

Report No. 55011-AM

ARMENIA

The 2008–09 Global Economic Crisis, Policy Responses, and Household Coping Strategies

June 2010



Human Development Sector Unit
Europe and Central Asia Region
The World Bank

CURRENCY EQUIVALENTS
(Exchange Rate Effective as of May 2010)
Currency Unit = AMD (Armenian Dram)
AMD 1.00 = 0.0026 US\$
US\$1.00 = 380 AMD

FISCAL YEAR
January 1 to December 31

ABBREVIATIONS AND ACRONYMS

AE	Adult Equivalent
AMD	Armenian Dram
ECA	Europe and Central Asia
FB	Family Benefit
GDP	Gross Domestic Product
GOA	Government of Armenia
ILCS	Integrated Living Conditions Survey
ILO	International Labor Organization
IMF	International Monetary Fund
NSS	National Statistics Service
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
PPP	Purchasing Power Parity
SME	Small and Medium Enterprise

Regional Vice President:	Philippe H. Le Houerou
Country Director:	Asad Alam
Acting Sector Director:	Mamta Murthi
Sector Manager:	Jesko Hentschel
Task Team Leader:	Lire Ersado

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Acknowledgement

The report is a product of the Armenia Programmatic Poverty Assessment, part of the South Caucasus Regional Programmatic Poverty Assessment work. It is prepared by a team led by Lire Ersado and comprising Mehtabul Azam, Natsuko Kiso, Tigran Kostanyan, Ramya Sundaram and Victoria Strokova. The National Statistics Services, Republic of Armenia (NSS) has kindly provided access to the Integrated Living Conditions Survey data. The team is grateful to Mr. Stepan Mnatsakanyan (President, NSS), who provided critical inputs in designing the conceptual framework to understand and analyze the impact of the crisis. Ms. Diana Martirosova (Head, Household Survey Department, NSS) and Ms. Armen Shihanyan (Data Management Specialist, NSS) were instrumental in the ILCS data collection and analysis.

The task was undertaken under the guidance of Asad Alam (Regional Director, ECCU3), Mamta Murthi (Acting Sector Director, ECSHD), Tamar Manuelyan Atinc (former Sector Director, ECSHD), Aristomene Varoudakis (Country Manager, Armenia), and Jesko Hentschel (Sector Manager, ECSH4). Peer reviewers were Gero Carletto (DECRCG), Jose Molinas (LCSPR) and Kenneth Simler (ECSPE). Carmen Laurente provided able assistance with formatting and production of the note.

Executive Summary

Introduction

1. **Armenia is one of the hardest hit countries by the 2008–09 global economic crisis.** It experienced the most severe economic contraction since the early years of transition. The impact of the crisis has been felt on multiple fronts, including a sharp decline in foreign direct investments, falling demand for Armenian commodity exports, dwindling remittance inflows, and reduced availability of and increased cost of domestic credit. Real gross domestic product (GDP) growth became negative in the fourth quarter of 2008 as the crisis began to unfold. The rate of economic contraction hit its nadir in August 2009 when it reached negative 18.4 percent for the first eight months of the year compared to the same period in 2008. For 2009 as a whole, the Armenian economy was estimated to have contracted by about 15.6 percent. The resulting slowdown in growth and domestic and foreign investment has led to job and income losses for the citizens and shrank the tax base for the government.

2. **The Government of Armenia (GOA) has taken a number of steps to maintain macroeconomic stability and to protect the poor during the crisis.** It mobilized additional funding to spur domestic demand and boost both liquidity in the real estate sector and support to small and medium enterprises and other investment projects that generate employment. It allowed exchange rate adjustment of the dram. The 2009 budget was revised and deficit spending increased to 7.5 percent of GDP. Armenia made a concerted effort to use employment and social protection programs to mitigate the serious setback Armenians experienced, after a decade of nearly double-digit growth and substantial poverty reduction. More important, the Armenian authorities protected or increased spending on social safety nets such as pensions, last-resort social assistance, unemployment insurance, and public works programs. Armenia also employed measures to improve the targeting efficiency of its signature last-resort social assistance program, the Family Benefit. These measures were anticipated to help lessen the impact of the crisis on the poor and the vulnerable and to protect the gains Armenia made during the last decade of nearly double-digit growth and substantial poverty reduction. In addition to government support measures, the crisis is likely to induce households to engage in various own risk management strategies.

3. **The main objective of this report is to analyze the welfare impact of the 2008–09 global economic crisis and to assess the effectiveness of public and private coping strategies.** More specifically, this report asks the following questions: What was the poverty impact of the 2008–09 global economic crisis in Armenia? Did the crisis reverse the poverty reduction trends of the last decade? If so, by how much? Who was affected most in the aftermath of the crisis? What were the main government policy response measures and how effective were they in mitigating the impact? What were households' own coping strategies and their implications for

long-term welfare? Using household survey and macroeconomic data before and during the crisis, the report seeks answers to these questions and draws post-crisis policy implications.

Poverty Trends

4. **According to the 2009 Armenia Integrated Living Conditions Survey (ILCS), data collected during the crisis show that about 40 percent of Armenian households suffered the direct impact of the crisis through loss of labor income, remittances, or income from farm activities.** Household consumption declined from ADM42,211 per adult equivalent in 2008 to ADM38,491 in 2009 (in 2008 prices), a 9 percent decrease in real consumption expenditures. Urban areas and the richest income groups experienced a higher rate of decline in their consumption expenditures. While consumption expenditures in urban areas decreased by about 10 percent, the corresponding decrease in rural areas was about 7 percent. Household consumption expenditure decreased across all main spending categories, except for utilities. Household expenditures on healthcare, transportation, and purchase of durable goods declined by 20, 21, and 23 percent, respectively.

5. **The crisis has disrupted the poverty reduction momentum that Armenians enjoyed in recent years.** Before the onset of the crisis, Armenia achieved substantial poverty reduction. Between 1999 and 2008, for instance, poverty incidence declined from 56 percent to 23.5 percent, lifting over 1 million Armenians out of poverty. However, the empirical evidence in the aftermath of the crisis shows that the global economic downturn has reversed Armenia's poverty reduction momentum. *For the first time since the late 1990s, poverty incidence increased in 2009 by an estimated 3 percentage points. The increase in poverty incidence was driven by a decline in growth, while improved distribution helped lessen the impact.*

Household Coping Strategies

6. **Households employed several coping strategies, including those potentially harmful in the long run.** The main coping mechanisms have included: reduction in food consumption, substitution away from more expensive goods, reduction of spending on healthcare, increased use of public transportation, less use of entertainment, and fewer meetings with friends. Over 40 percent of affected households report cutting back on food consumption, which has implications for nutritional adequacy for adults and children. Cuts in health spending in response to the crisis have been large. While all income groups had to adjust their budgets, the crisis presented more severe challenges for the poor and the vulnerable. Over 50 percent of the poorest quintile reported consuming poorer-quality food items, reduced or stopped visits to health centers, and reduced or stopped purchase of medicines. While the crisis did not lead to a noticeable decline in children's school attendance, the overall reductions in the government and household budgets for education are likely to reduce investments in education and worsen education quality and learning outcomes.

7. **The crisis could jeopardize long-term welfare, particularly due to cuts in healthcare, nutrition, and education spending, with disproportionately larger impact on the poor and**

vulnerable. While some coping strategies are short-lived, such as substituting less expensive for more expensive goods, others such as foregoing regular healthcare may jeopardize household's long-term sustainability and weaken their future capacity to manage risks. The likelihood of adopting harmful coping strategies decreases with an increase in household income, and is higher for households that suffered the impact of the crisis. Poorer households are much more likely to cut food consumption and healthcare spending than households with higher income levels, as are households that reported affected by the crisis than those that were not affected.

The Role of Public Crisis Response Measures

8. **The observed increase in poverty was substantially lower than what would have occurred in the absence of public policy measures, which provided protection to the poor and vulnerable.** While the GOA's crisis response has been multipronged, the key measure was the protection of priority social spending. In Armenia, the main social protection programs consist of two schemes for low-income and vulnerable households: (a) the Family Benefit (FB), and (b) pensions. The FB is a last-resort program of targeted cash transfer to poor and vulnerable families. Pensions are both contributory (for workers) and non-contributory (for those without a qualifying work record). The beneficiaries of non-contributory pensions include the elderly, persons with disabilities, and ex-military officers and privates and their families. The protection of public spending on social protection and the improved targeting of the last-resort safety net program were the main factors that helped Armenia avoid worse outcomes. Armenia was able to reduce the poverty impact of the crisis from a projected 8-percentage-point increase to 3 percentage points.

9. **Overall, Armenia spent about 6.8 percent of its GDP on all social protection programs in 2009.** It spent about 1.8 percent of GDP on social assistance programs, including FB, paid public works, unemployment benefits, and social care. Therefore, Armenia's spending on social assistance as a share of GDP is slightly better than the Europe and Central Asia (ECA) average of 1.7 percent, but smaller than the 2.5 percent average for the Organization for Economic Co-operation and Development (OECD) countries. The FB, Armenia's signature social assistance program, accounted for about 60 percent of total spending on social assistance programs. As a share of GDP and overall public spending, Armenia increased its spending on pro-poor social protection programs during the crisis. For example, overall social protection expenditures increased from 5.8 percent of GDP in 2008 to 6.8 percent in 2009. Spending on FB grew from 0.8 percent to 1 percent of GDP during the same period.

10. **Armenia's main social protection programs reach about 59 percent of all households, with at least one member receiving one of the benefits**—the Family Benefit, pensions, or other cash transfer programs. Among these programs, the pensions benefit has the highest coverage (48 percent of households). The FB, the main anti-poverty program, reaches about 13 percent of all Armenian households. Armenia's social protection programs' coverage of the poor and the bottom 20 percent of the population is impressive. Overall, social protection programs covered 97 percent of the poorest 20 percent of the population and 82 percent of the poor in 2009, an increase of 14 percentage points from the coverage rate in 2007. Although not

an anti-poverty program, pensions cover a significantly large share of the poor (75 percent) and the extreme poor (91 percent), both significant improvements over pre-crisis coverage rates.

11. The FB achieved a better targeting performance in 2009 compared to a relative poor performance in 2007. About 61 percent of FB resources went to the bottom quintile, making it one of the well-targeted programs in the region. About 70 percent of the FB resources accrued to the poor in 2009 compared to only 48 percent in 2007. The FB's targeting accuracy improved substantially from 43 percent of program resources going to the poorest 20 percent of the population in 2007 to 61 percent in 2009. According to 2009 ILCS data, the lion's share of the program's resources reach the poor, and the majority of the beneficiaries are the poor and vulnerable populations. As a result, the program provided a significant cushion against the impact of the crisis.

12. Armenia's social protection programs played a larger poverty reduction role during the crisis than before. This is evident from what the levels of poverty would have been in the simulated absence of social transfers before and during the crisis.¹ Before the impact of the global economic crisis was felt in Armenia, poverty incidence would have been 38.9 percent without both pensions and FB compared to the actual 23.5 percent. In 2009, on the other hand, poverty would have gone from the actual 26.5 percent to about 45.7 percent in the absence of the transfers. Therefore, in terms of poverty reduction, the importance of social transfers increased from 15.1 percentage points before the crisis to 19.2 percentage points in the aftermath of the crisis. Therefore, Armenia's social protection programs were very effective instruments in leveraging government response to mitigate the impact of the crisis on the poor. Of the potential 4.9-percentage-point increase in poverty incidence avoided, social protection measures accounted for 4.1 percentage points (or 84 percent). This conclusion is reinforced by the views expressed by Armenian households: more households reported relying on the support from the government to cope with the crisis than on their own coping strategies or on support from other sources. About 45 percent of affected households reported relying on government support during the crisis compared to about 25 percent of affected households that reported relying on borrowing or help from relatives and friends.

13. The main challenge for Armenia with regard to its social protection to the poor is to improve the FB's outreach so it covers more of the deserving population. Currently, only 36 percent of the poor are covered by the program. Although this is an improvement over the coverage rate before the crisis, the program leaves out nearly two-thirds of Armenia's poor. Earlier assessments have highlighted that simplification of certification requirements and stepping up outreach efforts could immensely help in achieving higher coverage. The current certification process imposes a significant burden on households in terms of time and effort to gather all the required documents and have them certified. These cumbersome procedures are susceptible to red tape and may have frustrated many poor families, who may have given up applying altogether, contributing to fairly low coverage of the FB among the poor.

14. There is a high likelihood that the poverty impact of the crisis will continue well after the macroeconomic recovery is ensured. This calls for maintaining robust mitigation

¹ These simulations are based on the assumptions that all public transfers are consumed without any savings and that the income effect of the transfers is zero or negligible.

measures for the most vulnerable households and further expansion of the existing mitigation measures to lessen the burden on the most vulnerable households. Further policy action may include expansion of the existing last-resort program to cover more deserving families and the new poor; supporting programs that generate employment and prepare the labor force for post-crisis recovery and growth; and expansion of the unemployment benefit program, which currently covers only one in five of the registered unemployed. As some of the programs are targeted to the poor and expected to act as automatic stabilizers, the conditions for their phasing out should depend on job creation and poverty reduction, and on ensuing overall fiscal sustainability.

I. Introduction

1.1. **Armenia is one of the hardest hit countries by the 2008–09 global economic crisis. It experienced the most severe economic contraction since the early years of transition. Real gross domestic product (GDP) growth became negative** in the fourth quarter of 2008 as the crisis began to unfold. The rate of economic contraction hit its nadir in August 2009, when it reached negative 18.4 percent for the first eight months of the year compared to the same period in 2008. For 2009 as the whole, the Armenia economy was estimated to have contracted by about 15.6 percent. The resulting slowdown in growth and domestic and foreign investment has led to job and income losses for the citizens and shrank the tax base for the government, increasing the fiscal deficit nearly tenfold. Many individuals suffered through unemployment and underemployment and a decline in both wages and the prospects for migration and remittances. Although the Armenian economy is expected to modestly rebound in 2010, the poverty and social impact of the severe downturn is likely to persist for some time to come.

1.2. **At the onset of the crisis, micro-macro simulations of the poverty impact showed that the crisis presented a serious threat to the poverty reduction momentum that Armenia enjoyed in recent years** (World Bank 2009). The poverty projections, which were made in March 2009 based on the anticipated economic slowdown at the time and a pre-crisis household survey data as a baseline, suggested that overall poverty could increase by about 5 percentage points in 2009 from its level in 2008. Revised simulations conducted in September 2009, reflecting a worse macro growth environment, indicated a potential 8-percentage-point increase in overall poverty incidence.

1.3. **Recognizing the severity of the crisis, the Government of Armenia (GOA) took measures to provide a cushion against the crisis for the poor and vulnerable population.** Among these measures, the main one has been the protection of public spending on priority social programs, including on pensions, unemployment insurance, and the last-resort social assistance program called Family Benefits (FB). These cash transfer programs were considered to be the most important vehicles of social protection during the crisis. The GOA also protected spending on other pro-poor programs in agriculture, education, and healthcare services.²

1.4. **Economic shocks such as the 2008–09 global economic crisis are also likely to induce households to engage in various own risk management strategies.** A number of studies show that during a economic crisis, households, anticipating or facing conditions of adversity, engage in various own and informal risk management strategies—some mainly risk-reducing and others simply coping devices to protect consumption once a shock has taken place (Paxson 1992;

² In addition to social safety nets programs, the GOA protected spending in the following programs. In the health sector: hospital services for vulnerable groups, maternal child health-care, medical care for mentally ill people, and treatment of cancer, tuberculosis and infectious diseases; in education: laboratory services for high schools; and in agriculture: extension services for farmers and forest monitoring. However, the impacts of these programs are not directly addressed in this report.

Zimmerman and Carter 1996). Such strategies typically involve maintaining a diversified portfolio of livelihood activities, saving and dis-saving, and social support capabilities to shelter oneself from or to cope with shocks. Income diversification is one of the most common strategies to manage risk and sustain a livelihood.

1.5. The objectives of this report are threefold. First, the report presents the actual poverty impact of the crisis. What was the welfare impact of the 2008–09 global economic crisis in Armenia? Did the crisis reverse the poverty reduction trends of the last decade? Using household survey and macroeconomic data before and during the crisis, the report analyzes the impact of the crisis and presents empirical estimates of how much poverty increased and who was affected most in the aftermath of the crisis. Second, it analyzes the effectiveness of households' own coping strategies. Third, it assesses the role government policy response measures described above played in mitigating the impact of the crisis on the poor and vulnerable households. Finally, the report draws policy lessons from the global economic crisis on the adequacy of existing social protection schemes to provide a cushion against similar shock in the future.

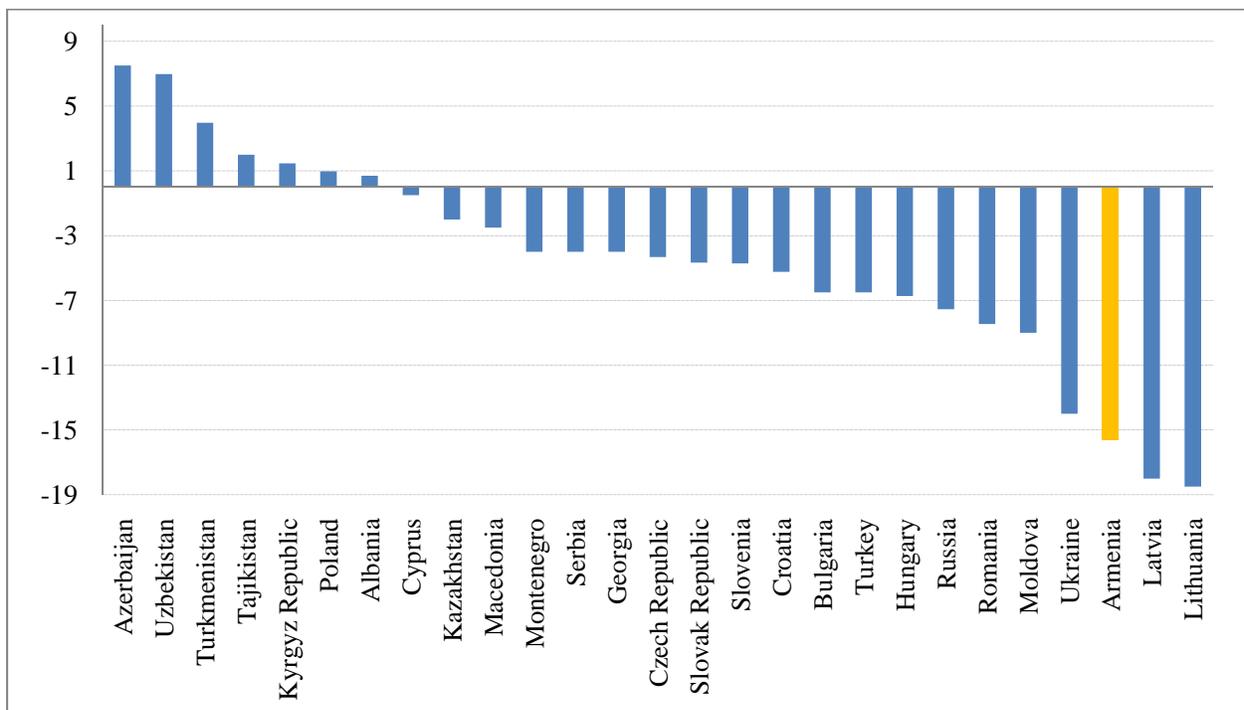
Data

1.6. Fresh data from the Armenia Integrated Living Conditions Survey (ILCS) for the first three quarters of 2009, and ILCS data before the onset of the global economic crisis, are used. The 2009 and pre-crisis ILCS data are comparable since they use virtually the same survey instrument and identically designed. The Armenia ILCS is a quarterly representative sample of about 2,000 households surveyed each quarter for a total of about 8,000 households each year. It contains detailed information on household composition, education, health, labor market, migration, agriculture, income, public and private transfers, expenditure, saving and debt, and the subjective perception of individuals and households. In addition, the report uses data from a crisis response questionnaire, which was linked to the ILCS. The crisis response modules included questions on the impact of the crisis on household income and income sources, including wages, remittances, borrowing, and other sources. The crisis modules also included questions on behavioral changes in consumption patterns and household coping strategies, and informal and informal sources of support during the crisis. The fact that the crisis-related modules were linked with the full-blown household survey data provides the authors a rich dataset to study the impact of the crisis and coping strategies by exploiting the wealth of information in both sources.

