

98281



Activation for Poverty Reduction

**Realizing the Potential of
Armenia's Social Safety Nets**

September 2014

Social Protection and Labor Global Practice



Acknowledgments

This note was prepared by the team led by Matteo Morgandi that includes Josefina Posadas and Tomas Damerau, under the supervision of Ximena Del Carpio and Rebekka Grun (task team leaders of the Labor Market and Social Inclusion Technical Assistance P132514). Paula Cerutti, Soledad Giardili, Lisa Oberlander, and Laura Sinn provided analytical and research inputs. Background papers informing the note were prepared by Denis Nikitin (Benefit Formula Analysis), Susanna Karapetyan (Stocktaking of SP Benefits), Paula Nagler (Analysis of GORT administrative data), and Lisa Oberlander (OECD Tax and Benefit Model for Armenia). The note benefitted greatly from the feedback provided by the staff of the Ministry of Labor and Social Issues at different consultative stages, by peer reviewers Aline Coudel, Kathy Lindert, and Nistha Sinha, as well as various colleagues, including Boryana Gotcheva, Aylin Isik-Dikmelik, Aleksan Hovhannisyan, and sector and practice managers Omar Arias and Andy Mason. Lauri S. Scherer professionally edited the note. Sujani Eli and Satik Nairian provided administrative support.

Cite as: Morgandi M., J. Posadas and T. Damerau. 2014. "Activation for Poverty Reduction. Realizing the Potential of Armenia's Social Safety Nets". Social Protection and Labor Global Practice, The World Bank, Washington DC.

Disclaimer

This report is a product of the staff of the International Bank for Reconstruction and Development / The World Bank. The findings, interpretations, and conclusions expressed in this volume do not necessarily reflect the views of the Executive Directors of The World Bank or the governments they represent.

Table of Contents

ABBREVIATIONS.....	3
EXECUTIVE SUMMARY	5
INTRODUCTION	5
ACTIVATION FOR WHOM? A PROFILE OF ARMENIA'S VULNERABLE WORKING-AGE POPULATION	5
FAVORING ACTIVE INCLUSION: IS THE CURRENT BENEFIT SYSTEM READY FOR ACTIVATION?.....	8
PRIORITIES FOR A NASCENT ACTIVATION SYSTEM	10
CHAPTER 1. A PROFILE OF THE CLIENTS OF ACTIVATION IN ARMENIA.....	14
INTRODUCTION	15
THE PROFILE OF ARMENIA'S VULNERABLE POPULATION.....	17
WHAT CAN EXPLAIN THE BLEAK EMPLOYMENT OUTCOMES AMONG POOR AND SA BENEFICIARIES?.....	25
CHAPTER 2. IS THE SOCIAL PROTECTION SYSTEM READY FOR ACTIVATION?	30
INTRODUCTION	31
MAIN CHARACTERISTICS OF ARMENIA'S SOCIAL ASSISTANCE AND LABOR BENEFIT SYSTEM	32
PERFORMANCE OF THE SOCIAL ASSISTANCE SYSTEM IN PROTECTING FROM POVERTY	36
PERFORMANCE OF THE FAMILY BENEFIT PROGRAM IN TERMS OF ACTIVATION.....	43
HOW MUCH POTENTIAL FOR ACTIVATION EXISTS IN THE FAMILY BENEFIT PROGRAM POPULATION?	43
MOBILITY AND GRADUATION PATTERNS AMONG SOCIAL ASSISTANCE BENEFICIARIES.....	45
COULD ACTIVATION MEASURES ENHANCE GRADUATION OF SOCIAL ASSISTANCE BENEFICIARIES?.....	52
CHAPTER 3. PRIORITIES FOR A NASCENT ACTIVATION SYSTEM	56
INTRODUCTION	57
REDESIGN THE TARGETING SYSTEM TO REDUCE COVERAGE GAPS AND ENHANCE COORDINATION	58
ENHANCE PROGRAM DESIGN TO IMPROVE EMPLOYMENT PROSPECTS OF WORK-ABLE INDIVIDUALS AND THE HUMAN CAPITAL OF THE FUTURE WORKFORCE.....	61
ACTIVATION PROGRAMS FOR THE LABOR MARKET INSERTION OF WORK-ABLE BENEFICIARIES	63
CONDITIONALITIES TO ENHANCE HUMAN CAPITAL ACCUMULATION OF THE FUTURE GENERATION	67
REFERENCES	72
ANNEX 1. BEHAVIORAL REQUIREMENTS AND BENEFIT SANCTIONS IN SELECTED OECD AND EASTERN EUROPEAN COUNTRIES	76
ANNEX 2. STATISTICAL PROFILE OF VULNERABLE GROUPS	84
ANNEX 3. TAX AND BENEFIT MODEL: ADDITIONAL SIMULATIONS	89

Abbreviations

ALMP	Active Labor Market Program
AW	Average wage
CCT	Conditional cash transfer
CRRC	Caucasus Research Resource Center
CWI	Center for Work and Income
ECA	Europe and Central Asia
EU	European Union
FB	Family benefit
FBP	Family Benefit Program
GDP	Gross domestic product
GoA	Government of Armenia
ILCS	Integrated Living Conditions Survey
LCT	Labeled cash transfer
LTU	Long-term unemployment
LM	Labor market
LRSA	Last Resort Social Assistance Program
MIS	Management Information System
MOLSI	Ministry of Labor and Social Issues
MW	Minimum wage
OECD	Organisation for Economic Co-operation and Development
PES	Public Employment Services
PMT	Proxy-means test
SA	Social assistance
SESA	State Employment Service Agency

SI	Social insurance
SMEC	Social Medical Expertise Commission
SP	Social protection
SPAP	Social Protection Administration Project
SSN	Social safety net
SSSS	State Social Security Service
TSSU	Territorial social services unit
UB	Unemployment benefit
UCT	Unconditional cash transfer

Executive Summary

Introduction

Since the peak of the economic crisis, poverty reduction in Armenia has made limited progress, with poverty rates moving from 34.1 percent in 2009 to 32 percent in 2013. This slow pace has been mirrored by the limited progress of the labor market (LM), particularly in terms of job-creation. In 2013, about 36 percent of people worked in the agricultural sector, and about half of all workers earned wages through informal jobs.

