health budget cuts were often smaller than the overall gross domestic product contraction. Although both education and health sectors are in need of structural reforms in many countries, protecting those budgets while implementing long-term reforms is crucial to ensuring basic human capital investments. Strengthening automatic stabilizers, adjusting program parameters, and starting new social programs can help governments respond better to crises in the future.

We hope that *The Jobs Crisis* will find interested readers in the region and beyond, as it is one of the first systematic accounts of the consequences of the current macroeconomic crisis on the welfare of people.

Philippe H. Le Houérou
Vice President, Europe and Central Asia
The World Bank

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Abbreviations

ALMP	Active Labor Market Program
CRS	Crisis Response Survey
ESF	European Social Fund
EU	European Union
GDP	Gross Domestic Product
GMI	Guaranteed Minimum Income
HBS	Household Budget Survey
HIF	Health Insurance Funds
ILO	International Labour Organization
IMF	International Monetary Fund
ISKUR	Turkish Employment Agency
LFS	Labor Force Survey
LRSA	Last-Resort Social Assistance
LVL	Latvian Lat
MIP	Medical Insurance Program
NGO	Nongovernmental Organization
OECD	Organisation for Economic Co-operation and Development
OSI	Open Society Institute

PSM	Propensity Score Matching
UI	Unemployment Insurance
UNICEF	United Nations Children's Fund
WWS	Workplaces with Stipends
YoY	Year over Year

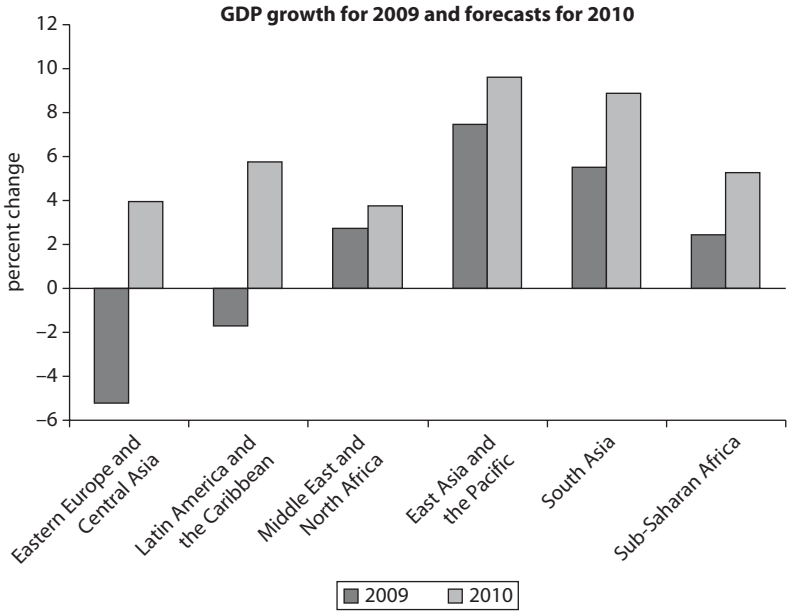
Overview

Introduction

The onset of the financial crisis was evident as early as mid-2007 when a real estate bubble in the United States and parts of Western Europe imploded, triggering multiple bank failures. In a short period of time, property values plummeted, the value of retirement accounts shrank, household savings evaporated, and general consumer and producer confidence disappeared. The financial crisis swiftly expanded into an economic crisis throughout America and Western Europe, from where it spread to developing countries that had depended on foreign direct investment, consumer and mortgage credit, trade, and remittances. By early 2009, it was clear that this economic downturn would be more severe than any crisis since the Great Depression, prompting some to refer to it as the "Great Recession."

Eastern European and Central Asian countries were hit particularly hard (see figure O.1). During 2009, global gross domestic product (GDP) contracted for the first time since World War II—about 2.2 percent—but across the region,[1] the average contraction was more than 5 percent and 20 of 30 economies recorded declines in GDP. Simulations of poverty rates given GDP contractions indicate that by the end of 2010, there could be 10 million more poor people in Eastern Europe and Central Asia, relative to baseline precrisis projections. Estonia, Latvia,

Figure O.1 GDP Contracted More Significantly in Eastern Europe and Central Asia in 2009 Relative to Other Regions and the Recovery in 2010 Was also More Muted than in Other Regions



Source: World Bank staff calculations using IMF World Economic Outlook Database, October 2010.
Note: Regional averages include only low- and middle-income countries based on World Bank classification of regions. Eastern Europe and Central Asia also includes Croatia, Czech Republic, Estonia, Hungary, Latvia, Poland, Slovak Republic, and Slovenia.

and Lithuania were among the hardest hit with sharp economic contractions of 14 to 18 percent. Large countries also suffered severe GDP contractions: the Russian Federation, 7.9 percent; Turkey, 4.7 percent; and Ukraine, 15.1 percent.

Unprecedented fiscal pressures emerged in many of the region's countries. Public finances deteriorated sharply in 2009, with an average decline in the fiscal position equivalent to 3.8 percent of GDP. As growth weakened, government revenues fell and spending on social protection programs rose for those countries worst hit by the economic downturn.

The fiscal reaction to the crisis varied across the region. Three oil and gas exporters—Azerbaijan, Russia, and Uzbekistan—suffered the largest decline in the fiscal balance in 2009. Abundant public savings built up in recent boom years allowed these countries to put in place expansionary fiscal policies. In contrast, for a number of countries in Eastern Europe,

the boom years had led to growing public spending commitments with no accumulation of buffer-stock savings.

About This Report

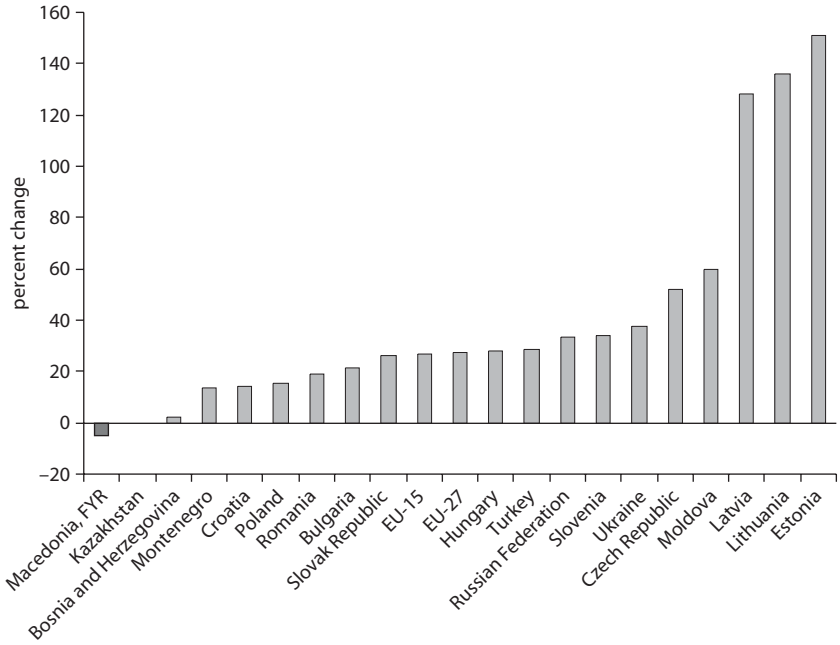
The impact of economic crises on household welfare typically are traced through four main transmission channels: (i) financial markets, via reduced access to credit, eroding savings, and sinking asset values; (ii) product markets, via lower growth and production, and relative price changes; (iii) labor markets, via falling employment, wages, and remittances; and (iv) government services, via declining education, health, and social protection services. Although these four transmission channels all affect household welfare, this report focuses on labor markets and government services.

This report presents the findings that emerged from a heightened monitoring effort launched by the World Bank to track the impacts of deteriorating macroeconomic conditions on families and government social responses to the crisis in Eastern European and Central Asian countries. The report synthesizes findings from administrative sources (for example, public employment offices, social benefits monitoring), Crisis Response Surveys, and government social responses. The report explores the following topics: (i) labor market adjustments, from firms halting new hiring, laying off workers, and reducing the wage bill by changing the hours of work, wage rates, and so on; (ii) coping strategies adopted by households, including measures to increase household income and reduce household expenditures following an income shock; and (iii) government social initiatives to protect household welfare, sometimes concurrently with tough fiscal consolidation measures. The report ends with reflections on policy options for governments to better prepare themselves to respond to future shocks.

Labor Market Impacts

Crisis Response Surveys confirm that labor market deterioration was the main transmission channel of the crisis to households, as firms laid off workers, halted hiring, and reduced their wage bill. Year over year (YoY) increases in registered unemployment in 27 Eastern European and Central Asian countries averaged 30 percent, increasing from 9.4 to 12.2 million between December 2008 and 2009 (see figure O.2). Unemployment rates rose sharply in Estonia, Latvia, and Lithuania, but

Figure O.2 Unemployment Increased in Most of Eastern Europe and Central Asia between 2008 and 2009



Source: Kuddo (2010a) using various Labor Force Surveys (rather than administrative data).
Note: EU-15 countries are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom. EU-27 countries are EU-15 plus Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovak Republic, and Slovenia.

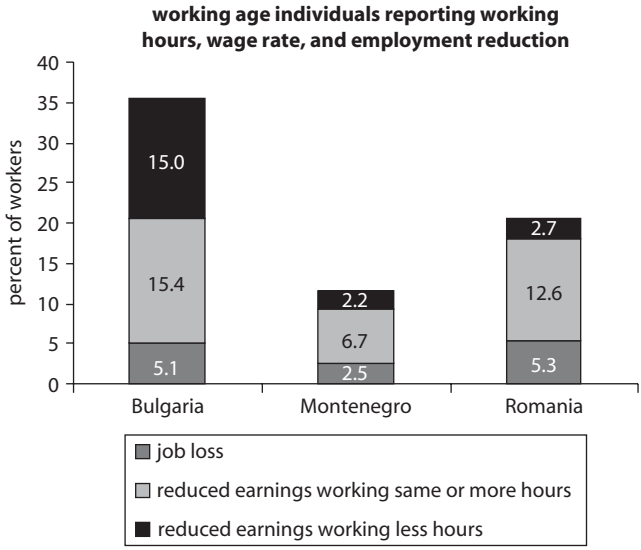
also in larger countries such as Russia, Turkey, and Ukraine. Job losses have occurred across the board, but the construction, retail, and manufacturing sectors were hit particularly hard. Among all workers, the share of men among registered job seekers increased, likely because the hardest hit sectors of the economy were typically male dominated. New entrants to the labor market faced difficult employment prospects, with youth unemployment reaching record highs of 25 percent (twice the adult rate) in 17 Eastern European and Central Asian countries in 2009.

Unemployment has lasted longer and competition for jobs has increased considerably since the crisis. Among 20 countries, long-term unemployment increases were sharpest in Estonia, Latvia, and Lithuania. People who have remained unemployed for long periods have had difficulty getting rehired because of stigma, discouragement, or deterioration of their skills. Increasingly, long-term registered unemployment has fallen

on youth, low-skilled workers, and minority ethnic groups. These groups also are more prone to poverty and social exclusion, and hence long spells of unemployment can have a more permanent impact on these groups than other vulnerable groups.

As prevalent as job losses were in 2009, the pain of the recession was far more broad-based. Workers who kept their jobs took home smaller paychecks (see figure O.3). Firms implemented measures to reduce their wage bill, including reducing hours of work and wage rates, and increasing administrative leave, wage arrears (mainly in member countries of the Commonwealth of Independent States), and temporary contracts. Although these measures may have muted worker layoffs to some extent, household welfare deteriorated as take-home pay shrank. Data from three Crisis Response Surveys indicated that in Bulgaria, six times as many workers took home smaller paychecks than lost their jobs; in Montenegro, it was four times as many workers; and in Romania, it was three times as many workers.

Figure O.3 Far More Workers Took Home Smaller Paychecks than Lost Their Jobs



Source: Azam 2010.
Note: The denominator is workers working in the last period (current workers not working in the retrospective period are excluded). For Romania and Montenegro, current workers who did not have a job in the retrospective period could not be identified, so the denominator is current workers plus the workers who quit or lost their job between the two periods; the values underestimate the effects.

The employment decline for each percent of GDP contraction varied widely across countries. Relatively low worker firing costs in Estonia and Latvia led to a high employment contraction; Lithuania and Turkey reduced real hourly wages significantly, leading to a smaller employment contraction; Ukraine and the former Yugoslav Republic of Macedonia provided subsidies to companies that agreed to retain workers, leading to less unemployment; Turkey witnessed a shift in employment from industry to agriculture and services, most likely into the informal sector and unpaid family labor (LFS); and, in Croatia, relatively inflexible labor regulations led firms to hold on to employees early on in the crisis, but as the crisis dragged on, layoffs increased. As such, the employment-to-GDP relationship depended heavily on worker firing costs, firm behavior to shrink their wage bill, government interventions, and perceptions about the crisis.

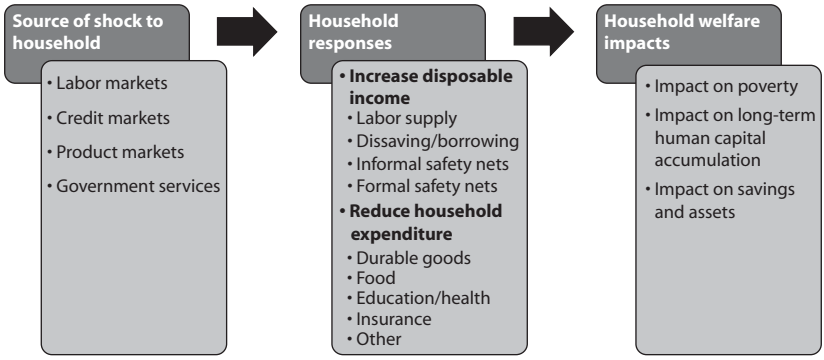
Finally, because the 2009 crisis was a global crisis, deteriorating foreign labor markets resulted in lower domestic remittance inflows to families. Here too, the region was hit harder than other regions around the world. Across the region, official remittance inflows are estimated to have fallen by 23 percent in 2009, compared with a 6 percent decline across all developing countries. Armenia, Kazakhstan, Moldova, and Romania are expected to witness sharp reductions of one-third to one-half of 2008 remittance levels. These remittances have provided vital income for families and, hence, these reductions could affect household welfare.

Household Coping Mechanisms

Crisis Response Surveys analyzed in Armenia, Bulgaria, Latvia, Montenegro, and Romania reflected a broad array of measures households took in the wake of shocks to increase incomes or reduce expenditures (see figure O.4). Strategies to increase household disposable incomes included increasing labor supply, borrowing or drawing down on savings, and tapping informal (charitable donations, remittances, cash from friends and family) and formal transfers (government social safety nets). Strategies to reduce expenditures included reducing consumption of durable goods, and also basic welfare items such as food, health care, and education.

Labor supply. Households that experienced an income shock were more than twice as likely to increase labor supply as households that did not, although with varying success. Many crisis-affected households sent nonworking family members to find work, and working family members

Figure O.4 Households Tried to Increase Income or Reduce Expenditures to Mitigate the Impacts of the Crisis



Source: World Bank staff.

sought additional work, especially if their hours had been reduced at their primary jobs.

Savings and borrowing. Few households were able to rely on savings and more often households increased indebtedness. Vulnerable households that experienced income shocks were more likely to be already indebted and without savings.

Informal and formal transfers. Informal transfers were *not* among the most important mitigation strategies for most households and the effectiveness of formal transfers varied in their response to the crisis. In fact, given the global nature of the crisis, informal transfers such as remittances, receipts from charities, and help from relatives were also a transmission channel of the crisis.

Food expenditures. Households reduced food expenditures in five countries in which Crisis Response Surveys were launched, with some households reducing the quality and others the quantity of food consumed. Poor households were more likely to adopt this coping strategy, in some cases putting their nutritional status at risk.

Health care. Households consistently reported reducing health care expenditures and utilization. As a result, people exposed themselves to a higher risk of illness, disability, or in extreme cases, death. Crisis-affected

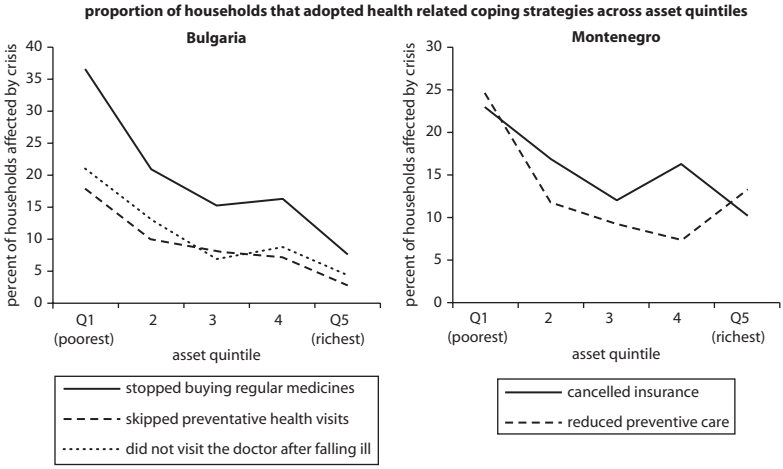
households in Armenia, Bulgaria, and Montenegro reduced doctor visits, medical care, and prescription drug use significantly.

In Bulgaria and Montenegro, poor households were more likely than rich households to adopt risky coping strategies (such as reducing preventative health care visits, cutting prescription drug use), increasing their vulnerability to future shocks (see figure O.5).

For example, in Bulgaria, 36 percent of crisis-affected households in the poorest quintile stopped buying regular medications, while 7 percent of households in the richest quintile resorted to this coping strategy; and in Montenegro, a quarter of households in the poorest quintile reduced preventative care utilization, while 13 percent of households in the richest quintile did the same. In Bulgaria, the only country in which the ethnic dimension was analyzed, Roma and Turkish minorities were more likely to adopt such risky coping strategies during the crisis than nonminorities.

Education. Evidence from Armenia, Bulgaria, Montenegro, and Romania showed that few households reduced education investments. Generally, 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 unaffected by the crisis. The low out-of-pocket and opportunity costs (because child labor is relatively rare in the region) of sending children to school in most countries in the region are likely to have helped families keep their children in school.

Figure O.5 Crisis-affected Households Increased Vulnerability to Future Shocks by Adopting Risky Coping Strategies



Source: Azam 2010.

Households directly affected by the crisis, however, adopted responses that put education outcomes at indirect risk. In Bulgaria, households significantly reduced education expenditures on transportation, basic supplies, and tutoring; also in Bulgaria and Montenegro, households canceled or postponed training (for example, in languages and information technology). These choices could reduce lifetime earnings, but are not as severe as withdrawing from general schooling.

Social Policy Responses to Protect Households

In the face of sharp GDP contractions, many Eastern European and Central Asian countries implemented or scaled up policies and programs to protect human welfare and long-term human capital. Measures to protect affected households included gearing up passive and active labor market programs, strengthening social assistance, maintaining or increasing minimum pensions, and in a few instances ensuring access to health and education services.

Passive labor market programs. In about one-third of Eastern European and Central Asian countries, unemployment insurance (UI) benefits were among the first benefits to reach crisis-affected households, tracking registered unemployment rates relatively well. Simulations of the impact of the recession on household welfare for Latvia showed that the presence of a functioning UI system likely prevented an additional 3 percentage point increase in poverty during the height of the crisis. However, UI coverage is low and many unemployed people are ineligible for benefits. In December 2009, on average across 24 Eastern European and Central Asian countries, Labor Force Surveys (LFSs) indicate that less than one-third of unemployed people were covered by UI.

Because of fiscal constraints brought on or exacerbated by the crisis, some countries implemented measures to reduce UI expenditures. For example, Hungary and Ukraine tightened UI eligibility criteria, Ukraine tightened eligibility criteria to register as unemployed, the Czech Republic reduced benefit periods, and Estonia raised contribution rates.

Active labor market programs. In 2009, a number of Eastern European and Central Asian countries responded to deteriorating labor market conditions by increasing spending on programs to support those who are employed, support new employment, provide income support, enhance employability, and improve job matching. Some active labor market

programs implemented during the crisis included reducing nonwage costs to raise labor force participation rates among women and youth (Turkey); implementing public works programs or increasing public investment (Armenia, Kazakhstan, Latvia, Russia); introducing or scaling up wage subsidy programs by offering incentives for "short-time work" and reducing social security contributions (Bulgaria, Estonia, Russia, Turkey); and expanding access to training or retraining (Bulgaria, Russia).

Social assistance. Some Eastern European and Central Asian countries leveraged Last-Resort Social Assistance (LRSA) programs as a crisis response. LRSA programs in the region often are well targeted to poor people by global standards, but make up only a small share of overall social assistance (noncontributory system) spending and cover a small share of the population. In Bulgaria, Montenegro, and Serbia, the countries' flagship LRSAs responded to the crisis by increasing coverage rates. In Armenia, coverage rates decreased during 2009, but that was due to the government's attempts to reduce leakage and improve targeting. In contrast, in Romania and Ukraine, there was no appreciable increase in the number of social assistance beneficiaries.

Pensions. A larger share of households in the region receive pensions than in other emerging market regions. Although pensions are not designed to act as LRSA, the broad coverage can make them more effective as a last-resort source of income during an economic contraction than other safety net programs. Armenia, Romania, Russia, and Turkey significantly increased minimum pensions in 2009 to protect the poor. In Romania, for example, the increase in pensions likely explains the small poverty reduction that occurred between 2008 and 2009 despite the 7 percent GDP contraction. The increase in pensions, however, also contributed to a steep deterioration in the country's fiscal balance.

Access to education and health. Most Eastern European and Central Asian countries protected spending on education and health. Across seven countries analyzed, four countries *increased* real expenditures on education (Armenia, Moldova, Russia, Turkey), whereas the other three countries (Bulgaria, Latvia, Ukraine) cut education expenditures but by less than their GDP contraction. A few countries implemented measures to protect the poor by providing additional resources to students in schools that are planned to be consolidated (Bulgaria), protecting

programs targeting the poor and vulnerable (Armenia), and reducing out-of-pocket educational expenses (Latvia). Armenia, Moldova, Russia, and Turkey *increased* real health expenditures in 2009 relative to 2008, and Latvia and Ukraine cut expenditures but by less than their GDP contraction. Bulgaria, however, reduced real health expenditures by more than its GDP contraction. A few Eastern European and Central Asian countries implemented special measures to protect poor people from further hardships resulting from health sector consolidation: increasing health care coverage (Georgia), redirecting resources to services valuable to poor people (Latvia), and exempting out-of-pocket expenses (Armenia, Romania).

Improving Responses to Subsequent Jobs Crises

Effective crisis responses are those fiscally responsible measures that are ***timely, targeted, and temporary***. Timely measures inject money into the economy quickly to provide income support. Targeted measures provide income support to people who are most affected by the downturn and hence would support at least a minimum welfare basket of goods for the existing and "new" poor. Finally, temporary measures reduce or expire as the economy improves and hence should not increase budget deficits in the long run.

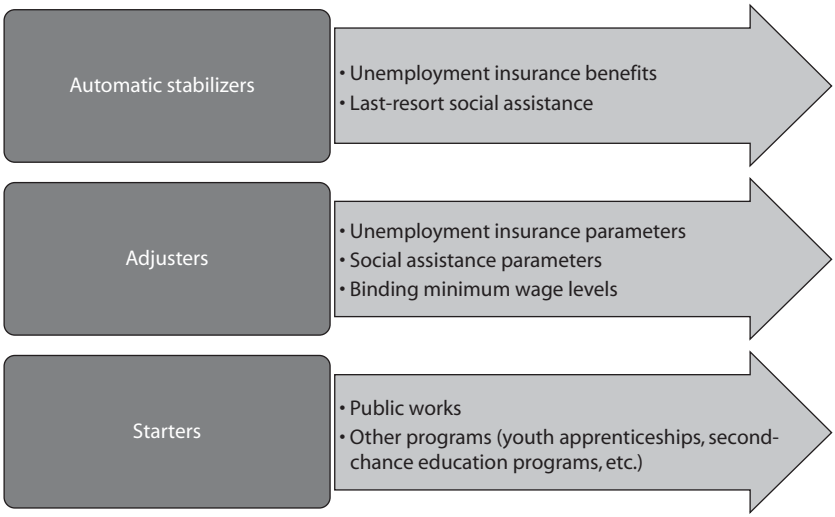
There are three pillars to an effective crisis response: (i) automatic stabilizers, (ii) adjusters, and (iii) starters (see figure O.6).