II. The Impact of the Crisis

2.1. **After a decade-long boom and for the first time since the late 1990s, Armenia experienced negative economic growth in 2009, the result of the global slowdown.** Armenia was one of the hardest hit countries in the Eastern Europe and the Commonwealth of Independent States (CIS) (Figure II.1). The impact has been felt on multiple fronts, including falling demand for its exports, dwindling inflows of remittances, and reduced availability and increased cost of credit for the public, corporate, and financial sectors in Armenia’s small but increasingly integrated economy.

Figure II.1: GDP Growth Rates in ECA during the Crisis, 2009

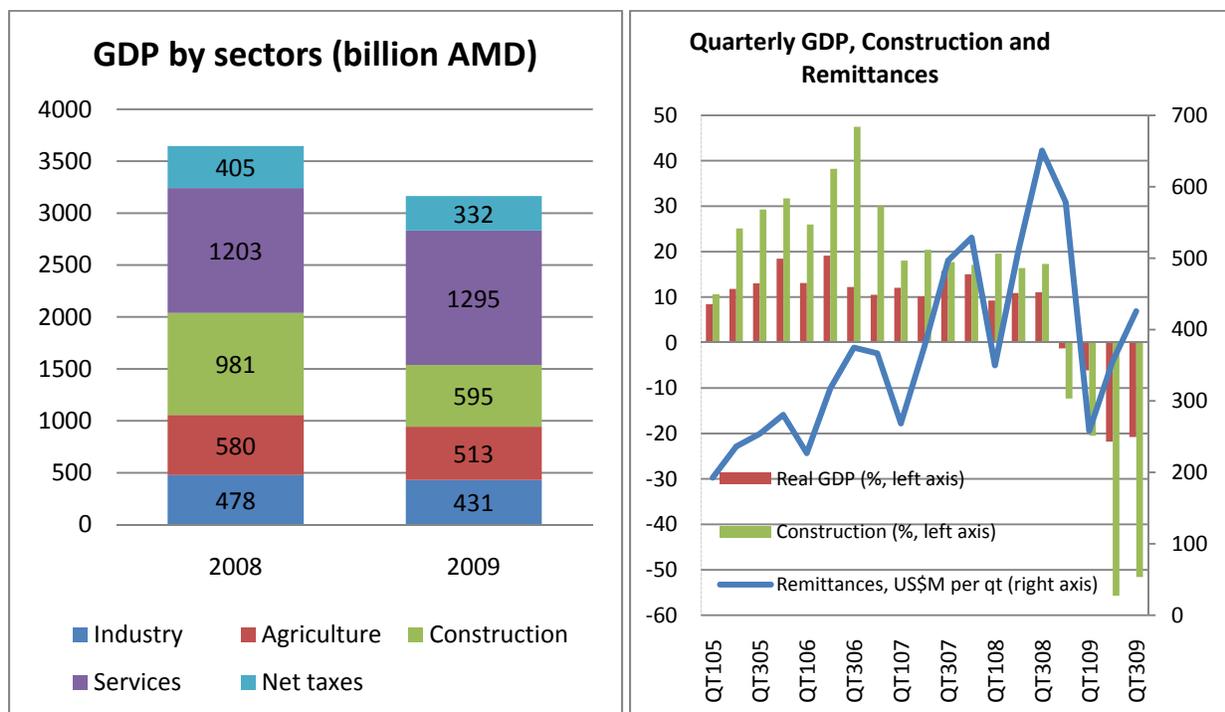


Source: Various World Bank databases.

2.2. **The sharp contraction of Armenia’s economy reflected its excessive reliance on the construction sector and high dependence on remittances.** The abrupt decline in remittances and foreign direct investment (FDI) led to a rapidly shrinking construction sector, which had been the predominant source of growth in recent years (Figure II.2, left panel). Remittances from abroad, which are significant contributors to consumption and investment, significantly slowed in the aftermath of the crisis after sustained growth during the 2000s (Figure II.2, right panel). Based on the 2009 data, the construction and industry sectors have led the economic decline, with 45 percent and 9.5 percent contraction, respectively (year-over-year). Thus,

Armenia’s vulnerabilities were exacerbated by a narrow economic base, with construction accounting for a disproportionately high share of GDP growth and its decline during the crisis.

Figure II.2: The Impact of the Crisis on Sectoral GDP



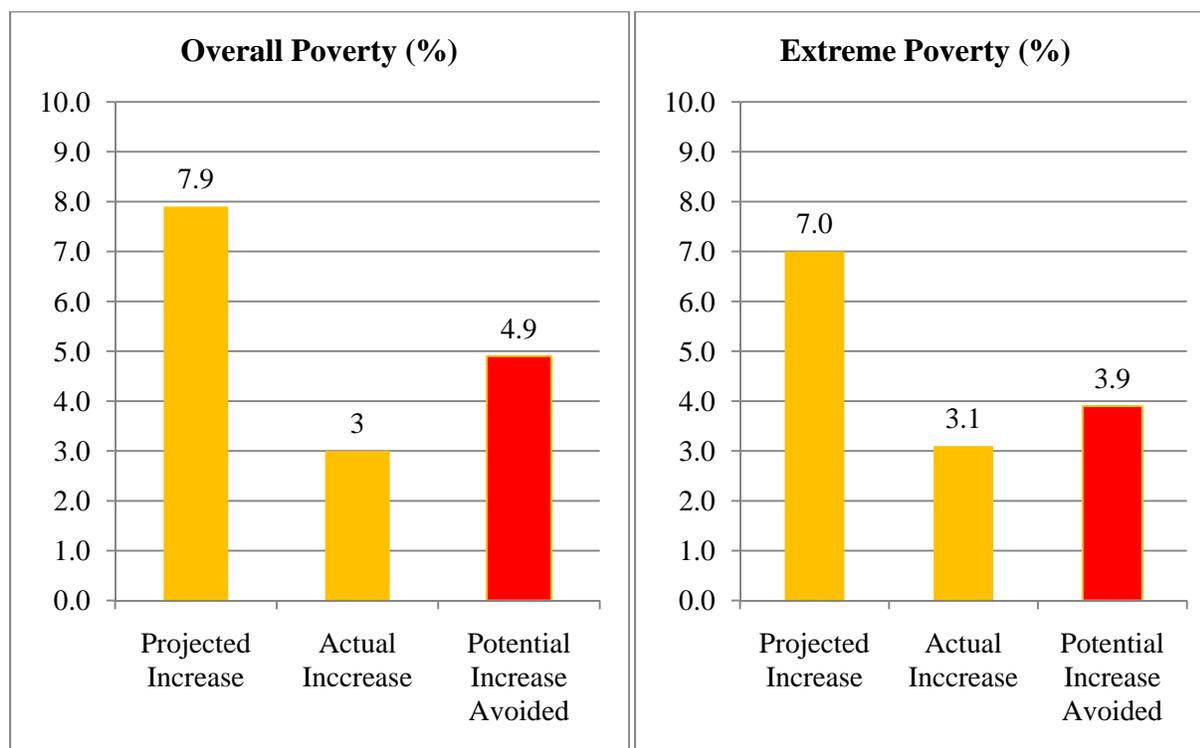
Source: Ministry of Finance, Republic of Armenia.

2.3. **The resulting slowdown in growth and domestic and foreign investment has led to job and income losses for the citizens, and shrank the tax base for the government.** Unemployment rose sharply in the last quarter of 2008, as numerous gold and molybdenum mines closed, putting further pressure on the economy, social safety nets, and tax receipts. Armenia’s main trading partners, particularly Russia, are also countries that account for most of Armenia’s temporary migrants and remittances, and sluggish growth there slashed the crucial remittances sent home by thousands of Armenians. The loss of income and employment opportunities led to declining consumption and ability to smooth consumption and to further depletion of productive assets. As detailed in the following sections, the crisis hit hard those below and not far above the poverty line. Informal risk management and coping strategies were ineffective against a crisis affecting every region and every individual all at once. The ability of the poor to maintain their consumption during economic shocks is often more limited than the ability of the non-poor (World Bank 2000). With declining demand for labor at home and abroad, there was reduced scope and effectiveness of increasing labor supply and migration as coping strategies. Most affected households reduced investment in health and nutrition since families have had to cut back on spending. Thus the crisis could be transformed into setbacks for future generations.

2.4. **Household survey data in the aftermath of the crisis show that the crisis had important negative impacts on living conditions in Armenia.** It disrupted the poverty

reduction momentum that Armenians have enjoyed in recent years. Before the onset of the crisis, Armenia achieved substantial poverty reduction. Between 1999 and 2008, for instance, poverty incidence declined from 56 percent to 23.5 percent, lifting over 1 million Armenians out of poverty. Robust economic growth, growing wages and labor market participation, increased pensions and other social transfers, and substantial remittance flows were among the main reasons behind this poverty reduction (NSS 2009). However, most recent data from the ILCS show that the global economic downturn has reversed Armenia poverty reduction momentum. For the first time since the late 1990s, poverty incidence increased by about 3 percentage points in 2009 compared to the same period in 2008 (Figure II.3).³ The worsening of the poverty outcome is largely attributable to the global economic crisis.⁴

Figure II.3: Armenia Avoided Substantial Potential Increases in Poverty during the Crisis



Sources: Armenia ILCS 2008 and 2009.

2.5. However, the actual increase in poverty was substantially lower than what would have occurred in the absence of household coping strategies and the mitigation measures that the GOA undertook. According to the micro-simulations, the overall poverty incidence would have increased by about 8 percentage points between 2008 and 2009 (see Annex A). That would have meant about 140,000 people falling below the poverty line in 2009, implying that the gains in poverty between 2005 and 2008 were to be wiped out due to the crisis. As shown on Figure 2.14, the actual poverty increase between 2008 and 2009 was only 3 percentage points.

³ In order to maintain comparability with the available 2009 data, only the first three quarters of 2008 are used in estimating the changes in poverty rates between 2008 and 2009.

⁴ See Annex A for a description of the methodology used for simulations of the poverty impact of the crisis.

Hence, Armenia was able to avoid about a 5-percentage-point potential increase in poverty (Figure II.3). This section of the report analyzes the main transmissions channels, the actual impact of the crisis, and the factors that helped Armenia avoid experiencing potentially worse poverty outcomes due to the crisis.

The Main Channels of Transmission

2.6. **There were multiple channels through which the economic crisis affected household welfare and poverty in Armenia.** The most important channels identified so far include: (a) labor markets (decreased employment, reduced wages), (b) decline in migration and remittances (stemming from economic slowdown in source countries), and (c) price changes and exchange rate adjustments in response to the crisis.⁵

Labor Market

2.7. **The data show a significant number of jobs lost, particularly in construction and manufacturing.** There was a sharp increase in registered unemployment in 2009 and the trend continued in the first quarter of 2010 (Table II.1). The official unemployment rate went up from 6.3 to 6.9 percent between 2008 and 2009. The unemployment rate further worsened to 7.3 percent during the first quarter of 2010. The greatest declines in regular employment are reported in the construction and mining sectors, with spill-over effects on other sectors. Job losses and the pool of unemployed have increased not only because of job losses within Armenia but also because of large flows of returning migrants from Russia and other countries that are facing their own economic downturns (see Figure II.8).

Table II.1: Labor Market Participation during the Crisis

	Official Unemployment Rate (%)	Discouraged Workers (%)	Number of Registered Unemployed (thousands)	Those Receiving Unemployment Benefit (% of registered)
2008	6.3	5.5	74.9	20.7
2009	6.9	6.9	81.4	26.0
2010 (Jan–Mar)	7.3	Not available	84.3	Not available

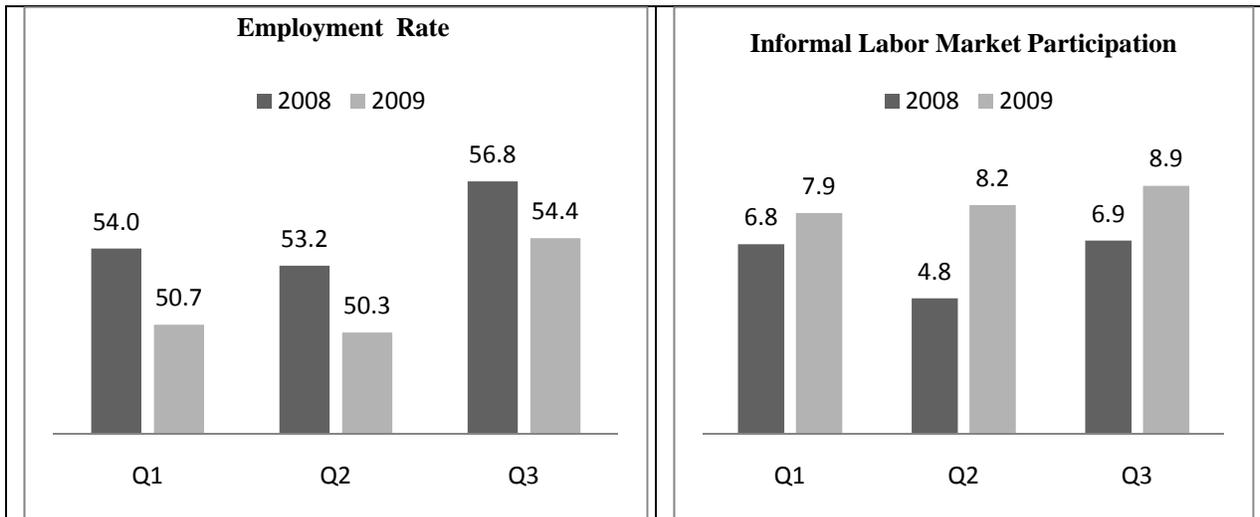
Source: Armenia National Statistical Service (NSS), 2010.

2.8. **The labor market was one of the main channels of transmission of the crisis, mostly through decreases in the level of employment.** The share of discouraged workforce (that is, those willing to work, but believe they cannot find a job) increased from 5.5 percent in 2008 to

⁵ Since our earlier report looked at the impact of the crisis through price and exchange rate changes, and the exchange rate has stabilized since the adjustment took place in March 2009, this transmission channel is not the focus of this report. Please refer to World Bank (2009) for discussions on the impact of the crisis through price changes.

6.9 percent in 2009. Formal labor market participation declined during the crisis (Figure II.4, left panel). On the other hand, informal labor participation of individuals increased during the same period (Figure II.4, right panel).

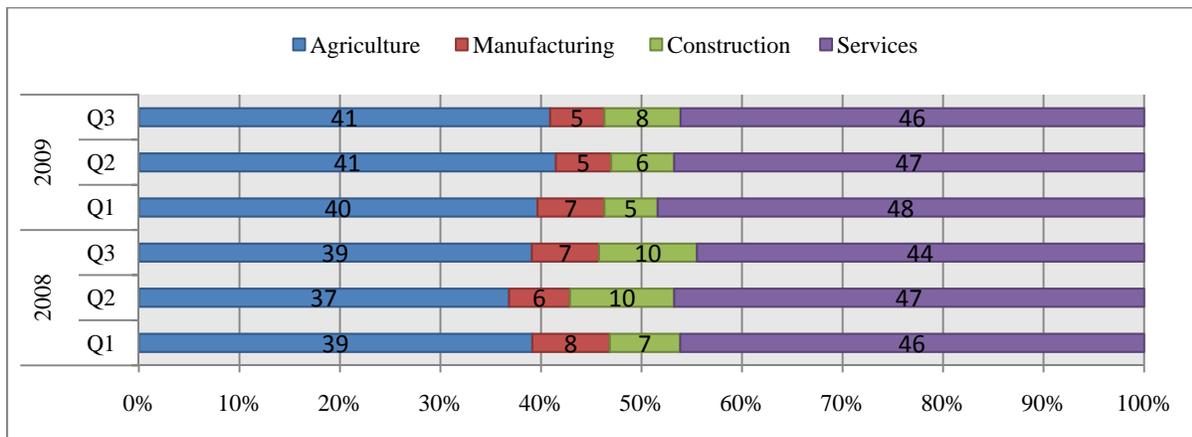
Figure II.4: Labor Market Participation during the Crisis
 (% working-age population)



Source: Armenia ILCS 2008 and 2009.

2.9. **There appears to be some shift to agriculture as the sector of last resort.** Reduced labor demand in urban areas and in industrial sectors may have led to labor reallocation into agriculture and movements into other subsistence activities where earnings can be significantly lower (Figure II.5). However, the decline in employment in the other sectors may have led to an increase in the share of the agricultural labor force without appreciable movement of labor into agriculture.