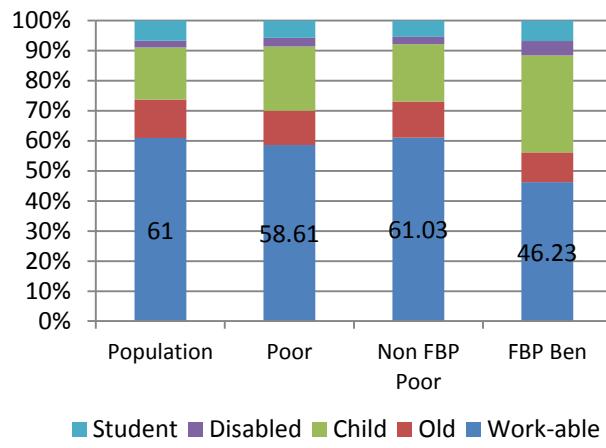
These conditions highlight the need to have a robust social protection (SP) system that not only offers adequate protection to people living in poverty but can also serve as a tool to increase the quality of human capital, which in turn can help improve their economic opportunities. The government of Armenia (GoA) has shown a clear interest in building its infrastructure to deliver SP services through integrated social service centers as a means to better harness its investment in SP. Its vision is to ultimately implement an integrated social policy that personalizes interventions and tries to address multiple constraints that people face when trying to escape poverty—not only through the provision of cash benefits.

The objective of this policy note is twofold. First, it provides a diagnostic of the SP system in order to identify the key issues that could be addressed to enhance its effectiveness and efficiency to achieve greater poverty reduction. Second, the note outlines a set of options—policies and reforms—for the GoA to consider as it continues to strengthen its poverty-reduction strategy. It is important to note that the focus of the report is on social assistance (SA) and LM policies for vulnerable groups. Other key aspects of SP—such as pensions, labor regulations, or the functioning of the LM as a whole—are not addressed in this report, and they have been the subject of extensive analysis elsewhere.

A profile of Armenia's vulnerable working-age population

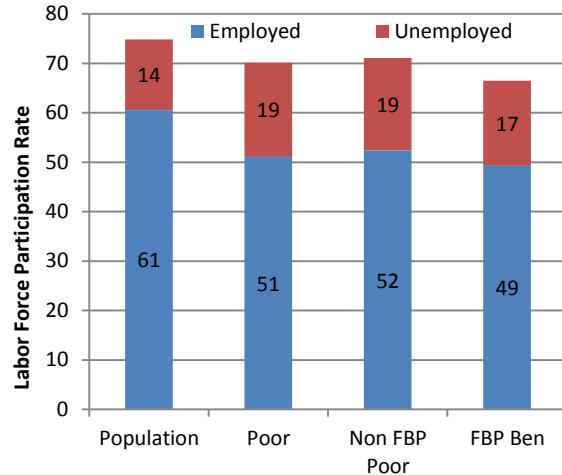
Activation is a coordinated package of policies that includes incentives, programs, and financial support to favor the inclusion of the vulnerable population into the LM as a means for sustainable poverty reduction. For this reason, activation policies focus only on work-able individuals. Survey data suggests that 61 percent of the population in Armenia could be presumed to be able to work, that is, they are not in school, are able-bodied, and are of working age (Figure A). Within the vulnerable population, the poor who are not covered by safety nets exhibit similar demographic characteristics to the rest of the population; on the other hand, households that receive SA have on average many more members that cannot be expected to work than the average of the population. This is the result of the targeting rules of these benefits.

Figure A. Demographic composition across population typologies



Source: Armenia Integrated Living Conditions Survey (ILCS) 2011.

Figure B. Labor force participation rates of work-able population, by group



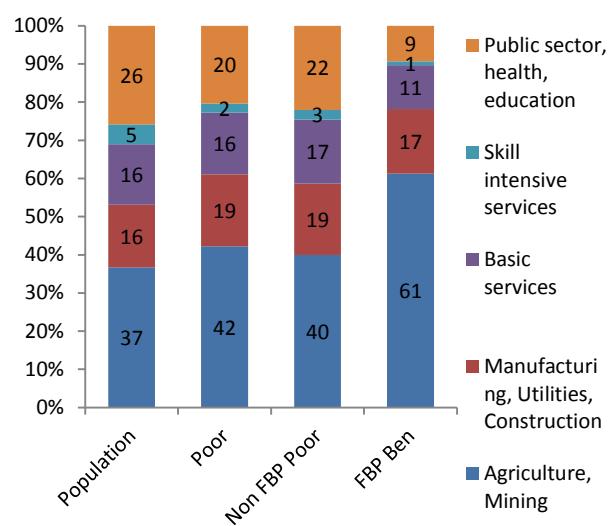
Source: ILCS 2011.

Note: Work-able population only.

In spite of this still favorable demographic situation, only one out of three individuals who could work is actually employed, and LM outcomes among vulnerable groups are considerably worse. While labor force participation rates are nearly the same among the poor and the general population, the employment rates of the poor are 12 percentage points lower than the national average (Figure B). This highlights the important nexus between joblessness and poverty in Armenia. Safety net beneficiaries, particularly those in the Family Benefit Program (FBP), are those who suffer from the highest joblessness rates, in this case driven by particularly low labor force participation rates. Further analysis shows that labor force participation rates are particularly low among women, due to high rates of ‘labor market discouragement’ (defined as the reluctance to search for work in spite of being interested in working).