Automatic Stabilizers

Eastern European and Central Asian countries' response to the crisis was aided by the presence of *automatic stabilizers*, which were established long before the onset of the crisis. This helped avoid more expensive measures such as generalized price and wage subsidies, or prolonged delays from implementing ad hoc emergency measures. UI benefits worked well as an automatic stabilizer in nine Eastern European and Central Asian countries for which benefits monitoring data are available. In Bulgaria, Estonia, Latvia, Lithuania, and Romania, the number of UI beneficiaries more than doubled between December 2008 and 2009, likely preventing a large increase in poverty. However, the UI system needs to undergo reforms to further increase coverage if it is to work as a broad-based stabilizer.

Existing LRSA programs can act as automatic stabilizers during recessions to help households deal with income shocks. In six countries for

Figure O.6 Three Pillars to an Effective Crisis Response



Source: World Bank staff.

which benefits data are available, only three showed the expected crisis response. LRSA targeting performance is generally good by global standards, and the programs are designed to be temporary in that they expire after several months of benefit receipt, making them suitable automatic stabilizers. Many countries can benefit from improving the agility of the targeting mechanism, upgrading safety net benefit administration by phasing in automated processes, and placing the burden of LRSA funding more on central governments, rather than local governments.

Adjusters

Some judicious policy *adjustments* during a crisis can improve the crisis response. Three sets of parameters are identified in this report. First, UI benefit amounts (Estonia, Russia, and Turkey), duration of payout (Latvia, Poland, Romania), and eligibility rules (Latvia) can be altered when moral hazard is less of a risk during a downturn. Second, LRSA program performance can be improved (Armenia, Poland), guidelines can be altered to increase coverage (Latvia, Romania), benefit amounts can be increased (Azerbaijan, Georgia, Kazakhstan, Latvia, Romania), and the financing burden can be altered to acknowledge local government fiscal positions (Latvia, Romania). In addition, countries could

relax activation conditions so that deserving people do not lose benefits or become trapped in a cycle of poverty at a time when jobs are scarce. Third, minimum wage rates can be adjusted downward to reduce layoffs among low-wage workers and to ensure that new entrants to the labor force (youth) have a fair chance at securing employment, while weighing tax revenue implications and the stimulus value of the lower minimum wage.

Starters

When existing safety nets cannot respond to the emerging vulnerable population, even when program parameters are adjusted, new programs can be *started* to reach uncovered people and protect household welfare. For example, public works can be an effective countercyclical labor market program during covariate shocks, such as economic crises or natural disasters. Several Eastern European and Central Asian countries, including Armenia and Latvia, implemented public works programs in 2009 to carry out maintenance and create community assets while reducing the swelling ranks of unemployed people by providing a minimum safety net.

To reduce implementation delays during a crisis, countries could maintain priority "shovel-ready" programs that could ensure that resources are allocated to building infrastructure or maintaining assets with the highest value to the community. Also, governments could maintain flexibility in social investment funds to generate labor-intensive work for people when private sector labor demand falls.

During crises, as information emerges about uncovered vulnerable groups, social programs can be launched to protect incomes and help households to avoid making decisions that would hurt long-term human capital accumulation. The range of programs can vary considerably depending on the safety net and labor programs available in the country. In Eastern Europe and Central Asia, these programs include youth apprenticeship programs, second-chance education programs, and mobility allowances. However, to minimize delays and to ensure effective program design, these programs also need to be planned ahead of time.

Crisis Responses Require Fiscal Discipline, Planning, and Data

In designing social responses, the implications for the budget position across the cycle are important to consider. Increasing the countercyclical social response can result in sharp government spending expansions during deep recessions, particularly when unemployment increases are large.

Crisis responses also require reliable and timely monitoring indicators. Most of the region's countries have strong administrative information systems and regular household surveys and LFSs, but some countries may need to improve the reliability of their data collection.

Note

1. In this report, Eastern European and Central Asian countries refer to Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kosovo, the Kyrgyz Republic, Latvia, Lithuania, FYR Macedonia, Moldova, Montenegro, Poland, Romania, Russian Federation, Serbia, the Slovak Republic, Slovenia, Tajikistan, Turkey, Turkmenistan, Ukraine, and Uzbekistan.

CHAPTER 1

Introduction

The onset of the financial crisis was evident as early as mid-2007 when the real estate bubble began to deflate throughout the United States and parts of Western Europe, triggering multiple bank failures. Between February and September 2008, Northern Rock, Bear Stearns, IndyMac Bank, and Washington Mutual were all seized by their respective governments. On September 15, 2008, the financial world was rocked to the foundations when Lehman Brothers filed for bankruptcy.

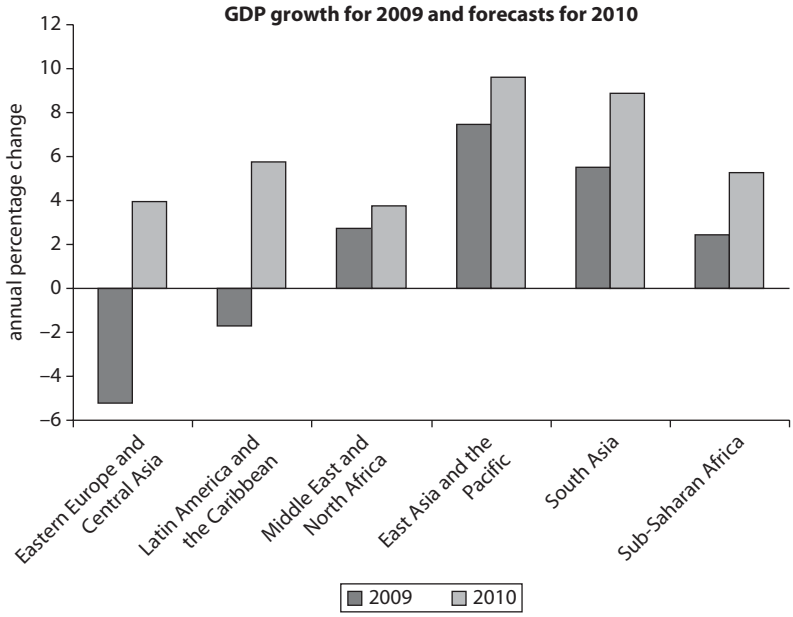
In rapid succession, property values plummeted, the value of retirement accounts shrank, household savings evaporated, and general consumer and producer confidence disappeared. The financial crisis swiftly expanded into an economic crisis throughout America and Western Europe, where it spread to developing countries that had depended on foreign direct investment, consumer and mortgage credit, trade, and remittances. By early 2009, it was clear that this economic downturn would be more severe than any crisis since the Great Depression during the 1930s, prompting some to refer to it as the "Great Recession."

Eastern Europe and Central Asia Were Particularly Hard Hit by the Global GDP Contraction, the First Since World War II

Globally, the gross domestic product contraction was about 2.2 percent, but in Eastern Europe and Central Asia it was more than 5 percent (see figure 1.1). The effects of the financial crisis were particularly severe in the region because before the crisis, most of these countries were enjoying large-scale capital inflows. Simulations of poverty rates for a given GDP contraction indicate that by 2010, there could be 10 million more poor people in the region, relative to baseline precrisis GDP growth projections if no new policies are enacted (Tiongson et al. 2010).

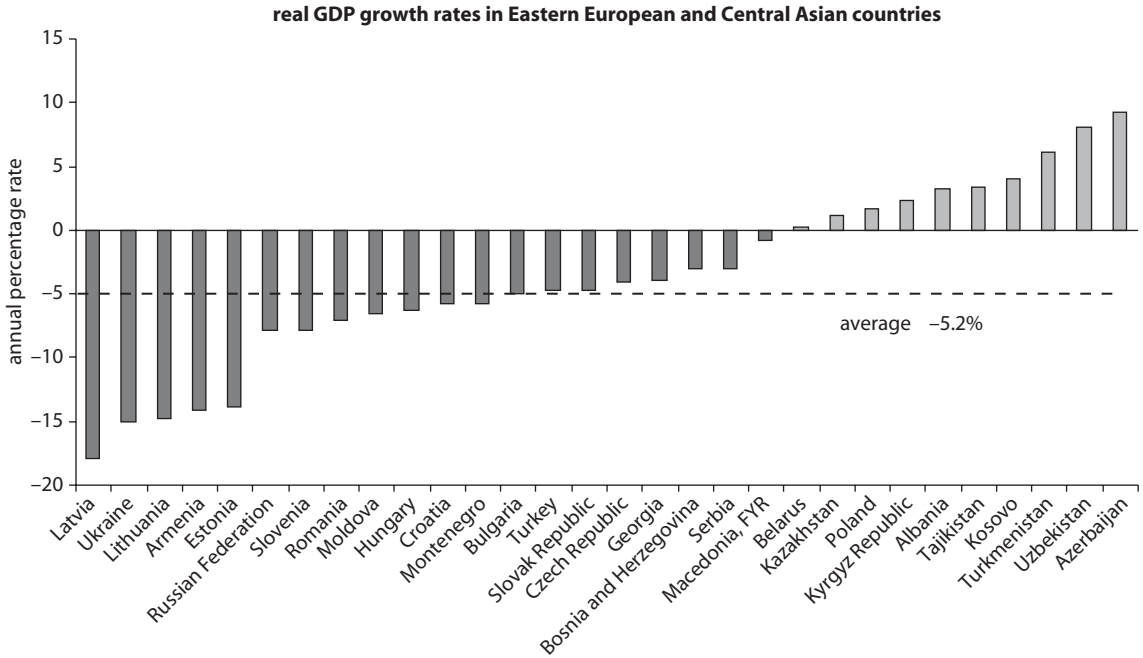
In 2009, output in 20 of 30 Eastern European and Central Asian economies contracted (see figure 1.2). Estonia, Latvia, and Lithuania were among the hardest hit, with sharp economic contractions that ranged from 14 to 18 percent. Large (populous) countries also suffered

Figure 1.1 GDP Contracted More Significantly in Eastern Europe and Central Asia in 2009 Relative to Other Regions



Source: World Bank staff calculations using IMF World Economic Outlook Database, October 2010.
Note: Regional averages include only low- and middle-income countries based on World Bank classification of regions. Eastern Europe and Central Asia also includes Croatia, Czech Republic, Estonia, Hungary, Latvia, Poland, Slovak Republic, and Slovenia.

Figure 1.2 Twenty of 30 Eastern European and Central Asian Economies Contracted in 2009

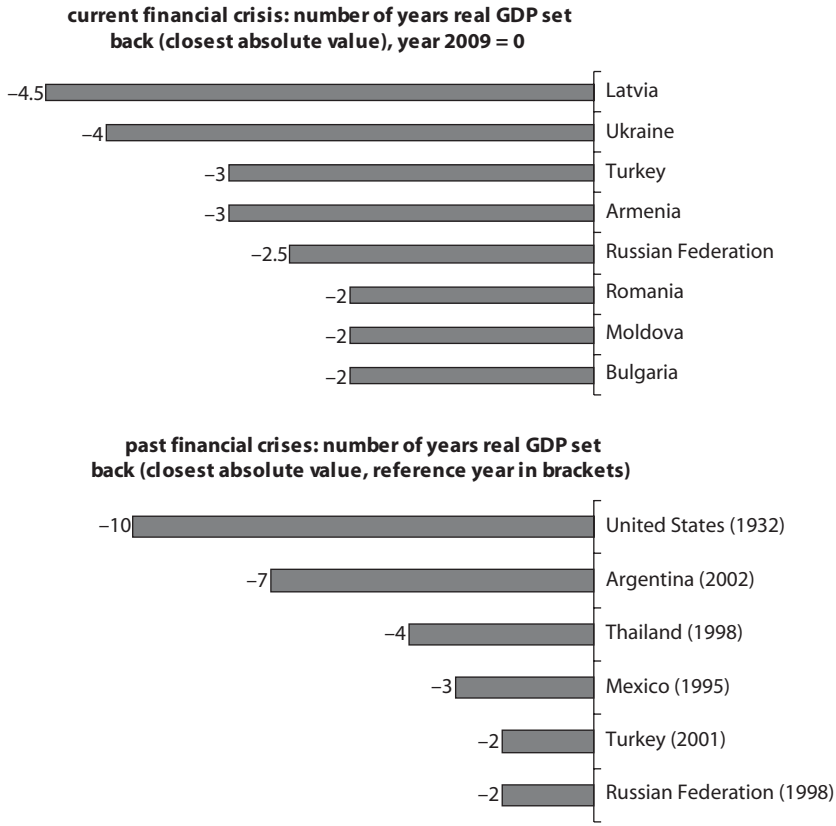


Source: World Bank staff calculations using IMF World Economic Outlook Database, October 2010.

severe GDP contractions: the Russian Federation, 7.9 percent; Turkey, 4.7 percent; and Ukraine, 15.1 percent. Fortunately, Central Asian countries appear to have been spared from a GDP contraction in 2009.

The depth of the crisis has eroded benefits accrued during several years of rapid economic growth and development (see figure 1.3). Real GDP has been set back several years—in Latvia, to levels seen four to five years ago; in Ukraine, seen four years ago; and in Turkey and Armenia, three years ago. These development setbacks are comparable to the setbacks caused by the Asian Crisis of 1998, and the Mexican Peso Crisis of 1994. The 2009

Figure 1.3 Years of Development in Eastern Europe and Central Asia Were Undone by the 2009 Recession, Which Was More Severe than Past Financial Crises in the Region



Sources: World Bank staff calculations using IMF World Economic Outlook Database, October 2010, for all countries except the United States; data for the United States are from the National Bureau of Economic Research (NBER) Macrohistory database.
Note: Reference year may not identify the beginning of the crisis but instead is the year in which real GDP con-

economic downturn set Russia back by more than its 1998 crisis and affected Turkey by more than its 2001 financial crisis. This report makes no attempt to compare the impact of the 2009 crisis with the transition from a planned economy to a market economy, which took place in the early 1990s in Eastern European and Central Asian countries.

Unprecedented Fiscal Pressures Have Emerged in Many Eastern European and Central Asian Countries

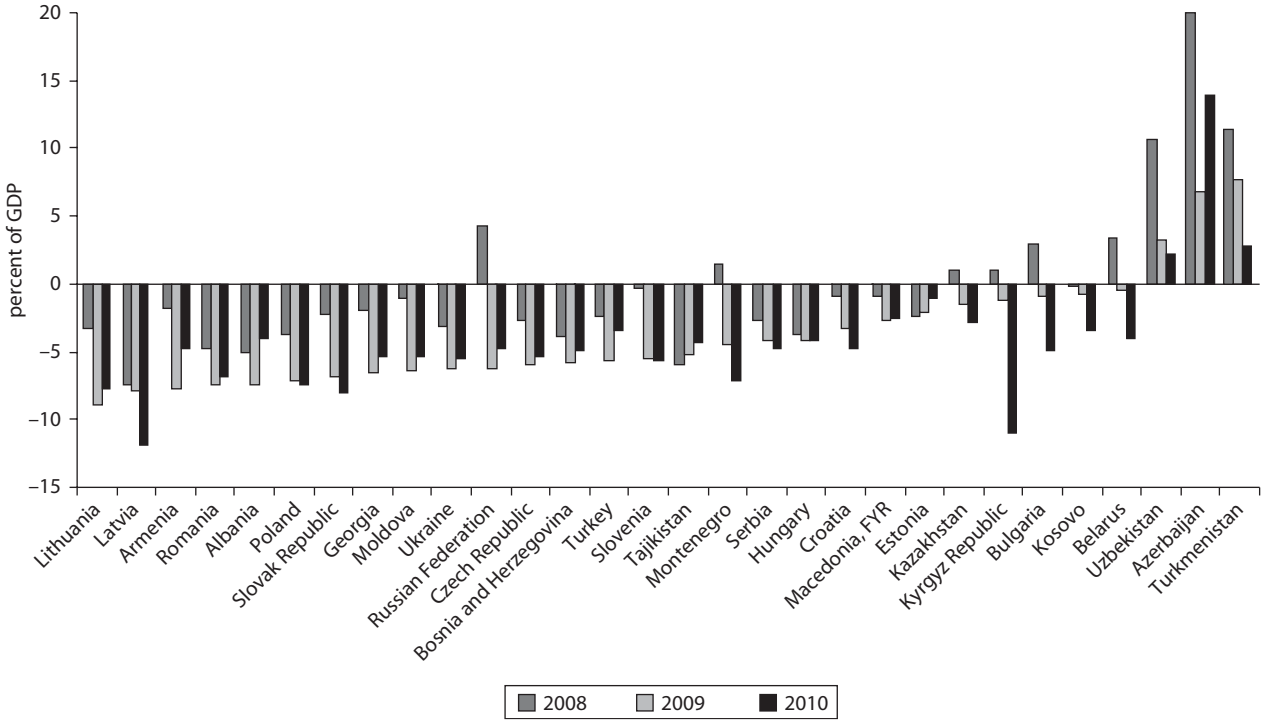
Public finances deteriorated sharply in many Eastern European and Central Asian countries in 2009, with an average increase in fiscal deficits equivalent to 3.8 percent of GDP (see figure 1.4). The fiscal reaction to the crisis, however, was diverse across the region. Three oil and gas exporters in the region had the largest decline in the fiscal balance in 2009, namely, Azerbaijan, Russia, and Uzbekistan. However, abundant public savings built up in recent years during the boom in hydrocarbon prices allowed these countries to put in place expansionary fiscal policies. In contrast, for a number of countries in Eastern Europe, the boom years had led to growing spending commitments and no accumulation of public buffer-stock savings. In general, these countries also had a higher level of automatic stabilizers on the expenditure side, leading to larger emerging spending pressures as the crisis unfolded. Therefore, they faced the crisis with limited fiscal space, forcing them to adjust fiscal spending downward as government deficits widened.

Four Transmission Channels: How the Crisis Affects Household Welfare

The social impacts of the crisis on household welfare can be traced through four main transmission channels (see figure 1.5): (i) financial markets, via reduced access to credit, eroding savings, and sinking asset values; (ii) labor markets, via falling employment, wages, and remittances; (iii) product markets, via declining growth and production, and relative price changes; and (iv) government services, via reduced education, health, and social protection services.

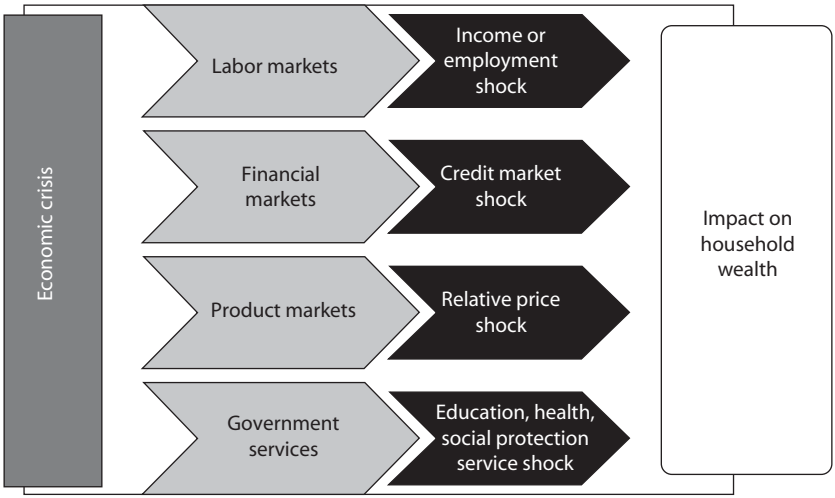
Financial markets can transmit crisis effects through declining real estate prices, interest or inflation rate changes, falling stock market values, and reduced credit availability. Labor markets can transmit crisis effects when sector profitability declines or governments pursue contractionary policies. The impact on labor markets depends on the national labor market institutional structure, but usually includes reductions in employment, wages, benefits, hours of work, and accruals of wage arrears; reduced

Figure 1.4 Fiscal Positions Deteriorated Substantially in Many Eastern European and Central Asian Countries, 2008–10



Source: IMF World Economic Outlook Database, October 2010.
Note: Estimates for 2009 for Poland and Slovenia; projections for 2010.

Figure 1.5 Economic Crises Affect Households through Four Main Transmission Channels



Source: World Bank staff.
Note: The figure shows only direct transmission channels and omits linkages among the four main channels and second-round impacts of the crisis. For example, teacher layoffs reduce educational services, which affect labor markets. Also omitted are the differential impacts according to household characteristics, such as employment sector, gender, location, mortgage type, and so on.

demand for household enterprise products; and shifts from formal to informal sector employment. Product markets can transmit effects of an economic crisis through changes to commodity prices, assets, exchange rates, and taxes or tariffs, triggering changes to the profitability of these sectors, and affecting wages and employment. Government service provisions can transmit effects of an economic crisis through budget cuts in education, health, and social protection, among others.

About This Report

This report presents the first empirical findings that emerged from analyzing data in the region on the following: (i) the impacts of deteriorating macroeconomic conditions on families, and (ii) the household and government *social* responses to the crisis. It does so by drawing on a heightened monitoring effort that included synthesizing data from administrative sources, and specialized household surveys (Crisis Response Surveys, see box 1.1). The report aims to introduce policy makers from Ministries of Finance, Labor, Welfare, Education, and

Box 1.1

Crisis Response Surveys

Crisis Response Surveys (CRSs) were launched in several Eastern European and Central Asian countries to assess the effects of the crisis on households. The CRS focused on the following, albeit to different extents:

- Assessing primary transmission channels for the effects of the crisis—labor markets, access to credit, government services—through which household welfare was affected.
- Determining the impacts on welfare by tracking expenditures on health, education, and food security—that cannot be quantified by administrative data.
- Understanding household responses, such as increasing labor supply, reducing expenditures, postponing investments, selling assets, relying on formal or informal credit, and the extent to which existing social safety nets allow effective family coping.

Crisis Response Surveys Were Fielded in Several Countries

	Led by Bank	*Led by government or other organization*
Stand-alone survey	Montenegro	Bulgaria (OSI) Georgia (UNICEF) Romania (government) Tajikistan (government)
Crisis module added to regular survey	Life in Transition Survey	Armenia (HBS, government) Croatia (LFS, government) Latvia (LFS, government) Serbia (LFS, government)

Source: World Bank staff.
Note: HBS = Household Budget Survey; LFS = Labor Force Survey; OSI = Open Society Institute; UNICEF = United Nations Children's Fund.

The CRS were sometimes stand-alone surveys and at other times modules added to existing or scheduled surveys. The pros and cons of the two basic models for CRS are described below.

(continued next page)

Box 1.1 *(continued)*

Comparing a Stand-alone Survey with a Crisis Module Added to a Regular Survey

	Pros	*Cons*
Stand-alone survey	Can be implemented in a relatively short time Flexibility with timing, questions No restrictions on data access or release	Bypasses government systems Usually cannot incorporate a strong consumption module (no poverty numbers)
Crisis module added to regular survey	Cheaper to carry out HBS: consumption module is available HBS/LFS: Can compare some observed coping strategies with stated coping strategies	HBS/LFS: questionnaires are usually long and can affect response quality HBS: response rates are low in Europe and Central Asia HBS/LFS: delays in data release

Source: World Bank staff.
Note: HBS = Household Budget Survey; LFS = Labor Force Survey.

Each CRS was tailored to country-specific crisis-related information needs and benefited from coordination with teams that were implementing and monitoring crisis-related assistance programs.

Health to information that can improve future social responses to crises. Although all four transmission channels affect household welfare, the primary focus of this report is on the labor channel and government services channel.[1]

The report focuses on the following topics: (i) labor market adjustment, both from employment and unemployment impacts and changes in the wage bill resulting from changes in hours of work, wage rates, and so on; (ii) coping strategies adopted by households, including measures to increase household income and reduce household expenditures following an income shock; (iii) government social initiatives to protect household welfare, sometimes concurrently with tough fiscal consolidation measures; and (iv) policy options for

governments to better prepare themselves to respond to future shocks (see chapter 5).

The report complements two other crisis-related World Bank publications written in the region, namely, Mitra, Selowsky, and Zalduendo (2010) and Tiongson et al. (2010). The former report focuses on (i) whether the transition from planned to market economies might have made the region's countries more vulnerable to the crisis; (ii) whether the choices made in the transition will affect the recovery; and (iii) what structural reforms are needed to address growth constraints given the likely drop in capital flows in the postcrisis world. Tiongson et al. (2010) focus on understanding the key macroeconomic shocks confronted by the region and the simulated impact of such shocks on household welfare. Both reports analyze data that were available at the beginning of the crisis.

This report analyzes data collected during the crisis. There are three important caveats regarding findings presented in this report. First, for many people, hardships continue and the recovery is not fully realized, which in turn means that findings presented in this report must be seen as intermediate findings rather than an evaluation of the final impact of the crisis on Eastern European and Central Asian countries. Recession conditions prevail in many countries with high unemployment, tight credit, eroded pension balances, diminished savings, and low consumer confidence. These conditions could trigger long-term impacts: people may spend their savings or take on more debt; assets could be eroded and human capital accumulation could be jeopardized; job seekers may become discouraged and withdraw from the labor force; and people may lose their ability to smooth consumption during other (and more frequent) idiosyncratic shocks.