Figure II.5: Some Evidence of Labor Reallocation to Agriculture

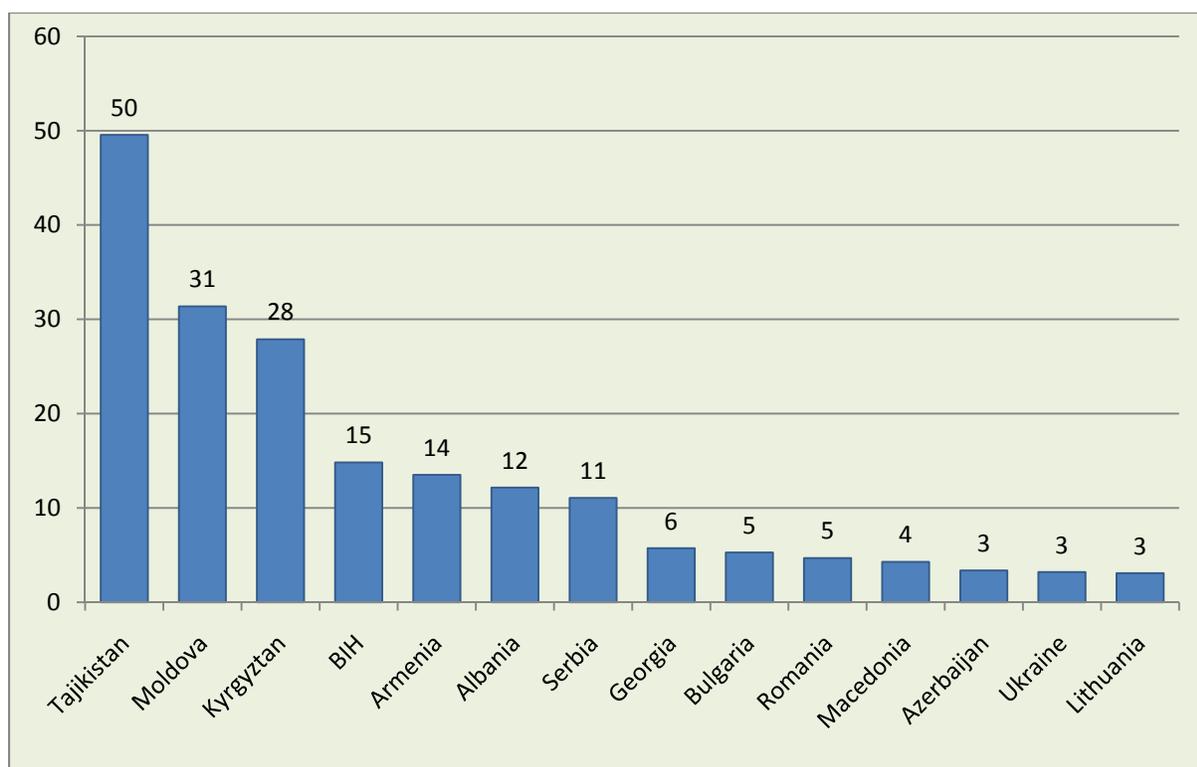


Source: Armenia ILCS 2008 and 2009.

2.10. **Migration and remittances play a significant role in poverty reduction and provide essential foreign exchange.** Official remittances constitute about 14 percent of GDP and actual remittances were expected to be much larger, making Armenia one of the most highly remittance-dependent countries in the region (Figure II.6). According to the ILCs data before the crisis, remittances accounted for 55 percent of income for those who reported receiving internal or external remittances. External remittances accounted for almost 60 percent of household income for those depending on them. With remittances from abroad accounting for a significant share of both GDP and household income, the effect of the crisis was felt through declining government revenues and the declining incomes of individual families and businesses that depend on migration and remittance flows.

Figure II.6: Official Remittance Flows to ECA Countries, 2008

(share of GDP)

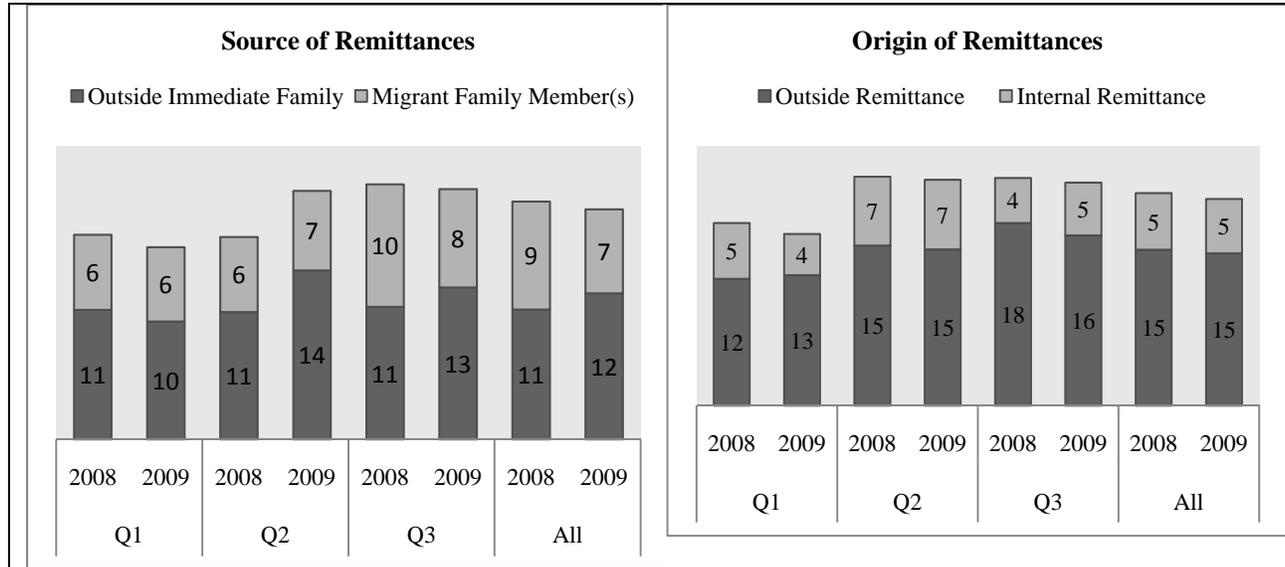


Source: World Bank staff estimates based on the International Monetary Fund's Balance of Payments Statistics.

2.11. **A large share of remittances to Armenia comes from individuals outside the immediate family, and the trend continued during the financial crisis.** Overall incidence of remittance flows to Armenia remained stable, since the decline from migrant resources was substituted by an increased flow of remittances from non-immediate-family sources (Figure II.7, left panel). Contrary to the notion that outside immediate family sources may be less committed in difficult times to continuing to send remittances than are immediate family sources, the evidence from household survey data shows a more active participation of the Armenian

Diaspora in sending remittances. The share of households receiving remittances from both within and outside Armenia also remained rather stable during the crisis (Figure II.7, right panel).

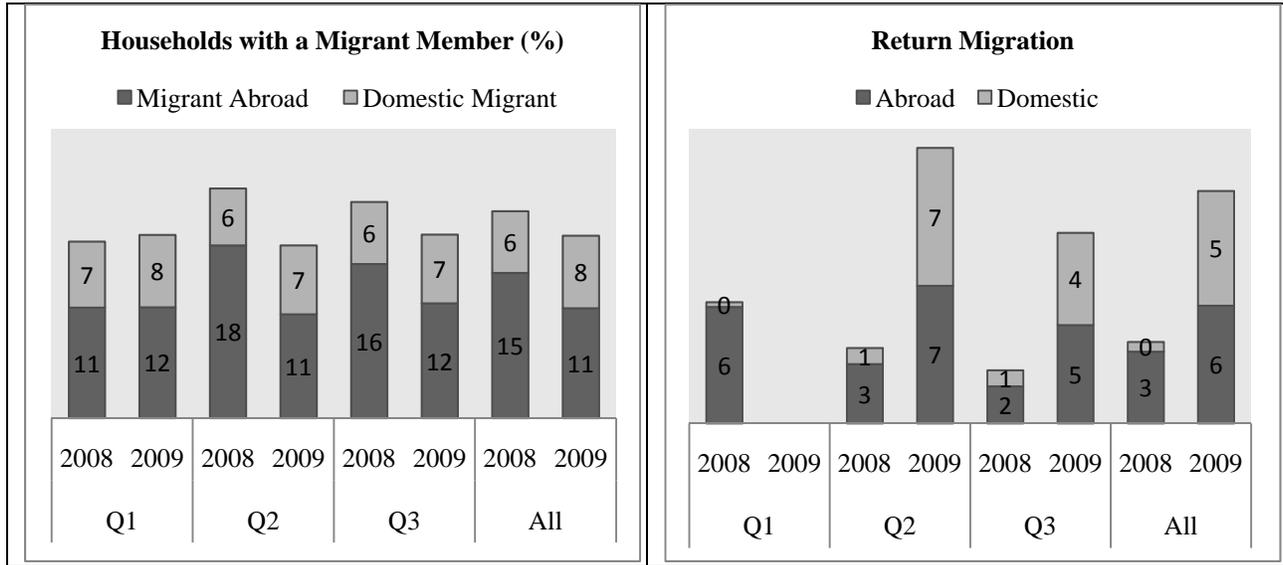
Figure II.7: Source and Origin of Remittance Flows to Armenia
(%, households)



2.12. **In 2009, there was an appreciable decline in external migration, compounded by an increase in return migration.** And, with a lack of alternatives at home, some migrants stayed abroad but are no longer able to send remittances with the same regularity or amount. However, as Figure II.7 shows, no substantial decrease in the incidence of remittance flows is observed, since the declines in migrant remittance flows are offset by increases from non-immediate-family sources, underscoring strong extended family ties of the Armenian Diaspora.⁶

⁶ See, for example, Alesina and Giuliano (2007).

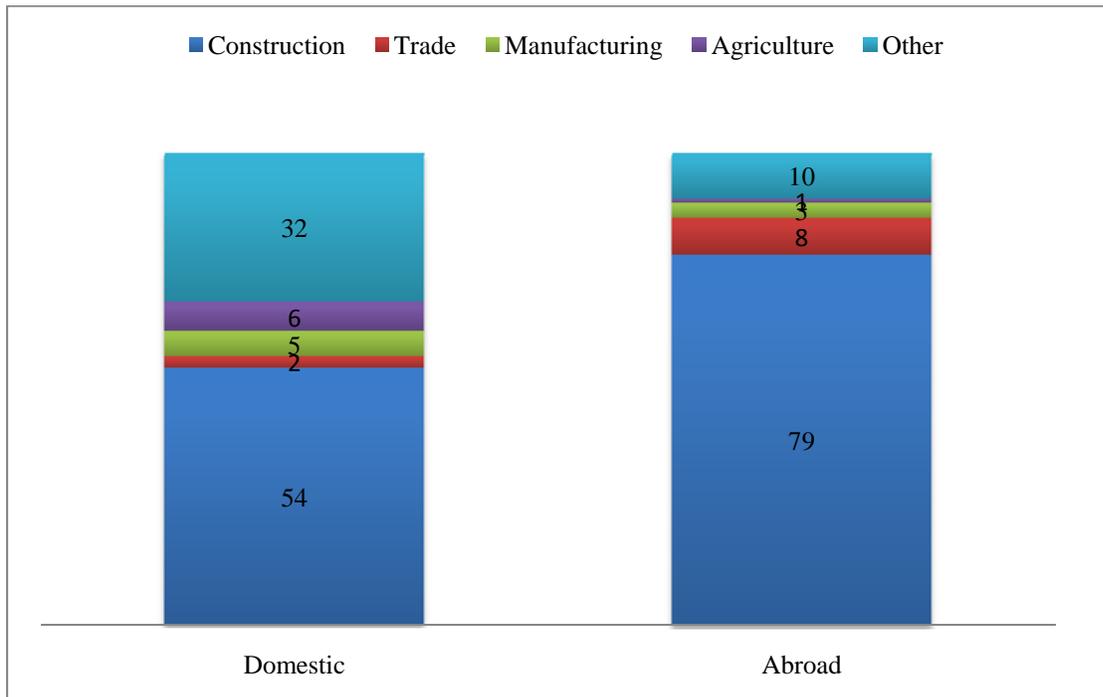
Figure II.8: Migration and Return Migration before and during the Crisis



Source: Armenia ILCS 2009.

2.13. **Russia is the main destination, accounting for 80 percent of Armenian migrant labor.** Nearly 80 percent of Armenian migrants abroad and more than half of the domestic migrants work in the construction sector (Figure II.9), which has been one of the most affected during the crisis, in both Russia and Armenia.

Figure II.9: Migrant Sector of Employment
(% migrant individuals)

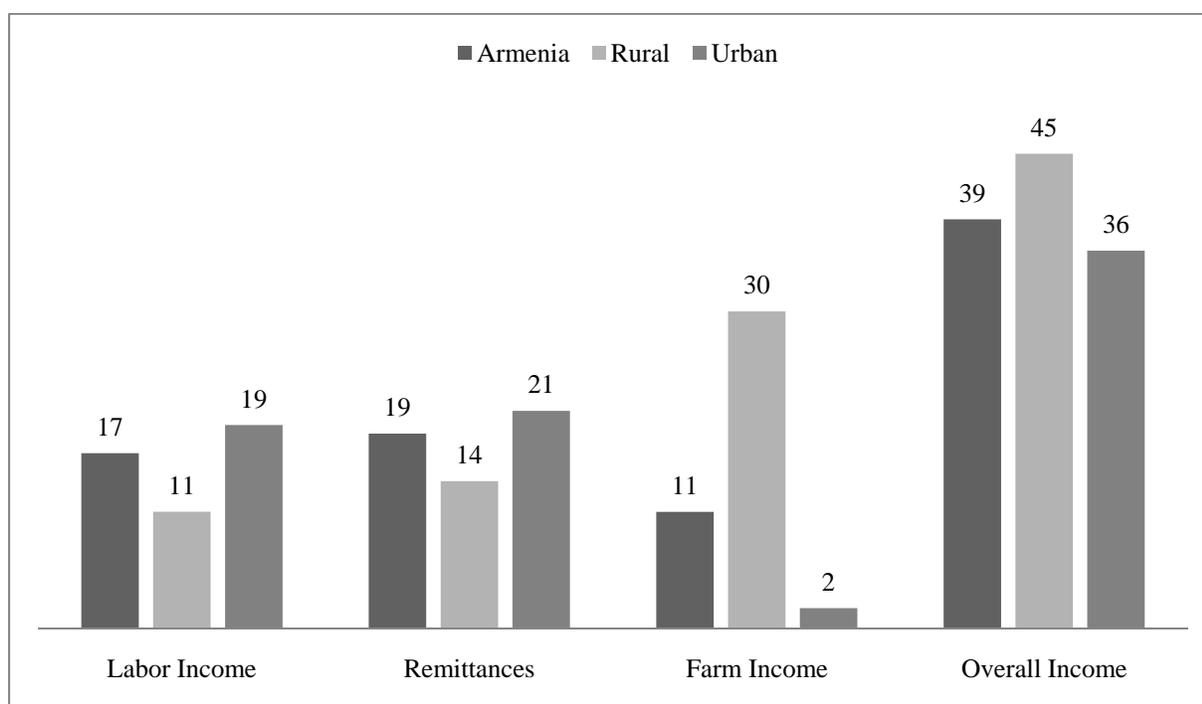


Source: Armenia ILCS 2009.

Impact on Household Income

2.14. **Nearly 40 percent of Armenian households have reported being affected by the global economic crisis.** The main transmission channels have been the labor market (job loss, reduced wage), the decline in remittance flows, and the decline in farm sale income (mainly for rural areas). Figure II.10 presents the percentage of households that reported to have been affected by the crisis. The impact through the labor market and remittances was larger in urban than in rural areas. A higher percentage of households living in urban areas reported a decline in both labor income and remittances. In total, almost 32 percent of the households reported a decline in either labor income or remittances.

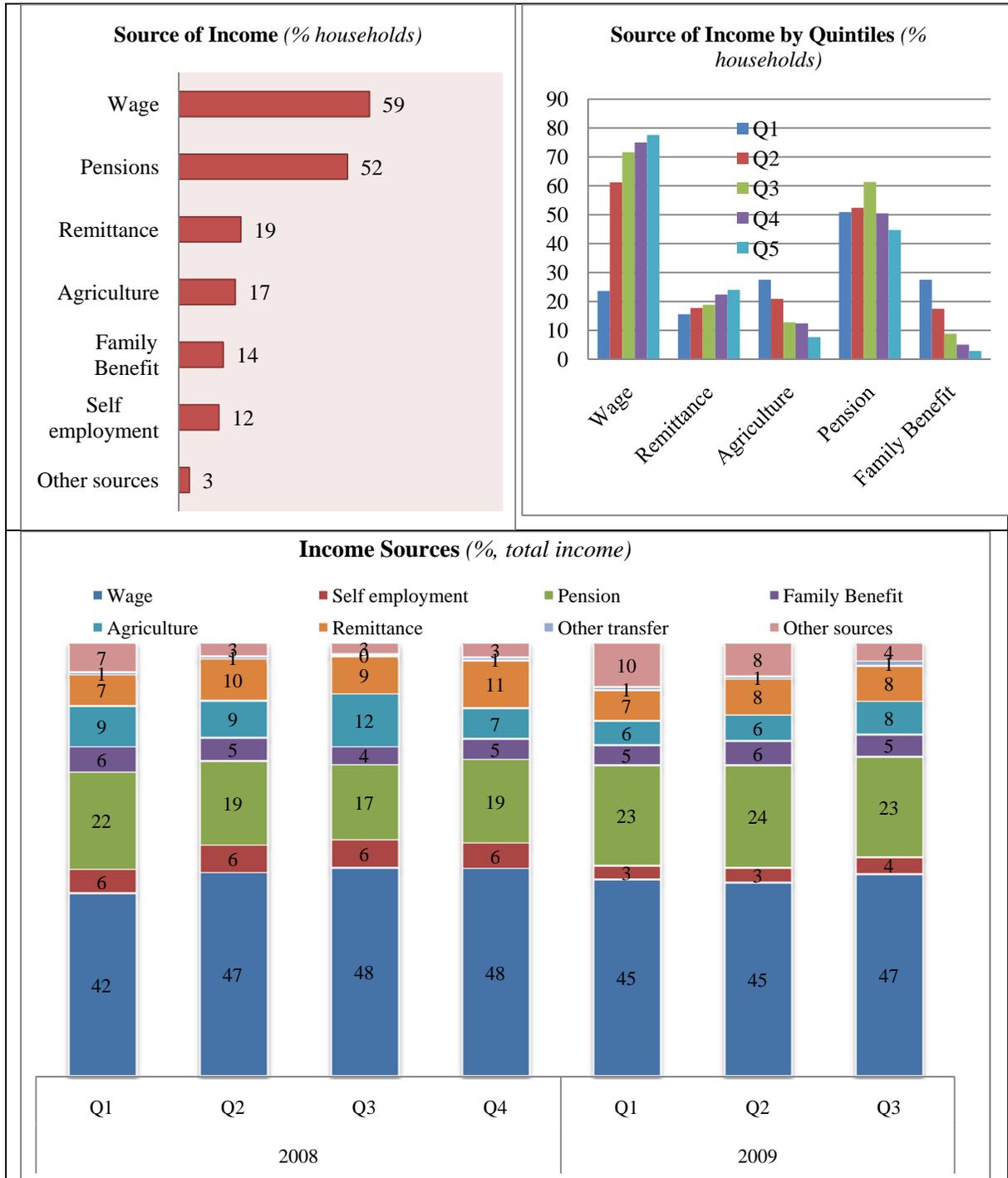
Figure II.10: Impact of the Global Economic Crisis
(% households reporting decline in income in 2009 compared to 2008)



Source: Armenia ILCS 2008 and 2009.

2.15. **In Armenia, the incidence of wage income is highest, as is its relative share of total household income.** Pensions and remittances are the second- and third-largest sources of income for Armenian households (Figure II.11, lower panel). Therefore, given the income structure, the largest impact of the crisis on income comes through the labor market, followed by remittances. However, note that agriculture and public transfers (that is, pensions and the Family Benefit) are increasingly the more important sources of income for the poor (Figure II.11, top-right panel).