Surprisingly, the sectors of employment of the poor not covered by family benefit are not radically different from the average population (Figure C). And earnings for the poor not covered by family benefit appear distributed similar to the rest of the population; the propensity to hold informal jobs among the working poor is only 6 percentage points lower than the rest of the population (Figure D). This suggests that ‘low work intensity’—the number of household members who work—is a more important factor to explain household poverty in Armenia, compared to low wages. On the other hand, working FBP beneficiaries stand out for having a much higher share of informal jobs (Figure D), working in agriculture, and being out of wage employment more than all other groups. Their hourly earnings are also markedly lower than the rest of the poor, and overall they work fewer hours. This skewed distribution of safety nets in favor of informal and low paid work is in part driven by the program’s targeting method, as will be explained later.

Figure C. Sector of employment, by group



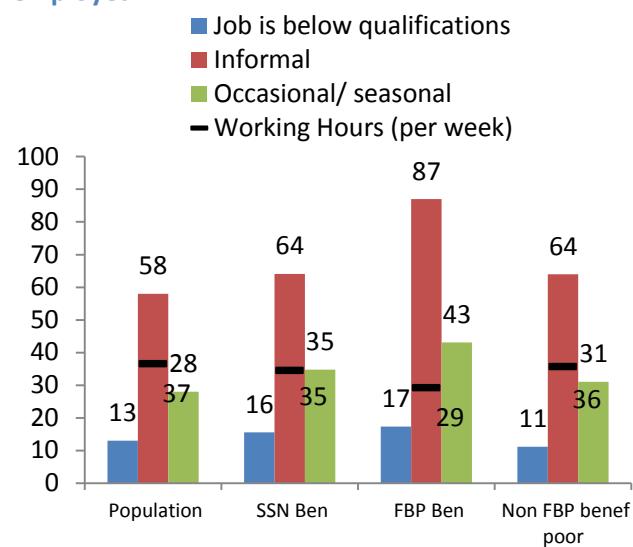
Source: ILCS 2011.

Three main sets of factors can explain why social safety net (SSN) beneficiaries and the poor have worse employment outcomes compared to the general population: first, *employability*, which includes all factors that make an individual suitable for a job (for example, skills and personal attributes); second, *constraints to labor supply* (distribution of caretaking duties in the household, ability to decide to work, preferences, and mobility); and third, *incentives* to participate in formal employment—particularly in the case of SA beneficiaries.

In terms of employability, *prima facie* the basic demographic profile of vulnerable populations is not radically different from the rest of the population. In particular, even if the workable vulnerable groups include a slightly lower share of tertiary educated individuals (Figure E), almost all workable beneficiaries have at least a secondary education degree. Further analysis is thus needed to understand differentials in education and skills quality, unobservable in this data, which are likely to play a more important role in this context than formal diplomas.

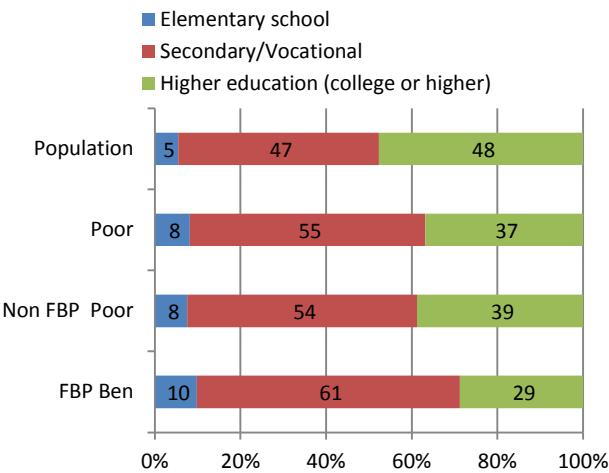
On the other hand, participation constraints are likely to matter much more. In particular, the household structure and number of dependents in poor and SSN beneficiary households is radically different from the general population (Figure F). This is likely to significantly impact the labor supply for some workable members, especially women, who culturally are expected to bear the burden of caretaking. In addition, 41 percent of FBP beneficiaries appear to live in female-headed households, nearly twice as many as the general population.

Figure D. Incidence of low-quality jobs among the employed



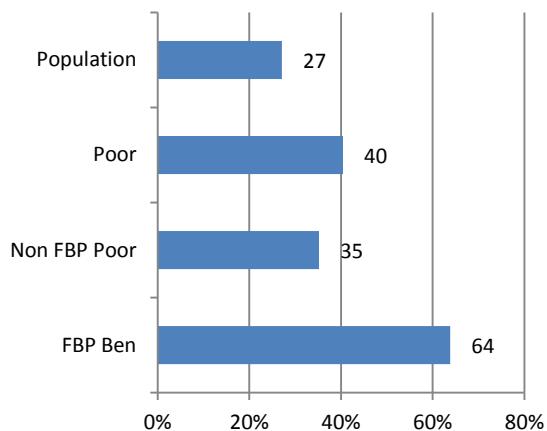
Source: ILCS 2011.

Figure E. Education level of the work-able population, by group **Figure F. Share of households with two or more children aged 0–15 years, by group**



Source: Authors' calculations based on ILCS 2011.

Note: Work-able population only.



Source: Authors' calculations based on ILCS 2011.

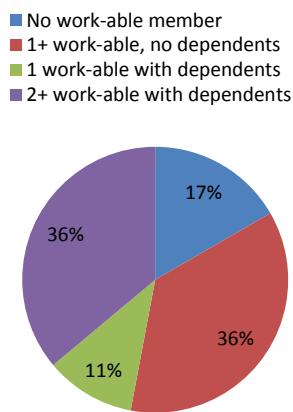
Favoring active inclusion: Is the current benefit system ready for activation?