A second caveat is that, at the time of writing this report, most countries have implemented only one round of fiscal consolidation measures, and more measures are likely through 2011 and possibly longer for many crisis-affected countries as they struggle to control deficits. Especially in European Union (EU) member countries, euro convergence criteria (also known as the Maastricht criteria) will require more fiscal consolidation measures. The process of fiscal retrenchment could put human development service provisions—and, hence, human capital accumulation—at risk if not carefully implemented.

A third caveat is that the report does not fully evaluate the impact of the crisis on final human development outcomes, but instead evaluates the impact on intermediary human development indicators. A full-scale evaluation of the impact on final human development outcomes cannot

be undertaken at this point on a regional level because data requirements will not be met for several months in most countries.

The report is organized as follows. Chapter 2 synthesizes findings on the impact of the crisis on labor markets. Chapter 3 presents the coping strategies adopted by those crisis-affected households to protect their welfare following an income shock. Chapter 4 presents the governments' social initiatives undertaken to protect household welfare of those affected by the crisis. Finally, chapter 5 provides recommendations for governments to prepare for future crises based on findings from this monitoring effort.

Note

1. For a discussion of the financial markets channel in the region, see Tiongson et al. (2010). The product market channel was less dominant in this crisis because Eastern European and Central Asian countries did not experience large-scale devaluation or high inflation.

CHAPTER 2

Labor Market Impacts

Households reported that the effects of the crisis primarily were transmitted through labor market impacts: when unemployment increased, those who kept their jobs took home smaller paychecks, and remittance inflows fell as foreign labor markets deteriorated. The findings in this chapter are derived from Labor Force Surveys (LFSs), Crisis Response Surveys (CRSs), and government administration units, mainly public employment offices.

Registered unemployment in the region rose 30 percent in one year to reach 12.2 million in December 2009. Increasing unemployment affected men and ethnic minorities more, because these groups are highly represented in the hard-hit construction and manufacturing sectors, but youth unemployment, too, reached record highs. Unemployment lasts longer and competition for jobs has increased since the crisis began. These increases in long-term unemployment are sharpest in Estonia, Latvia, and Lithuania. Youth, low-skilled workers, and ethnic minorities are growing among the registered long-term unemployed; a disturbing trend given that these groups are more difficult to return to employment and are more vulnerable to poverty, social exclusion, and risk of structural (not temporary) unemployment.

Despite the large number of job losses, a far more broad-based impact resulted as labor markets deteriorated through increased part-time employment, administrative leave, wage arrears, and temporary contracts as firms tried to reduce their wage bill.

The employment decline varied widely across countries. Relatively low worker firing costs in Estonia and Latvia led to a high employment contraction; Lithuania and Turkey reduced real hourly wages significantly, leading to a smaller employment contraction; Ukraine and the former Yugoslav Republic of Macedonia provided subsidies to companies that agreed to retain workers, dampening unemployment figures; and, in Croatia, tight labor regulations led to a smaller initial impact on employment, but as the crisis dragged on, layoffs became more common. As such the employment-GDP relationship depended heavily on worker firing costs, firm behavior to shrink their wage bill, government interventions, and perceptions about the duration of the crisis.

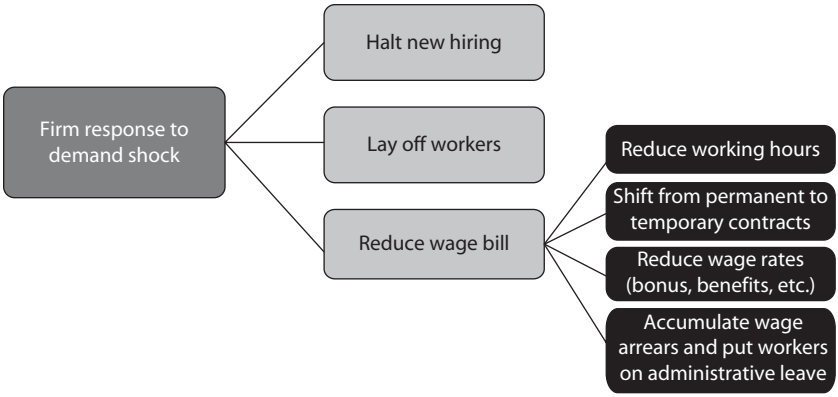
Finally, because the 2009 crisis was a global crisis, deteriorating foreign labor markets resulted in lower domestic remittance inflows to families.

Labor Markets Were the Main Transmission Channel for the Crisis

The 2009 crisis led firms to respond to lower output demand by reducing input costs, which included labor costs. Firms can control labor costs by (i) laying off workers; (ii) halting new worker hires; or (iii) reducing the wage bill by implementing measures that affect currently employed workers, such as reducing wage rates or hours of work, shifting workers from permanent to temporary status, putting workers on administrative leave, and accumulating wage arrears (figure 2.1). Therefore, the chosen mechanism with which firms reduce labor costs depends, among other things, on firing costs, government policies during the crisis, labor union strength, and perceptions about the length and depth of the crisis. This report focuses on unemployment and employment rates, and also analyzes the measures used by firms to reduce their wage bills, which have measurable impacts on households' welfare.[1]

CRSs (see box 1.1) reveal that deteriorating conditions in domestic and foreign labor markets were a more common reason for declining welfare than reductions in pensions, safety net benefits, investments, or rental incomes[2] (see figure 2.2).

Figure 2.1 Firm Responses to Demand Shocks



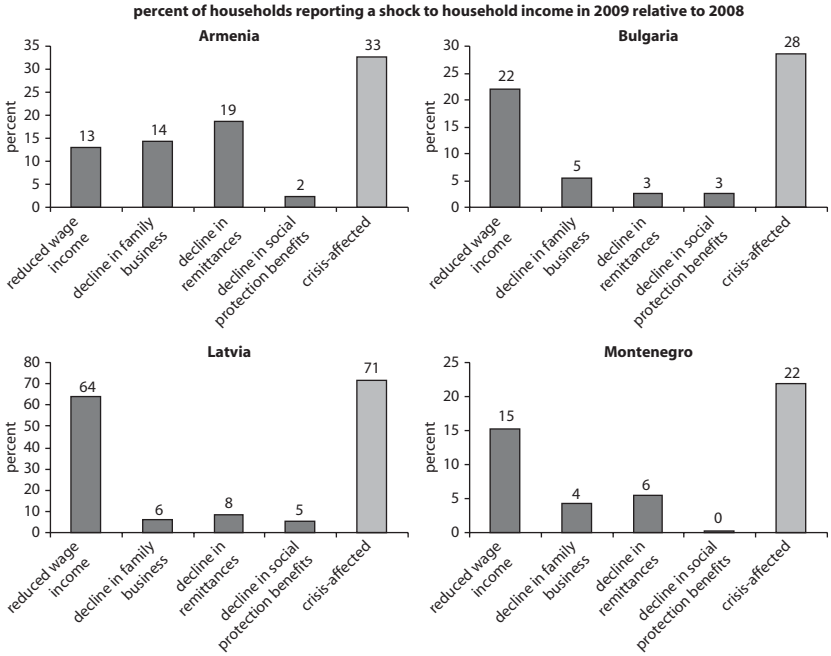
Source: World Bank staff.

- In Armenia, of the 33 percent of households that reported income declines in 2009 relative to 2008, 13 percent reported income declines from lower wages, 14 percent of households reported a reduction in self employment income, and 19 percent reported declines in both internal and external remittances.[3]
- In Bulgaria, of the 28 percent of households that reported a direct crisis impact, almost 22 percent reported that labor market conditions had deteriorated compared with the previous year.
- In Latvia, of the 71 percent of households that reported a crisis impact, 64 percent reported that income from wages declined.
- In Montenegro, of the 22 percent of households that reported a crisis impact, 15 percent reported being affected by reduced wage income.[4]

Unemployment Increased Sharply

Across the region, some 12.2 million people were registered as unemployed in December 2009 compared with 8.4 million in June 2008, and 9.4 million in December 2008 (Kuddo 2010a). Job losses have occurred in most sectors, but entrepreneurs and workers in construction, retail, and manufacturing sectors were hit particularly hard. The severe fiscal squeeze also compelled some governments to shrink their payrolls in response to ballooning deficits, leading to government layoffs.

Figure 2.2 In Four Eastern European and Central Asian Countries, the 2009 Crisis Affected Most Households through the Labor Market Channel



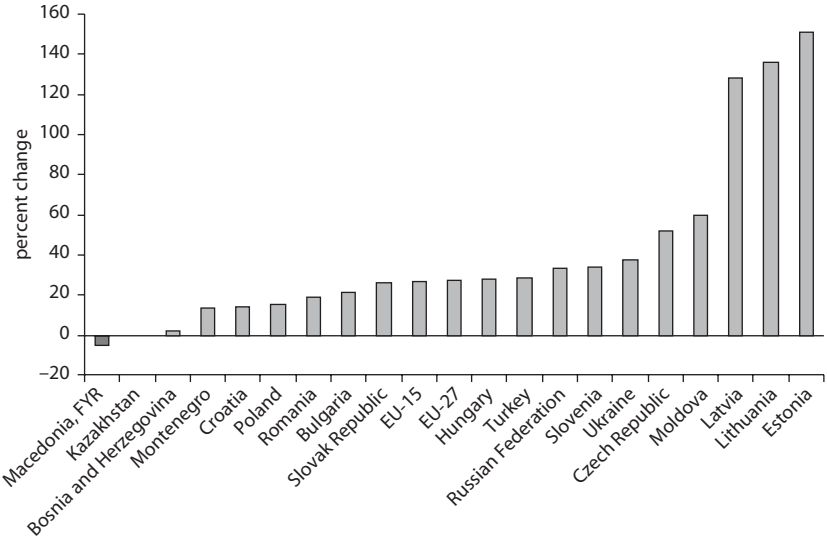
Sources: Azam 2010; World Bank 2010a.
Note: This report defines a labor market shock as a job loss, wage rate reduction, hours of work reduction, accumulation of wage arrears, or administrative leave. Each Crisis Response Survey queried households about whether components of income were affected during the crisis relative to those components in 2008. A household is characterized as crisis-affected if any of the household income components are lower in 2009 than they were in 2008.

Among new EU member states, the number of unemployed rose sharply according to available LFSs. During 2008–09, unemployment in Estonia increased by 151 percent; in Lithuania, 136 percent; and in Latvia, 128 percent (Kuddo 2010a). Unemployment increases were not restricted to small countries; Russia, Turkey, and Ukraine experienced increases of around 30 percent between 2008 and 2009, slightly more than the increase in EU-15 countries. Unemployment actually *declined* in FYR Macedonia and Kazakhstan (see figure 2.3).

Male Representation among the Unemployed Increased

The share of men among registered job seekers increased in most Eastern European and Central Asian countries. From December 2008 to December 2009, the share of men among registered job seekers increased

Figure 2.3 Unemployment Increased in Most Eastern European and Central Asian Countries between 2008 and 2009



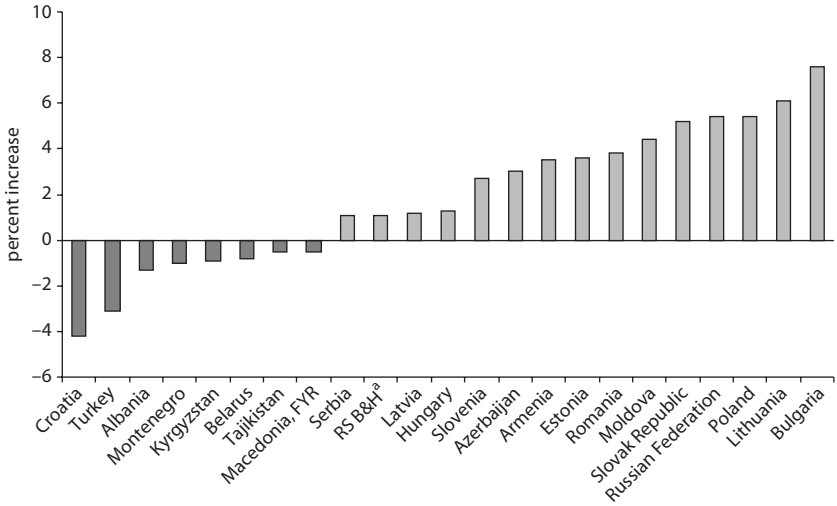
Source: Kuddo 2010a.
Note: EU-15 countries are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom. EU-27 countries are EU-15 plus Bulgaria, Cyprus,

from 37 percent to 45 percent in Bulgaria, 52 percent to 58 percent in Lithuania, and 44 percent to 49 percent in Poland (see figure 2.4) (Kuddo 2010b). Among the sectors most affected by the crisis were the male-dominated construction and manufacturing industries.

Youth Unemployment Is Twice the Adult Rate

Between 2008 and 2009, youth[5] unemployment rates increased by 5.4 percentage points, reaching 25 percent, twice the rate of adult unemployment in 17 Eastern European and Central Asian countries (see figure 2.5). That is not to say that younger workers were affected disproportionately by the crisis. In fact, high unemployment rates among youth are relatively common, especially in middle-income countries.[6] In 2009, in Latvia and Lithuania, youth unemployment rates more than doubled relative to 2008; new EU member states also witnessed a large but less significant increase in youth unemployment. Youth-to-adult unemployment rates across countries, however, vary. In Romania, the youth unemployment rate is three times the adult unemployment rate; in Kazakhstan, the youth unemployment rate is almost equal to the adult unemployment rate.

Figure 2.4 In a Majority of Eastern European and Central Asian Countries, Males Made Up a Bigger Fraction of the Registered Unemployed in 2009 Relative to 2008



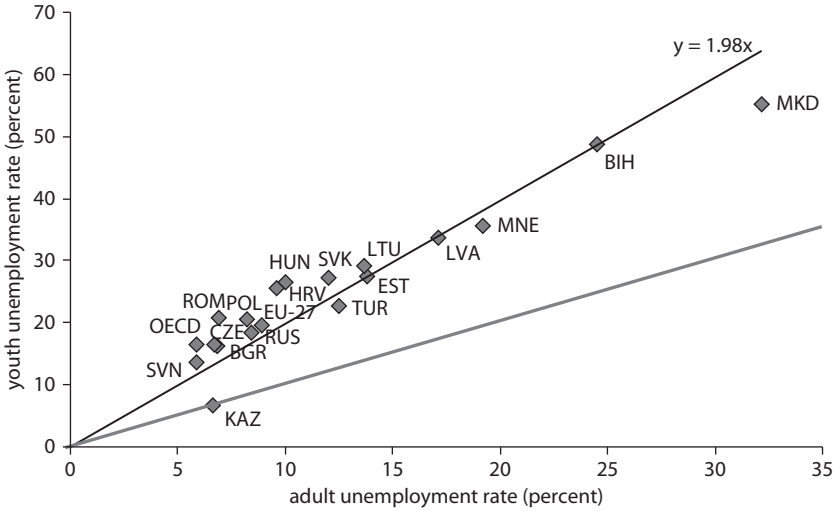
Source: Kuddo 2010a.
a. RS B&H = Republic of Srpska (Bosnia and Herzegovina).

The increase in youth unemployment is cause for concern because youth joblessness can lower lifetime earnings as youth take up jobs that are beneath their skill levels and as employers discriminate against youth (who have gaps in their work history or have no work history) because they perceive a low-quality worker. Past work on crises also has shown that labor market prospects among less-qualified youth are particularly affected by recessions, which in turn, escalates vulnerability to long-term unemployment (World Bank 2007). Young people with low educational attainment are more susceptible to long-term unemployment, inactivity, or difficult school-to-work transitions than are young people with upper-secondary or university education.

In Some Countries, Long-Term Unemployment Increased Sharply and Competition for Jobs Became Fierce

The number of workers unemployed for more than one year increased dramatically in Estonia, Latvia, and Lithuania between the fourth quarter (Q4) 2008 and Q4 2009 (see figure 2.6). In Q4 2009, there were 38,700 long-term unemployed workers in Lithuania, up from 3,100 at Q4 2008 (not pictured). In Estonia, long-term unemployment in Q4 2009 was

Figure 2.5 Youth Unemployment Rates in Eastern Europe and Central Asia Were Twice Those of Adult Unemployment Rates in 2009 According to LFS Data



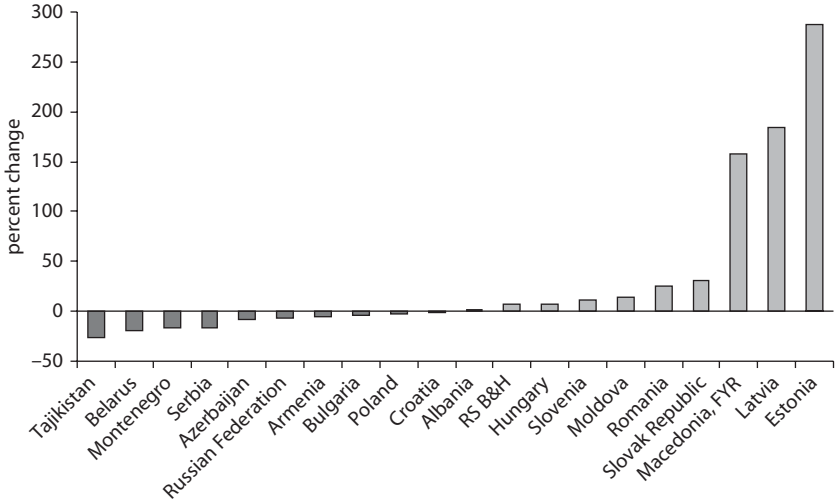
Source: World Bank staff calculations based on Kuddo 2010a.
Note: BGR = Bulgaria; BIH = Bosnia and Herzegovina; CZE = Czech Republic; EST = Estonia; HRV = Croatia; HUN = Hungary; KAZ = Kazakhstan; LTU = Lithuania; LVA = Latvia; MKD = Macedonia, FYR; MNE = Montenegro; OECD = Organisation for Economic Co-operation and Development; POL = Poland; ROM = Romania; RUS = Russian Federation; TUR = Turkey; SVK = Slovak Republic; SVN = Slovenia; EU-27 countries are Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, and the United Kingdom.

3.8 times higher than in Q4 2008, and in Latvia, it was 2.6 times higher. However, some countries, notably Belarus, Montenegro, Serbia, and Tajikistan reduced the number of long-term unemployed.

The share of youth, low-skilled workers, and ethnic minorities grew among the registered unemployed; this is a problem in the medium term as well because these groups are more difficult to return to employment, and are more vulnerable to poverty, social exclusion, and structural unemployment. Vulnerable groups easily can fall into a perpetual cycle of unemployment if the duration of unemployment is long. The unemployed might get into the habit of being unemployed, their skills may depreciate, and gaps in *recent* work experience may hinder their chances of being hired.

Competition for jobs increased rapidly in 2009 relative to 2008, making it harder for job seekers to get employed, but also increasing the case loads for public employment office staff. Between 2008 and 2009, the

Figure 2.6 Long-Term Unemployment Increased Dramatically in Some Countries between End–2008 and End–2009



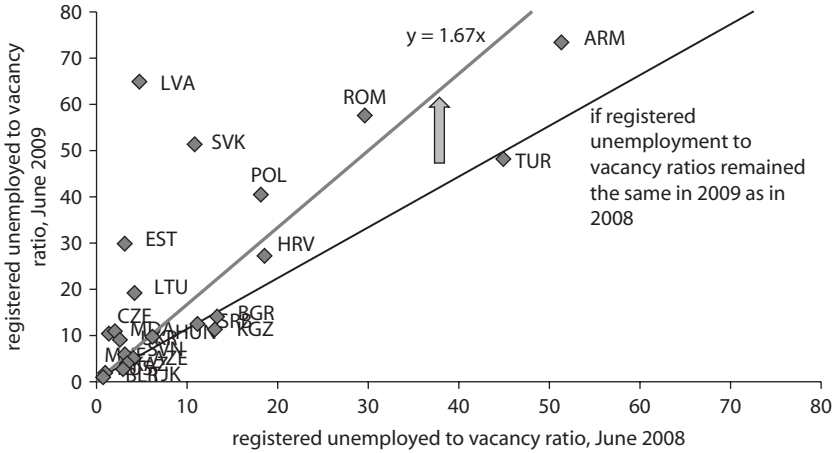
Source: Kuddo 2010a.
Note: RS B&H = Republic of Srpska (Bosnia and Herzegovina). For Lithuania data, see text.

number of registered job seekers per vacancy increased significantly (see figure 2.7).[7] Large increases were recorded in Estonia, Latvia, and the Slovak Republic. Similarly, in the Slovak Republic, there were five times more job seekers in 2009 than in 2008 for each job vacancy; in Estonia, there were 10 times more job seekers in 2009 than in 2008 for each job vacancy. At the other extreme, little change in the ratio of job seekers to vacancies was seen in Bulgaria, Kazakhstan, and Tajikistan.

Workers Who Kept Their Jobs Took Home Smaller Paychecks

Unemployment rate increases, although very significant, are only part of the story and do not reveal the full extent of the labor market deterioration that also occurred through lower wage rates, reduced hours of work, increased mandatory administrative leave, and higher wage arrears, all of which are common during economic downturns in the region. These measures helped firms control costs without laying off workers, but household welfare deteriorated as incomes shrank in Eastern European and Central Asian countries in response to financial uncertainty.[8]

Figure 2.7 Number of Registered Job Seekers per Vacancy Increased between 2008 and 2009, Revealing a Tighter Labor Market in Most Countries



Source: World Bank staff calculations based on Kuddo 2010a.
Note: ALB = Albania; ARM = Armenia; AZE = Azerbaijan; BGR = Bulgaria; BLR = Belarus; CZE = Czech Republic; EST = Estonia; HRV = Croatia; HUN = Hungary; KAZ = Kazakhstan; KGZ = Kyrgyz Republic; LTU = Lithuania; LVA = Latvia; MDA = Moldova; MNE = Montenegro; POL = Poland; ROM = Romania; RUS = Russian Federation; SRB = Serbia; SVK = Slovak Republic; SVN = Slovenia; TJK = Tajikistan; TUR = Turkey; UKR = Ukraine.

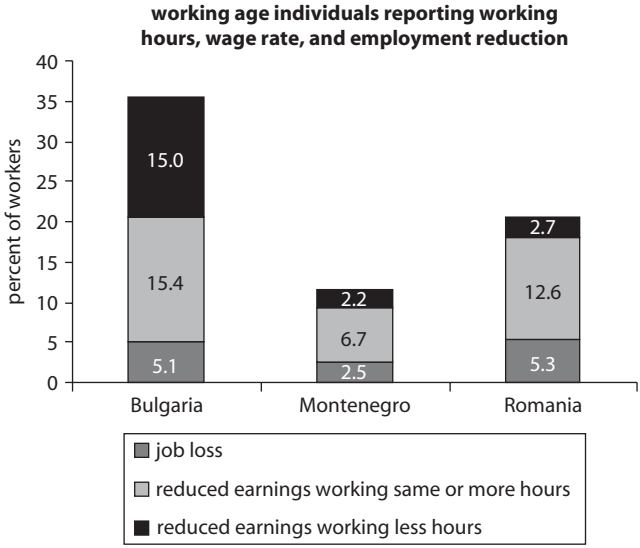
For a number of Eastern European and Central Asian countries in 2009, reduced salaries and hours of work were far more common than job losses (see figure 2.8). In Bulgaria, six times more workers took home smaller paychecks than the number losing jobs; in Montenegro, it was four times as many workers; and in Romania, it was three times as many workers.