Figure II.11: Household Income Sources during the Crisis (2009)

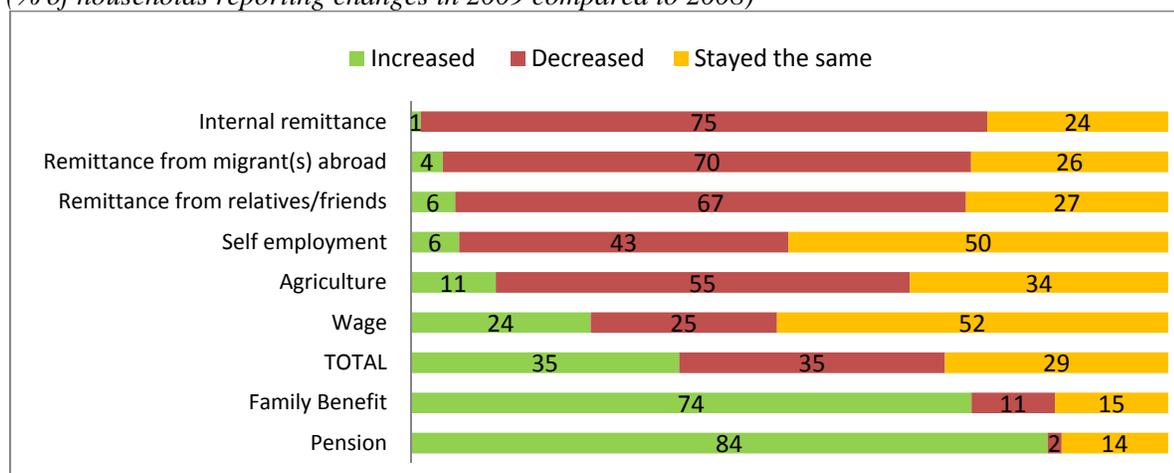


Source: Armenia ILCS 2009.

2.16. Overall, one out of every three households reported a decline in income in the aftermath of the crisis. One out of four households reported a decline in wage income. The share of wage in household income dropped from 48 percent in quarters three and four of 2008

to 45 percent in quarters one and two of 2009. Similarly, over 70 percent of households reported a decline in both internal and external remittances (Figure II.12). While public transfers (such as pensions and Family Benefit) increased in their importance during the crisis, income from agriculture and self-employment activities substantially decreased.

Figure II.12: Changes in Incomes from different Sources before and during the Crisis
(% of households reporting changes in 2009 compared to 2008)



Sources: Armenia ILCS 2009.

Impact on Household Consumption Expenditures

2.17. **Overall consumption spending between the first three quarters of 2008 and 2009 declined substantially.** Household consumption declined from ADM42,211 per ae in 2008 to ADM38,491 in 2009 (in 2008 prices), a 9 percent decrease in real consumption expenditures (Table II.2). Urban areas and the poorest income groups experienced a higher rate of decline in their consumption expenditures. While consumption expenditures in urban areas decreased by about 10 percent, the corresponding decrease in rural areas was about 7 percent. Consumption expenditures among households in the poorest quintile have decreased by 8 percent compared with a 13 percent decline among households in the richest quintile.

Table II.2: Changes in Consumption Expenditures before and during the Crisis

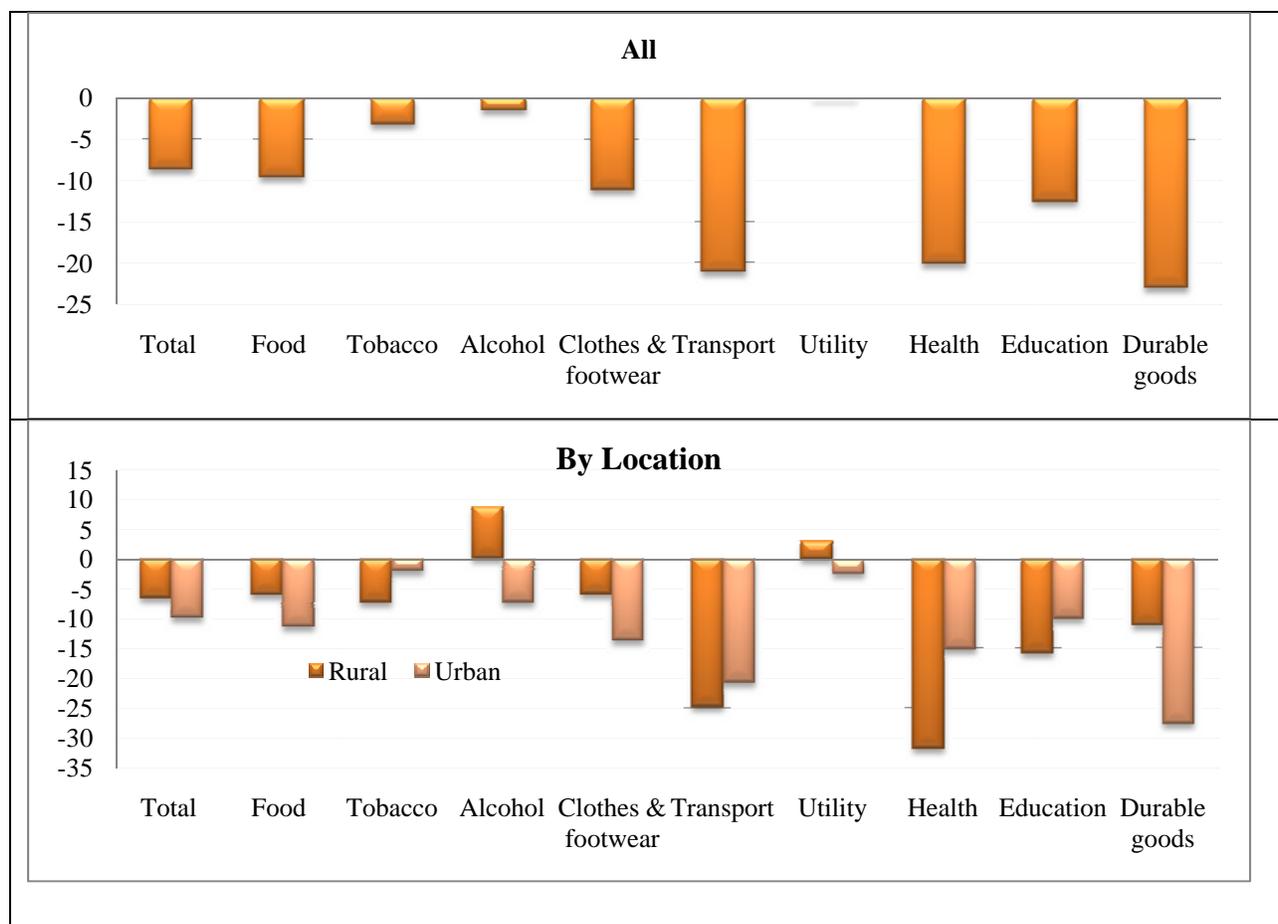
Area	Mean per Ae Expenditure, Real Terms (2008 prices, ADM)		
	2008	2009	Change (percent)
Urban	43,564	39,205	-10
Rural	39,769	37,093	-7
<i>Quintile</i>			
Quintile 1 (lowest)	21,358	19,746	-8

Quintile 2	28,795	27,423	-5
Quintile 3	36,019	33,723	-6
Quintile 4	46,150	42,710	-7
Quintile 5 (highest)	78,750	68,880	-13
Total	42,211	38,491	-9

Sources: Armenia ILCS 2008 and 2009.

2.18. Household consumption expenditure decreased across all main spending categories, except for utilities. Household expenditures on healthcare, transportation, and purchase of durable goods declined by 20, 21, and 23 percent, respectively (Figure II.13). In rural areas, there was a spike in alcohol consumption. On the other hand, the declines in spending on healthcare and purchase of durable goods were larger in rural areas. The combination of rising unemployment and deterioration of living standards may have led to additional stress and risky behavior such as increased alcohol consumption.

Figure II.13: Changes in Spending Patterns during the Crisis (% change in 2009)

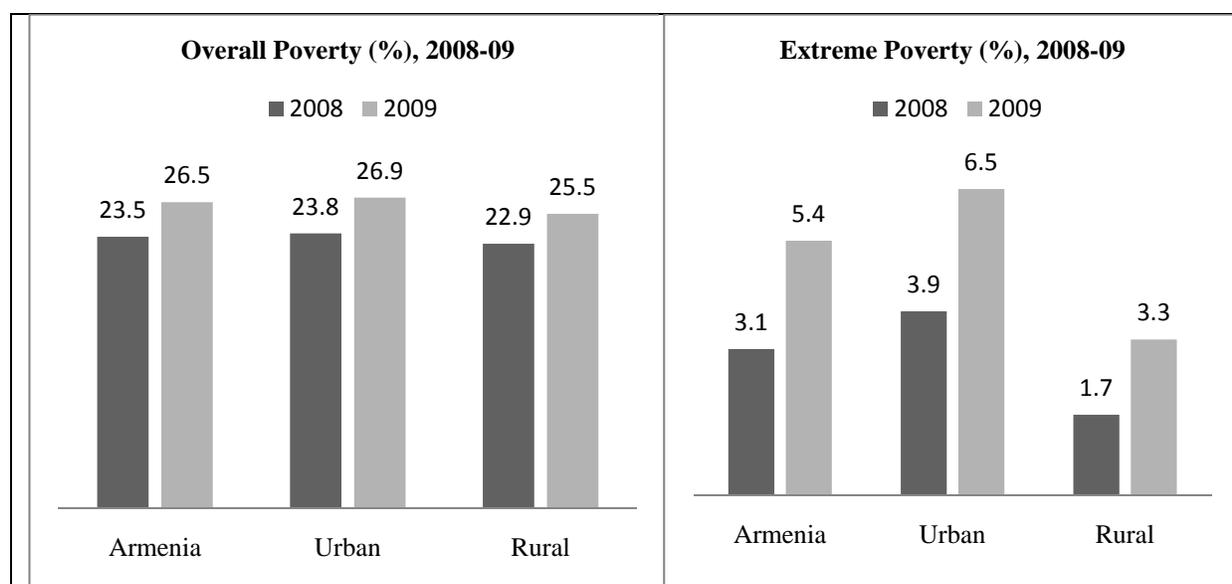


Source: Armenia ILCS 2008 and 2009.

Poverty and Distributional Impact

2.19. **Against the background of already high levels of poverty and vulnerability, even small losses in income were difficult to cope with, particularly for those just above and just below the poverty line.** According to a comparable welfare measure and based on the 2008 poverty line of ADM25,188 per ae per month, overall poverty incidence increased from 23.5 percent to 26.5 between the first three quarters of 2008 and 2009 (Figure II.14, left panel), a nearly 3-percentage-point increase. The worsening of the poverty outcome can be attributed to the global economic crisis. Urban areas appear to have suffered slightly more than rural areas, but the differences are not statistically significant. The increase in extreme poverty incidence was more pronounced—it nearly doubled during the crisis (Figure II.14, right panel).

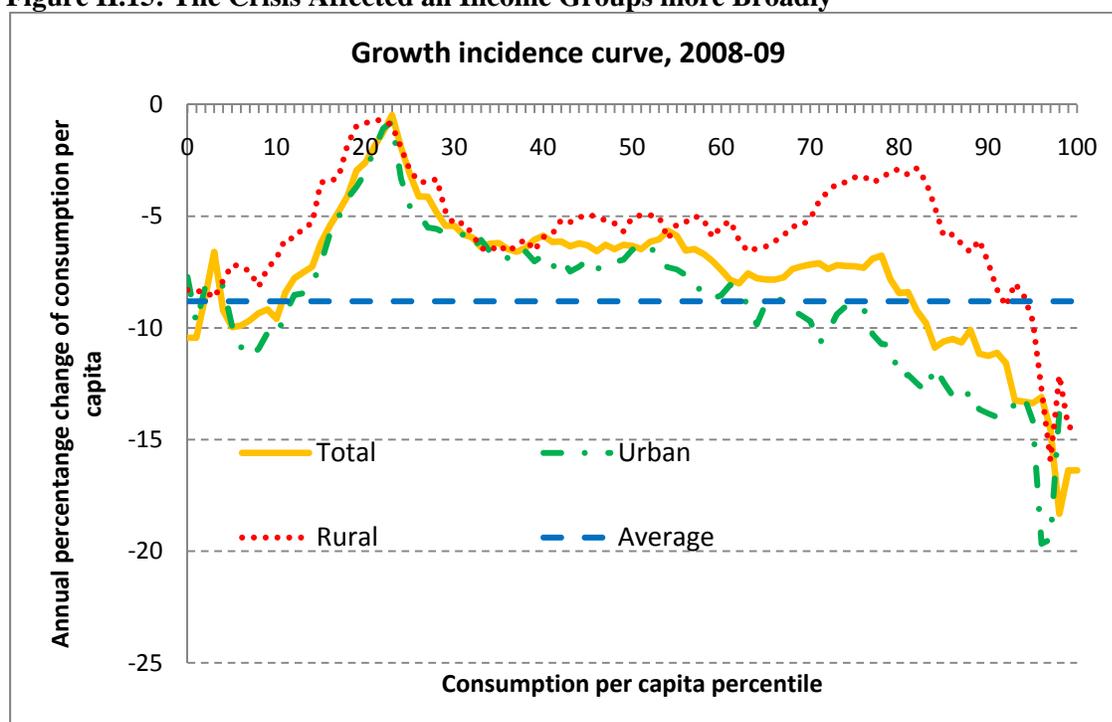
Figure II.14: Changes in Overall and Extreme Poverty in the Aftermath of the Crisis



Sources: Armenia ILCS 2008 and 2009.

2.20. **The decline has affected all income groups, but at an uneven pace.** The general decline in consumption is reflected in the shape of the growth incidence curves (Figure II.15). The richer income groups appear to have lost more from the financial crisis, particularly in urban areas. Rural consumption declines were lower than those of urban.

Figure II.15: The Crisis Affected all Income Groups more Broadly



Sources: Armenia ILCS 2008 and 2009.

2.21. **The increase in poverty incidence was driven by a decline in growth, while improved distribution helped lessen the impact.** As shown earlier, overall poverty, increased by 3 percentage points between the first three quarters of 2008 and 2009. This increase could be decomposed into change in consumption (growth), change in welfare distribution (consumption inequality), and interaction between the two. Table II.3 presents the decomposition of changes in poverty into growth and redistribution components. It shows that all the increase in poverty was due to a decline in consumption.⁷ However, improved distribution has helped avoid the possibility of a larger increase in poverty incidence. For example, if the distribution of consumption had not improved, the increase in national poverty incidence would have been higher by 3 percentage points.

Table II.3: Decline in Growth Drove the Increase in Poverty

	Headcount (%) 2008	Headcount (%) 2009	Change	Growth	Redistribution	Interaction
Armenia	23.5	26.5	3.0	4.7	-3.0	1.3
Urban	23.8	26.9	3.1	4.9	-3.8	2.0
Rural	22.9	25.5	2.6	3.7	-2.9	1.8

Sources: Armenia ILCS 2008 and 2009.

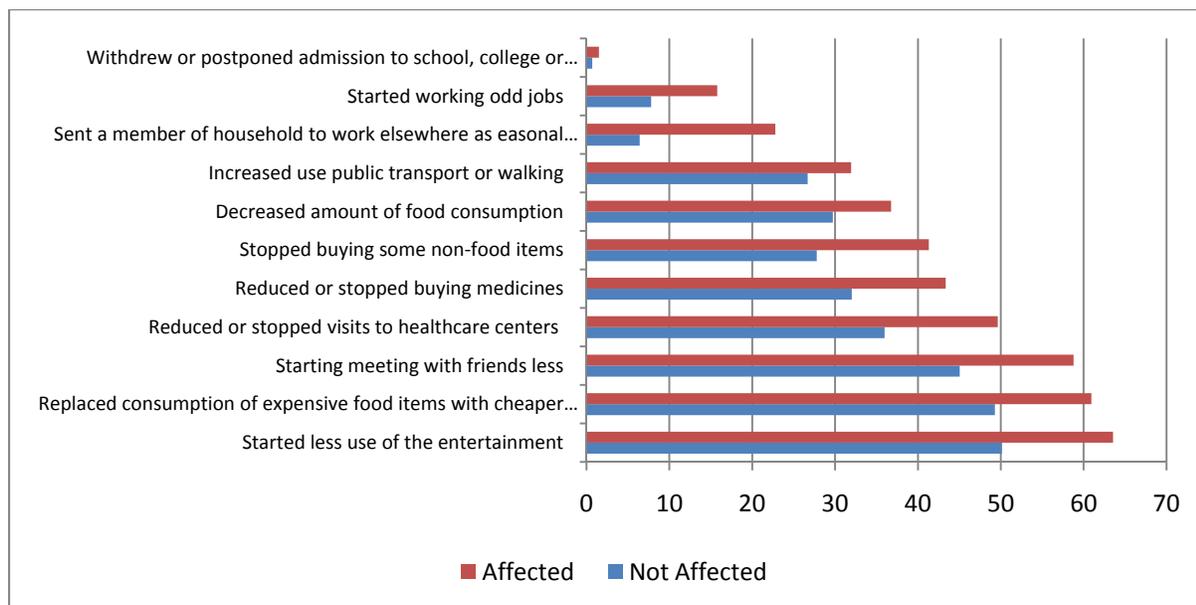
⁷ The growth-inequality decomposition (Ravallion and Datt 1992) reveals what the impact of growth would be on poverty incidence, keeping inequality constant, and what the impact of redistribution would be on poverty between the two periods if consumption remained constant.

III. Household Coping Strategies

3.1. Declines in employment, drops in earnings, and contraction of remittances together have affected Armenian households. The question we ask here is: How did the households cope with the economic slowdown, whose impact is expected to linger for a long time? Based on the data from the Armenia ILCS and the associated crisis-monitoring modules through quarter three of 2009, we present the evidence households' own coping strategies during the crisis.

3.2. **Households employed several coping strategies, including those potentially harmful in the long run.** The main coping mechanisms have included: reduction in food consumption, substituting less-expensive goods for more expensive goods, reduction of spending on healthcare and medicines, increased use of public transportation, less use of entertainment, and fewer meetings with friends (Figure III.1). Over 40 percent of affected households report cutting back on food consumption, which has implications for nutritional adequacy for adults and children. Cuts in health spending in response to the crisis have been large. Access to drugs and medicines, with increases of the price of imported pharmaceuticals and exchange rate adjustment, has declined in the aftermath of the crisis.