Compared to the rest of the region, Armenia's spending on SP is very low in terms of gross domestic product (GDP), and nearly all SP spending is allocated to benefits for individuals who are not able to work. In 2012, Armenia spent 5.4 percent of the GDP on social insurance (SI), 1.7 on SA, and about 0.1 percent on the LM, compared to about 8 percent, 2 percent, and 0.5 to 1 percent respectively in the average Europe and Central Asian region country. Programs intended to serve the work-able population as direct beneficiaries include primarily Active Labor Market Programs (ALMPs), and, to some extent, SA benefits that cover the working population, such as the FBP; although these programs and services represent only 6 percent of all SP spending. Thus, the limited protection available for the vulnerable work-able population may indirectly incentivize some of them to enter inactivity-related programs, such as disability pensions or early retirement.

The FBP is the paramount mechanism for protecting the poor. The FBP covers 80 percent of households registered in the SA system and represents .76 percent of expenditure in SA (in 2012); in addition, an emergency benefit provides coverage to a smaller number of households that do not reach the vulnerability threshold to qualify for the FBP (7 percent of households registered). Less than a quarter of all households living below the poverty line received the FBP in 2012. Ninety seven percent of the population knows about the program, and most applicants understand its eligibility criteria in broad terms, so under coverage cannot be explained by lack of information, but rather by the fact that the program size is designed to be relatively small. Although about 60 percent of beneficiaries were pre-transfer poor in 2012, the inclusion error has grown year on year since 2011, suggesting the importance of adjusting coefficients to the new economic structure of poor households in order to make the best of the limited resources.

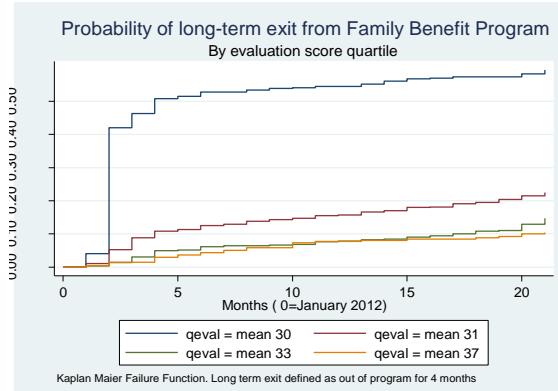
In terms of activation potential, about half of the individuals who benefit from the FBP could be considered work-able, though many have high caretaking duties. According to the administrative database, 49 percent, or about 200,000 individuals, could be considered work-able, that is, of working age (15–64 years) and not recorded as disabled or as students in the family benefit (FB) registry. This figure closely matches the share of work-able individuals derived from the 2011 ILCS of households (46 percent). More than 80 percent of households have at least one work-able member, though a significant share has dependents (see Figure H).

Figure G. FBP beneficiary households typology



Source: Authors' calculation based on MOLSI administrative data 2013.

Figure H. Probability of exit from the program by evaluation score at entry



Source: Authors' calculations based on MOLSI administrative data 2013.

However at present the benefit formula leaves limited space for beneficiaries to try to work in the formal LM. Households with at least one work-able individual and no dependents are much more likely to have an evaluation score close to the threshold of 30 compared to all other household typologies. On the other side of the spectrum, households that have no work-able member, or households with a single earner and many dependents, exhibit a distribution that is more skewed toward higher evaluation scores, and thus with more room to earn a formal income without being disqualified. The OECD tax benefit model applied to Armenia indicates that FBP beneficiary households close to the eligibility threshold may find it too costly to enter the formal LM at low pay. If members take a formal job just above the minimum wage, most of their new income is lost through the combination of paying new taxes and losing their previous benefits. The actual relevance of these incentives will depend to the extent that formal sector jobs at low pay actually exist in the market and are coveted by beneficiaries.

Among beneficiaries, ‘graduation’ is infrequent and highly associated with the vulnerability score at entry, and not necessarily driven by substantial improvement in household conditions. Survival analysis applied to a section of the administrative data¹ indicates that by month 16, a quarter of the

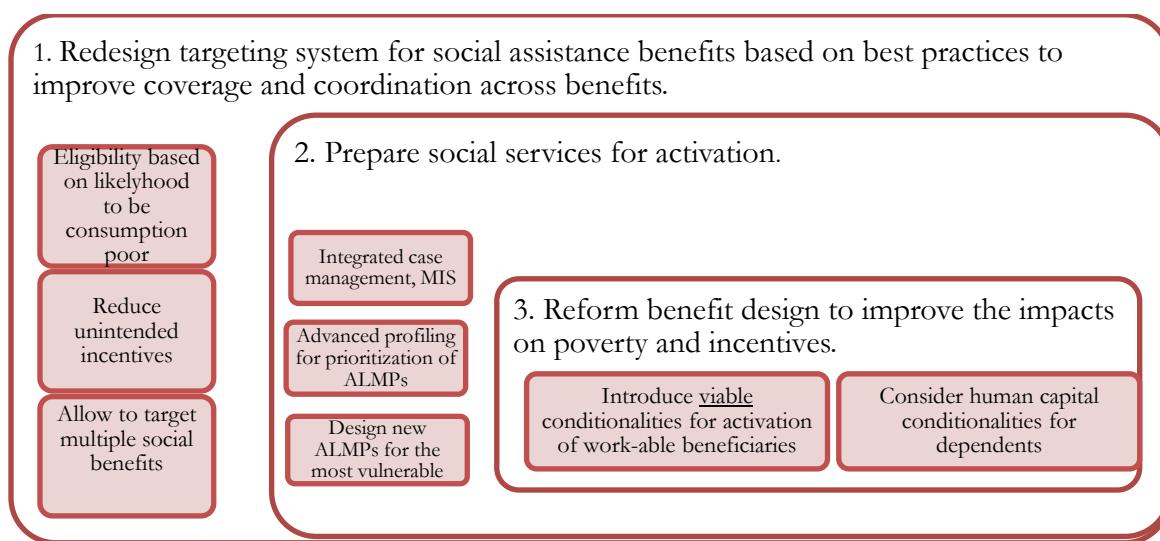
¹ This was computed using 2,131 households that were followed for 20 months and were registered in the program for the first time in January 2012. The choice to follow households for 20 months was dictated by data availability. Because the administrative dataset does not report the actual date of permanence in the program, we define as new entrants those households that were registered in January 2012 but were not beneficiaries in the previous periods available to us: October 2011 to December 2011, and in October of 2008, 2009, and 2010.