Education shielded some workers from extreme income losses. In Bulgaria and Romania, job losses were relatively more concentrated among workers with no schooling or only primary school attainment (see figure 2.9). Total earnings reductions were observed across all education attainment levels, however, with more take-home pay adjustment for more educated workers. Because less educated workers are also generally poorer, this pattern of labor adjustment suggests that poorer people were likely to have experienced a precipitous income decline (sparked by job loss) compared with the nonpoor (who experienced income reductions).[9]

Part-time Employment Increased, but from a Low Base

Part-time employment rates increased, but the incidence of part-time employment in Eastern European and Central Asian countries is

Figure 2.8 Far More Workers Took Home Smaller Paychecks than Lost Their Jobs



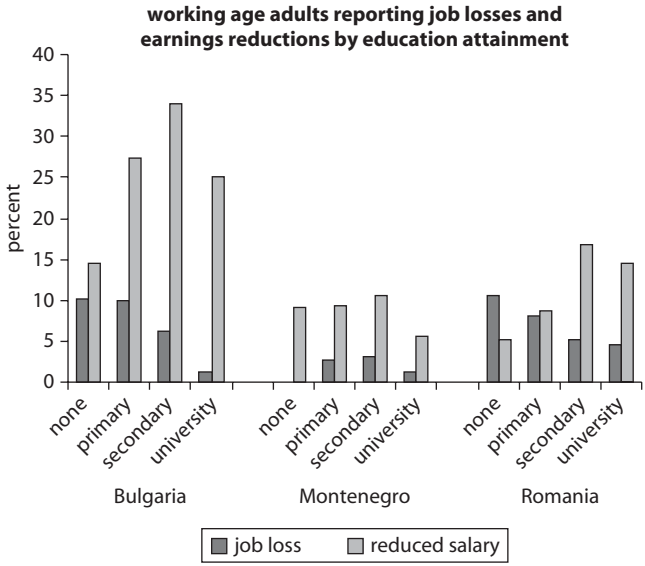
Source: Azam 2010.
Note: The denominator is workers working in the last period (current workers not working in the retrospective period are excluded). For Romania and Montenegro, current workers who did not have a job in the retrospective period could not be identified, so the denominator is current workers plus the workers who quit or lost their job between the two periods; the values underestimate the effects.

low relative to EU-15 countries. Between Q4 2008 and Q4 2009, the biggest increases in part-time employment occurred in Latvia, 34 percent from a base of 6.7 percent of total employment; Lithuania, 25 percent from a base of 6.7; and Estonia, 22 percent from a base of 7.6 percent (see figure 2.10). Some 1.2 million Ukrainian workers of the 20.2 million total workers were on reduced working hours during Q1 2009. In Russia, about 4 percent of all employees at large and mid-size enterprises in key sectors worked part-time under employer-initiated arrangements alone, and another 8 percent of employees worked part-time following mutual agreements with their employers (World Bank 2010e).

Temporary Employment Increased, also from a Low Base

The number of employees with temporary employment contracts increased in Latvia by 49 percent and in Hungary and the Czech Republic by 13 percent, but from a relatively low base (see figure 2.10).

Figure 2.9 Education Shielded Some Workers from Job Losses, but Not from Earnings Reductions



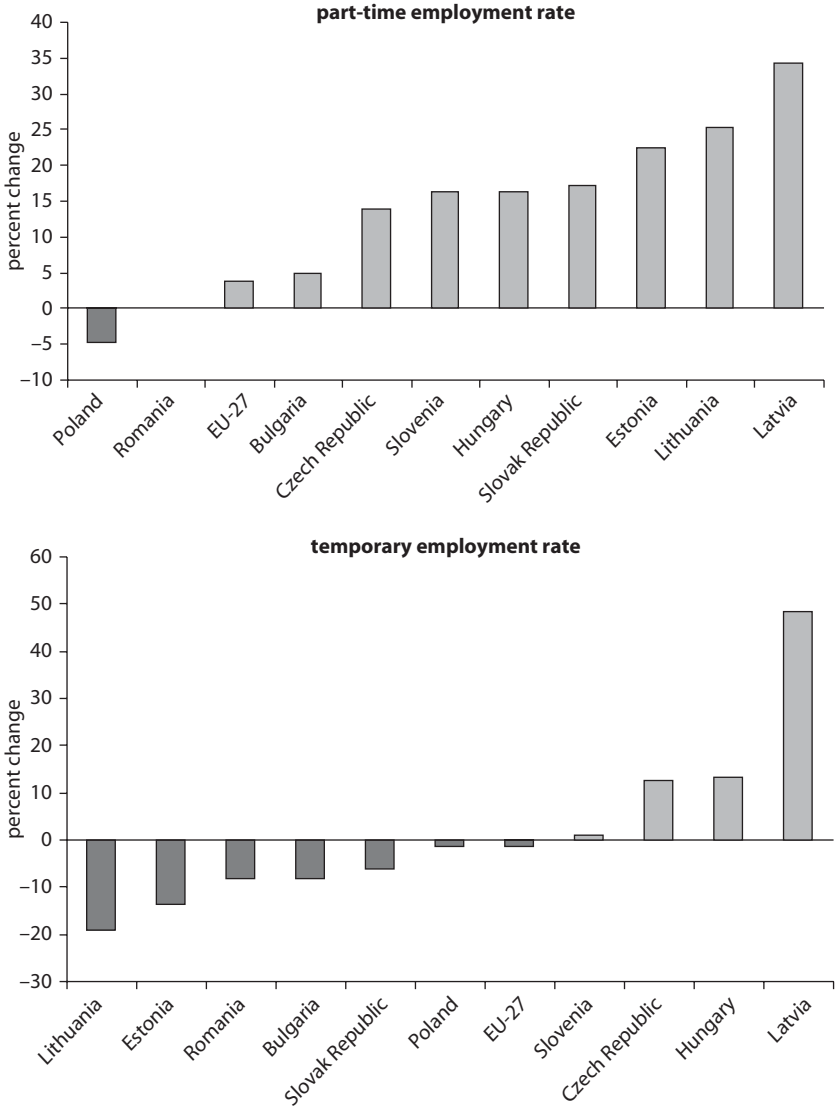
Source: Azam 2010.

In Latvia, employment with temporary contracts increased to 5.2 percent of the total workforce, in Hungary to 9.3 percent, and in the Czech Republic to 9 percent. Among new EU member states, Poland has the highest proportion of employees with temporary contracts at 26.5 percent, followed by Slovenia with 17.1 percent.

Wage Rates Declined . . . in Some Countries

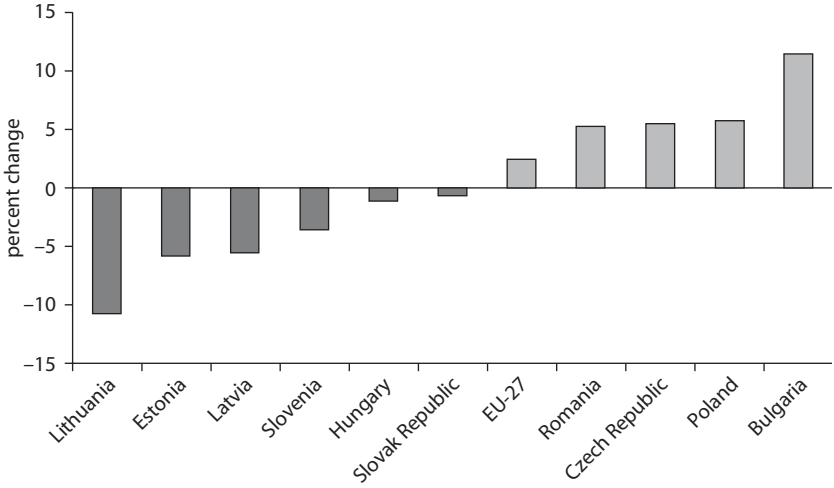
In some new EU member states, real wages adjusted downward, especially in Estonia, Hungary, Latvia, Lithuania, and Slovenia (see figure 2.11). In Lithuania, real hourly wages fell by 12.5 percent YoY through Q4 2009. In Estonia, Hungary, Latvia, and Slovenia, real wages declined more than 4 percent YoY through Q4 2009. However, Bulgaria showed an 11 percent increase in average hourly wages YoY through Q4 2009. In Croatia, the average real wage in December 2009 was nearly 3 percent lower than one year earlier (World Bank 2010b). Between December 2008 and December 2009, in Russia, real wages fell by 2.8 percent; but in Kazakhstan, wages increased by 6 percent (World Bank 2010e).

Figure 2.10 Part-Time and Temporary Employment Increased from Q4 2008 to Q4 2009, Albeit from a Low Base



Sources: World Bank staff calculations based on Massarelli, Giovannola, and Wozowczyk 2010.

Figure 2.11 Real Wages Declined Sharply in Some Eastern European and Central Asian Countries, and Increased in Others from Q4 2008 to Q4 2009



Sources: World Bank staff calculations based on Eurostat 2010; Massarelli, Giovannola, and Wozowczyk 2010; Mrlianova and Wirtz 2010.
Note: Percent change in Q4 2009 compared with Q4 2008, working day adjusted. Data for Bulgaria, Hungary, Latvia, Romania, and Slovenia are provisional. Real change calculated based on annual inflation rates in

Firms Accumulated Wage Arrears and Put Workers on Administrative Leave, Especially in Some Member Countries of the Commonwealth of Independent States, to Control Labor Costs

In the past, particularly in member countries of the Commonwealth of Independent States, employers have resorted to wage arrears to postpone layoffs, especially if severance pay rules are enforced and labor laws are inflexible. However, now that governments are imposing penalties on businesses that accrue wage arrears, use of this measure has declined. Nevertheless, in Russia during 2009 wage arrears still amounted to 3.24 billion rubles (US$105 million), or around 1 percent of the monthly wage fund in large and midsize enterprises. During 2009, an estimated 1.1 million workers were on involuntary administrative leave and another 859,000 were involuntarily employed part time, a 10-fold increase over the previous year (Kuddo 2009a).

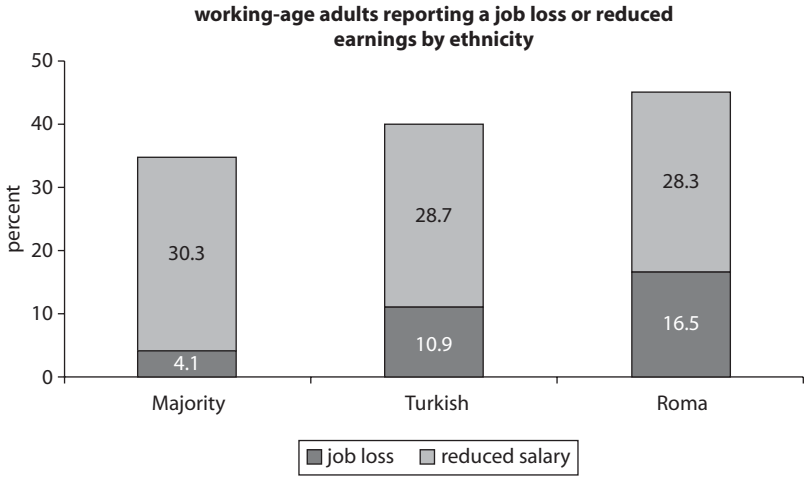
In Bulgaria, Labor Market Adjustments Were More Severe on Roma and Turkish Minorities

In Bulgaria,[10] the only country in which ethnic issues were analyzed, Roma and Turkish groups suffered disproportionately from deteriorating labor market conditions (see figure 2.12).[11] Among survey respondents, about 45 percent of Roma and 40 percent of Turkish households reported a layoff, reduced salary, or fewer hours of work relative to 34 percent for majority households. Only 4 percent of majority households lost jobs compared with 17 percent of Roma households and 11 percent of Turkish households. Salary reductions were similar across the ethnic groups.

The Employment Decline Varied across Countries Due Not Only to Labor Market Regulations but also to a Confluence of Factors

As economic output declined, firms took steps to reduce their input costs, which also included controlling their labor costs. However, as described in figure 2.1 firms controlled labor costs by (i) laying off workers; (ii) halting new worker hires; or (iii) reducing the wage bill by implementing

Figure 2.12 In Bulgaria, Roma and Turkish Ethnic Minorities Were Hit Harder by Labor Market Shocks than Nonminorities



Source: Azam 2010.

measures that affect currently employed workers. Reducing the wage bill includes reducing wage rates or hours of work, shifting workers from permanent to temporary status, putting workers on administrative leave, and accumulating wage arrears. Because firms have a variety of mechanisms in which to control labor costs, the employment growth to GDP growth varies with the chosen mechanism in firms, industries, and countries. Therefore, the chosen mechanism with which firms reduce labor costs depends on firing costs, government policies, labor union strength, and perceptions about the length and depth of the crisis.

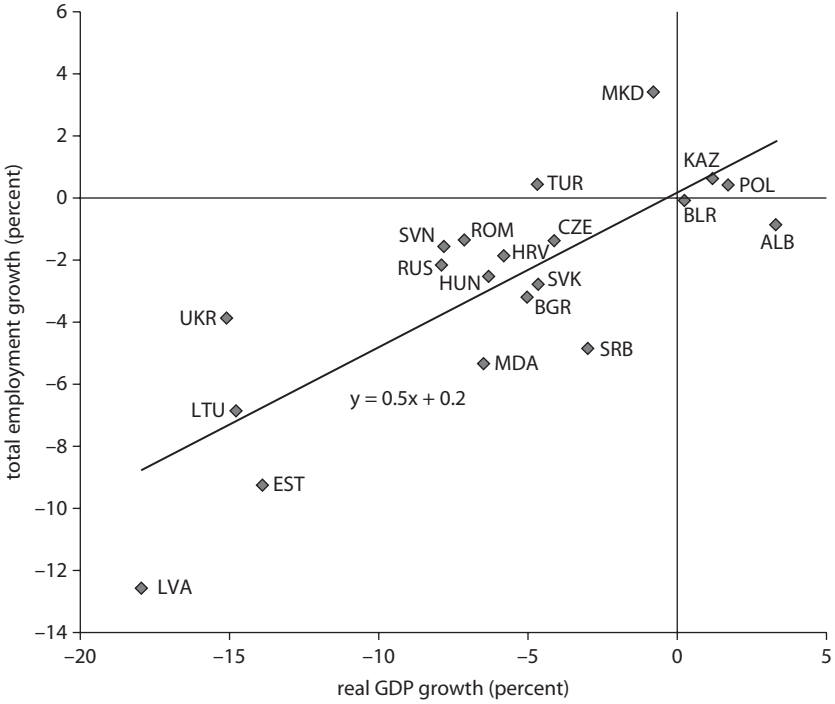
Across 20 Eastern European and Central Asian countries for which 2009 employment and GDP data are available, on average, a 1 percent decrease in GDP growth was associated with a 0.5 percent decrease in employment (see figure 2.13).[12] Countries above the trend line are those that experienced a smaller (larger) employment contraction (expansion) than the average regionwide impact for a given GDP contraction (expansion) and vice versa. For example, FYR Macedonia, Romania, Turkey, and Ukraine all experienced smaller employment contractions (or even expanded employment) than would have been expected for a given GDP contraction. At the other extreme, Estonia, Latvia, Moldova, and Serbia all experienced larger employment contractions than expected for their respective GDP contractions.

The employment decline varied widely across countries because of country-specific factors. Reasons for high or low employment elasticities of GDP are described for the following outliers:

- Low worker firing costs led to bigger employment declines in some countries in response to a given GDP contraction (see Boeri and van Ours 2008).[13] Countries such as Latvia and Estonia, with relatively flexible labor markets are below the trend line, meaning that more workers lost their jobs controlling for the size of the GDP contraction than other Eastern European and Central Asian countries.

- Some national governments negotiated or mandated specific labor market conditions and thereby reduced the expected employment reduction that could have accompanied the GDP contraction. In Ukraine, the government provided subsidies to selected firms in exchange for firms retaining workers. FYR Macedonia reduced social contributions from 32 to 26.9 percent of gross wages in 2009, essentially reducing the cost to hire or keep workers (Kuddo 2009b).

Figure 2.13 The Employment Growth to Economic Growth Relationship Varied Considerably across Eastern European and Central Asian Countries, 2008–09



Sources: World Bank staff calculations based on IMF World Economic Outlook Database, October 2010, and ILO *LABORSTA Database*.
Note: Official employment estimates for Belarus and Serbia; Labor Force Survey for others. Persons age 15 and over for all, except Russia (15–72 years) and Ukraine (15–70 years). Quarterly annual average data; monthly annual average data for Belarus, Russia, Serbia, and Turkey. ALB = Albania; BGR = Bulgaria; BLR = Belarus; CZE = Czech Republic; EST = Estonia; HRV = Croatia; HUN = Hungary; KAZ = Kazakhstan; LTU = Lithuania; LVA = Latvia; MDA = Moldova; MKD = Macedonia, FYR; POL = Poland; ROM = Romania; RUS = Russia; SRB = Serbia;

- Firms' crisis response also varied across countries and affected the employment-GDP relationship. In Romania, fiscal consolidation measures launched in 2009 included lowering the public sector wage bill by suspending bonus payments and overtime payments, and introducing a 10-day unpaid leave of absence. These measures may have spilled over into the private sector and, hence, layoffs were less common as firms controlled input costs with wage rate reductions rather than layoffs. Lithuania's GDP contraction was comparable to Estonia's, but Estonia had a larger employment

reduction in part because real hourly wages fell more significantly in Lithuania than in Estonia.

- Intersectoral transitions led to an increase in employment in Turkey in 2009 relative to 2008. Although 309,500 jobs were lost in the industrial sector, 230,000 jobs were created in the agriculture sector and 149,250 were created in the service sector (according to LFS data). It appears that the jobs were created in the informal sector and that the informal sector provided a safety net for people who could not get or could not remain employed in the formal sector as the 2009 crisis took its toll on the Turkish economy.

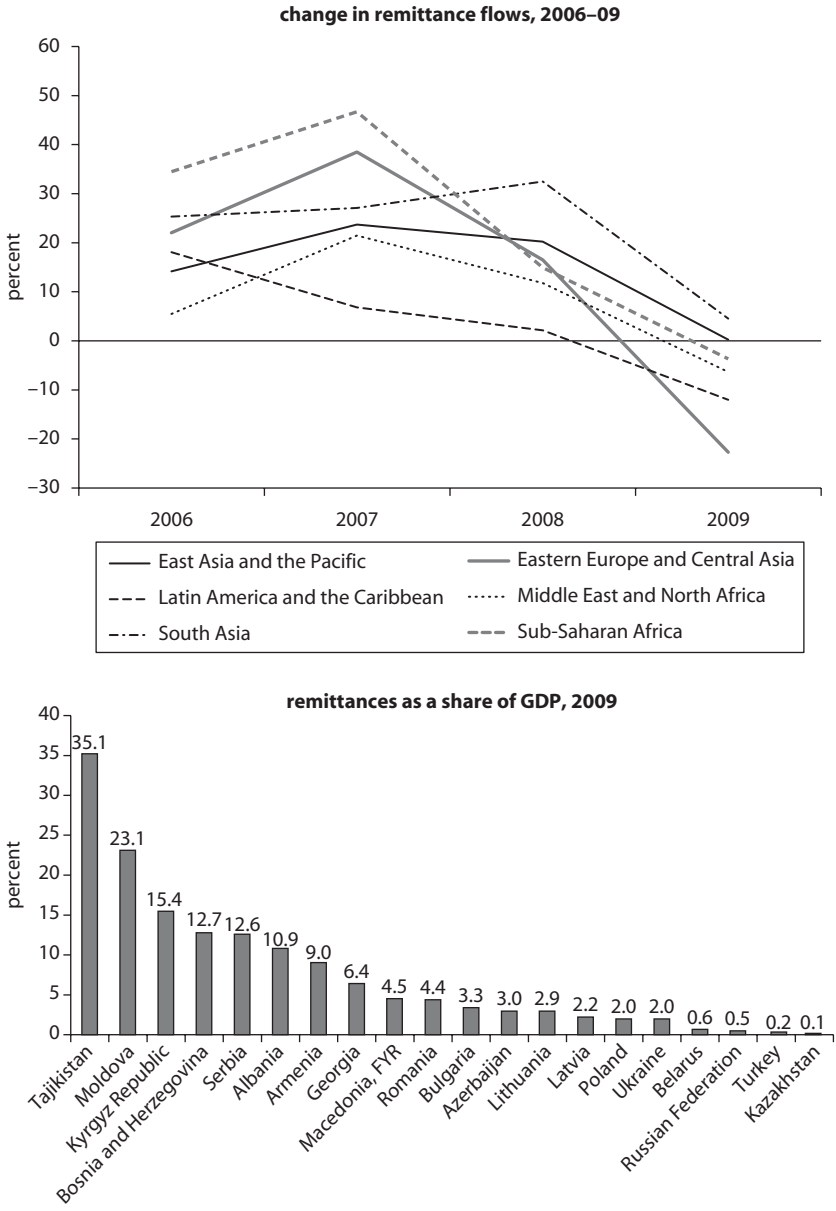
- Perceptions about the length and depth of the crisis also affected employment elasticities of GDP. For example, in Croatia, the sharp economic downturn after the onset of the crisis resulted in only a small employment contraction because strict employment protection legislation led companies to weigh the high cost of firing workers against the projected duration of the crisis (World Bank 2010b).

Foreign Labor Market Conditions Spawned Domestic Consequences

Across the region, unemployment in host countries caused 2009 official remittance flows to fall by 23 percent, compared with a 6 percent decline across all developing countries (Ratha, Mohapatra, and Silwal 2010). Remittance flows essentially have the same impact on households as domestic labor market shocks, meaning that households' incomes fall. Although remittances are thought to be relatively resilient during crises, this decline in remittance inflows created hardships in Eastern European and Central Asian countries where remittances are a significant source of household income. In the most remittance-dependent countries in the region, the ratio of remittance incomes to GDP in 2009 was 35 percent in Tajikistan, 23 percent in Moldova, and 15 percent in the Kyrgyz Republic (see figure 2.14).

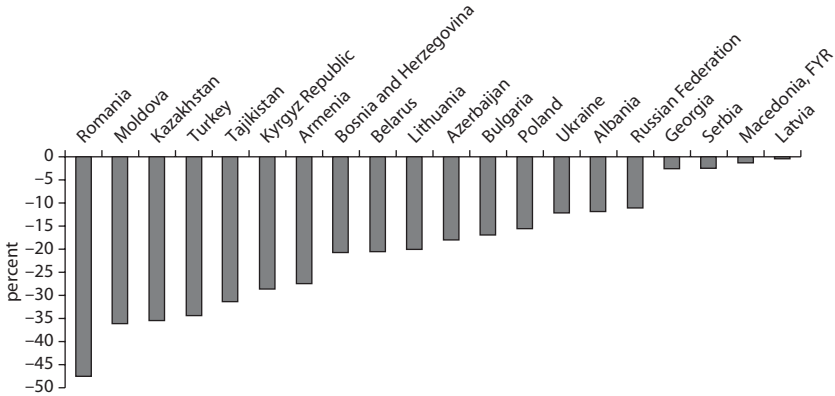
Between 2008 and 2009, remittance inflows fell in most countries in the region, but the amount of the drop varied considerably across countries; Kazakhstan, Moldova, and Romania witnessed reductions of one-half to one-third 2008 remittance levels (see figure 2.15). Georgia, FYR Macedonia, and Latvia saw little change between 2008 and 2009 remittance levels.

Figure 2.14 Remittances Declined Significantly in 2009 across Eastern Europe and Central Asia



Source: Inflows data from Mohapatra, Ratha, and Silwal (2010).

Figure 2.15 Remittance Inflows Contracted Significantly in Some Eastern European and Central Asian Countries between 2008 and 2009



Source: World Bank staff calculations based on Inflows data from Mohapatra, Ratha, and Silwal (2010).

Notes

1. In doing so, the report ignores the "churning" that occurs in the labor market as firms both hire and fire workers, leading to turnover.
2. A study conducted in the United States by the Pew Research Center, Social and Demographic Trends Report (2010), revealed that 55 percent of all working adults reported a period of unemployment, pay cut, reduced work hours, or involuntary part-time work.
3. According to the official estimates, remittances constitute 14 percent of the GDP.
4. In addition, around 10 percent of the households reported wage arrears in Serbia and Montenegro.
5. For this study, the term "youth" means those who are 15–24 years old.
6. Among OECD countries, youth unemployment rates increased by about 6 percentage points to reach 19 percent in 2009, or about 2.8 times that of adults. In EU-27 countries, youth unemployment rates are 2.2 times that of adults. See Scarpetta, Sonnet, and Manfredi (2010) for details.
7. Countries with higher perceived benefits to registering, such as eligibility for active labor market programs, social assistance, and other programs, typically record high ratios of job seekers to vacancies.
8. This finding is consistent with Khanna, Newhouse, and Paci (2010) in their analysis of 41 middle-income countries around the world; they found that the

impact of the economic downturn fell disproportionately on employment quality, meaning reduced work hours and a shift away from better-paid industrial sector jobs.

9. The surveys do not capture the severity of total earnings cuts (percent of decline).
10. The Bulgaria Crisis Response Survey is the only one that also contained a Roma booster sample and hence contained sufficient observations for Roma-specific analysis.
11. Minorities are often more vulnerable during crises. The Pew Research Center Social and Demographic Trends Report (2010) reported that blacks and Hispanics in the United States bore disproportionately high effects from the crisis.
12. Okun (1962) found that a 3 percent increase in output is associated with a 1-percentage-point decline in unemployment.
13. However, low firing costs also are often associated with increased hiring when the economic recovery takes hold.

CHAPTER 3

Household Coping Mechanisms

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[1] 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.