Figure III.1: Coping Strategies during the Crisis



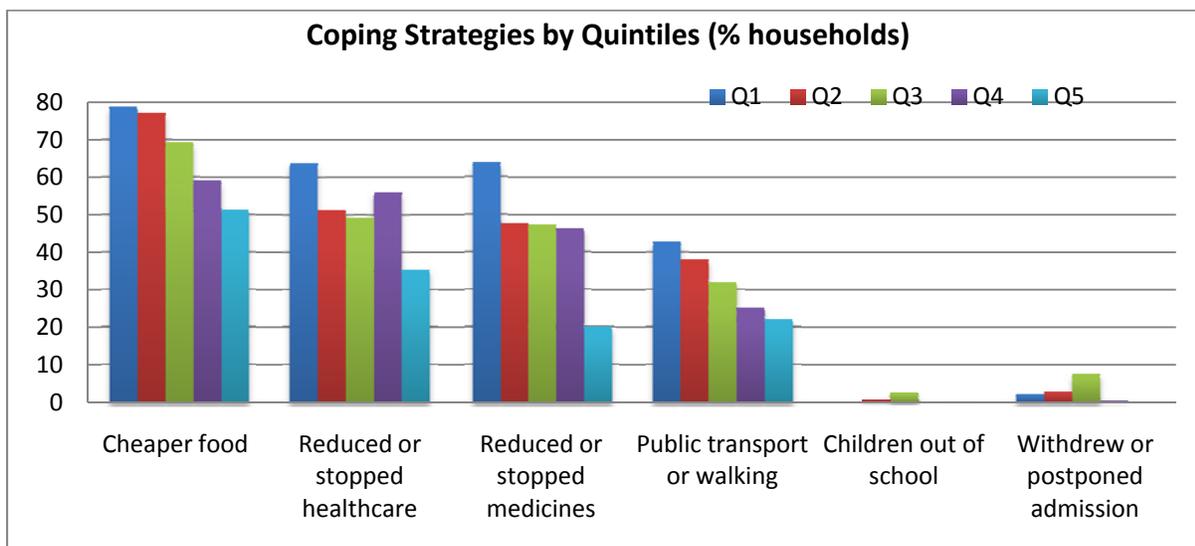
Source: Armenia ILCS 2009.

3.3. **While coping is generally associated with suffering a shock, Armenian households that did not report being affected by the crisis also employed mitigation measures.** As can be seen from Figure III.1, both types of households (affected and not affected) employed several coping measures during the crisis. This may have been due to an anticipation of being hit with the economic slowdown through future loss of job or remittances. However, note that the

degree of use of most reported coping strategies is statistically higher among affected households than those not affected.

3.4. **While all wealth groups had to adjust their budgets, the crisis presented more severe challenges for the poor and the vulnerable.** Over 50 percent of the poorest quintile reported consuming poorer-quality food items, reduced or stopped visits to health centers, and reduced or stopped purchase of medicines (Figure III.2). The difference between the poor and the rich in their responses to the crisis is nowhere more vivid than in the quality of food consumed and in reduction to healthcare utilization. Health care cutbacks in both services and drug purchases occur in 50 to 60 percent of all households except for those in the wealthiest 20 percent of families. The percent of households in each quintile reducing food consumption moves inversely with income, with 20 percent of the wealthiest cutting back (which is noteworthy in itself) but over 55 percent of poor households doing so.

Figure III.2: Household Coping Strategies by Income Groups



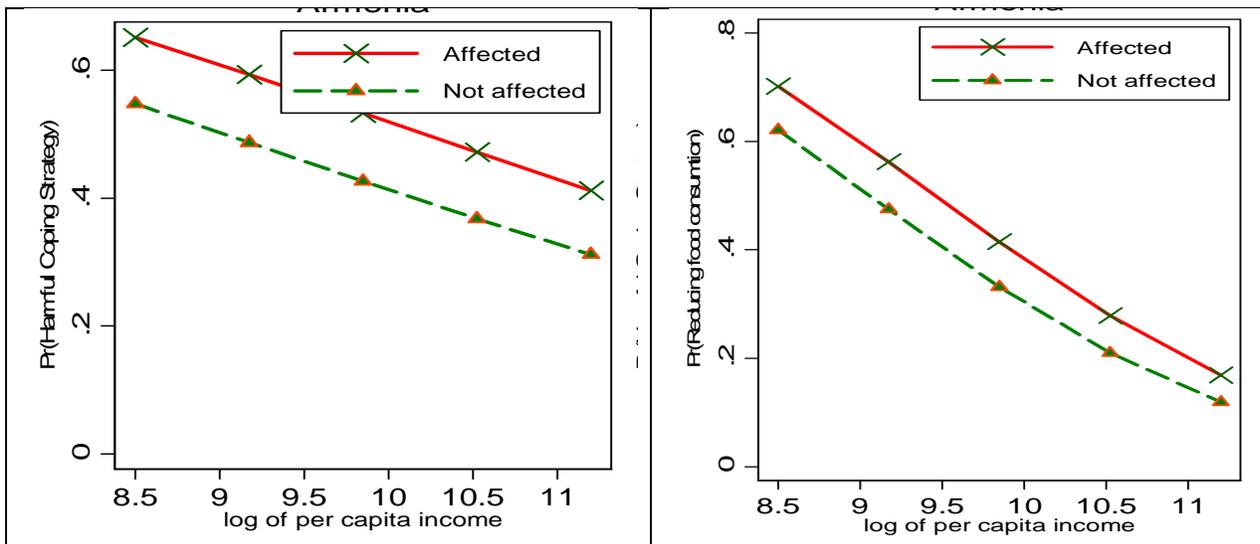
Source: Armenia ILCS 2009.

3.5. **Crisis-affected households did not sacrifice their children’s school attendance.** Past economic crises have shown that an economic downturn produces countervailing effects on enrollments. While loss of income may reduce household demand for education given non-trivial out-of-pocket expenditures incurred, the decrease in the opportunity costs of education due to weak labor markets may increase enrollment at the same time. In Armenia, there is no evidence of a significant number of children withdrawn from schools because of the crisis. Regardless of income status, almost all households kept their children in school (Figure III.2). Although there were no net effects on enrollments, reductions in government and household budgets (see Figure II.13) for education are likely to threaten educational investments and worsen education quality and learning outcomes.

3.6. **Affected households could jeopardize their future welfare by adopting potential harmful coping strategies.** While some coping strategies are short-lived, such as substituting

less-expensive goods for more expensive goods, others may jeopardize household's long-term sustainability and weaken their future capacity to manage risks (for example, foregoing regular healthcare, withdrawing children from school). The probability of adopting potentially harmful strategies is plotted in Figure III.3, left panel, after controlling for all observable household characteristics.⁸ Similarly, the right panel presents household's likelihood of reducing food consumption as a response to the crisis. The likelihood of adopting a harmful strategy decreases with household income and is higher for households that suffered the impact of the crisis. The poorer households are much more likely to cut food consumption than households with higher income levels, as are households that reported being affected by the crisis than those that were not affected.

Figure III.3: Probability of Harmful Coping Strategies and Reduced Food Consumption



Source: Armenia ILCS 2009.

⁸ We control for dependency ratio, number of children, household size, head education, head labor market status, area of residence, whether a household is affected, and local area (local fixed effects).

IV. Social Policy and Crisis Response

4.1. The GOA's response measures to the crisis included: (a) exchange rate adjustment to ensure balance and stability; (b) reduction in low-priority spending to partially offset revenue reductions while raising additional external financing to cover the higher deficit; (c) support for employment-generating activities through increased capital spending and provision of state aid to small and medium enterprises (SMEs); and (d) safeguarding of priority social spending, including on safety nets, education, and healthcare, to protect the poor and vulnerable. Although the steep decline in revenue required adjustment on the expenditure side and total spending was cut by 8.5 percent, the GOA ensured priority social spending programs were protected. The government also undertook substantial fiscal stimulus through a large increase in capital spending, and financial support to the real sector, including SME credit lines and support to selected firms.

4.2. **While the GOA's crisis response has been multipronged, the main focus of this report pertains to the safeguarding of priority social spending, which was aimed at protecting the poor and vulnerable populations.** The main social protection programs, which are considered high priority and hence protected during the crisis, include the Family Benefit (FB), pensions, unemployment insurance, and paid public works program. The FB is a last-resort program of targeted cash transfer to poor and vulnerable families. Pensions are both contributory (for workers) and non-contributory (for those without a qualifying work record). The beneficiaries of non-contributory pensions include the elderly, persons with disabilities, and ex-military officers and privates and their families.

4.3. **The FB and pensions were considered to be good vehicles for delivering support to both the existing beneficiaries and to those households affected by the economic crisis.** The GOA protected its spending on these programs despite significant fiscal pressures and cuts elsewhere in its 2009 revised budget. The GOA also undertook measures to improve efficiency of its spending, particularly on the FB program, through better targeting of program resources. Armenian authorities used information in the existing registry of families that applied for the FB benefit and integrated them with employment information from another database to help cross-check the accuracy of the applications.

4.4. **The main objective of this section is to assess the role the social protection programs played during the 2008–09 global economic crisis.** The report analyzes the two main social protection programs—pensions and the last-resort targeted Family Benefit—in terms of their coverage and targeting efficiency of the vulnerable population, and their adequacy and poverty alleviation impact during the economic crisis. The report highlights the significance of safeguarding adequate and effective social assistance programs to ensure that the limited resources reach those who need them and provide adequate protection during a shock.

Social Protection Programs in Armenia

4.5. **Armenia has a long record of social protection programs, dating back to the Soviet era.** The social protection system plays an important role in helping individuals and families cope with income shocks and provide old-age security. The coverage of the social protection system is broad: In 2009, about 59 percent of the population benefited from some form of social protection transfers, either directly or indirectly through the sharing of benefits within the household. The contributory social insurance benefits include pensions and unemployment insurance and are conditional on formal employment and contribution compliance. Apart from the contributory pensions, the pension system allows the provision of several types of “no work-related pensions” such as survivor’s pensions, the civil and military disability pension, the old-age social pension, the pension for special merits, the social disability pension, and the personal pension.

4.6. **The social assistance programs, on the other hand, are wholly non-contributory.** In the late 1990s, Armenia reformed its social assistance system in response to the need and political desire for a simple, affordable, and well-targeted safety net. Several Soviet-era categorically targeted programs were integrated and a version of proxy means testing was used to target the intended beneficiaries. The result is a simple, cash-based system that accords priority to the elderly, people with disabilities, and poor families with children. As a result of these changes, the non-contributory safety net programs consist of one main anti-poverty scheme for low-income and vulnerable households: the Family Benefit (FB). The FB is proxy means-tested on income and other poverty risk factors and is targeted at the most vulnerable families. There are other small social assistance programs and benefits such as cash transfers to expectant mothers and working mothers with infants below age 2, free access to healthcare for the poor, and social care services.

The Pension System⁹

4.7. The current Armenia pension system has contributory insurance benefits based on employment history and non-contributory social pension benefits, and special pension security for military officials and servicemen. The insurance pension system is a mandatory, defined-benefit system, financed on a pay-as-you-go basis from payroll contribution, providing old-age, disability, and survivor benefits. On the other hand, social pension covers those that did not participate in the insurance pension programs, including the elderly, the disabled, and families who lost breadwinners. The social and military personnel pensions are financed by the state budget (Table IV.1).

4.8. **In 2009, the pension system in Armenia served 474,000 contributors and 523,000 beneficiaries, with a resulting system dependency ratio (SDR) of 1.1.** The number of

⁹ The discussion on Armenia’s pension system briefly presented here is based on the current system and does not incorporate proposed changes under the Armenia “Pension Reform Program,” currently being debated in the national Assembly and anticipated to be implemented in the next few years.

employees contributing to the system is relatively low—about 25 percent of the population aged 15 to 60, and 40 percent of the formal labor force. The exclusion of farmers and self-employed and low formal labor force participation are the main factors affecting the number of contributors to the system. Furthermore, the current pension benefit system does not provide strong incentives to participate, since the size of the pension benefits does not depend on the level of income and contributions made to the system. With a regressive contribution regime, low-income earners face high contribution rates. At the same time, the high income earners face low replacement rates given low benefit levels. Therefore, the pension system discourages participation by both low and high earners beyond five years of service required to qualify for the basic pension. A more earnings-related formula, offering benefits proportional to income earned, could improve the incentives to participate.¹⁰

Table IV.1: Beneficiaries of and Contributors to Armenia’s Pensions System

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of Beneficiaries ('000)	560	553	544	544	540	533	527	523	524	523
Number of Contributors ('000)	335	333	360	418	408	459	471	469	476	474
Share of Contributors to Beneficiaries	1.7	1.7	1.5	1.3	1.3	1.2	1.1	1.1	1.1	1.1
Average Benefit Size (AMD per month)	4,473	4,574	5,748	7,452	8,842	9,805	10,912	12,746	21,370	24,520
Average Wage (AMD per month)	22,706	24,483	27,324	34,783	43,445	52,060	62,293	74,227	87,406	102,054
Pension Benefit (percent of average wage)	20	19	21	21	20	19	18	17	24	24

Source: World Bank staff calculations based on data from NSS.

4.9. In 2008, Armenia increased pension benefit levels by 60 percent. As a result, average pension benefit increased to one-quarter of the average wage level. In 2007, the average pension was AMD12,746, with the average net replacement rate of 17 percent.¹¹ This replacement rate was significantly lower than in countries with similar contribution rates.¹² The low benefit levels

¹⁰ The proposed new pension reform strategy would replace the regressive contribution rate by a proportionate personal income tax. The pension benefit levels will still be flat and unrelated to income, however, and thus would remain unattractive to high-income earners (Government of Armenia 2008).

¹¹ Replacement rates are defined as the ratio of the pension benefit for a new pensioner with average lifetime earnings to the average wage.

¹² The average net replacement rate in OECD countries of 69 percent was achieved with a median contribution rate of 24 percent. In Hungary and Croatia, the contribution rates of 26 percent and 20 percent, respectively, manage to provide replacement rates of 50 percent and 43 percent, with 90 percent of required funds for contributory pensions collected through contributions.

and replacement rates reflected low compliance, collection, and administrative efficiency (World Bank 2008).

Family Benefit Program

4.10. **The Family Benefit (FB) is Armenia's main last-resort social assistance program aimed at protecting the very poor and vulnerable population.** It was introduced in 1999 to assist individuals and families who fell below a certain income level. The FB beneficiaries also qualify for a free basic health package. Targeting of FB is done using the so-called household poverty and vulnerability scoring formula. The scoring formula ranks applicants in terms of their expected poverty. The formula gives preference to certain social groups such as the disabled, single mothers, orphans, and families with many children, taking also a host of other variables into account such as income, place and condition of residence, car ownership, and utility bills. The eligibility decision using this scoring formula is based on information from a number of required documents that applying families need to bring to the regional social services center after having the documents certified by municipality and other authorities. The staff of the social office enters the information into the computerized database, which calculates the score. Households with a score below the fixed national threshold are eligible for the FB.

4.11. **The certification process imposes a significant burden on families in terms of time and effort to gather all the required documents and having them certified by municipality and other agencies.** Every year beneficiaries are required to recertify with the social agency, again collecting all the documents and having them certified. Many poor households cannot, or feel they cannot, provide the required documentation, and give up even applying, contributing to fairly low coverage of the FB among the poor (see next section).

Spending on Social Protection Programs

4.12. **Since 2008, all social protection programs (both social assistance and social insurance) have been financed from general revenues. The total budgetary allocations for the core social protection programs in 2009 amounted to ADM216 billion, with social protection expenditures constituting 6.8 percent of GDP. The largest spending item was pensions, at AMD180 billion (83 percent of total social protection spending). The FB accounted for 15 percent of total social protection spending in 2009.**

4.13. **Armenia has been gradually increasing its social protection spending, both as a share of its GDP and of consolidated total public expenditures.** In 2009, Armenia spent an estimated 6.8 percent of its GDP on all social protection programs, including pensions and the FB compared to 5.8 percent in 2008 (Table IV.2). Pensions and FB accounted for about 5.7 percent of GDP in 2009. While the bulk of public spending on overall social protection programs goes to pensions, the targeted FB nevertheless provides a vitally needed cushion against poverty and vulnerability and represents a non-negligible share of total public spending. However, spending on FB, both as a share of GDP and of total spending, has been declining over the last

several years. This is mainly due to fewer families registering and qualifying for the FB, since the Armenian economy grew and many were lifted out of poverty.

Table IV.2: Public Spending on Social Protection, 2005–10

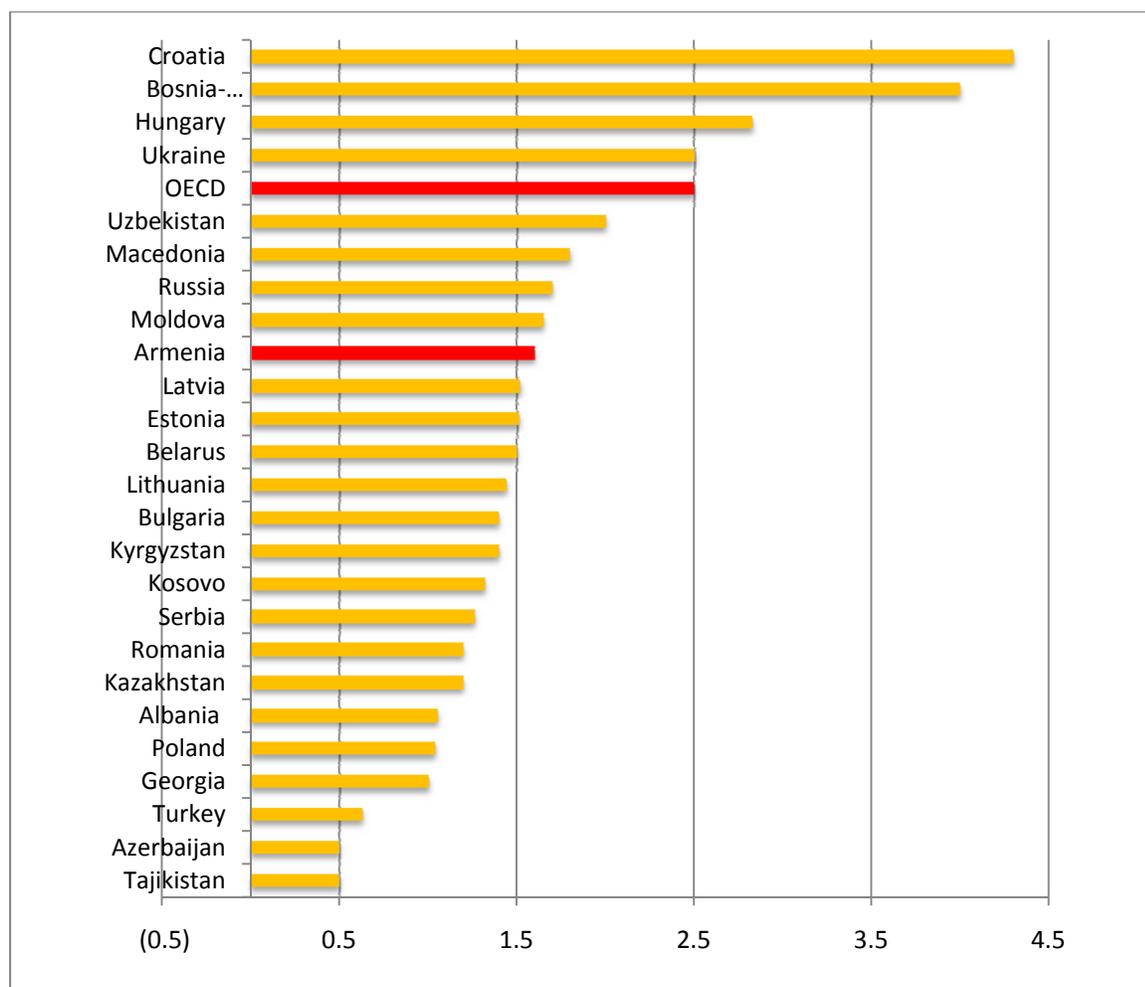
	2005	2006	2007	2008	2009	2010
Total Spending on Social Protection						
(%GDP)	4.64	4.66	4.78	5.80	6.84	6.74
(%consolidated budget)	21.29	21.82	22.22	26.67	25.04	23.26
Pensions						
(%GDP)	3.24	3.17	3.14	4.23	5.70	5.56
(%consolidated budget)	14.88	14.83	14.59	19.44	20.86	19.20
Family Benefit						
(%GDP)	0.88	0.91	0.84	0.78	1.02	0.96
(% consolidated budget)	4.03	4.26	3.90	3.58	3.74	3.32
Other Social Protection Programs						
(%GDP)	0.52	0.58	0.80	0.79	0.12	0.22
(%consolidated budget)	2.37	2.73	3.73	3.65	0.36	0.74

Note: Data for 2005–09 based on the budget execution and national accounts. Data for 2010 are from the Budget Plan for 2010.