households exit the program for at least 4 months. As shown in figure H, the chances for graduating are highly dependent on the score of the household at entry, not much on their level of welfare at exit. Households that graduate do not on average substantially change their economic condition since per capita household incomes increase only by about 5,000 AMD per capita per month (about US\$12). This calls for a new set of rules to define when households should leave the program, more geared to changes to their actual well-being.

Priorities for a nascent activation system

The impact of SP spending on poverty and inclusion could be maximized through improvements at the program and system levels. Armenia's benefit system already displays important strengths—in terms of programs, infrastructure, and resources—to build on for the second generation of integrated SSNs. Figure I provides a summary of the overarching recommendations. The rest of the chapter will focus specifically on areas that are considered a priority, particularly the reform of the targeting system, the potential to introduce benefit conditionalities, and client profiling. There are other important areas for development, such as an integrated information system, the design of new ALMPs, integration models, and case management approaches that are not addressed in this study.²

Figure I. Overview of the main recommendations



Source: Authors' illustration.

First, reforming the FBP targeting formula could simultaneously address multiple issues and serve as the basis for a more integrated protection system. The current formula has served well the needs of the program until present, but now it could be revamped to improve its incentive compatibility with activation, and to adjust to the evolving characteristics of poor households. Simulations based on the ILCS data indicate that using a proxy-means test (PMT) formula in Armenia could help reduce the

² Many of these topics are being addressed as part of the upcoming World Bank Social Protection Administration Project II, or they were defined in the previous project.

inclusion error. In addition, a renewed PMT formula that ranked households in terms of predicted poverty would facilitate a differentiation of benefit eligibility according to different income thresholds—some more geared toward subsistence, others more focused on facilitating graduation. Finally, a gradual phasing out of benefits would reduce the implicit costs of leaving the program for beneficiaries, while safeguards should be maintained for groups that, though not poor, are considered socially vulnerable. The latter could be allowed into the program at a higher eligibility threshold; in addition, the one-off assistance program could complement the FBP to protect individuals who suffer sudden income-shocks, which are not well captured by a PMT formula.

Second, the impact of benefits on poverty could be enhanced if the benefits are tied to conditionalities that have a proven beneficial impact. Activation measures differ broadly based on their objectives, but overall they could be divided in two groups: (i) those that aim to incentivize inclusion in the LM of work-able members who are out of work, and (ii) those to build the human capital of the future workforce. In particular, conditionalities can maximize the impact of transfers if they increase the utilization of services that should—either immediately or in the long run—facilitate poverty reduction. Any mutual obligation program requires an adequate supply of services at the local level in order to be enforceable and fair for beneficiaries. In addition, in some circumstances, conditionalities can discourage individuals from applying for the benefit, if they are not in real need.

Activation programs for work-able individuals will require a combination of LM services and active case management in order to direct individuals toward LM integration. At present, only a small percentage of the work able beneficiaries of the FBP seem to be registered in the public employment services (PES). In addition, currently the PES system does not have the capacity to provide active programs even to one work-able beneficiary per household, due to the low availability of vacancies and of ALMPs. Thus, the introduction of activation conditionalities for all work-able will first require a series of system-level improvements, including: (i) strengthening the incentives to utilize existing services (for instance, by making it mandatory to consult with employment services); (ii) further investing in expanding the capacity of the PES to serve a large number of work-able beneficiaries, both in terms of vacancies collected and of ALMPs; (iii) modifying the benefit formula to reduce disincentives from entry into formal jobs or ALMPs; and (iv) integrating information systems to allow monitoring compliance with conditionalities.

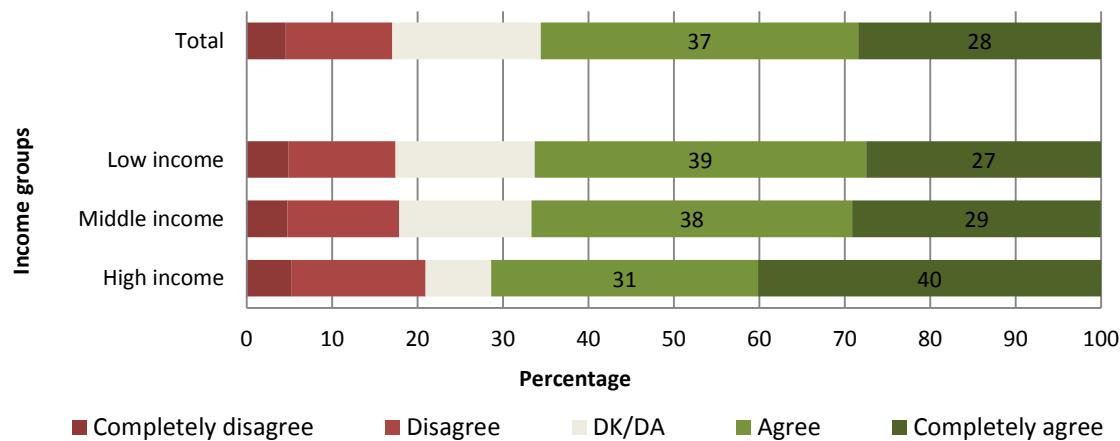
In light of capacity constraints, the use of an advanced system of profiling of work-able beneficiaries, could help identify those who are more likely to need access to the services offered by the State Employment Service Agency (SESA). The introduction of mandatory activation of all work-able beneficiaries does not seem feasible in the short run. To address these constraints, Armenia could consider adopting a statistical profiling system that would prioritize some households for ALMPs. Examples from Ireland, Sweden, and Australia show that administrative data can be used to generate statistical models that are easily implementable in the PES and can predict the duration of the unemployment spells of the registered unemployed, from the day of registration. This allows the early identification of different segments of jobseekers who are more vulnerable, which are then either prioritized for case management meetings or offered ALMPs at higher intensity from the start. Such a system would help one-stop shops or employment services manage the large inflow of beneficiaries and

prioritize clients. A similar model could be generated to identify the typology of households that are least likely to graduate from the FBP over time