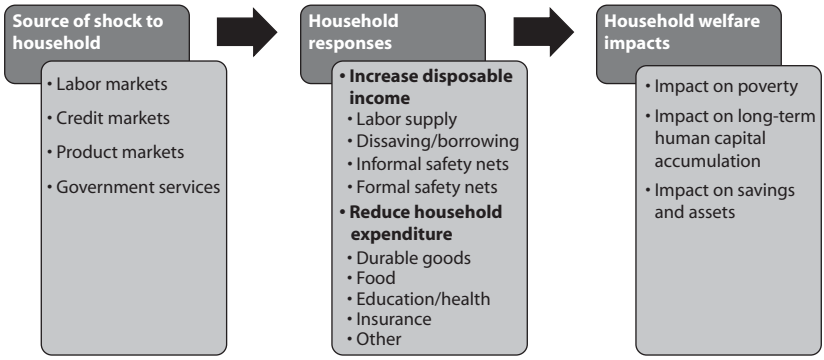
- Surveyed households tried to cope with the crisis by increasing labor supply, despite the challenges of a weak labor market, either by increasing the number of hours worked, or by sending nonworking members of the household into the labor market.
- Few surveyed households could rely on savings and 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.

Figure 3.1 Households Tried to Increase Income or Reduce Expenditures to Mitigate the Impacts of the Crisis

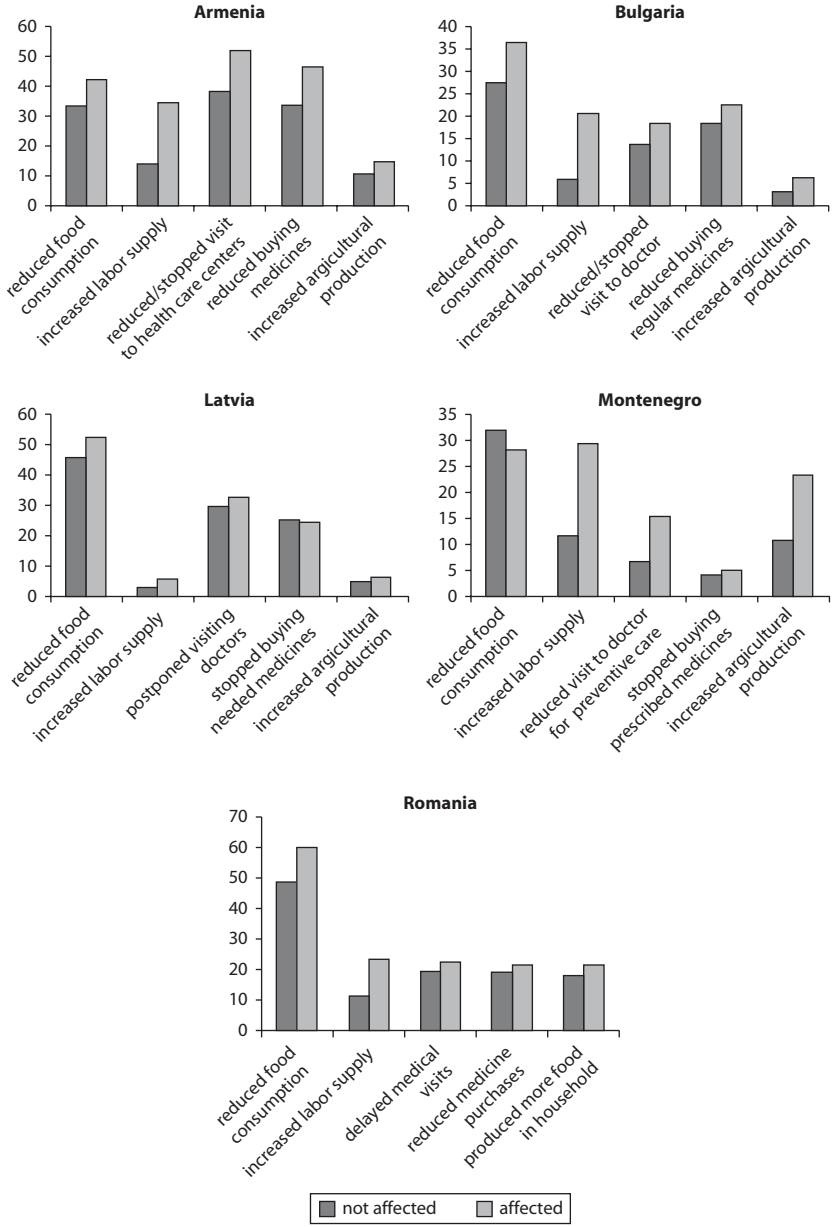


Source: World Bank staff.

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,

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.

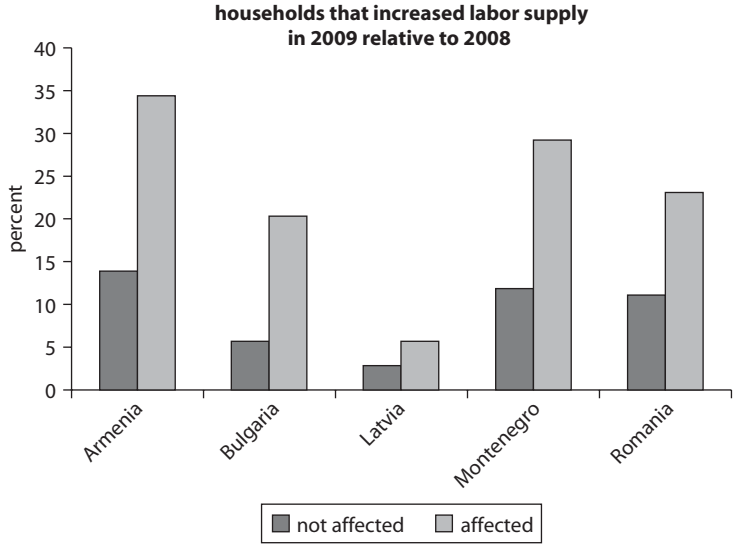
Households That Experienced a Shock Sought to Cope by Increasing Disposable Income

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.[3] 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.

Figure 3.3 Households Increased Labor Supply in Response to the Crisis

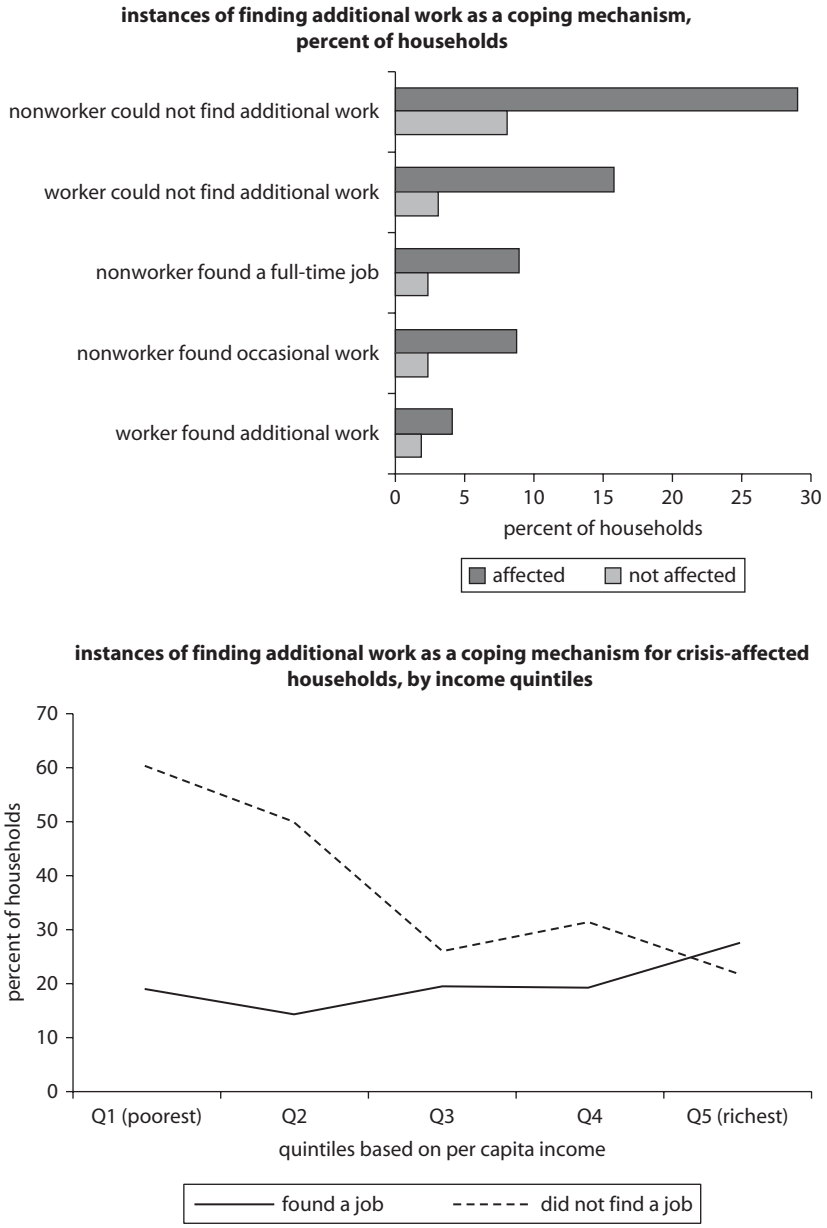


Source: Azam 2010.

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.[4] In contrast, 50 percent of households in the wealthiest quintile sought additional work and more than half of them succeeded.

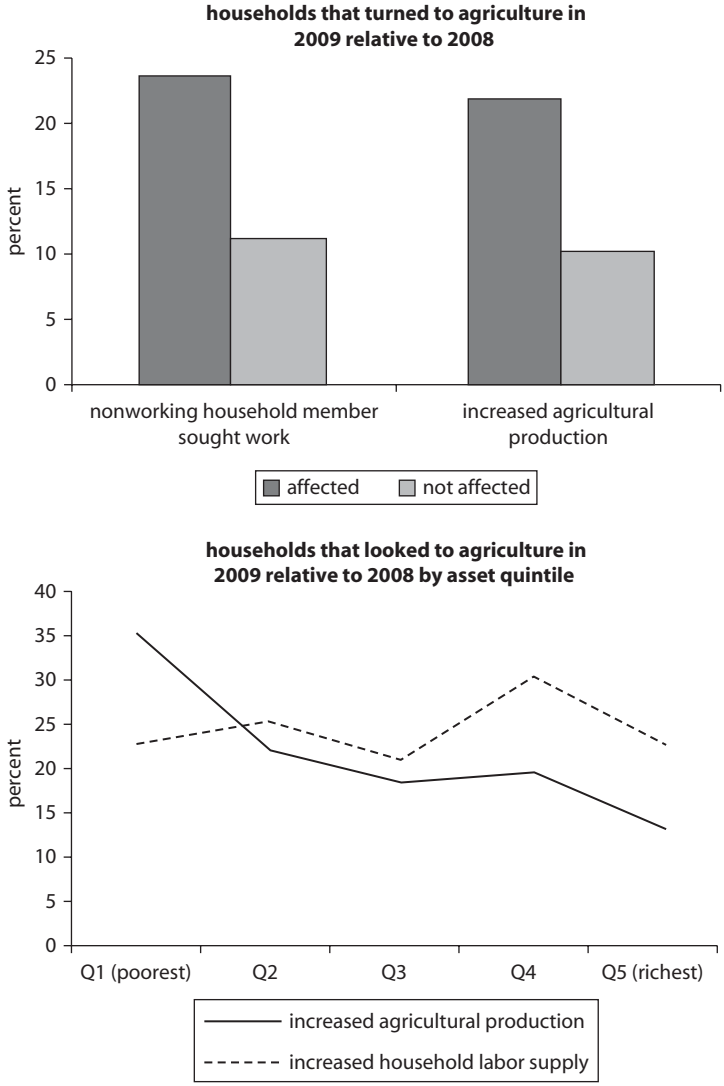
Attempts by households to increase labor supply at a time of low job vacancies are somewhat surprising. Findings from the CRS in Montenegro reveal that crisis-affected households were almost twice as likely to seek work during 2009 relative to 2008 (see figure 3.5). Similarly, twice as many crisis-affected 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



Source: Azam 2010.

Figure 3.5 In Montenegro, Poor Households Were More Likely to Increase Labor Supply in Agriculture



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.[5] However, CRSs show that informal transfers were not among the most important mitigation strategies for most households during this crisis.[6,7] 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:

Average Treatment Effect on Treated $= E(Y1 - Y0|D = 1) = E(Y1|D = 1) - E(Y0|D = 1)$

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.

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.[8] 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.[9] 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

	Armenia	*Bulgaria*	*Montenegro*	*Romania*
Education				
Withdrew children from school	No	No	No	N/A
Postponed or canceled training	No	Yes	Yes	N/A
Cut education expenditure	N/A	Yes	No	N/A
Dropped extracurricular activities	N/A	N/A	N/A	Yes
Moved from expensive to cheaper schools	N/A	N/A	No	N/A
Health				
Reduced or canceled doctors visits	Yes	No	No	No
Reduced or canceled medical care	N/A	Yes	Yes	N/A
Reduced medicine purchases	Yes	N/A	No	No
Canceled medical insurance	N/A	Yes	N/A	N/A

Source: Dasgupta (2010) using various Crisis Response Surveys.

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

Channel	*Country examples*
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.
Outcomes	***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.

Sources: Chang et al. 2009; Lustig and Walton 1998; Pastor and Wise 2004; Ramesh 2009.

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.[10] 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

Box 3.3

Most Impacts of Past Crises on Health Outcomes Were Negative

The literature on the impact of crises on health outcomes differ 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

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

(continued next page)

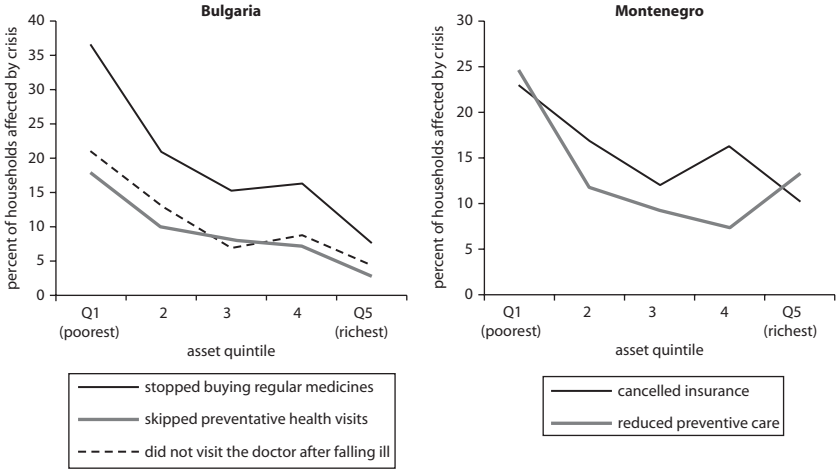
Box 3.3 *(continued)*

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

Sources: Chang et al. 2009; Ferreira and Schady 2009; Lustig and Walton 1998; Pastor and Wise 2004;

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.

Figure 3.6 Households That Were Directly Affected by the Crisis Increased Their Vulnerability to Future Shocks by Adopting Riskier Coping Strategies than Crisis-Unaffected Households

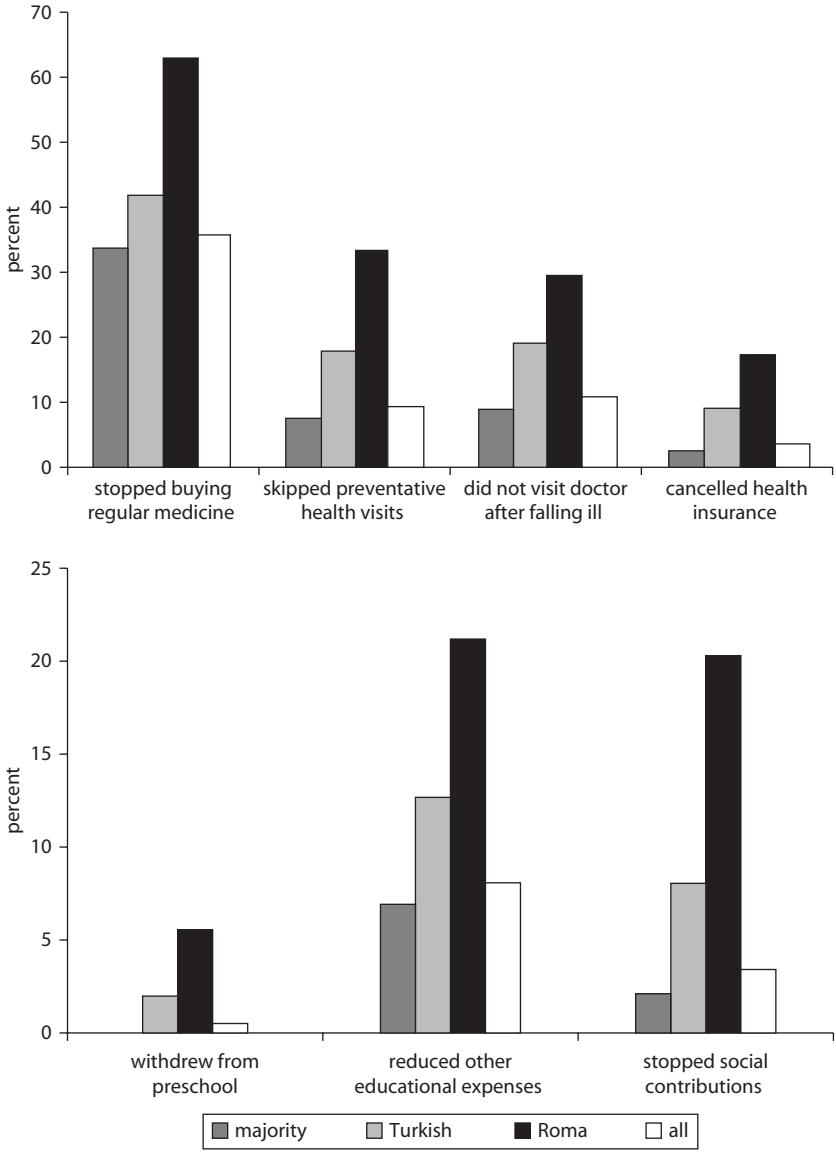


Source: Azam 2010.

In Bulgaria, Roma and Turkish Minority Households Adopted Riskier Coping Strategies

In Bulgaria,[11] 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.

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).

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

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 for 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.

CHAPTER 4

Social Policy Responses to Protect Households

During the 2009 crisis, sharp GDP contractions prompted Eastern European and Central Asian countries to implement or scale up policies and programs to protect human welfare and long-term human capital. Measures to protect the affected households have included scaling up passive and active labor market programs, strengthening social assistance, protecting and sometimes increasing minimum pensions, and ensuring access to health and education services.

UI benefits played an important role in protecting households affected by the crisis. These benefits, however, reached only a minority of those who needed help during the crisis in many countries. Last-resort social assistance (LRSA), too, was leveraged, but coverage remained weak relative to the size of the crisis and, in some countries, coverage rates did not increase significantly as expected. A few countries maintained minimum pensions, despite fiscal pressure to consolidate their budgets, and a few countries increased minimum pensions as a crisis response. Many governments were compelled to undertake austerity measures to control debt levels, but in a number of instances, governments protected poor families with education and health sector fiscal consolidation efforts.

Given the breadth and depth of the crisis, the early findings are that the government social response was prudent. Instruments to protect the

welfare of the poor were deployed during the crisis, but those instruments sometimes fell short because of low coverage rates, delays in deployment, fiscal constraints, and data availability.

Four Tools Have Been Deployed to Protect People from the Effects of the Crisis

To protect households from the effects of the crisis, four main tools were adopted, albeit to varying extents, by governments in the Eastern Europe and Central Asia region (see table 4.1).

- First, labor market measures were deployed to address the deteriorating labor market conditions. Programs included those to support the currently employed, facilitate job creation, provide income support, enhance employability, and improve job matching.
- Second, social assistance programs were used to protect poor households from falling below minimum welfare levels.

Table 4.1 Mechanisms for Governments to Mitigate the Impact of the Crisis on Households

	Examples
1. Labor Market Measures	
Support currently employed	√ Wage subsidies, social security tax reduction for currently employed (Poland)
	√ Short work schedule (Poland)
Facilitate job creation	√ Start-up support, business tax reduction (Bulgaria, Estonia, Poland, Russia, Turkey)
	√ Wage subsidies (for new entrants)/social security tax reductions (Estonia, Russia, Turkey)
	√ Apprenticeships, internships (Bulgaria, Estonia, Kazakhstan, Turkey)
Provide income support	√ Unemployment insurance
	√ Public works; public investment program (e.g., Kazakhstan, Latvia, Russia, Turkey)
	√ Training for pay (conditional cash transfer)
	√ Activation
Enhance employability	√ Retraining, preventative training (Bulgaria, Russia)
	√ Training/retraining (with or without stipends)
Improve job matching	√ Job search assistance (all countries)
	√ Job fairs, job brokerage
	√ Mobility allowances (Russia)

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Table 4.1 *(continued)*

2. Social Assistance	
Launch or adjust parameters to LRSA programs	
3. Social Insurance	
Parameter adjustment to minimum pensions	
Parameter adjustment to disability, sickness, maternal, survivor, and so on	
4. Measures to Maintain Human Capital	
Ensure access to education	√ Protect vulnerable students
	√ Redirect funding to programs that target poor people
	√ Exempt poor students from out-of-pocket expenditures
Maintain health care utilization rates	√ Increase health care coverage
	√ Redirect resources to services valuable to poor people
	√ Exempt out-of-pocket expenses
Protect Health Insurance Funds	√ Protect core health spending for primary care and prescription drugs

Source: World Bank staff.
Note: LRSA = Last-Resort Social Assistance.

- Third, pension policies were adopted to respond to the crisis in a few countries.
- Fourth, countries enacted measures to maintain human capital to ensure access to education, promote health care utilization, and uphold sustainability of Health Insurance Funds (HIFs) while protecting the poor.

Labor Market Measures Have Been Deployed and Early Results Are Encouraging

In response to deteriorating labor market conditions, Eastern European and Central Asian countries have boosted labor market programs to focus on employed workers and unemployed workers. Countries implemented or scaled up a host of discretionary labor market policy measures, including programs to support the currently employed, facilitate job creation, provide income support, enhance employability, and improve job matching (see figure 4.1).

Figure 4.1 A Typology of Labor Market Policy Measures Enacted to Mitigate the Impact of the Crisis

Support currently employed	• Wage subsidies, social security tax reduction for currently employed • Short work schedule
Facilitate job creation	• Start-up support; business tax reduction (Bulgaria, Estonia, Poland, Russia, Turkey) • Wage subsidies (for new entrants)/social security tax reductions (Estonia, Russia, Turkey) • Apprenticeships, internships (Bulgaria, Estonia, Kazakhstan, Turkey)
Provide income support	• Public works; public investment program (e.g., Kazakhstan, Latvia, Russia, Turkey) • Training for pay (conditional cash transfer) • Activation
Enhance employability	• Retraining, preventative training (Bulgaria, Russia) • Training/retraining (with or without stipends)
Improve job matching	• Job search assistance (Latvia, Slovenia) • Job fairs, job brokerage • Mobility allowances (Russia)

Source: World Bank staff.