Source: NSS and administrative statistics.

4.14. **Armenia’s spending on social assistance as a share of GDP is on par with the ECA average of 1.7 percent, but smaller than the 2.5 percent average for the OECD countries** (Figure IV.1). The FB, Armenia’s signature social assistance program, accounted for about 60 percent of total spending on social assistance programs. As a share of GDP and overall public spending, Armenia increased its spending on pro-poor social protection programs during the crisis. For example, overall social protection expenditures increased from 5.8 percent of GDP in 2008 to 6.8 percent in 2009. Spending on FB grew from 0.8 percent to 1 percent of GDP during the same period.

Figure IV.1: Armenia’s Public Spending on Social Assistance Programs Compared to ECA and OECD Countries (as % of GDP)



Sources: NSS data for Armenia, 2009; various World Bank Public Expenditure Reviews and OCED Social Spending Database for other countries.

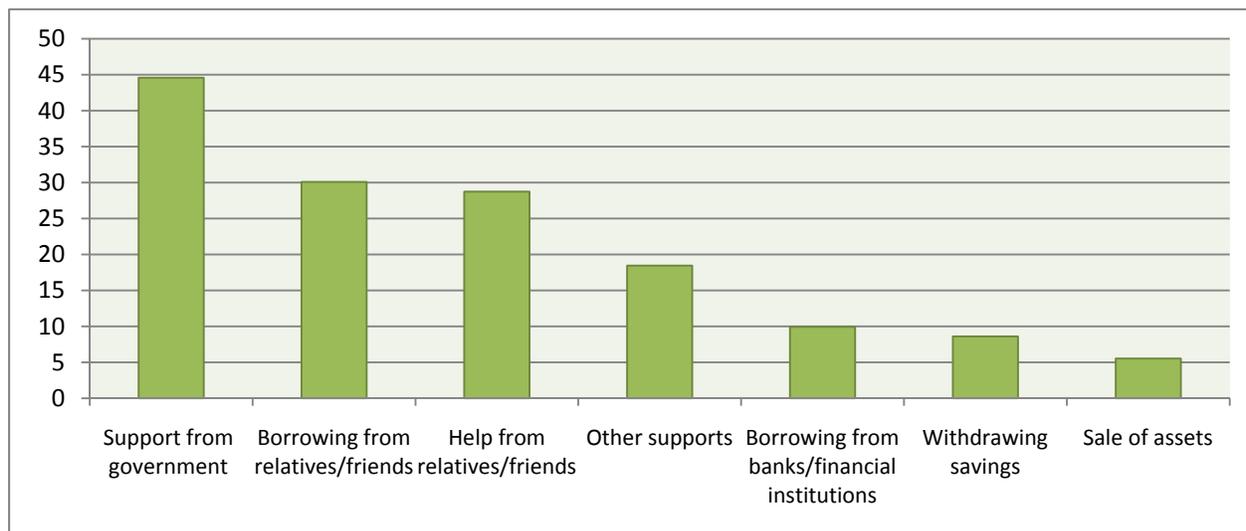
The Role of Social Protection Programs during the Crisis

4.15. **The questions we seek to answer are:** How pro-poor are the social protection programs? Did they provide adequate protection to the poor and vulnerable during the crisis? What would have been the level of poverty without them? Have the roles of these programs increased during the aftermath of the global economic crisis? To answer these questions, the report attempts to provide a broad picture of Armenia’s main social protection programs and their coverage, targeting accuracy, adequacy, and poverty impact. We use data from the Integrated Living Conditions Survey (ILCS) before and during the aftermath of the crisis to assess the role these programs played in mitigating the impact on the poor and vulnerable.

4.16. **More households relied on support from the government for mitigating the impact of the crisis than their own coping strategies or support from other sources.** About 45

percent of affected households reported relying on government support during the crisis (Figure IV.2). In comparison, about 25 percent of affected households relied on borrowing or help from relatives and friends. Withdrawing and sale of assets were not considered viable options to cope with the crisis.

Figure IV.2: More Households Relied on Government Support than other Coping Strategies
(Percentage of households that reported relying on different sources of support during the crisis)



Source: Armenia ILCS 2009.

4.17. To assess the distributional outcomes of the FB and pensions, welfare conditions of the population and the beneficiaries with and without the programs are analyzed. To do this, households are ranked by consumption before the receipt of the respective social protection transfer. After that, we estimated the coverage, benefit incidence, adequacy, cost-benefit ratio, and leakage and errors of exclusion of the respective social protection programs based on pre-transfer consumption expenditure rankings. In the paragraphs below, the performances of the FB and pensions during the global economic crisis and their impact on poverty are briefly examined. Detailed results of the benefit incidence analysis are presented in Annex B.

Coverage: How Many People Receive Social Protection Benefits?

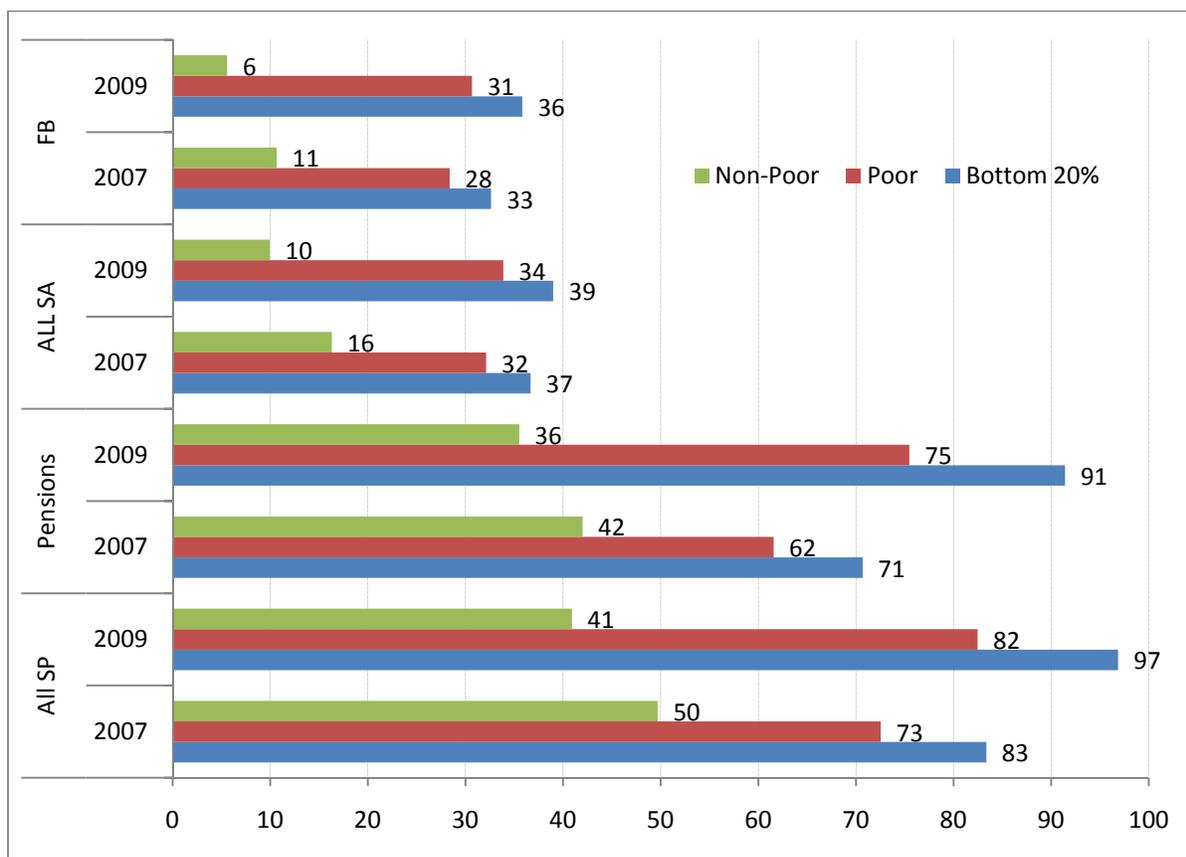
4.18. **Family Benefit.** The FB, the core of Armenia’s social assistance system, reached about 13 percent of the population (slightly less than 15 percent coverage in 2007). The coverage of the poorest 20 percent of the population is at estimated at 36 percent, an improvement over the 2007 coverage of 33 percent (Figure IV.3). The coverage of the overall poor at 31 percent in 2009 was higher than 28 percent in 2007. The coverage of the non-poor by the FB was 11 percent and 6 percent in 2007 and 2009, respectively, suggesting significant reduction in leakage during the crisis.

4.19. **The main challenge for Armenia with regard to its social assistance to the poor is to improve the FB’s outreach so that it covers more of the deserving population.** Simplifying of certification requirements and stepping up outreach efforts could immensely help in achieving

higher coverage. The certification process imposes a significant burden on households in terms of time and effort to gather all the required documents and have them certified by municipalities and other agencies before visiting the social benefits office. Every year beneficiaries are required to recertify with the social agency, collecting all the documents and having them certified over again. These may have frustrated many poor families, who may have given up applying altogether, contributing to fairly low coverage of the FB among the poor. The requirement to recertify annually may be unnecessary given eligibility depends to a large (but not exclusive) extent on factors that seldom vary, such as presence of household members that are disabled, orphans, or single mothers.

4.20. **Pensions.** Coverage of pensions in 2009 is estimated at 91 percent of the poorest 20 percent of the population, a substantial improvement from 71 percent in 2007. Pensions covered 75 percent of the poor and 36 percent of the non-poor in 2009 compared to 62 percent of the poor and 42 percent of the non-poor in 2007.

Figure IV.3: Coverage of the Main Social Protection Programs



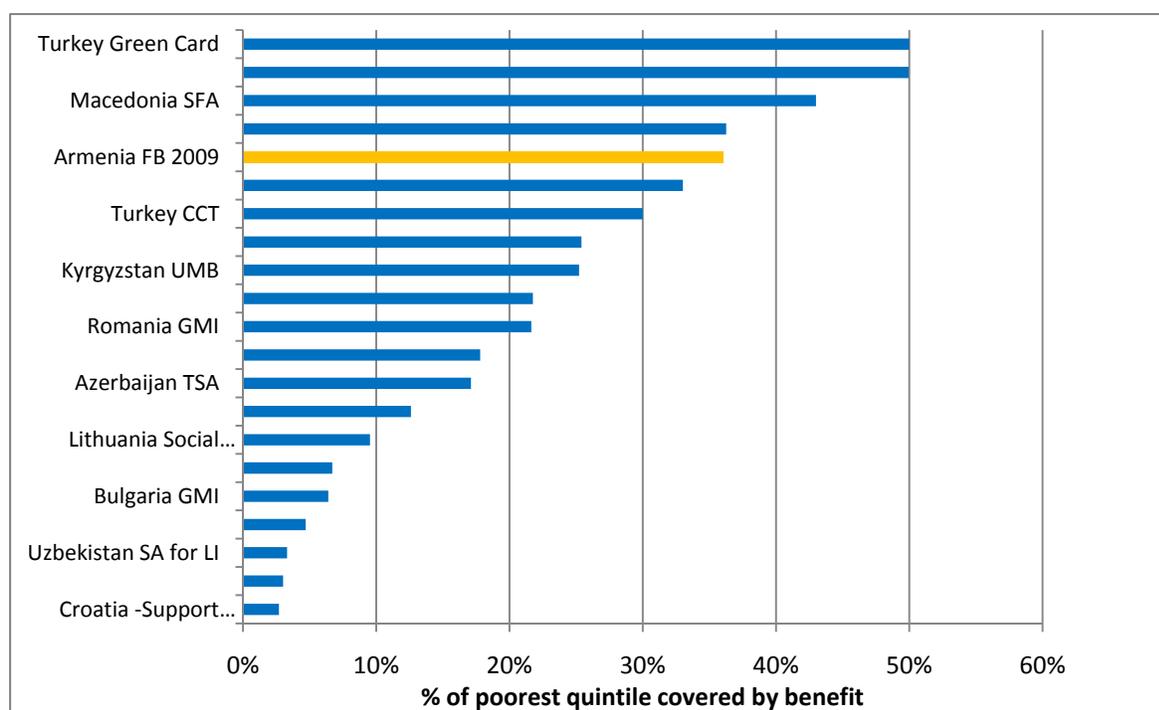
Source: 2007 and 2009 ILCS data.

4.21. **Overall Social Protection Programs.** Fifty-nine percent of all Armenians are covered by at least one type of social protection program (Figure IV.3), whether contributory or noncontributory, according to ILCS 2009 data. Of those, 60 percent receive only pensions; 14 percent receive only the FB; 3 percent receive only other social benefits; and the remaining 23

percent rely on pensions, the FB and other benefits (see Annex B, Table B.2). Among consumption deciles, about 97 percent of households in the poorest quintile received one or more social protection transfers, nearly triple those in the top quintile (35 percent). And more than 82 percent of the poor compared with about 41 percent of the non-poor received social protection benefits.

4.22. **Regional Comparison.** In regional comparison, the FB exhibits better than average coverage of the poorest 20 percent of the population than similar programs in other countries (Figure IV.4). The FB’s coverage is better than Georgia’s targeted social assistance (TSA) and other similar last-resort programs in the region, but is lower than Turkey’s Green Card program, which covers nearly half of the poorest 20 percent of the population.

Figure IV.4: Coverage of Armenia’s Family Benefit in 2009 in Regional Comparison

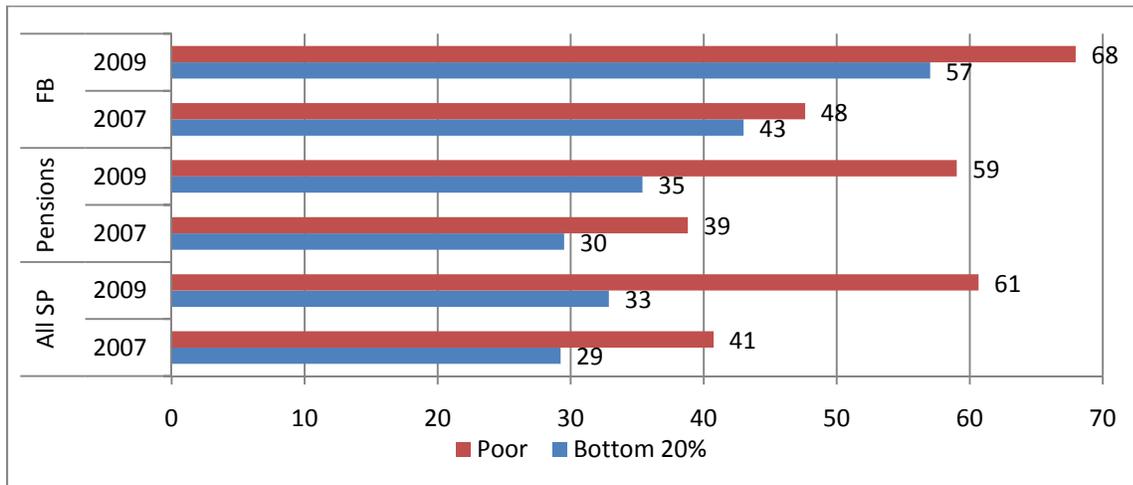


Sources: ILCS 2007 and 2009 for Armenia; ECA Household Survey Database.

Distribution of Beneficiaries: Who are the Beneficiaries of Social Protection Programs?

4.23. **In 2009, the majority of Armenia’s social protection program beneficiaries were the poor, whereas, in 2007, the poor accounted for less than half of all beneficiaries.** About 61 percent of all beneficiaries were poor in 2009 compared only 41 percent in 2007. The share of the bottom 20 percent of the population among the social protection program beneficiaries also increased from only 29 percent in 2007 to 33 percent in 2009.

Figure IV.5: Distribution of Social Protection Beneficiaries



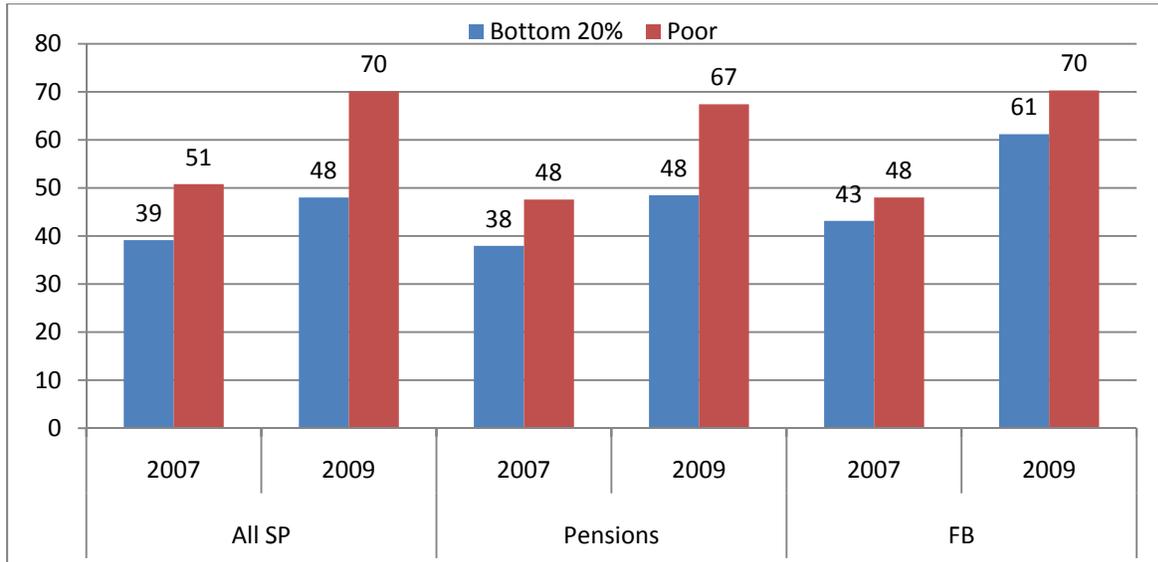
Source: 2007 and 2009 ILCS data.