For households with children, access to the FBP could be made conditional on fulfilling responsibilities that can help address the health, nutrition, and education deficit accumulated among poor children from a young age. There are a number of potential human capital conditionalities that could tie receipt of the family benefit to the use of services that are critical for the development of children at different ages. For instance, the high rate of malnutrition in poor households among children below 5 years is alarming, and the gap in secondary school graduation rates between the poor and nonpoor is significant and it has recently increased. Thus, in line with experiences in other European and Central Asian countries, secondary education attendance could become a potential benefit conditionality for youth in beneficiary households. Or, if supply was adequately expanded, conditionality for pre-primary education would meet the dual goals of supporting female labor force participation and improving children's life-long learning outcomes. Conditionalities could also be used to expand the attendance of preventive health services for some non-communicable diseases particularly common in Armenia, or to enhance utilization of maternal and child health services to correct severe malnutrition observed among poor children.

From a political economy perspective, the introduction of conditionalities would enhance public support to expand coverage of safety nets to reach a greater share of the poor. Recent opinion polls commissioned for this report suggest that less than half of the adult population in Armenia would support an expansion of the FBP as currently designed. However, as shown in Figure J, if benefits were provided with some conditionalities, such as sending children to school or requiring beneficiaries to look for work, public support for the expansion of SSNs in a budget neutral way would substantially increase.

Figure J. Support for increasing coverage of the FBP if benefit came with conditionality



Source: Caucasus Research Resource Center (CRRC), South Caucasus Barometer Survey 2013.

Note: Figure shows response to the question: "In other countries, SA is given to a larger share of the poor than in Armenia, but, in exchange, recipients are required do certain actions like searching for work, or sending children to school. To what extent do you agree or disagree to extend the number of poor families included in the FBP in exchange of requiring some of these actions from recipients?"

Finally, at the system level, Armenia will need to strengthen coordination across functions, in the context of social service integration. Armenia has already made significant strides in the integration of

its services into ‘one-stop shops’ as a basis for building more synergies across SP functions. Under the first Social Protection Administration Project (SPAP), and in its incipient follow-up investment, SPAP II, the GoA has invested in the colocation of all its SP service functions across the country, with new or upgraded facilities, an integrated management information system, the introduction of new case management procedures, and built up innovative interventions. As a next step, the GoA will need to ensure that the incentives and designs of different programs are mutually reinforcing and compatible. Regardless of the specific activation menu chosen, implementing mutual obligations programs will require trained case managers and a good household profiling system to identify needs and match those with services. These tools seem essential to build a more effective SSN system that makes the best of existing resources.

Chapter 1. A profile of the clients of activation in Armenia

Key Messages

This chapter presents a profile of the potential clients of activation measures.

- Activation is a policy ‘package’ that includes incentives, programs, and financial support to favor the inclusion of the vulnerable population into the LM as a means of sustainable poverty reduction. Among the vulnerable, activation policies focus on work-able individuals.
- This note identifies as targets of activation policies both safety net beneficiaries—FBP beneficiaries in particular—and the poor who are not covered by safety nets.
- Focusing on the work-able SSN beneficiaries alone is unlikely to substantially impact the LM outcomes of Armenia’s poor, because so many of them remain uncovered by SSN.

Large shares of the work-able remain out of work, particularly among vulnerable groups.

- Armenia can count on a relatively large share of the population (60 percent) that can be presumed able to work. The share of work-able among the poor who are not covered by safety nets, on average, mirrors the rest of the population.
- On the other hand, households that receive LRSA have on average many more members that cannot be expected to work.
- In spite of this large potential, only one out of three individuals who could work is actually employed. Vulnerable groups lag behind the population in most LM outcomes. In fact, though labor force participation rates are nearly the same among the poor and the general population, employment rates are 12 percentage points lower for the poor. The situation is particularly dire for beneficiaries of the FBP, who exhibit the lowest labor force participation and employment rates.

Low work-intensity is a major cause of poverty for most households...

- The sectoral and employment characteristics of the poor outside safety nets are not radically different from the average population, given the prevalence of informality and agricultural work in the economy as a whole.
- For instance, the hourly earnings for the poor not covered by the FBP appear similarly distributed to the rest of the population. And nearly half of the employed population reports that they wish to change their job, but cannot find any better opportunity.
- This means that although low wages contribute to poverty, the presence of many household members who do not work is a primary reason for poverty in Armenian households.

... while FBP beneficiaries work in jobs of particularly poor quality.

- Working FBP beneficiaries stand out for having a much higher share of informal jobs, working in agriculture, and being out of wage employment than the rest of the poor.
- The hourly earnings of working FBP beneficiaries, and their hours worked, are markedly lower than the rest of the poor.
- The skewed distribution of safety nets in favor of informal and low paid work is driven by the FBP targeting method.

Vulnerable groups face high constraints to join the labor force.