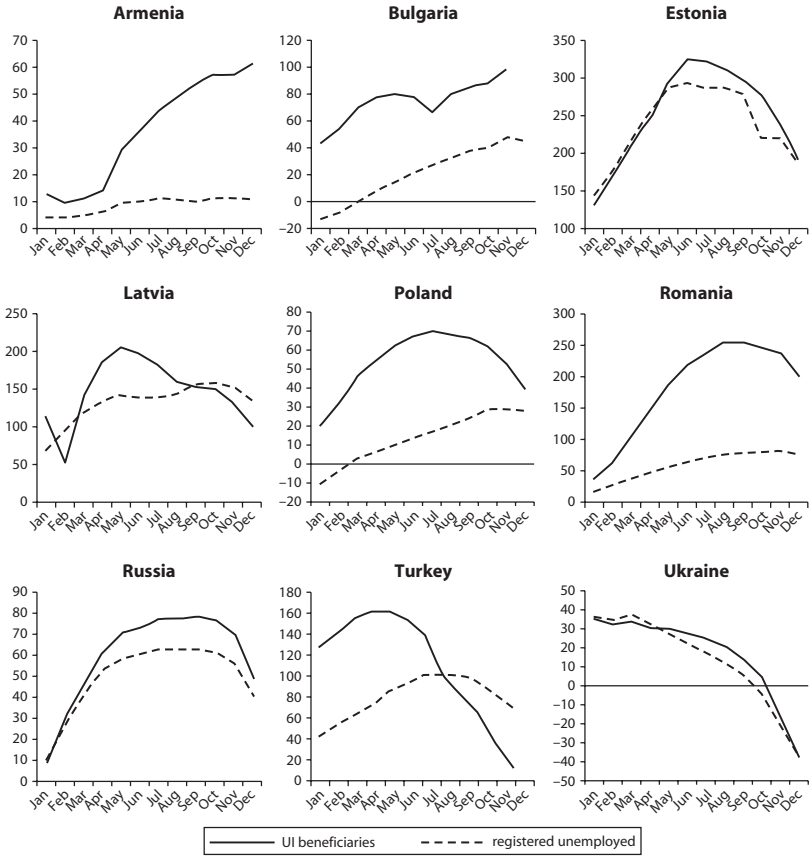
Unemployment Insurance Was Often the First Benefit to Reach Crisis-Affected Households

In Eastern European and Central Asian countries, UI benefits are an attractive and rapid response to job loss designed to provide relief to the unemployed who qualify for the benefit. In Armenia, Bulgaria, Croatia, Latvia, Montenegro, Romania, Serbia, Turkey, and Ukraine, contributory and noncontributory unemployment insurance benefits were the first government social response to help households affected by income shocks (World Bank Forthcoming). Figure 4.2 plots figures and timelines for the registered unemployed and unemployment insurance beneficiaries for nine countries. Overall, the number of UI beneficiaries follows the trajectory of the number of registered unemployed for all nine countries, confirming that UI benefits responded to layoffs in the economy.

However, coverage of unemployment insurance is low. Many unemployed people are ineligible for unemployment benefits. Figure 4.3 shows

Figure 4.2 Unemployment Insurance Was the First Government Social Response to Households Affected by the Crisis

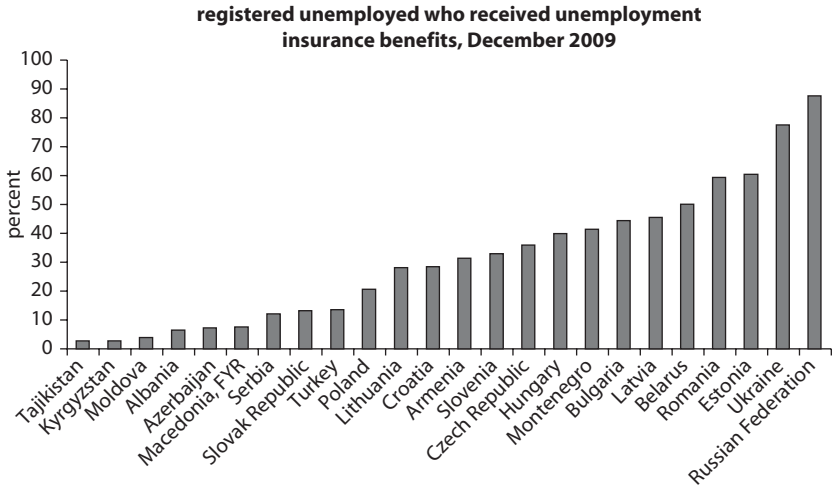
Year-over-year growth in total registered unemployment and unemployment beneficiaries, 2008–09



Source: World Bank staff calculations using Kuddo 2010a.
Note: For Estonia, data on unemployment insurance beneficiaries also includes recipients of unemployment

the large range in UI benefits coverage among the *registered* unemployed, ranging from less than 3 percent in the poor Central Asian economies of Tajikistan and Kyrgyzstan, to more than 75 percent in Russia and Ukraine. Clearly, UI benefits are viable as a safety net for deteriorating labor market conditions if coverage is large relative to registered unemployment.[1] In Croatia, for example, only 30 percent of the registered unemployed population receives UI benefits and among the recently unemployed, only 40 percent receive benefits (World Bank 2010b). The UI benefit

Figure 4.3 Unemployment Benefits Cover Only a Fraction of Total *Registered* Unemployed in Many Eastern European and Central Asian Countries



Source: World Bank staff calculations using Kuddo 2010a.

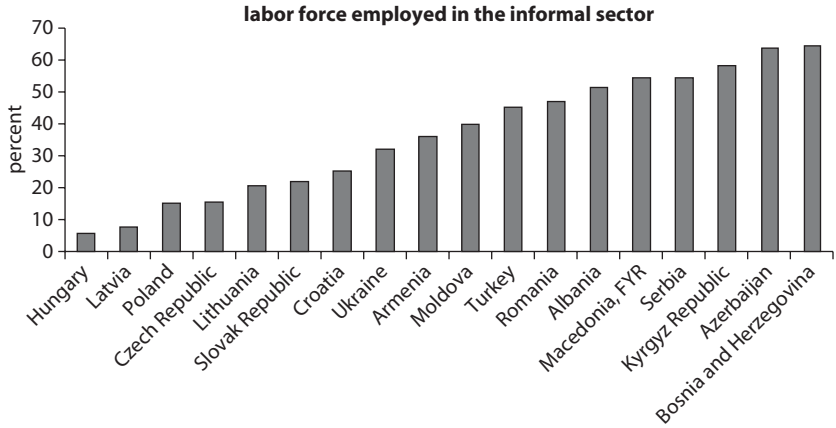
coverage gap reveals that most of the newly unemployed are new labor market entrants or informal sector workers.

Several factors determine UI coverage rates, primarily, that the worker is in the formal sector. This factor alone excludes a significant fraction of the region's labor force. Across 18 Eastern European and Central Asian countries, between 5 and 65 percent of the labor force works in the informal sector, according to some estimates (see figure 4.4) (Kuddo 2009b).[2] Conversely, 35 to 95 percent of workers are in the formal sector, but only a fraction is protected by UI because many workers do not meet tenure and eligibility requirements.

Some Governments Focused on the Fiscal Implications of Unemployment Insurance and Tightened Eligibility and Conditions, and Others Focused on Revenue Generation

Fiscal constraints motivated some countries to tighten eligibility criteria for UI. The UI benefit payouts increased significantly, but in some countries, benefit payments were outstripped by increases in the number of registered unemployed. For example, in Poland, Romania, and Turkey, UI benefit coverage rates were trending down *before* registered unemployment rates began to decline. This could be because beneficiaries were removed from the UI rolls as their eligibility expired, or because eligibility criteria had tightened.

Figure 4.4 Informal Sector Employment Is Sizable in Some Countries and These Workers Generally Are Not Covered by Unemployment Insurance

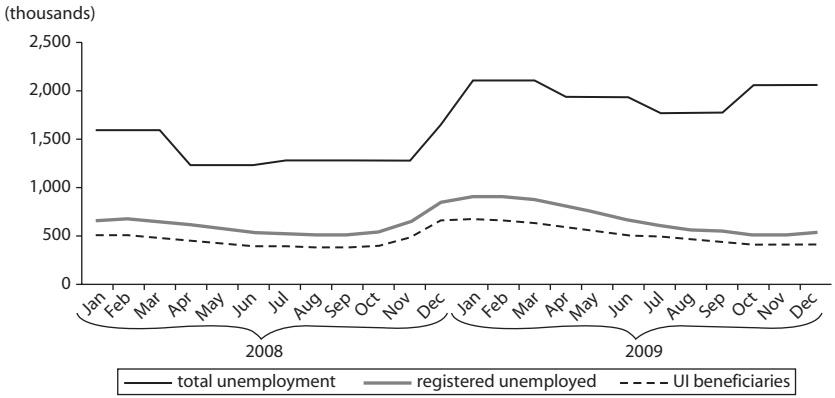


Source: Kuddo 2009b.

Comparing registered unemployment and UI beneficiaries can be misleading. In Ukraine, for example, UI benefits tracked registered unemployment fairly well in 2008 (see figure 4.5), but the subsequent declining trend in registered unemployment and UI beneficiaries is counterintuitive given the relatively high unemployed population. In fact, in January 2009, the government limited UI benefit payouts to people who had no land, meaning that people who had some land were removed from the registered unemployment lists. This measure effectively excluded a number of the rural unemployed from UI benefit payments, even when they only owned small plots. In March 2009, the government began to require weekly visits to the employment office, up from monthly visits, to renew employment status. The more frequent visits increase the cost of registering and hence the intake of registrations is reduced (see chapter 5 recommendations).

Some governments focused more on increasing revenue generation for social insurance funds by raising contribution rates or lowering expenditures by tightening eligibility criteria and reducing the period during which benefits were paid. For example, Estonia raised UI contribution rates from 0.9 percent to 4.2 percent, including the employee share. Hungary tightened eligibility for welfare provisions among long-term unemployed people. The Czech Republic shortened the duration of

Figure 4.5 In Ukraine, Higher Proportions of the Unemployed Have Lost Coverage of Unemployment Insurance Benefits since the Onset of the Crisis



Sources: World Bank staff calculations using Kuddo (2010a) data on the number of people who are registered unemployed and unemployment insurance beneficiaries. ILO *LABORSTA Database* for number of unemployed.

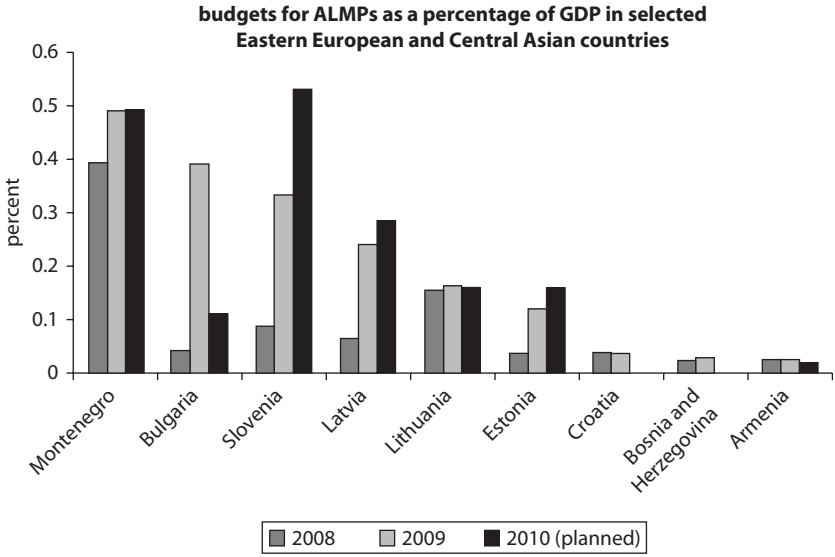
UI benefit payments by one month to enable higher benefits during the first two months of UI benefits.

Active Labor Market Programs Have Been Scaled Up but Their Impact Is Unclear

In 2009, Eastern European and Central Asian countries responded to deteriorating labor market conditions by increasing spending on active labor market programs (ALMPs) (see figure 4.6).[3] Even at elevated spending levels, during the crisis, ALMP spending often was much lower than the 0.47 percent of GDP allocated in EU-27 countries and the 1.32 percent of GDP allocated by member countries of the Organisation for Economic Co-operation and Development (OECD) before the crisis in 2007 (OECD 2009a). Low expenditures on ALMPs before the onset of the crisis suggest that ALMP coverage was small as was the impact on aggregate employability and labor force competitiveness. In 2009, Bulgaria, Estonia, Latvia, and Slovenia considerably increased their ALMP shares in GDP, albeit from a small base and to a large extent due to European Social Fund (ESF) transfers.[4]

Although several Eastern European and Central Asian countries implemented a series of ALMPs to respond to weak labor market conditions, impacts on household welfare and service delivery efficiency depend on

Figure 4.6 Active Labor Market Program Budgets Were Fortified in Many Countries to Reduce Long-Term Unemployment



Source: World Bank staff calculations using ALMP spending from Kuddo (2010a) and GDP data from the IMF World Economic Outlook Database, October 2010.

budget allocations, enforcement levels, and political commitment. Some ALMPs implemented during the crisis include the following:

- To support the currently employed, Ukraine provided subsidies to mining firms.
- To facilitate job creation, Bulgaria paid temporary wage subsidies to employers for hiring newly laid-off workers.[5] Similarly, Turkey provided social security tax reductions to firms that hired unemployed women.
- To provide income support to the unemployed, Latvia implemented a new public works program where participants, registered unemployed people not receiving UI benefits, were paid less than the binding minimum wage for low-skilled labor-intensive work for up to six months.[6]
- To enhance employability, Turkey accelerated expansion of ISKUR's (the Turkish Employment Agency) vocational training and trainee

stipends that reached 167,000 people in 2009, up from 30,000 in 2008, and introduced youth internships. A number of countries, especially EU countries with access to ESF resources, also scaled up training programs and provided stipends to participants.
- To improve job matching, countries also provided more intensive job search assistance (Latvia and Slovenia) and mobility allowances (Russia).

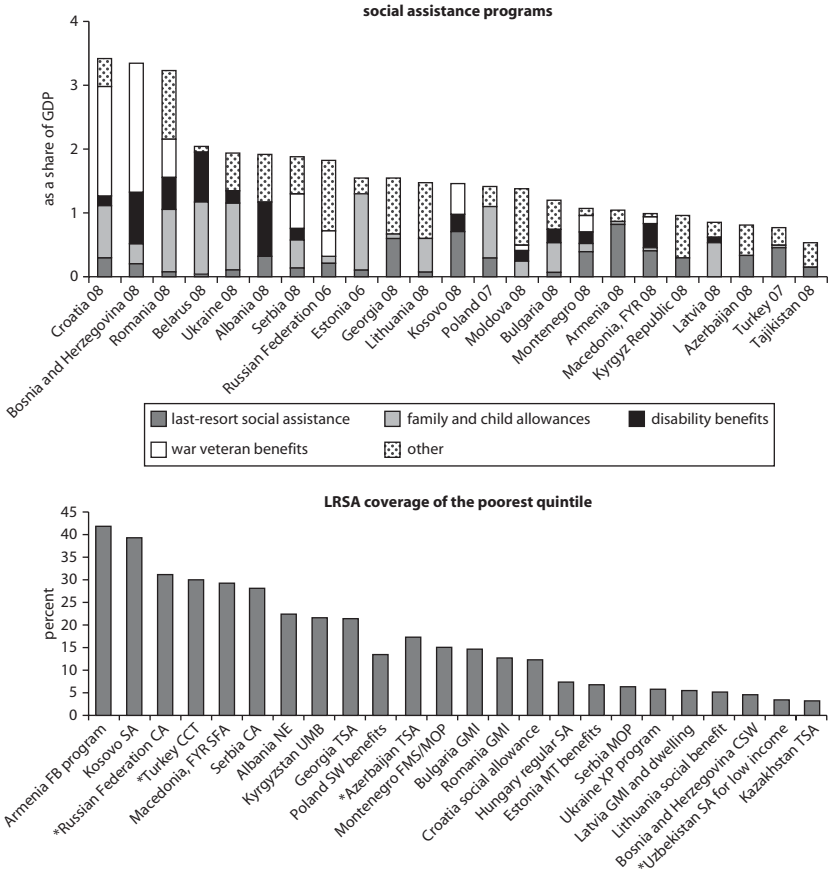
Across Eastern Europe and Central Asia, and in many OECD countries, governments introduced or scaled up wage subsidy programs to encourage businesses to retain or hire workers under schemes that included short-time work,[7] hiring subsidies,[8] and reduced social security contributions (Kuddo 2010b). These programs offer considerable short-term value to support labor demand, but often have been plagued by high deadweight costs if they postpone necessary industrial restructuring and withdrawing them can be politically unpopular. Wage subsidies also can result in *job substitution* rather than job creation. To minimize costs, these schemes need to be temporary and targeted to workers experiencing a temporary demand decline and to those at high risk of long-term unemployment. Otherwise, these schemes risk being less effective in preserving jobs and even can become an obstacle to recovery—slowing worker reallocation from declining to expanding firms.

Social Assistance Measures Have Been Leveraged and the Response Is Mixed

On average, countries in the region spend about 1.6 percent of GDP on a range of social assistance programs that have multiple objectives (see figure 4.7). Among these programs, most Eastern European and Central Asian countries have at least one LRSA program, often well targeted to poor people by global standards. These LRSAs represent a small share of overall social assistance (noncontributory system) spending and cover a small share of the population and a small share of the poor.[9]

Predicting the point at which households turn to LRSA is difficult using existing data, but it is likely that a time lag occurs between negative GDP growth and lower household welfare, and a further lag occurs between lower household welfare and household demand for LRSA. This report uses registered unemployment rates as a proxy, although other indicators might be more accurate, such as when UI benefits terminate, but those data were unavailable for this report. Assuming that the demand for LRSA programs increases with unemployment, and not necessarily

Figure 4.7 Last-Resort Social Assistance Programs Account for a Small Share of Social Assistance Spending and Cover a Small Share of the Poor in Many Eastern European and Central Asian Countries

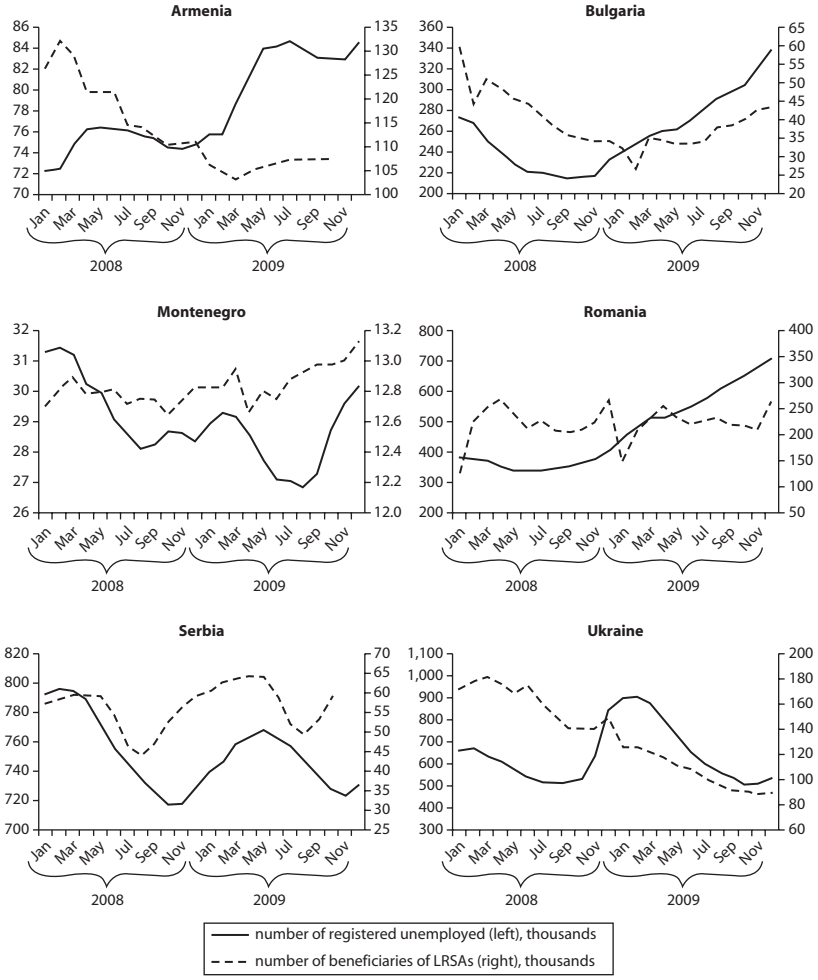


Source: World Bank staff.
Note: To facilitate comparison across countries, LRSA performance indicators (coverage, targeting accuracy, adequacy, and so on) are calculated using a standardized methodology that ranks individuals into quintiles based on harmonized consumption aggregates (World Bank 2005) and pretransfer consumption per capita. An asterisk (*) before a program indicates that the standardized methodology was not applied.

with GDP contractions, it is reasonable to compare patterns of people who are registered as unemployed and those who receive LRSA benefits. Only a minority of unemployed workers receive UI benefits and, therefore, a larger group of the unemployed have to endure joblessness with no safety net. Therefore, an increase in registered unemployment is likely to be proportional to an increase in social assistance demand.

In Bulgaria, Montenegro, and Serbia, initial evidence suggests that each country's flagship LRSA responded to the crisis. That is, levels of registered unemployment and the numbers of LRSA beneficiaries corresponded to some degree (see figure 4.8). In all three countries, the number of LRSA beneficiaries had been declining over the years, and the

Figure 4.8 Performance Varied among Last-Resort Social Assistance Programs as a Crisis Response



Source: World Bank staff calculations based on World Bank (Forthcoming).

2009 crisis led to a reversal in those trends with new entrants into the program.

In Armenia, Romania, and Ukraine, LRSA coverage was unresponsive to increasing registered unemployment rates. In fact, in Armenia and Ukraine, LRSA incidence declined during 2008 and 2009; and in Romania, LRSAs remained essentially flat during the same 24 months. Armenia's declining LRSA incidence can be explained by the government's effort to remove the nonpoor from the list of beneficiaries and at the same time increase the number of poor beneficiaries. This move led to an overall decrease in beneficiaries, but early evidence suggests that the gains to the poor were significant (World Bank 2010a). Romania went a different route to help the poor during the crisis. Rather than scaling up LRSAs, Romania focused on increasing minimum pensions (Azam and Isik-Dikmelik 2010).

Relative to the speed of UI, LRSAs either responded with a lag or in some cases did not respond at all. The reasons for these patterns require further investigation, but some hypotheses are outlined below:

- In some countries, LRSAs have been decentralized to local governments, where typically the constraints of balanced budget requirements prevent countercyclical expenditures. In Latvia, cash-strapped local governments diverted LRSA applicants to public works programs, which are centrally financed, effectively imposing a work requirement to the social assistance program (World Bank 2010d).
- Despite the acute need to expand and scale up LRSA programs, bureaucratic and procedural requirements may slow participant flows. For example, some countries, including Bulgaria, require LRSA applicants to be registered as unemployed for a specified period before they are eligible for LRSAs. Similarly, bureaucratic requirements can delay the disbursement of social benefits because of the time needed to enroll an applicant, perform targeting exercises, and provide benefits.
- Negative social stereotypes of LRSA beneficiaries (such as substance abusers who have little interest in holding a job) may deter potentially qualified LRSA applicants from enrolling because of the stigma associated with social benefits. Instead, they may deplete their own assets or adopt risky coping strategies, such as reducing health or education utilization. As a result, the trend across Eastern Europe and Central Asia shows declining enrollment in LRSAs, the programs cover only a small fraction of the population and only a small fraction of the poor (see figure 4.7).

Some Eastern European and Central Asian Countries Altered Last-Resort Social Assistance Program Guidelines to Improve the Crisis Response

Countries responded to increased safety net demands through the following measures (see table 4.2)

- Improving performance of existing programs (Armenia, FYR Macedonia, Poland, Romania)
- Relaxing eligibility criteria for participation or increasing funding (Azerbaijan, Bulgaria, Croatia, Latvia, Poland, Romania, Serbia)
- Increasing benefit amounts (Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Latvia)
- Introducing new programs or safeguards to protect vulnerable groups (Kazakhstan, FYR Macedonia, Moldova)

Armenia and Georgia strengthened LRSA performance by improving targeting accuracy to exclude nonpoor households from social assistance programs, thus supporting more poor people with minimal fiscal impact. In 2008, Armenia improved the targeting performance of its main LRSA (the Family Benefit) by reducing leakage to the nonpoor, thereby increasing the volume of program resources to the bottom quintile from 43 to 61 percent between 2007 and 2009.[10] This might help explain the declining trend in social assistance beneficiaries seen in figure 4.8.