4.24. **Of the FB beneficiaries, in 2009, the bottom quintile and the poor accounted for 57 percent and 68 percent, respectively.** The corresponding figures in 2007 were only 43 percent and 48 percent, underscoring significant targeting improvement following the measures instituted in 2008 and during the crisis. Looking at the members of those households ranked according to their pre-FB consumption per ae in 2009, 78 percent of all recipients of the FB belonged to the two bottom consumption quintiles.

Targeting Accuracy: What Share of the Family Benefits Reaches the Poor?

4.25. **The FB achieved a higher targeting performance in 2009 than in 2007.** About 61 percent of the program resources accrued to families in the first quintile and 70 percent of benefits went to the poor (Figure IV.6). In 2009, about 57 percent of the FB beneficiaries, receiving over 61 percent of the program resources, came from the bottom population quintile. Most FB beneficiaries (78 percent), receiving almost 80 percent of FB resources, belong to the bottom two population quintiles.

Figure IV.6: Targeting Performance of Armenia’s Family Benefit Program



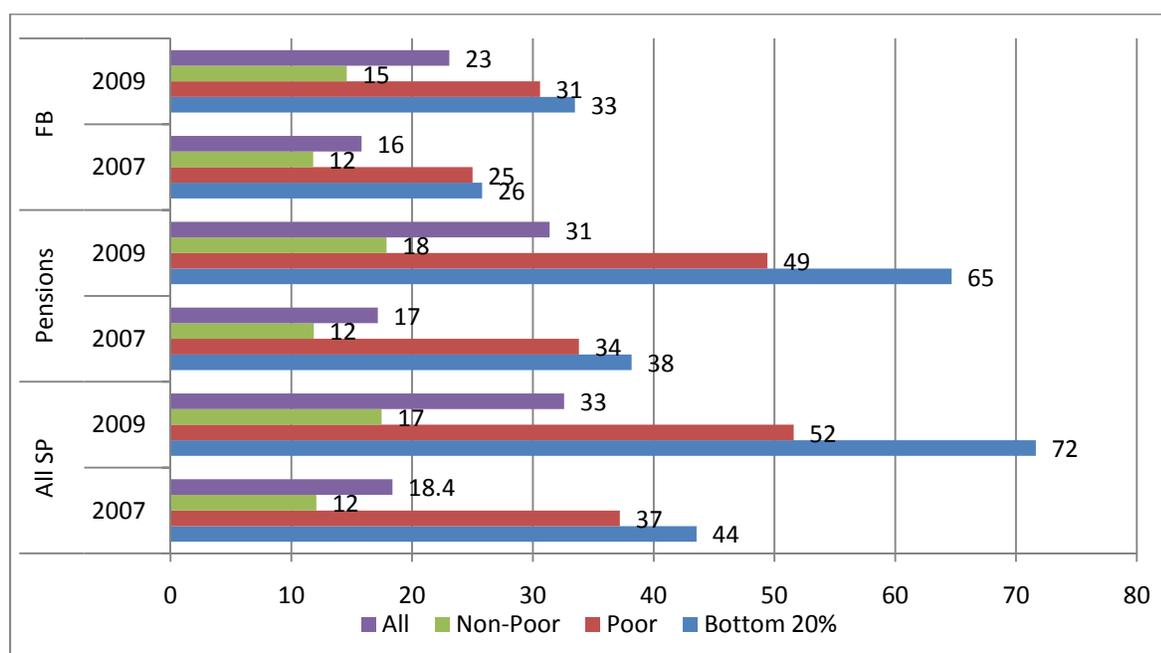
Source: 2007 and 2009 ILCS data.

Adequacy: Are the Benefits Large Enough to Alleviate Poverty?

4.26. Are Armenia’s social protection program benefits large enough to alleviate poverty?

Across all programs and all beneficiaries, social protection cash transfers amount to 33 percent of household expenditures (conditional on receiving) in 2009 (Figure IV.7). This was a significant improvement over the 2007 share of 18 percent of total household spending (conditional on receiving). For the first quintile, they amount to 72 percent of household expenditures. Therefore, they are of vital importance for the welfare of recipient households. Pensions in particular constitute a high share of household expenditures. For households in the first quintile, benefits are on average equivalent to 65 percent of household consumption expenditures (conditional on receiving). On the other hand, the FB amounts to a relatively small share of household spending. However, the generosity of the benefit increased markedly between 2007 and 2009. In 2009, the FB accounted for 23 percent of all beneficiary household expenditures and 34 percent of the consumption of the beneficiaries in the bottom quintile.

Figure IV.7: Social Transfers as Share of Household Consumption Expenditures



Source: Staff estimates based on ILCS 2007 and 2009.

4.27. **There is large overlap between beneficiaries of pensions and the FB, since families are permitted to receive both pensions and the FB at the same time, provided they qualify for both.** In 2009, about 63 percent of the FB beneficiaries also received pensions (and about 15 percent of pensions recipients also received the FB) (Table IV.3). This has caused problems for families because the amount of pension income counts negatively toward eligibility for the FB. While the eligibility score for the FB has remained remarkably stable, nominal pensions have been increased over time. Even a small increase in pension can make an FB beneficiary household cross the eligibility threshold score. It is not known exactly how many households have experienced this, but it is a significant source of complaints and imposes large costs on the system in managing the appeals of citizens, who are understandably dissatisfied since the pension increase would usually be less than the loss of the FB.

Table IV.3: Social Protection Program Overlap in Armenia, 2009

	Pensions	FB	Other SP Programs
Pension	100	15	4
FB	63	100	4
Other SP Programs	48	11	100

Source: Armenia ILCS 2009.

Poverty Impact: How Effective were Social Protection Programs during the Crisis?

4.28. Social protection programs in Armenia can be simulated to estimate their impact on poverty, although by how much depends on assumptions. For simplicity, it is assumed here that recipient households spend 100 percent of all transfers and that labor supply and other behaviors are unchanged in response to transfers. Pre-transfer expenditures are therefore obtained by subtracting transfers from actual observed expenditures.

4.29. **In 2008, before the crisis, all social protection programs combined reduced poverty by 15.1 percentage points in the overall population and by 27.1 percentage points among beneficiaries.** Table IV.4 presents the poverty scenarios with and without social transfers. Without social protection transfers, poverty incidence in Armenia could have been close to 39 percent in 2008 compared to 23.5 percent in the presence of all social protection transfers. In the absence of any transfers, the poverty headcount rate (among beneficiaries) could have been 53.4 percent instead of the observed 26.3 percent (Table IV.5). In 2008, social transfers reduce the beneficiaries' poverty gap by some 16.9 percentage points, from 20.4 percent to 3.5 percent.

Table IV.4: Overall Poverty Reduction Impact of Social Transfers before and during the Crisis
(in %)

	Poverty			Inequality
	Poverty Headcount	Poverty Gap	Poverty Severity	Gini
2008				
With all social transfers*	23.5	2.9	0.8	27.5
Without all social transfers	38.7	12.0	6.6	34.4
Without pensions only	35.5	9.8	5.1	32.7
Without social assistance only	27.2	4.6	1.6	29.0
Without a family benefit only	27.1	4.5	1.5	28.9
2009				
With all social transfers*	26.5	4.9	1.5	25.4
Without all social transfers	45.7	17.6	10.6	34.4
Without pensions only	42.3	15.2	8.7	32.5
Without social assistance only	30.0	6.9	2.6	26.9
Without a family benefit only	29.7	6.7	2.5	26.8

Note: Social transfers include all types of pensions, the FB, unemployment benefits, compensations for privileges, and other benefits. Poverty gap indicates the average shortfall of the consumption of the poor population relative to the overall poverty line. Poverty severity is squared poverty gap. Calculations are based on poverty rates for all households (not just program beneficiaries), comparing actual to simulated pre-transfer poverty.

Source: Armenia ILCS 2007–09.

4.30. **How did the importance of the social protection transfers change during the global economic crisis?** In 2009, during the crisis, all social protection programs combined reduced poverty by 19.2 percentage points in the overall population and by 31.4 percentage points among beneficiaries. Without social protection programs poverty incidence in Armenia could have reached 45.7 percent in 2009 compared to the estimated 26.5 percent in the presence of all social protection transfers. In the absence of any transfers, the poverty headcount rate (among beneficiaries) could have been 60.3 percent, instead of the observed 28.9 percent (Table IV.4).

Social transfers reduce the beneficiaries' poverty gap by some 22.6 percentage points, from 28.6 percent to 6 percent.

Table IV.5: Poverty Reduction Impact on Recipients of Social Transfers before and during the Crisis

	Poverty Headcount	Poverty Gap	Poverty Severity
<i>2008</i>			
With pensions and the FB	26.3	3.5	0.9
Without pension and the FB	53.4	20.4	13.2
With pensions	25.0	3.3	0.8
Without pensions	50.3	18.1	11.6
With the FB	36.4	5.3	1.3
Without the FB	54.7	16.1	6.5
<i>2009</i>			
With pensions and the FB	28.9	6.0	1.8
Without pension and the FB	60.3	28.6	24.6
With pensions	28.1	5.7	1.7
Without pensions	57.9	25.9	18.7
With the FB	41.6	9.3	2.8
Without the FB	67.7	24.5	27.5

Note: Social transfers include all types of pensions, FB, unemployment benefit, compensations for privileges, and other benefits. Poverty gap indicates the average shortfall of the consumption of the poor population relative to the overall poverty line. Poverty severity is squared poverty gap.

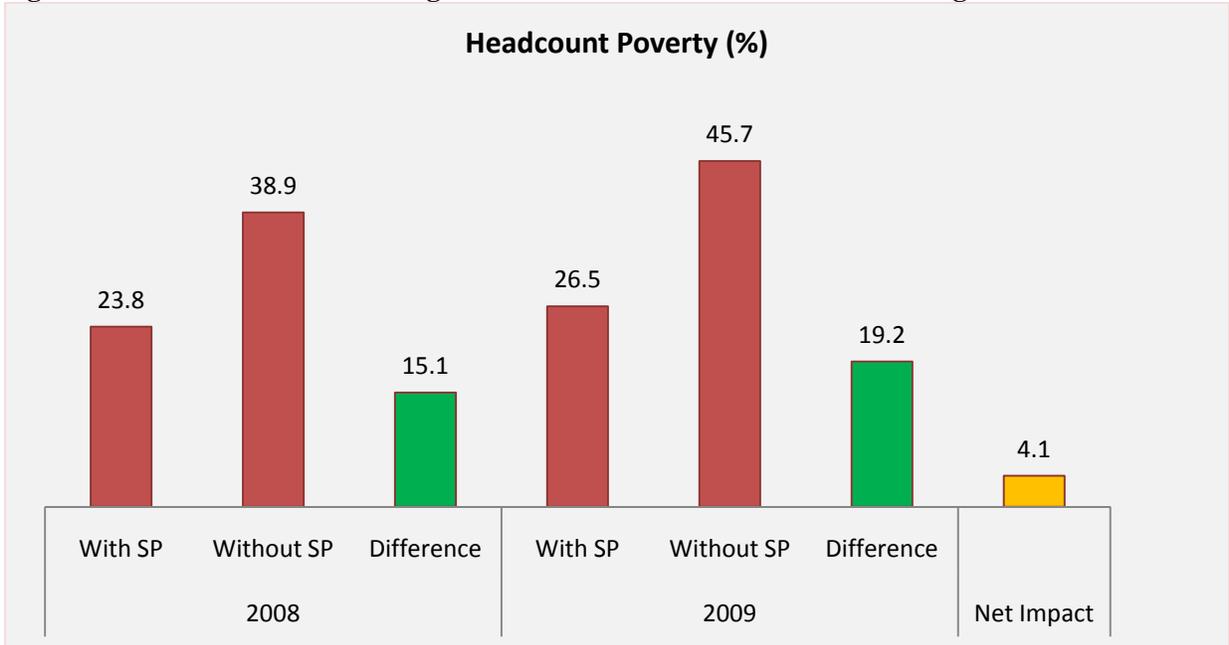
Source: Armenia IILCS 2007, 2008 and 2009.

4.31. **Significant commitment by the government to protect pro-poor spending has enhanced the mitigation impact of the social protection programs during the crisis.** Our analysis suggests that social protection programs have played a significantly larger role in mitigating the poverty impact of the crisis than other coping strategies. The increased importance of public transfers can be explained by two factors. First, decline in other sources of income due to the crisis would have enhanced the marginal impact on poverty of the public transfers. It is likely that more households would have combined income from all sources, not including public transfers, below the poverty line following the crisis than before the crisis. Therefore, a public transfer, whether it is the form of pensions or the Family Benefit, was more likely to lift more households above the poverty threshold in 2009 than in 2008. Second, the average size of pension and Family Benefit increased in 2009, compared to 2008. Finally, the government's decision to protect the priority social spending programs, while other government programs suffered budget cuts, ensured that these programs did not decline during the crisis and provided the needed cushion to the beneficiaries.

4.32. **Social protection measures helped avoid about a 4.1-percentage-point potential increase in poverty** (Figure IV.8), indicating their enhanced importance during the crisis. That means, the policy response measures have accounted for 84 percent of the estimated 4.9-percentage-point potential increase in poverty avoided (Figure II.14). All other strategies,

including households' own coping mechanisms, may have contributed only the remaining 0.8-percentage-point potential increase in poverty avoided between 2008 and 2009. Note that had these priority social spending programs been subjected to the same across-the-board cuts, their poverty reduction impact would have been diminished rather than enhanced. For example, a 15 percent decline in public transfers, commensurate with the decline in GDP, would have meant an increase in overall poverty by about 3.5 percentage points to 29 percent in 2009, instead of 26.5 percent.

Figure IV.8: Social Protection Programs Provided the most Protection during the Crisis



Source: Armenia ILCS 2008 and 2009.

V. Conclusions and Policy Implications

5.1. **The 2008–09 global economic crisis disrupted the robust poverty reduction momentum that Armenia enjoyed in recent years.** Armenia experienced the most severe economic contraction since the early years of transition. Real GDP growth fell by 15.6 percent in 2009, making Armenia one of the hardest hit countries in the region. The resulting slowdown in growth and domestic and foreign investment has led to job and income losses for the citizens and shrank the tax base for the government. Recognizing the seriousness of the crisis, the GAO took a number of steps to maintain macroeconomic stability and to provide a cushion to the poor and vulnerable against the crisis. The GAO mobilized additional funding to spur domestic demand, boost liquidity in the real estate sector, and support SMEs and other investment projects that generate employment. It allowed exchange rate adjustment of the dram. More important, the Armenian authorities protected spending on priority social programs and made concerted efforts to use employment and social policies to mitigate the impact of the crisis. Armenia also employed measures to improve the efficiency of spending through better targeting of its signature last-resort social assistance program, that is, the Family Benefit (FB). These measures were anticipated to help lessen the impact of the crisis on the poor and the vulnerable.

5.2. **This report presented an empirical estimation of the actual welfare impact of the crisis and assessed the effectiveness of public and private coping strategies in providing mitigation against the crisis.** It finds that about 40 percent of Armenian households suffered the direct impact of the crisis through loss of labor income, remittances, or income from farm activities. Household real consumption declined by about 12 percent. As a result, the crisis has reversed Armenia's poverty reduction momentum. For the first time since the late 1990s, poverty incidence increased in Armenia in 2009 by an estimated 3 percentage points. The increase in poverty incidence was driven by a decline in growth, while improved distribution helped lessen the impact.

5.3. **While households employed several coping strategies, they were less effective in the face of a covariate shock; some of the strategies households resorted to can be potentially harmful in the long run.** Over 50 percent of the poorest quintile reported consuming poorer-quality food items, reduced or stopped visits to health centers, and reduced or stopped the purchase of medicines. Thus, the crisis could jeopardize long-term welfare, particularly due to cuts in healthcare, nutrition, and education spending, with disproportionately larger impact on the poor and vulnerable. The poorer households are much more likely to cut food consumption than households with higher income levels, as are households that reported being affected by the crisis than those that were not affected.

5.4. **On the other hand, public policy response measures were highly effective in providing mitigation against the crisis.** The observed increase in poverty was substantially lower than what would have occurred in the absence of public policy measures, which provided significant protection to the poor and vulnerable. While the GOA's crisis response has been multipronged, most important for the poor and vulnerable was the protection of priority social spending in last-resort social assistance program and pensions. Armenia was able to reduce the

poverty impact of the crisis from a projected 8-percentage-point increase to the actual 3-percentage-point increase.

5.5. Moreover, the GOA was able to substantially improve the efficiency of spending on its signature last-resort social assistance program. The Family Benefit (FB) achieved a better targeting performance in 2009 compared to a relative poor performance in 2007, and the efforts made to improve targeting accuracy in 2008 paid off significantly. About 61 percent of the FB benefits went to the bottom quintile, making it one of the well-targeted programs in the region. About 70 percent of FB benefits went to the poor in 2009 compared to only 48 percent in 2007. The FB's targeting accuracy improved substantially from 43 percent of program resources going to the poorest 20 percent of the population in 2007 to 61 percent in 2009. According to the 2009 Integrated Living Conditions Survey (ILCS) data, the lion's share of the program's resources reached the poor, and the majority of the beneficiaries are the poor and vulnerable populations. As a result, the program provided a significant cushion against the impact of the crisis.

5.6. The main challenge for Armenia with regard to its social protection to the poor is to improve the FB's outreach so that it covers more of the deserving poor population. Currently, only 36 percent of the poor are covered by the program. Although this is an improvement from the coverage rate before the crisis, the program leaves out nearly two-thirds of Armenia's poor. Assessments highlighted that simplification of certification requirements and stepping up outreach efforts could immensely help in achieving higher coverage. The current certification process imposes a significant burden on households in terms of time and effort to gather all the required documents and have them certified by municipalities. These cumbersome procedures are also susceptible to red tape, which may have frustrated many poor families into giving up applying altogether, contributing to fairly low coverage of the FB among the poor.

5.7. Expanding coverage has significant fiscal implications and needs to be undertaken while ensuring fiscal sustainability. The GOA currently has an ambitious target of covering 55 percent of the poor by the FB program by 2011. Table V.1 presents the estimated cost of expanding the program under different coverage scenarios.¹³ As can be seen from the table, there is a large discrepancy between the expected target goal and the budget allocations in the 2010 budget and that proposed under the Medium Term Expenditure Framework (MTEF) for 2011 (see World Bank, 2010). Assuming no substantial improvement in targeting from that achieved in 2009 (as presented in Section IV), the number of FB beneficiaries would need to increase from the current 108,300 to about 192,400, to ensure 55 percent coverage of the poor by the FB program. That would mean the FB allocation will have to increase to over ADM 60 billion by 2011 (see Table V.1). Therefore, increasing the FB program coverage of the poor to 55 percent by 2011 is not only ambitious but also not currently adequately funded, according to current and planned budget information available.