- The household structure in poor and SSN beneficiary households is radically different from the general population. On average, in FBP beneficiary households there is one dependent for each work-able individual, twice as much as in the general population.
- As many as 41 percent of FBP beneficiaries live in single-parent households, and a quarter of them live in households with a young baby.
- Cultural norms on the division of roles in the household are also important, as many women reported that they were prevented from working by other family members.
- In addition, beneficiaries of LRSA may face disincentives to participate in formal employment due to the design of the LRSA benefits.

Further investigation is needed to understand their skills constraints.

- Worse employment outcomes among vulnerable groups compared to the general population could be attributed to a number of reasons that relate both to their household structure and to their individual characteristics.
- In terms of employability, the demographic and the education profile of vulnerable groups is not radically different from the rest of the population. More than a third of the poor and SSN beneficiaries hold tertiary education degrees. Education quality and the relevance of the skills that they own are likely to play a more important role than the data allows exploring.

Introduction

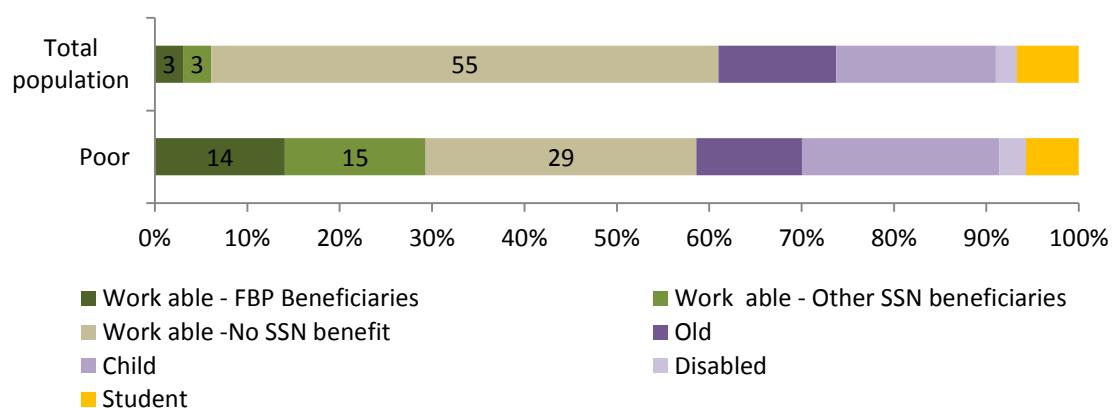
High rates of joblessness and low-paid work are major causes of poverty in Armenia. A recent assessment (Rutkowski 2012) provided an overview of the main challenges that affect the Armenian LM and the connection with poverty. Armenia's LM is characterized by low employment rates by international standards. In 2011, only 54 percent of the working age population was at work: this is lower than in any other country in the European Union (EU) member states and any other country in the South Caucasus or Central Asia (Arias et al. 2014). Low employment can be traced to two main factors: (i) high unemployment rates, particularly among youth, which underscores a difficult school-to-work transition and (ii) women's limited participation in the labor force. The incidence of poverty is particularly high among the unemployed (54 percent) and, to a lesser but non-negligible extent, among the employed in low-paying and low work-intensity jobs (28 percent in 2011).

Low employment rates can be attributed to the general scarcity of job opportunities although vulnerable groups face additional challenges that put them at a disadvantage in the LM. Despite the recent rebound in economic growth, the economy creates relatively few jobs (see World Bank, 2013b for a recent analysis of demand side issues). The underutilization of labor translates into limited opportunities to enter the labor force or to move up to better quality jobs. However, the likelihood of being employed in a productive job in Armenia is skewed along several sociodemographic factors, including age, education level, and experience, which suggests the importance of policies to improve the employability of the vulnerable.

This study focuses on informing social policies to favor the inclusion of the vulnerable population in the LM ('activation'), with the view of contributing to sustainable protection from poverty. The current note has the objective of providing a strategic direction for the GoA in the definition of integrated social policies to combat poverty through LM inclusion and improvement of labor productivity. This set of measures, broadly defined as activation, is foremost directed toward the population that can be considered capable of working ('work-able'), and in particular to the large population that is either out of work or in low-productivity jobs.

SSN beneficiaries are an important vulnerable group for activation policies, but the even larger number of nonbeneficiaries living below the poverty line remains a priority for activation. Figure 1 shows the distribution of Armenia's population according to ability to work and status as an SSN beneficiary. SSN beneficiaries represent only 6 percent of the total population in Armenia (and 10 percent of the work-able population). Moreover, even when taking into account the work-able population living below the poverty line (33 percent in 2011), only half of the work-able poor are covered by any SSN, and only a quarter of them by the FBP, the main LRSA program. Because poverty levels in Armenia remain consistently high and because SSN beneficiaries remain a very small share of the population, any activation policy aimed at fostering self-sufficiency will have a limited impact on poverty and LM participation unless it focuses on the broader group of poor individuals. Finally, it is important to note that a number of services such as the PES and ALMPs currently target the even larger population of the unemployed, only half of whom are actually poor.

Figure 1. Population distribution according to work ability and SSN beneficiary status



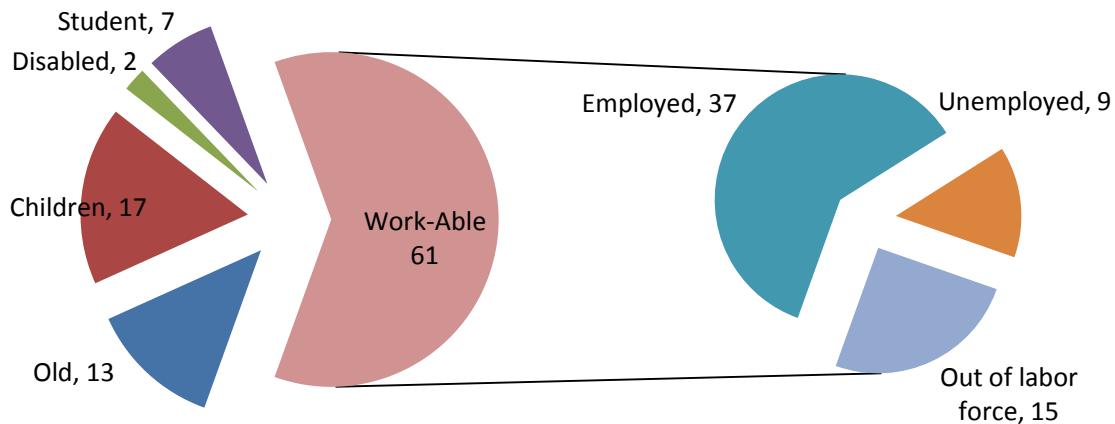
Source: Authors' calculations using ILCS 2011.