Some countries reversed declining trends in social assistance coverage to address the immediate effects of the economic downturn. Bulgaria increased its Guaranteed Minimum Income (GMI), a targeted poverty alleviation program, threshold by 20 percent; Latvia increased eligibility thresholds for its GMI by more than 40 percent, albeit from a low level; Georgia doubled the monthly benefit for additional (nonhead) household members (from about US$7 to US$14); and Romania increased its GMI threshold by 15 percent. Latvia and Romania also altered financing mechanisms to reduce the burden on local governments, which were struggling to maintain balanced budgets during the crisis while increasing GMI payouts. For example, in Latvia, local governments were slow to enroll people in their LRSA because municipalities were cash strapped as a result of the fall in tax revenues. The central government eased that constraint by providing 50 percent cofinancing for the LRSA.[11]

Table 4.2 Measures Taken by Eastern European and Central Asian Countries to Improve the Last-Resort Social Assistance Response to the Crisis

	Armenia	*Azerbaijan*	*Bulgaria*	*Croatia*	*Georgia*	*Kazakhstan*	*Kosovo*	*Kyrgyzstan*	*Latvia*	*Macedonia, FYR*	*Moldova*	*Montenegro*	*Poland*	*Romania*	*Serbia*	*Ukraine*
Adjust Social Assistance Spending in National Budget																
Increase spending on LRSAs			X	X	X		X	X	X			X	X	X	X	X
Expand Existing Social Benefits Coverage																
Revise eligibility criteria or increase eligibility thresholds		X		X					X					X	X	X
Increase benefits amount		X		X	X	X		X	X			X	X	X	X	
Extend duration of benefits		X							X							
Introduce a new crisis-specific social assistance program (not including public works)						X				X	X					
Strengthen Benefits Administration																
Improve targeting accuracy of existing LRSAs	X									X			X	X		
Consolidate beneficiary registries	X													X		
Develop Management Information Systems (MIS)				X										X	X	X
Speed up registration and targeting processes						X										

Minimum Pensions Were Used as a Crisis Response to Protect the Poor

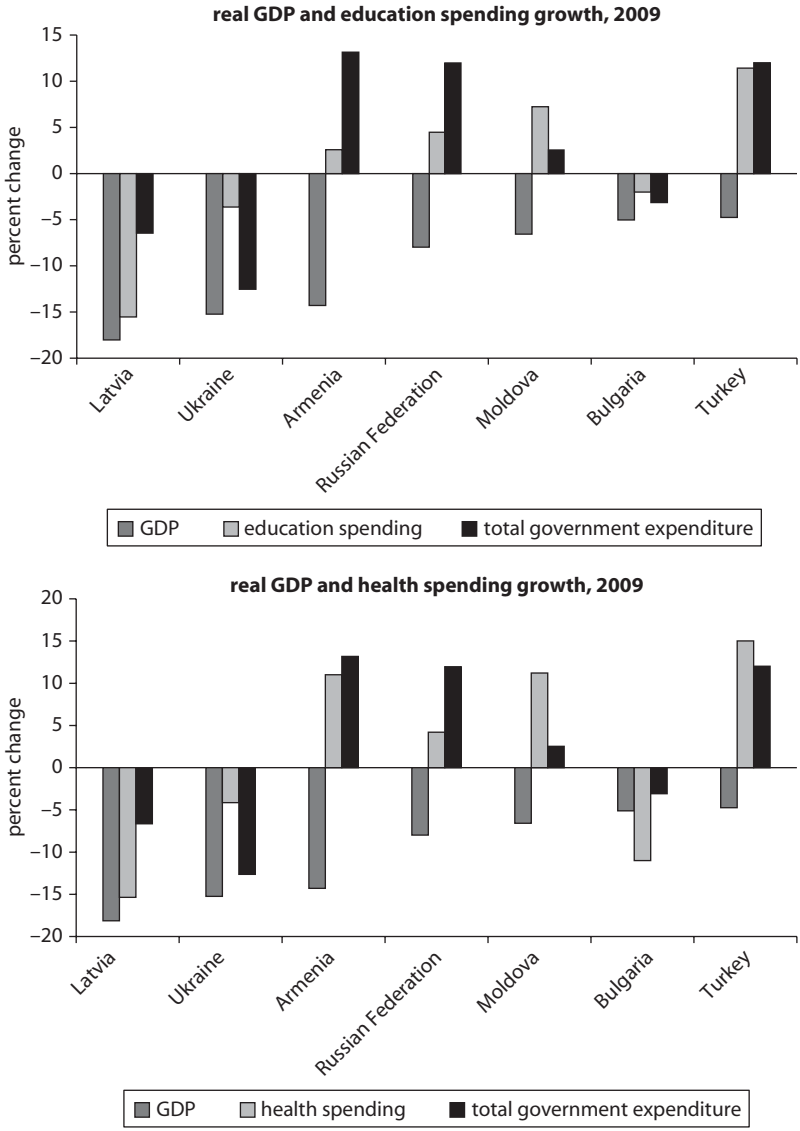
Some countries took steps to scale up or introduce minimum pensions to protect the poor. Armenia, Romania, Russia, and Turkey significantly increased minimum pensions in 2009.[12] Because of high pension coverage in the region, pension increases are likely to have immediate poverty relief.[13] Romania is an interesting example in this respect. Between 2008 and 2009, average monthly pensions rose 20 percent, while average prices rose 5 percent. This increase explains most of the poverty reduction, which fell from 5.7 to 4.4 percent between 2008 and 2009. This poverty reduction is particularly significant, and counterintuitive, given the 7 percent GDP contraction and the earlier simulated 1.7-percentage-point increase in poverty rates between 2008 and 2009 (Azam and Isik-Dikmelik 2010).

Although pensions may protect welfare during a crisis in countries with wide coverage, adjusting pension benefits has to be balanced against the costs of providing benefits. First, because pensions are not means tested, and hence are not targeted to those who need special protection, a sizable portion of benefits might accrue to the nonpoor. For example, 52 percent of all households in Romania benefited from the increase in pensions, whereas only 4.4 percent of households are poor. Second, minimum pensions are pensions that might accrue to the poorer segments of the population, but they are not an ideal tool to reach *crisis-affected* households and hence benefits are not likely to accrue to the "new poor." Third, altering the pensions' benefit amounts has long-term implications unless the government is able to reduce pensions in the future.[14] Pension benefit amounts have political significance, and thus, reducing them can be politically costly.

Government Education Spending Was Protected More than Government Health Sector Spending in 2009, and Some Governments Tried to Shield the Poor from Service Disruptions

Most Eastern European and Central Asian countries protected spending on education and health. Of the two, education expenditures were sheltered more than health expenditures. Cuts could come after a lag because education sector budgets are somewhat inflexible: the bulk of expenditures go toward teacher salaries, which are not easily adjusted, and governments are unlikely to lay off teachers and close schools during the school year. Figure 4.9 illustrates changes in real expenditure patterns. Governments in Armenia, Moldova, Russia, and Turkey *increased* real education spending; the other three countries cut education expenditures

Figure 4.9 Some Eastern European and Central Asian Countries Reduced Real Health and Education Spending during the Crisis



Sources: World Bank staff calculations based on Ministry of Finance (Armenia, Bulgaria, Moldova, and Turkey); Central Statistical Bureau (Latvia); Federal State Statistics Service (Russian Federation); Verkhovna Rada Budget Committee (Ukraine); and IMF World Economic Outlook Database, October 2010.
Note: Armenia and Turkey: central government expenditure only. Russia: health spending includes sport expenditure.

by less than their GDP contraction. Armenia, Moldova, Russia, and Turkey *increased* real health spending in 2009 relative to 2008. Among the countries analyzed, Latvia and Bulgaria made the toughest health-spending cuts. In Latvia, the cut was 15 percent in 2009, but even so, it was less than the 18 percent GDP contraction. Bulgaria, however, reduced real health spending by 11 percent, which was considerably more than its GDP contraction. These reductions in health spending by the government most likely will cause patients' out-of-pocket payments to increase if the health sector is not able to achieve comparable cost reductions.

A few Eastern European and Central Asian countries implemented measures to protect poor people by (i) providing additional resources to students of schools targeted for consolidation, (ii) protecting programs targeting the poor and vulnerable, and (iii) reducing out-of-pocket education expenses. Bulgaria continued to consolidate schools, a process begun during the boom years, but ensured that more vulnerable students were protected through a mitigation fund that enabled municipalities consolidating schools to provide additional services to at-risk students. The government also created opportunities for second-chance education and provided training for early school leavers and for people with low-level skills. Armenia enacted a decree that restored education (and health) spending for high-priority programs targeting the poor and vulnerable. Latvia added criteria for higher education subsidies to include poverty and social considerations that would reduce out-of-pocket expenses for the poor.

From this brief look at social spending trends in response to the crisis, it is not possible to deduce what happened to service provisions as a result of cuts. Spending reductions do not necessarily have to lead to a worsening of health and education outcomes. Research on the link between government education spending and education outcomes has highlighted the significance of factors other than the level of public spending, namely (i) efficiency of public spending, (ii) intrasectoral allocation of public spending, (iii) private education spending, and (iv) governance (summarized in Grey, Lane, and Varoudakis 2007). Empirical work in the area of health also supports the importance of cost-effectiveness—and not just the magnitude—of public spending for health outcomes (see, for example, Filmer and Pritchett 1999; Gupta, Verhoeven, and Tiongson 1999). The World Bank's *World Development Report 2004* suggests that organizational and allocative efficiency, institutional capacity, and governance are critical to the relationship between public spending on health and health outcomes. As part of cost-cutting measures, a number of countries in the region embarked on structural reforms in the health and education sectors aimed at increasing efficiency (see box 4.1).

Box 4.1

Eastern European and Central Asian Countries Used the Crisis as an Impetus to Initiate or Accelerate Structural Adjustments to Reduce High Fiscal Deficits

A few Eastern European and Central Asian countries realized that fiscal constraints arising from the crisis required a sustained public spending reallocation or reduction, rather than a one-time budget cut. As a result, they enacted ambitious efficiency-enhancing reforms.[a] Some governments implemented improved funding mechanisms in education and health to provide incentives for facility consolidation using improved resource allocation, and strengthened management oversight to control costs and improve quality. Some governments also raised the retirement age for pensions and revised indexation formulas. This box presents some of the efficiency reforms enacted by a few countries in the region.

Education Sector Reforms

In many Eastern European and Central Asian countries, substantial scope exists for savings in education without reducing access or quality. In most countries, staff numbers and school infrastructure are too large for existing student enrollment. Substantial savings could be achieved and used to improve education quality, or diverted to other sectors, if larger class sizes were created within existing schools through school closings or mergers. Interventions to accelerate school network consolidation include implementing such measures as "funds-follow-student" formulas, transferring school management to municipalities and nongovernmental organizations (NGOs) to improve incentives for efficient resource use and stronger accountability for results. For instance, Bulgaria closed about 15 percent of schools by implementing a per-student financing formula, which strengthened school-based management by increasing principals' discretion over budgeting, staff salaries, and staffing levels. In Latvia and Romania, formula-based per capita financing was enabled in 2010. In Poland, NGOs took over small schools to increase efficiency; now education inspectors can no longer block closures by local governments; and teachers can be hired under the labor code rather than the restrictive Teachers' Charter.

Health Sector Reforms

A few countries in the region took steps to enhance health sector efficiency by adopting reforms for drug procurement, hospital rationalization plans, health

(continued next page)

Box 4.1 *(continued)*

care payments and oversight, and measures to strengthen general practice. In Hungary, Romania, and Turkey, governments approved regulations to contain pharmaceutical and medical expenditures. Most Eastern European and Central Asian countries have inherited extensive hospital networks and the hospital staff has an incentive to treat patients in costly hospital-based services instead of cheaper outpatient and primary care services. These countries could benefit from politically unpopular hospital rationalization strategies, and some countries have begun to align incentives for hospitals to improve efficiency.

Hungary and Poland issued corporatization guidelines for hospitals, subject to commercial audit standards and bankruptcy. Romania updated their hospital rationalization strategy. Bulgaria implemented measures to improve health sector stewardship by strengthening the role of the Health Insurance Fund as the primary payer of hospitals. Georgia established a stakeholder forum to oversee health insurance companies' implementation of state-funded programs. Turkey implemented a fixed global budget for all Ministry of Health hospitals to contain hospital spending growth. Bulgaria, Hungary, Latvia, and Tajikistan strengthened the role of general practitioners in the health care delivery system to reduce overutilization of health specialists and tertiary health care.

Pension System Reforms

In most Eastern European and Central Asian countries, higher unemployment rates and falling wages during the economic downturn reduced worker contributions to pension systems, but expenditures remained constant or increased. The impact of the economic crisis compounds the fiscal impact from the demographic crisis. Throughout the region, long-term pension system sustainability is undermined because the ratio of beneficiaries to contributors is high—that is, the number of elderly retired people is rising in relation to the number of workers.

As a result, Hungary and Poland increased the effective retirement age and abandoned the generous pension indexation formula. Hungary's new pension reform law will increase the statutory retirement age starting in 2012; introduce penalties for early retirement; index pension parameters to GDP growth, to slow benefit increases during slow GDP growth; and since July 2009, abolished the 13th-month pension to reduce pension benefit outlays. Poland implemented a program to increase labor force participation among workers age 50 years and

(continued next page)

Box 4.1 *(continued)*

above, and enacted the Law on Bridging Pensions to reduce the number of people eligible for early retirement from 1.7 million to 300,000, while safeguarding pension base levels for those affected by the change.

Eastern European and Central Asian Countries Implemented Measures to Promote Long-term Pension System Sustainability

	Legislated	*Planned*
Change indexation/ minimum and basic pension and benefit cuts	Armenia, Hungary, Kosovo, Latvia, Lithuania, FYR Macedonia, Romania, Russian Federation, Serbia, Turkey, Ukraine	Estonia, Latvia, Moldova, Ukraine
Increase retirement age	Azerbaijan, Hungary	Croatia, Romania, Ukraine
Reduce incentives for early retirement	Hungary, Latvia, Poland	Romania, Ukraine

Most Efficiency-enhancing Measures Must Be Implemented with Safeguards for the Poor

Implementing structural reforms requires conscious steps to avoid damaging the welfare of poor and vulnerable households. Lessons can be taken from Latvia, which implemented deficit-reducing measures and protected vital government services. Prominent among the fiscal consolidation measures enacted was increased cost recovery through improved copay arrangements, closing hospitals and removing hospital beds, and shutting down unviable schools. The government, however, took steps to protect poor people who depend on government services by eliminating copayments for health care and pharmaceuticals; strengthening primary health care; providing transport for students from closed schools; and eliminating plans to abolish preschool education for 5 and 6 year-olds. The government also emphasized public information on the rationale for structural reforms through outreach activities, including disseminating information on propoor measures.

Source: Ajwad and Oral 2010.

a. This summary of key reforms is not an exhaustive list; information on reforms is drawn from World Bank Development Policy Lending documents.

A number of countries implemented special measures to protect poor people from further hardships because of ill health: increasing health care coverage, redirecting resources to services valuable to poor people, and exempting out-of-pocket expenses.[15] Georgia extended its Medical Insurance Program (MIP) coverage targeted to the poor from 750,000 to 900,000 beneficiaries. Latvia redirected resources toward services valuable to the poor by providing funding for additional public health nurses so that operating hours could be expanded to ensure that all patients received necessary preventive care and screenings. Romania planned copayments and hospital services reimbursements for vulnerable groups; Latvia exempted poor patients from various copayments.

Despite Fiscal Pressures on Health Insurance Funds, Core Health Spending Was Largely Protected

Although HIFs suffered a substantial drop in revenues,[16] governments reduced health expenditure growth, while protecting some core health spending for primary health care and prescription drugs (see Koettl 2010).[17] Much of the expenditure cuts were achieved by squeezing hospitals to decrease spending or to ration access to hospital services. Most countries in the region can increase efficiency by shifting their focus to primary health care from tertiary care, but it remains to be seen whether the HIF strategy of squeezing hospitals has enhanced efficiency or simply shifted the burden to system clients through higher out-of-pocket payments or rationing.

Notes

1. During the Asian crisis, Indonesia, Malaysia, the Philippines, and Thailand had no UI programs. The Republic of Korea had a functioning UI system and the government shortened the contribution period to increase eligibility and extended the duration of benefits so the number of beneficiaries rose from 5.7 to 8.7 million. Despite these efforts, 90 percent of unemployed people did not meet eligibility criteria for unemployment insurance (Ramesh 2009).
2. Informal workers do not contribute or accrue pension rights in any major mandatory pension schemes. However, many of the European and Central Asian countries not included in Kuddo (2009b) are likely to have higher informal labor force participation rates.
3. Often using European Social Funds.
4. ESFs are the European Union's main financial instrument designed to support the creation of more and better jobs in EU member states. ESF spending constitutes about 10 percent of the EU's total budget.

5. During the Asian crisis, the Republic of Korea introduced a job maintenance program, which was essentially a wage subsidy of between 0.33 and 0.66 percent of wages if a firm demonstrates the need for economic adjustment. An assessment of the program found that 22 percent of jobs would have been lost had it not been for the subsidy (Atinc 2003).
6. In May 1999, the Republic of Korea launched a public works program for the unemployed not covered by UI benefits. Around 2.5 times more people benefited from the public works program compared with UI. The wage had to be adjusted downward several times as some workers were leaving their jobs to receive the higher wages available through the program (Blomquist et al. 2002).
7. Germany gained notoriety for its short-time work program called Kurzarbeit. The government provides a subsidy from its UI funds to workers and employers so firms can cut labor costs without layoffs by spreading hourly cuts across all employees.
8. Different types of subsidies have been used widely in postcrisis periods: earlier examples include Argentina, Indonesia, the Republic of Korea, Malaysia, and Thailand (see Atinc 2003; Ramesh 2009).
9. Ongoing research on safety net performance across the Eastern Europe and Central Asia region suggests that errors of exclusion and inclusion persist.
10. Armenia reduced leakage by cross-checking databases of paid dividends by allowing the authorities to identify nearly 17,000 families receiving benefits that would have been ineligible had they fully disclosed their earnings (World Bank 2010a).
11. During 1998, in response to the crisis, the Republic of Korea expanded eligibility by adding a temporary component to the Livelihood Protection Program, for which 75 percent of benefits were covered by the central government (Blomquist et al. 2002). Despite the expanded coverage and increased budget allocation, however, only 7 percent of the new poor benefited from the expanded program, and the overall coverage decreased from 32 percent of the poor in 1997 to 17 percent in 1998 (Fallon and Lucas 2002).
12. World Bank (2009) reviews the crisis-inspired pension reforms.
13. Pensions cover between 40 and 50 percent of all households in a majority of countries in the region.
14. Although pension benefit increases are within the purview of the government, cuts in pensions are sometimes protected by the judicial system and cuts often are politically costly. This makes it difficult to roll back or decrease benefit levels. For example, in June 2010, a top court in Romania ruled out a pension cut demanded by the country's government as part of a fiscal austerity measure. Similarly, in December 2009, Latvia's constitutional court struck down pension cuts that were part of the austerity measures.

15. Argentina scaled up programs for maternal and child health during its 2001 crisis by about 70 percent, despite a 25 percent total government budget contraction. Thailand expanded its Public Assistance Program to protect vulnerable groups, and the Voluntary Health Card Program targeted to those close to poverty (Gottret 2009).
16. Most HIFs rely on payroll taxes so revenue is sensitive to changes in employment and wages, and revenue growth follows a procyclical pattern. However, HIFs also obtain significant revenues from other sources, such as the state budget and social insurers like pensions and unemployment funds.
17. Findings were based on detailed surveys on revenues, expenditures, insured populations, utilization, and wait lists. Surveys were sent to the HIFs of eastern-central Europe, Baltic, and Western Balkan countries. Ten countries reported data for 2007, 2008, and the first six months of 2009: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Latvia, Lithuania, FYR Macedonia, Montenegro, and Serbia.

CHAPTER 5

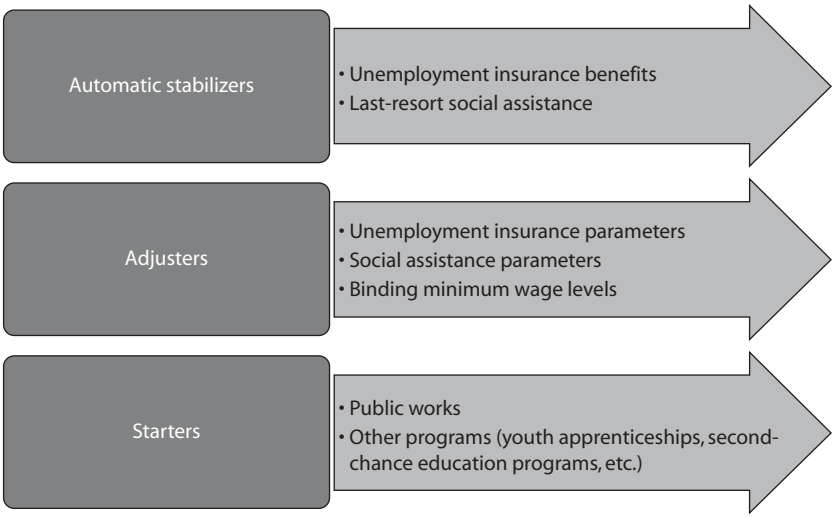
Improving Responses to Subsequent Crises

Several lessons emerged while monitoring the social impacts of the 2009 crisis. This chapter presents the lessons that can improve responses to subsequent crises.

Effective crisis responses are fiscally responsible measures that are prepared in advance of a crisis and that are ***timely, targeted, and temporary***. Timely measures provide income support quickly. Eastern European and Central Asian countries' mostly timely response to the crisis was aided by safety net programs established long before the onset of the crisis.[1] Targeted measures provide income to people who are most affected by the downturn and hence would support at least a minimum welfare basket of goods for the existing and new poor. Initially, well-performing safety nets could be scaled up by expanding coverage or increasing benefits, but this depends critically on national core capacity for safety net systems before a crisis. In some cases, new programs had to be launched to reach the new poor because existing program parameters could not be altered appropriately. Finally, temporary measures reduce or expire as the economy improves and hence should not increase budget deficits in the long run.

There are three pillars to an effective crisis response: (i) automatic stabilizers, (ii) adjusters, and (iii) starters (see figure 5.1). Although

Figure 5.1 Three Pillars to an Effective Crisis Response



Source: World Bank staff.

automatic stabilizers can be either revenue or expenditure items that adjust automatically and countercyclically, this report focuses on UI and LRSA. In light of new realities on the ground, such as higher incidence of people not covered by existing safety nets and reduced worries of moral hazard, governments can adjust parameters of existing safety nets. When existing programs cannot address the needs of the crisis, even if program parameters are adjusted, new programs can be started. Most countries in the region already had an array of safety nets in place, but one category of crisis responses that was missing was public works. This report focuses on public works, youth apprenticeships, second chance education programs, and mobility allowances as examples of programs implemented in the region in response to the crisis.

This chapter focuses on measures to protect households' welfare during a crisis and, as such, does not address the more general question of the role of fiscal policy in stabilizing output over the economic cycle.

Experience from the 2009 crisis reveals that several ECA countries already had a number of *automatic stabilizers* that worked reasonably well and others that did not respond as quickly as expected. Although UI appears to have worked in a number of countries, it is not yet a broad-based automatic stabilizer because UI coverage rates are relatively low.

LRSA program performance was mixed, and some countries might benefit from modernizing these programs so they can better react to future crises. Program parameter *adjustments* were made during the crisis to better respond to the crisis, but some adjustments were not well exploited. Some countries altered UI parameters and LRSA parameters, but the strategy was underutilized given its potential; and minimum wage rates and activation conditions rarely were adjusted even during the worst of the crisis. Finally, some countries did *start* new programs, such as public works, in response to high unemployment. Because many Eastern European and Central Asian countries already have at least one LRSA program that targets poor people, none of the countries had to resort to launching a new social assistance scheme during the 2009 crisis.

Tilting the policy balance toward more precrisis preparation and less postcrisis reaction can be beneficial for three reasons. First, postcrisis reactionary policy suffers from implementation lags, sometimes due to the political decision-making process or administrative capacity constraints.[2] Second, postcrisis reactionary policy is not always reversed automatically when the economic cycle improves. As a result, reactionary policies have the potential to lead to higher government deficits (Baunsgaard and Symansky 2009). Third, ex ante planning of policy responses to a downturn can lead to better-designed programs during a crisis and increased foresight on how to manage the fiscal costs of any such interventions across the economic cycle.

Responding to a crisis with existing safety nets by altering program parameters and starting new programs requires considerable fiscal discipline and planning. Failure to recognize those needs could lead to inappropriate responses to crises and to high costs to taxpayers. In addition, increasing the balance toward more precrisis preparation does not remove the need for postcrisis discretionary actions to confront a crisis. For example, governments embarked on a series of unplanned interventions over 2008–10, including monetary policy easing, bank bailouts, toxic asset buy backs, and loan forgiveness.

Depending on the fiscal position, it may be inappropriate in certain circumstances to allow a precrisis planned response to operate fully. If fiscal space is constrained because of concerns about fiscal solvency or the limited availability or high cost of financing, then allowing the budget deficit to increase in response to an output contraction may undermine macroeconomic stability. Fiscal savings built up in good times, for example, through the reduction of public debt, mitigate this risk. Finally, automatic stabilization is less desirable if the economy is faced with a supply

shock (Blanchard 2000). In the case of a more permanent shock to the supply side of the economy, automatic stabilizers delay the adjustment of actual output to its new potential level and lead to a widening of the output gap.

Automatic Stabilizers

One of the key lessons of the 2009 crisis in Eastern European and Central Asian countries is that *automatic stabilizers* such as UI benefits were timely, targeted, and temporary in their response. LRSA, which, too, is supposed to scale up during a crisis and wind down during good times, however, experienced some delays in its response.