¹³ The fiscal cost estimates take into account the increase in poverty by 3 percentage points in 2009. It assumes poverty would stagnate in 2010 and 2011, and the 2009 targeting accuracy of 70 percent of the program resources accruing to the poor is maintained.

Table V.1: Fiscal Cost Estimation of Expanding the Family Benefit Program in Armenia

	Base Coverage (2009)	Different Rates of Coverage					
		35	40	45	50	55	60
Coverage of poor (%)	31						
Number of FB beneficiary families	108,460	122,455	139,948	157,442	174,935	192,429	209,923
Annual cost of the program (billion AMD)	32.32	38.32	43.79	49.27	54.74	60.22	65.69
Average cost of program per beneficiary family per year (AMD)	298,030	312,931	312,931	312,931	312,931	312,931	312,931
Annual Cost of program (% , 2009 GDP)	1.02	1.21	1.38	1.56	1.73	1.90	2.08

5.8. **Given the high likelihood that the impact of the crisis will linger for some time to come, there is the need for continued robust mitigation measures for the most vulnerable households.** These may include expansion of the existing last-resort program to cover more deserving families, supporting programs that generate employment and earnings, and expansion of the unemployment benefit program that currently covers only one in five of the registered unemployed. Given that the program should act as an automatic stabilizer, the conditions for phasing it out should depend on job creation and further poverty reduction, and on ensuring the overall fiscal sustainability.

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Annex A: Methodology for Measuring the Poverty Impact of the Crisis

At the onset of the global economic crisis, micro-simulations were used to project the potential poverty impact of the crisis under alternative growth scenarios. The simulations allowed forecasting poverty levels beyond the most recent available national household survey data available before the crisis. The main simulation employed for Armenia has been PovStat, an Excel-based program designed to forecast or project various poverty measures over a future projection horizon. PovStat generates poverty projections using country-specific (unit record) household survey data and a set of user-supplied macroeconomic projection parameters. While survey data provide the distribution of household living standards in the country at a point in time, the projection parameters characterize a particular projection scenario.

Povstat Methodology. To calculate poverty indexes, PovStat uses per capita consumption as the measure of welfare. The basic methodology underlying PovStat is that the rate and sectoral pattern of growth determine how poverty measures evolve over time. In particular, PovStat starts with the initial assumption that household per capita consumption grows at the same rate as that of per capita output in the sector of employment of the household head. This assumption implies constant relative inequalities *within* sectors. The assumption can, however, be relaxed at the user's discretion by specifying a rate of increase/decrease in inequalities within any sector over the projection horizon.

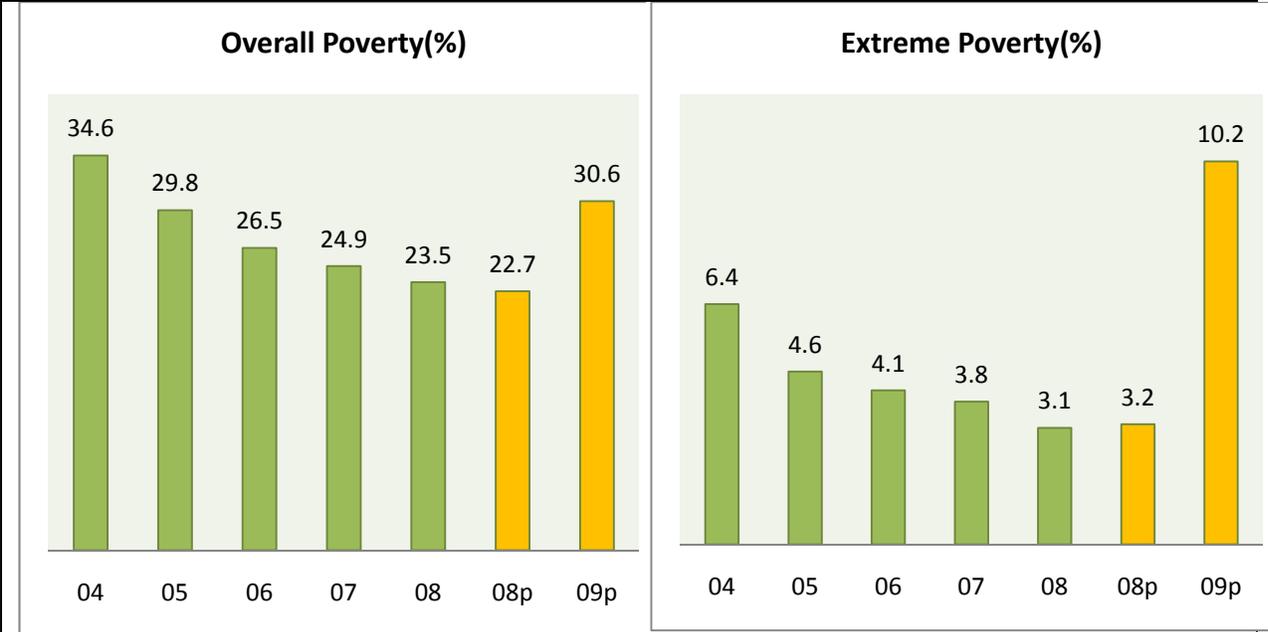
However, PovStat does not capture heterogeneity within households with multiple income earners in different sectors. This is mainly on account of the nature of data availability. If such data were available, PovStat could be easily run with individual rather than household-level data. PovStat allows poverty projections to be further conditioned by a number of projection parameters. Besides the rate of output growth by sector, the additional projection parameters relate to: (a) employment shifts across sectors, (b) changing terms of trade reflecting differential prices faced by consumers and producers, (c) changes in the relative price of food that is a prominent part of the poor's consumption bundle, (d) changes in inequality within sectors, (e) changes in the average consumption-income ratio, and (f) statistical drift in consumption growth between the national accounts and the surveys. By allowing these adjustments to be built into the projections, PovStat offers a flexible approach to poverty projection that could help avoid the biases typically associated with the simple back-of-the-envelope forecasts relying only on per capita GDP growth and an empirical elasticity of poverty measures with respect to growth. For detailed specification of these projection parameters and their implementation within PovStat, please refer to the User Manual by Datt and Walker (2006).

Main Results. Simulations of the impact of the crisis using the PovStat methodology suggest that Armenia could see a substantial increase in poverty rates in 2009, signaling a reversal in poverty trends and the gains in poverty reduction. The overall poverty incidence could increase by about 8.0 percentage points between 2008 and 2009 (Figure A.1, left panel). That means 140,000

people could fall below the poverty line in 2009. The projected poverty level in 2009 would be higher than that in 2005, implying that the poverty reductions recorded between 2005 and 2008 would be more than fully offset by poverty increases due to the crisis. The increase in the poverty gap would be more pronounced as the already poor become poorer.

The extreme poverty incidence and gap would increase by a substantially larger margin, reaching levels not seen since the early 2000s. Extreme poverty in Armenia is highly responsive to shocks due to the concentration of the poor just above the extreme poverty line. The levels of extreme poverty indexes in 2009 could easily surpass their corresponding levels in 2004 (Figure A.1, right panel). As a result, an estimated 149,000 people could fall below the extreme poverty threshold in 2009. The size of the extreme poor in 2010 could outnumber that in 2004 by about 77,000 people.

Figure A.1: Overall and Extreme Poverty Trends and Projections, 2004–09



Sources: NSS; World Bank staff estimates based on ILCS 2007, and growth and employment, remittances, and price change projections.

Annex B: Statistical Tables of Results

Table B.1: Coverage: 2009

	Quintiles of per ae consumption, net of each SP transfer						Poverty Status		Area of residence	
	Total	Q1	Q2	Q3	Q4	Q5	P	NP	Urban	Rural
All social protection	58.9	96.9	71.8	50.6	40.5	34.9	82.5	40.9	57.8	61.1
All social insurance	51.6	91.4	59.5	43.0	33.5	30.8	75.5	35.5	50.5	53.8
Pension	51.6	91.4	59.5	43.0	33.5	30.8	75.5	35.5	50.5	53.8
All labor market programs	1.0	1.3	0.8	2.0	0.3	0.3	1.3	0.8	1.4	0.1
Unemployment benefit	1.0	1.3	0.8	2.0	0.3	0.3	1.3	0.8	1.4	0.1
All social assistance	16.7	39.0	16.9	10.5	11.4	5.6	33.9	9.9	14.9	20.1
Family benefits	12.6	35.8	13.2	6.2	5.5	2.1	30.7	5.6	9.9	17.6
Other benefits + compensation for privileges + humanitarian assistance + Scholar	4.6	5.5	4.0	4.2	5.9	3.4	5.4	4.3	5.6	2.7

Notes:

Program coverage is the portion of population in each group that receives the transfer.

Specifically, coverage is: (Number of individuals in the group who live in a household where at least one member receives the transfer)/(Number of individuals in the group).

Program coverage is calculated setting as expansion factor the household expansion factor multiplied by the household size.

Table B.2: Coverage: 2007

	Quintiles of per ae consumption, net of each SP transfer						Poverty Status		Area of residence	
	Total	Q1	Q2	Q3	Q4	Q5	P	NP	Urban	Rural
All social protection	57.0	83.4	62.8	55.2	44.0	39.7	72.5	49.7	54.0	62.4
All social insurance	47.9	70.7	54.3	46.4	35.7	32.4	61.6	42.0	43.9	55.1
Pension	47.9	70.7	54.3	46.4	35.7	32.4	61.6	42.0	43.9	55.1
All labor market programs	0.4	0.7	0.3	0.4	0.3	0.1	0.6	0.3	0.5	0.1
Unemployment benefit	0.4	0.7	0.3	0.4	0.3	0.1	0.6	0.3	0.5	0.1
All social assistance	20.4	36.7	25.3	14.9	13.7	11.3	32.1	16.3	19.6	21.7
Family benefits	15.2	32.6	20.9	11.0	6.7	4.7	28.4	10.7	13.5	18.2
Other benefits + compensation for privileges + humanitarian assistance + Scholar	5.9	5.5	5.1	4.5	7.0	7.4	5.3	6.1	6.8	4.3

Notes:

Program coverage is the portion of population in each group that receives the transfer.

Specifically, coverage is: (Number of individuals in the group who live in a household where at least one member receives the transfer)/(Number of individuals in the group).

Program coverage is calculated setting as expansion factor the household expansion factor multiplied by the household size.

Table B.3: Benefit Incidence: 2009

	Quintiles of per ae consumption, net of each SP transfer					Poverty Status		Area of residence		
	Total	Q1	Q2	Q3	Q4	Q5	P	NP	Urban	Rural
All social protection	100.0	32.9	24.4	17.2	13.7	11.8	60.7	39.3	64.4	35.6
All social insurance	100.0	35.4	23.0	16.7	13.0	11.9	59.0	41.0	64.3	35.7
Pension	100.0	35.4	23.0	16.7	13.0	11.9	59.0	41.0	64.3	35.7
All labor market programs	100.0	28.1	16.4	41.4	6.9	7.2	33.9	66.1	95.6	4.4
Unemployment benefit	100.0	28.1	16.4	41.4	6.9	7.2	33.9	66.1	95.6	4.4
All social assistance	100.0	46.8	20.3	12.7	13.6	6.7	57.1	42.9	58.7	41.3
Family benefits	100.0	57.0	21.0	9.8	8.8	3.4	68.0	32.0	52.0	48.0
Other benefits + compensation for privileges + humanitarian assistance + Scholar	100.0	24.0	17.2	18.1	25.7	15.0	29.3	70.7	79.8	20.2

Notes:

Beneficiaries' incidence show the proportion of beneficiaries in each group.

Specifically, beneficiaries' incidence is: (Number of individuals in the group who live in a household where at least one member receives the transfer)/(Total number of direct and indirect beneficiaries).

Beneficiaries' incidence is calculated setting as expansion factor the household expansion factor multiplied by the household size.

Table B. 4: Benefit Incidence: 2007

	Quintiles of per ae consumption, net of each SP transfer					Poverty Status		Area of residence		
	Total	Q1	Q2	Q3	Q4	Q5	P	NP	Urban	Rural
All social protection	100.0	29.2	22.0	19.3	15.4	13.9	40.7	59.3	60.8	39.2
All social insurance	100.0	29.5	22.7	19.4	14.9	13.5	38.8	61.2	58.8	41.2
Pension	100.0	29.5	22.7	19.4	14.9	13.5	38.8	61.2	58.8	41.2
All labor market programs	100.0	39.5	18.1	22.6	16.4	3.4	41.0	59.0	87.0	13.0
Unemployment benefit	100.0	39.5	18.1	22.6	16.4	3.4	41.0	59.0	87.0	13.0
All social assistance	100.0	36.0	24.9	14.6	13.4	11.1	40.4	59.6	61.9	38.1
Family benefits	100.0	43.0	27.6	14.5	8.8	6.2	47.6	52.4	56.9	43.1
Other benefits + compensation for privileges + humanitarian assistance + Scholar	100.0	18.6	17.3	15.1	23.8	25.1	21.7	78.3	74.1	25.9

Notes:

Beneficiaries' incidence show the proportion of beneficiaries in each group.

Specifically, beneficiaries' incidence is: (Number of individuals in the group who live in a household where at least one member receives the transfer)/(Total number of direct and indirect beneficiaries).

Beneficiaries' incidence is calculated setting as expansion factor the household expansion factor multiplied by the household size.

Table B. 5: Adequacy: 2009

	Quintiles of per ae consumption, net of each SP transfer					Poverty Status		Area of residence		
	Total	Q1	Q2	Q3	Q4	Q5	P	NP	Urban	Rural
All social protection	32.6	71.6	32.7	24.7	19.7	12.4	51.6	17.5	32.1	33.6
All social insurance	31.4	64.7	30.8	23.5	20.5	12.8	49.4	17.9	31.5	31.2
Pension	31.4	64.7	30.8	23.5	20.5	12.8	49.4	17.9	31.5	31.2
All labor market programs	15.2	24.2	15.4	12.6	12.4	12.9	21.8	13.1	15.1	20.2
Unemployment benefit	15.2	24.2	15.4	12.6	12.4	12.9	21.8	13.1	15.1	20.2
All social assistance	18.0	33.7	16.6	12.3	8.6	5.5	30.1	9.8	17.1	19.5
Family benefits	23.1	33.5	19.0	16.6	13.0	9.1	30.6	14.6	24.7	21.3
Other benefits + compensation for privileges + humanitarian assistance + Scholar	6.7	20.7	7.7	4.8	4.4	3.2	17.9	4.5	6.3	9.0

Notes:

Generosity is the mean value of the share transfer amount received by all beneficiaries in a group as a share of total welfare aggregate of the beneficiaries in that group.

Generosity is calculated setting as expansion factor the household expansion factor multiplied by the household size.

Generosity expressed in LCU.

Table B. 6: Adequacy: 2007

	Quintiles of per ae consumption, net of each SP transfer					Poverty Status		Area of residence		
	Total	Q1	Q2	Q3	Q4	Q5	P	NP	Urban	Rural
All social protection	18.4	43.6	22.8	16.2	11.6	7.2	37.2	12.1	18.3	18.6
All social insurance	17.2	38.2	20.8	14.2	11.7	7.5	33.8	11.9	17.8	16.2
Pension	17.2	38.2	20.8	14.2	11.7	7.5	33.8	11.9	17.8	16.2
All labor market programs	11.2	15.2	14.1	9.9	7.9	6.2	15.1	10.0	11.1	12.0
Unemployment benefit	11.2	15.2	14.1	9.9	7.9	6.2	15.1	10.0	11.1	12.0
All social assistance	11.7	25.0	14.8	10.7	7.1	3.6	24.0	8.2	11.0	13.0
Family benefits	15.8	25.8	16.6	12.6	10.3	6.2	25.0	11.8	16.6	14.8
Other benefits + compensation for privileges + humanitarian assistance + Scholar	3.9	14.2	5.4	4.0	3.9	1.8	12.7	3.0	3.8	4.4

Notes:

Generosity is the mean value of the share transfer amount received by all beneficiaries in a group as a share of total welfare aggregate of the beneficiaries in that group.

Generosity is calculated setting as expansion factor the household expansion factor multiplied by the household size.

Generosity expressed in LCU.

Table B. 7: Targeting Accuracy: 2009

	Quintiles of per ae consumption, net of each SP transfer						Poverty Status		Area of residence	
	Total	Q1	Q2	Q3	Q4	Q5	P	NP	Urban	Rural
All social protection	100.0	48.0	19.4	12.7	10.5	9.4	70.1	29.9	65.5	34.5
All social insurance	100.0	48.5	18.3	12.3	10.8	10.1	67.4	32.6	66.2	33.8
Pension	100.0	48.5	18.3	12.3	10.8	10.1	67.4	32.6	66.2	33.8
All labor market programs	100.0	30.4	14.2	36.4	6.6	12.4	34.7	65.3	96.5	3.5
Unemployment benefit	100.0	30.4	14.2	36.4	6.6	12.4	34.7	65.3	96.5	3.5
All social assistance	100.0	58.3	17.7	10.2	9.0	4.8	67.4	32.6	59.1	40.9
Family benefits	100.0	61.2	18.3	9.2	7.8	3.6	70.3	29.7	56.4	43.6
Other benefits + compensation for privileges + humanitarian assistance + Scholar	100.0	41.2	15.0	12.0	18.2	13.5	45.2	54.8	76.8	23.2

Notes:

Benefits' incidence is the transfer amount received by the group as a percent of total transfers received by the population

Specifically, benefits' incidence is: (Sum of all transfers received by all individuals in the group)/(Sum of all transfers received by all individuals in the population).

Aggregated transfer amounts are estimated using household size-weighted expansion factors.

Table B. 8: Targeting Accuracy: 2007

	Quintiles of per ae consumption, net of each SP transfer						Poverty Status		Area of residence	
	Total	Q1	Q2	Q3	Q4	Q5	P	NP	Urban	Rural
All social protection	100.0	39.1	21.6	16.1	11.8	11.4	50.8	49.2	62.2	37.8
All social insurance	100.0	38.0	22.3	15.1	12.5	12.1	47.6	52.4	62.8	37.2
Pension	100.0	38.0	22.3	15.1	12.5	12.1	47.6	52.4	62.8	37.2
All labor market programs	100.0	30.9	24.2	23.6	18.6	2.6	32.4	67.6	83.7	16.3
Unemployment benefit	100.0	30.9	24.2	23.6	18.6	2.6	32.4	67.6	83.7	16.3
All social assistance	100.0	41.2	26.2	13.8	10.6	8.2	46.1	53.9	59.8	40.2
Family benefits	100.0	43.2	27.9	14.1	8.7	6.2	48.0	52.0	57.6	42.4
Other benefits + compensation for privileges + humanitarian assistance + Scholar	100.0	28.6	14.4	11.9	23.3	21.8	30.6	69.4	74.4	25.6

Notes:

Benefits' incidence is the transfer amount received by the group as a percent of total transfers received by the population

Specifically, benefits' incidence is: (Sum of all transfers received by all individuals in the group)/(Sum of all transfers received by all individuals in the population).

Aggregated transfer amounts are estimated using household size-weighted expansion factors.