Unemployment Insurance Worked as an Automatic Stabilizer, but It Covers too Few

UI benefits, worked well as an automatic stabilizer in several Eastern European and Central Asian countries to cushion household income shocks. Unemployment benefits were timely in that they reacted with minimum delay (as described in chapter 4), they were targeted to people who lost their jobs, and they are temporary because unemployment benefits expire after a specified duration of benefits receipt. Social insurance agencies and public employment services offices responded capably, considering the large and rapid increases in beneficiaries and fiscal outlays. Across 24 Eastern European and Central Asian countries for which UI benefit incidence data are available, Bulgaria, Estonia, Latvia, Lithuania, and Romania all more than doubled the number of UI beneficiaries between December 2008 and 2009, likely preventing a large increase in poverty. For example, simulations indicate that the Latvian poverty rate would have been 23 percent rather than 20 percent in the absence of UI in the country (Ajwad, Haimovich, and Azam 2010).

At a household level, unemployment benefits provide much-needed income for households that have suffered a job loss. On a macroeconomic level, unemployment benefits dampen output fluctuations by increasing government spending on transfers to households during downturns and reducing them during good times. In Latvia, during 2008–09, a 144 percent nominal increase in UI benefits amounted to a stimulus of 0.61 percent of GDP. Romania increased spending on UI benefits and in turn stimulated the economy by 0.21 percent of GDP, and Ukraine by 0.16 percent. Between 2008 and 2009, Armenia increased UI benefits spending in nominal terms by 74 percent and Azerbaijan by 31 percent, but coverage is low in these two countries and, hence, the stimulus effect was less than 0.01 percent of GDP. Unemployed people are more likely to spend

domestically, which supports local jobs, and very little of their UI benefits are likely to be saved or invested, especially among the poorer people. As such, the multiplier associated with unemployment benefits is likely higher than one.

To become an economywide automatic stabilizer, Eastern European and Central Asian UI systems could be reformed to increase coverage. In some countries, long work tenure requirements are mandated; in others, part-time workers are not covered by UI; and in many countries, the self-employed are not covered. These are all groups that could be covered with UI by varying the pay-in amounts, duration of benefits, and amount of benefits, for example. In addition to altering eligibility rules, formalizing workers who operate in the informal economy and integrating them into the UI system will broaden the base considerably. The formalizing process can be fostered by reducing operating costs and ensuring that hiring and firing practices are more flexible, according to an OECD study (OECD 2009b).[3]

To Perform as an Automatic Stabilizer, Timeliness of Last-Resort Social Assistance Needs to Improve

During a crisis, social assistance can be leveraged to help people who fall on hard times and have limited savings to cushion the shock.[4] As such, LRSAs can work as automatic stabilizers by expanding during recessions to help households smooth consumption, and then contracting during the recovery when the labor market improves. Across six countries in the region for which data are available, three had LRSA programs that responded to the crisis, while coverage rates of LRSAs did not increase as expected in the remaining countries. LRSA targeting performance in the region is generally good by global standards (see chapter 4), and the programs are designed to be temporary in that they expire after several months of benefit receipt. In addition, LRSAs can be effective automatic stabilizers because poor households generally save very little (see chapter 3) and, hence, spend their benefits in the local economy, which in turn induces a large multiplier effect.

LRSA performance in many countries in the region has been mixed and its fiscal stimulus effect low because LRSA coverage and budgets are small. Between 2008 and 2009, Armenia increased LRSA spending by 0.21 percent of GDP, Latvia by 0.07 percent, and Serbia by 0.02 percent (World Bank Forthcoming). However, these increases were small, given the dramatic drop in remittances in Armenia and very high unemployment in Latvia and Serbia in 2009. Most LRSAs are better at alleviating chronic poverty than transient poverty, not only because of the design, but

also because of the manner in which the budgeting process and financing sources function. Transforming LRSAs into more effective instruments to protect the most vulnerable households during deep recessions will require design modifications, including the following:[5]

- Promote effective targeting and incentive compatibility by phasing in eligibility that is based on criteria for assessing welfare, such as income levels, assets, and proxy indicators, instead of using criteria based on registered unemployment status and age (minimum pensions).

- Strengthen benefits administration to speed up registration and targeting and reduce errors and fraud. Eastern European and Central Asian countries can gain from upgrading social assistance benefit administration systems by phasing in automated processes, reorganizing service delivery, strengthening the referral function, and promoting results-based management within and across programs. Developing and implementing systems for detecting, remedying, and minimizing errors and fraud are critical for efficiency and political sustainability.

- Increase the central government's LRSA financing burden relative to the local government's burden. Experience in a few countries in the region showed that during the crisis, as tax revenues fell, local governments were neither willing nor able to absorb high LRSA benefit costs.[6] After the onset of the crisis, the decentralized financing model used by some countries to finance centrally mandated benefits almost guaranteed system failure. That is, cash-strapped local governments, which usually are expected to maintain balanced budgets, could not meet the increased demand for safety nets in the face of their reduced revenues.[7]

Adjusters

Program parameters can be *adjusted* to improve the crisis response. Three sets of parameters are identified in this report. First, UI benefit amounts, duration of payout, and eligibility rules can all be altered when moral hazard is less of a risk during a downturn. Second, LRSA program guidelines can be altered to increase coverage and reduce activation conditions. Third, minimum wage rates can be altered to minimize layoffs among low-wage workers, while weighing tax revenue implications and the stimulus value of the lower minimum wage.

Unemployment Insurance Program Parameters Can Be Adjusted to Reflect Labor Market Conditions

UI program parameters can be adjusted to respond to labor market conditions by changing the duration, coverage, and benefit amounts when certain thresholds are exceeded. During a recession, unemployment is more likely to stem from weak labor market conditions rather than individual decisions to choose leisure over work. As a result, more generous UI benefits may be desirable. The duration of benefit payments often sparks passionate debates on the relative weight given to protecting workers who paid into UI programs and who became unemployed due to no fault of their own. Additionally, a potential moral hazard might result if workers perceive an opportunity to live comfortably on UI benefits and, as a result, put little effort into staying employed, reduce their job search effort, or maintain unrealistic job expectations.

Latvia, Poland, and Romania all increased the duration of unemployment benefits during 2009. Latvia increased the unemployment benefit period to nine months by providing one-quarter of the gross minimum wage to UI beneficiaries whose benefits were exhausted within nine months; Poland extended the social unemployment subsidy from 12 to 18 months; and Romania extended the maximum duration of unemployment benefits from six to nine months. For comparison, in the United States, which generally maintains a less generous unemployment benefit system, the benefit duration was extended from 6.5 months to as much as two years for residents in states with high unemployment rates.

Some countries also changed the eligibility criteria to ensure that UI benefit coverage increased. In Latvia, the contribution period before a worker could claim benefits decreased from 12 months in the last 18 months to 9 months in the last 12 months.

Finally, Estonia, Russia, and Turkey increased the unemployment benefit amount.

Last-Resort Social Assistance Program Guidelines Can Be Altered to Reflect Crisis Conditions

LRSA program parameters can be adjusted to reflect crisis conditions on the ground. Based on country-specific criteria, such as labor market indicators or other proxies for household welfare, design changes can be made to ensure a stronger crisis response. In this vein, see table 4.2 for some examples from the 2009 crisis. Noteworthy among attempts to protect the poor in the midst of deteriorating economic conditions are measures to increase coverage (Azerbaijan, Croatia, Latvia, Romania, Serbia, Ukraine)

and measures to alter the financing burden to acknowledge local government fiscal positions (Latvia, Romania). For example, Latvia took steps to increase coverage of its LRSA program by increasing eligibility thresholds by more than 40 percent for its GMI poverty alleviation program between 2008 and 2009, albeit from a low level. In addition to increasing eligibility thresholds, Latvia temporarily altered financing mechanisms to reduce the burden on local governments, which before 2009 fully financed LRSAs (World Bank 2010d). Recognizing that cash-strapped local governments might restrict LRSA applications during the height of the crisis, the central government agreed to a temporary 50/50 split for all LRSA spending.[8] Between 2008 and 2009, real LRSA spending in Latvia increased by 133 percent.

Health financing systems, if tied to social assistance programs, can be altered as needed during a crisis to protect the poor. Households tend to cut down on health care during crises (see chapter 3) because of lower incomes or because of out-of-pocket expenses and hence, providing targeted financial protection to the poor can protect human capital.

Activation conditions could be altered to better reflect weak labor market conditions and increased workload among social welfare workers and public employment services staff. Although relatively unused by countries in the 2009 crisis, countries could have relaxed activation conditions so that deserving people did not lose benefits or become trapped in a cycle of poverty. Tighter activation conditions are useful to prevent welfare dependency, but when moral hazard worries are allayed, as they usually are when labor market conditions are weak, relaxing activation conditions can improve efficiency by reducing the workload on social workers and public employment services staff.

Adjust the Binding Minimum Wage if Layoffs Affect Low-wage Workers or New Entrants (Youth)

Governments could consider reducing binding minimum wages if monitoring statistics show a high proportion of minimum wage workers being laid off during an economic downturn or if new entrants and youth are disproportionately shut out of the labor force. Minimum wage rates are set such that the rates are high enough to secure a socially acceptable standard of living, while at the same time low enough that less productive workers are not excluded from the formal labor market. Reducing binding minimum wages is a politically unpopular measure that makes sense only during a recession, when layoffs are widespread among people

earning close to minimum wage or job prospects for new entrants to the labor force are weak. Recessions can lead to wage rate reductions at different points in the wage distribution and, therefore, governments could reduce statutory minimum wages to ensure that workers at or close to the minimum wage do not suffer job losses or that new entrants to the labor force (youth) are not shut out.

During 2009, countries in the region did not lower statutory minimum wage levels as a crisis response policy instrument. Instead, governments maintained minimum wages either to help families, maintain income tax revenues, or stimulate the economy. However, these goals are not necessarily achieved with minimum wages. With respect to poor families, minimum wages are generally an inappropriate poverty-reduction tool because most poor households are more affected by unemployment or informal sector employment than low minimum wages. On tax revenues, it is unclear whether income tax revenues fall more when minimum wage rates are maintained, but layoffs are high, or when minimum wage rates are decreased, but layoffs are low.

Starters

When existing safety nets cannot respond to the emerging vulnerable population, even when program parameters are adjusted, new programs can be *started* to cover uncovered people and protect household welfare. A relatively well-established program, especially for demand shocks, is public works. However, other programs also can be launched during a crisis if they are planned ahead of time. Programs could include youth apprenticeship programs, second-chance education programs, and mobility allowances.

Public Works Can Be an Effective Countercyclical Measure

Labor-intensive public works can be an effective countercyclical labor market program during covariate shocks, such as economic crises or natural disasters.[9] One reason for their desirability is that public works programs generally are self-targeting, where people self-select into the program based on the stipend rate and the labor intensiveness of the work. When stipends are low and the work is labor intensive, then nonpoor people are less likely to participate. As such, little time is lost implementing targeting systems.

Before the onset of the 2009 financial crisis, public works programs were relatively underutilized in Eastern European and Central Asian

countries. However, several countries in the region implemented public works programs in 2009 to carry out maintenance projects and create community assets. These public works programs served as a minimum safety net for the swelling ranks of unemployed people who were not covered by unemployment insurance benefits.

In Latvia, the government initiated an emergency public works program known as Workplaces with Stipends (WWS) to respond to high unemployment rates. The program targeted registered unemployed people who were not receiving UI benefits, a group that expanded as a result of the crisis. The program self-targets poor people by offering a low stipend for labor-intensive work—Latvian lat (LVL) 100 (US$200) per month, or about 80 percent of the net minimum monthly wage. Participants are hired on a first-come, first-served basis and are eligible to work for up to six months, with a minimum two-week requirement. Workers carry out maintenance of public infrastructure, conduct environmental cleanups, provide social services by working through civil society organizations, and provide some municipal and state services.

In Armenia, the Lifeline Road Improvement Project was prepared as a Rapid Response Project to create short-term jobs in road construction and to mitigate the crisis impact on the construction sector, which had suffered declines of 38 percent in outputs and 40 percent in employment. The project aimed to rehabilitate 240 kilometers of roads that the government already had identified and prioritized; it created 16,000 person-months of employment and helped local construction industries cope with the recession by hiring regionally based contractors. The program also helped increase local construction industry capacity by introducing modern and cost-effective technologies, providing hands-on support, and offering training by supervision consultants to increase industry efficiency and sustainability.

Initiating public works programs at the beginning of a crisis is not ideal because of the time required to design and implement the program, but the following recommendations can speed public works responses during a crisis:

- Maintain a list of priority shovel-ready programs to implement to ensure that resources are allocated to building infrastructure or maintaining assets with the highest value to the community. Shovel-ready project plans require regular updating to facilitate scale-up when needed.
- Maintain flexibility in social investment funds to generate labor-intensive work for people when private sector labor demand falls.

Other Programs Can Be Initiated to Narrow the Coverage Gap

During crises, as information emerges about uncovered vulnerable groups, social programs can be launched to protect incomes and help households to avoid making decisions that would hurt long-term human capital accumulation. The range of programs can vary considerably depending on the safety net and labor programs available in the country. In past crises, conditional cash transfer programs, social assistance schemes, price subsidies, and labor market programs were launched to protect people who were not eligible for government programs. In Eastern European and Central Asian countries, safety net programs were already relatively well established. However, the severity of the crisis required that additional safety net programs be launched. These programs included youth apprenticeship programs, second-chance education programs, and mobility allowances. To reduce delays and to ensure effective program design, these programs, too, need to be planned ahead of time.

Youth apprenticeships can help new entrants to the labor market secure employment and gain valuable skills during a time of low job creation. Employers generally like the program because it helps them keep labor costs relatively low while at the same time adding value to the firm. In addition, the program usually requires the apprentice to make a commitment to the firm, thereby giving the employer an incentive to teach the apprentice the trade. During a crisis, countries could use youth apprenticeship programs to temporarily provide employment to youth and also use the programs to enhance the skills of new labor market entrants. The programs, however, need to be designed with care to ensure that they are cost effective and cause minimal labor market distortions.

Second-chance education programs can be leveraged during a crisis to help people upgrade their skills. During a recession, the opportunity cost of participating in the second-chance program is low for beneficiaries and, hence, it is a good time to make these opportunities available to those people who missed out the first time they went through the education system. Often, second-chance education opportunities are taken up by people who did not complete secondary school and even may not have completed primary school. Thus, the average beneficiary is likely to be poor. As a result, providing a stipend can both encourage participation in the program and also provide income support to beneficiaries. Using the same logic, university quotas might be relaxed during recessions to allow larger cohorts of students to further their education while labor demand remains low.

Mobility allowances can help to facilitate employment when some sectors contract while other sectors expand. People might be reluctant to move to geographic regions of the country where jobs are more abundant if moving costs are high and, therefore, mobility schemes can help reduce this resistance to moving.

Crisis Responses Require Fiscal Discipline, Planning, and Data

Prudent Fiscal Policies during Good Times Are Needed to Build Up Savings for Use in Hard Times

In designing social responses, the implications for the budget position across the cycle are important to consider. Increasing the countercyclical social response can result in sharp government spending expansions during deep recessions, particularly when unemployment increases significantly. Although the focus has been on spending responses, revenues also adjust automatically—and often substantially—to sharp cyclical downturns. Together with spending increases, this has the potential to lead to fiscal deficit widening.

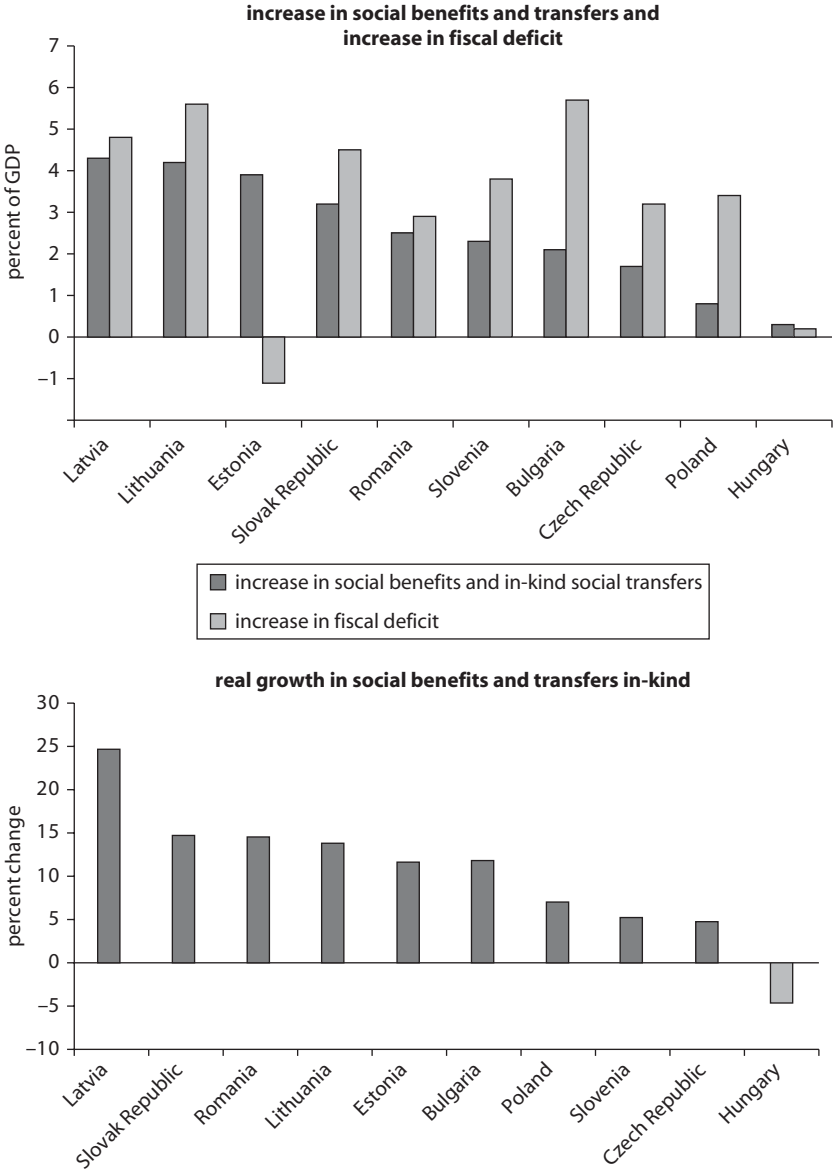
Where financing options are constrained or debt sustainability is a concern, cyclical changes in revenue or spending can result in a reduction in the fiscal space. One implication could be that the ability of a country to allow automatic responses to operate on the expenditure side of the budget becomes limited and the economy has to go through a costly fiscal contraction during a recession. Therefore, the use of prudent fiscal policies during good times to build up buffer stock savings becomes critical for effective responses in bad times.

For some countries in the region, the rise in spending on social transfers was substantial during the recent crisis: the increase was almost as large as the annual growth in the overall fiscal deficit for a couple of countries in 2009 (see figure 5.2). The expansion in social transfers is dependent not just on coverage, but also on the duration of benefits and the replacement rate for wages. At the same time, revenues adjusted downward in reaction to the collapse in output. In fact, in some cases, the contraction in GDP was accompanied by a higher-than-proportionate drop in revenues: the revenue-to-GDP ratio in 2009 fell by 4 percentage points in Latvia and by 2 percentage points in Lithuania compared with 2008.

Beware of Efficiency Costs

Although steps can be taken to improve crisis responses, they also may impose efficiency costs. For example, generous unemployment benefits

Figure 5.2 Social Transfers Increased in Most Countries in 2009 Relative to 2008



Source: World Bank staff calculations based on Eurostat and IMF World Economic Outlook Database, October 2010.
Note: Social benefits data consist of transfers made in cash to households to relieve them of the financial burden of certain risks or needs, for example, pensions, family and child allowances, and disabled persons' allowances.

might result in lower job search and job acceptance, in addition to distortions from the increases in taxes required to pay for the program. Furthermore, in countries with large and segmented labor markets, increasing UI benefits may magnify the segmentation between formal and informal labor markets.

Crisis Responses Must Be Based on Reliable and Timely Monitoring Indicators

Crisis responses require reliable and timely monitoring indicators. In that respect, countries in the region often are ahead of the curve relative to other regions, with very strong administrative information and regular household and Labor Force Surveys. Access to reliable and timely data to influence policies, however, varies across Eastern European and Central Asian countries.

More Work on Crisis Responses Is Needed

Increasing government social spending during a crisis entails efficiency and equity implications. Another way to increase the government response during the economic cycle is to allow the parameters that govern taxes or transfers to change based on some trigger linked to cyclical economic factors (Baunsgaard and Symansky 2009). This chapter has covered a number of these automatic responses. Further options can be considered. One possibility is to look for temporary tax policy measures to target low-income households.[10] Additional work is needed to identify other temporary tax or spending policies that have the potential to have a large multiplier impact on output or to protect the vulnerable from the impact of a deep recession. In any case, such temporary measures do not come with the wider efficiency or equity considerations that permanently increasing the size of government would have.

Notes

1. Past work demonstrates that countries with adequate safety nets established before the crisis have more capacity to minimize harmful effects on poor people (see, for example, Ferreira et al. 1999).
2. Only 50 percent of the "Contracts, Grants and Loans" portion of the American Recovery and Reinvestment Act of 2009, which was passed by the U.S. Congress on February 13, 2009, had been paid out as of August 20, 2010.

3. In particular, the OECD study recommends the following: lower minimum wages and labor taxation; set less restrictive employment protection legislation, especially if enforcement capacity is limited; remove restrictions on temporary employment; establish a direct relationship between social insurance contributions and benefits; simplify administrative procedures to set up a business; reduce red tape and corruption; simplify household and business tax schemes; encourage compliance with better governance; improve enforcement of tax, social security, and labor regulations; and improve coordination among agencies in charge of these institutions.
4. Successful examples of social assistance programs can be found in the postcrisis response schemes of Argentina (*Jefes y Jefas* Program), Mexico (*Oportunidades*), and the Republic of Korea (Livelihood Protection Program). See Galasso and Ravallion (2004); Lustig and Walton (1998); and Fallon and Lucas (2002), respectively, for details.
5. These recommendations focus on increasing safety net flexibility and responsiveness during crises, and hence they are a subset of required reforms.
6. Local governments have little or no leeway to finance expenditures by incurring a deficit.
7. As a result, considerable anecdotal evidence suggests that social welfare workers were pressured to keep new entrants to LRSA at a minimum.
8. During 1998, in response to the crisis, the Republic of Korea expanded eligibility by adding a temporary component to the Livelihood Protection Program, for which 75 percent of benefits were covered by the central government (Blomquist et al. 2002). However, despite the expanded coverage and increased budget allocation, only 7 percent of the new poor benefited from the expanded program, and the overall coverage decreased from 32 percent of the poor in 1997 to 17 percent in 1998 (Fallon and Lucas 2002).
9. Del Ninno, Subbarao, and Milazzo (2009) report: public works programs were launched in East Asia in 1997, in Latin America in 2002, and in many Asian countries after the 2004 tsunami. The authors argue that programs were set up to mitigate the negative effects of a shock among the most vulnerable population.
10. Blanchard, Dell'Ariccia, and Mauro (2010) suggest a flat refundable tax rebate as an example of such a measure.

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The global financial crisis that began in 2007 with the implosion of the real estate bubble in the United States and parts of Western Europe led to an economic downturn so severe that it ranks as the worst since the Great Depression. Experts coined the term "Great Recession" to convey the magnitude of the crisis. Even though the impacts, including the tightening of credit markets, bank failures, firm closures, and high demand for social safety nets, were felt around the world, the countries of Eastern Europe and Central Asia were the hardest hit.

The Jobs Crisis: Household and Government Responses to the Great Recession in Eastern Europe and Central Asia brings together evidence that World Bank teams have collected on the impact of the crisis on families in the region. The multiple monitoring tools deployed for this effort range from qualitative studies to Crisis Response Surveys, and from extensive use of administrative data to monitoring policy responses from many client governments in the region.

The book finds that some of the strategies adopted by families to cope with the crisis, such as reducing health care spending, ended up putting households at a higher long-term risk. Most families kept their children in school, but crisis conditions continue in some countries and as a result, education investments may still be reduced in favor of short-term survival in some cases.

Governments played a crucial role in mitigating the impact of the crisis on household incomes, the book notes. Unemployment benefits were among the first to reach crisis-affected households in a number of countries. Unemployment insurance coverage varied across countries, however, in some cases leaving many families to fend for themselves after the breadwinner lost his or her job. Poverty-targeted social assistance programs also played an important role in some countries to help families whose incomes had fallen below the poverty line. But these programs reached needy households with a delay and also suffered from low coverage in some countries.

One of the first systematic accounts of the consequences of the current macroeconomic crisis on the welfare of people, *The Jobs Crisis* examines household and government responses to the crisis. The book concludes with a discussion of how governments can better respond to future shocks with social policies and initiatives.

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