This first chapter provides a LM profile of the poor, SSN beneficiaries, and other out-of-work individuals, as these are the main targets of activation measures. Using the ILCS 2011,³ this section draws a profile of the population that could benefit from activation measures, according to three main groups: (1) beneficiaries of SSNs, especially those under the main SA program (the FBP); (2) nonbeneficiaries who live below the national poverty line; and (3) the nonpoor population that is out of work. This grouping is drawn for policy planning purposes since the government aspires to serve each of these population segments through a different package of measures according to their needs and characteristics. The first chapter of this note provides a LM profile of these vulnerable populations, with the purpose of identifying the constraints to their active inclusion in the LM.

The profile of Armenia's vulnerable population

Armenia is endowed with a large share of work-able individuals. Of its 3.1 million inhabitants, about 60 percent (1.9 million) could be considered work-able. For the purpose of this study, a person is considered work-able if s/he is of working age (15–64 years); is out of full-time education; and has no limitations that prevent him/her from working.⁴ Thus, a large share of Armenians could be participating in the country's economic life (see Figure 2).⁵

Figure 2. Population work ability and status in Armenia, 2011



³ This analysis focuses on specific population subgroups, such as SSN beneficiaries, that represent only about 12 percent of the population. In order to achieve sufficient statistical power, the analysis is pursued with ILCS 2011 in light of the significant drop in sample size, from 7,872 to 5,184 households, between 2011 and 2012.

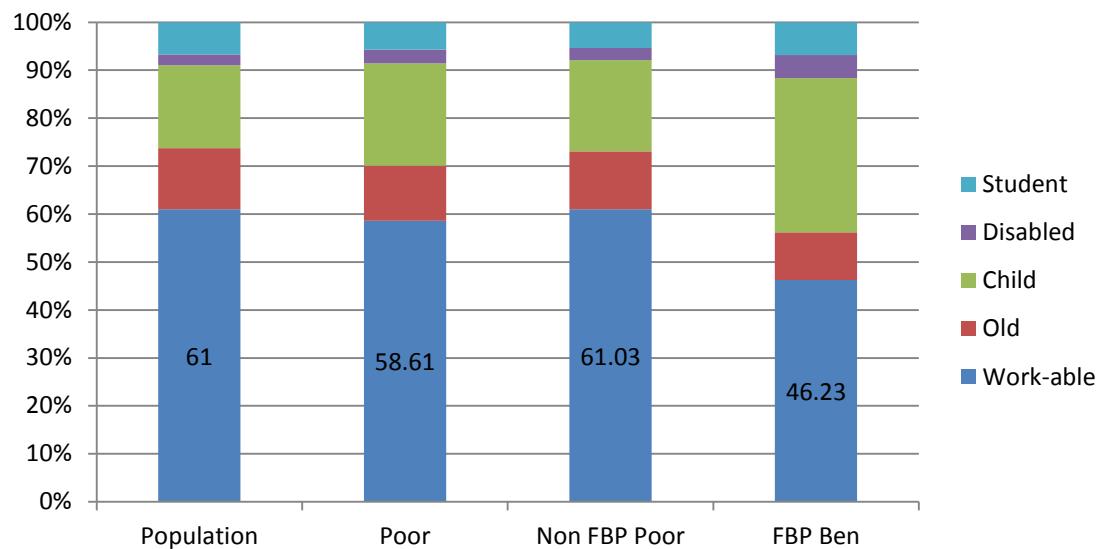
⁴ Countries increasingly move toward providing further work possibilities to those impaired by disabilities, including Armenia, but the set of policies and programs for this specific population is not the focus of this note.

⁵ Between 2010 and 2030, the share of young people who are of working age is set to shrink by about 6 percentage points, although the overall growth in the share of the population of working age will remain positive in the same period. (Arias et al. 2014).

Source: Authors' calculations using ILCS 2011.

The poor exhibit a similar demographic structure to the rest of the population, while households that receive SA benefits have on average many more non-workable members. Surprisingly, perhaps, there is no substantial difference in terms of demographic composition between those poor and the total population, and this can be partly explained by the fact that poverty rates are high in Armenia. In contrast, the SSN system by design is skewed toward households with a greater share of non-workable people—an issue that will be discussed in Chapter 2. As a consequence, the share of non-workable members is greater among SA beneficiaries, particularly among those who receive the FBP, who have many more children and disabled among their household members (see Figure 3).

Figure 3. Demographic composition across population groups



Source: Authors' calculations using ILCS 2011.

However, a large share of the work-able population, including SSN beneficiaries, is not employed. With only 6 out of 10 work-able employed, Armenia is facing an 'activity deficit'. Among work-able individuals in the population, 25 percent do not participate in the labor force. Nonparticipation is significantly higher for the poor population (at 30 percent), and it peaks among FBP beneficiaries (33 percent). Unemployment is also higher among the work-able poor and SSN beneficiaries than among the general population. Nearly half of the unemployed are first-time jobseekers, indicating a slow transition from education to the world of work (see Figure 5), and half of the unemployed have been looking for work for more than two years.

Figure 4. Labor force participation and employment rates

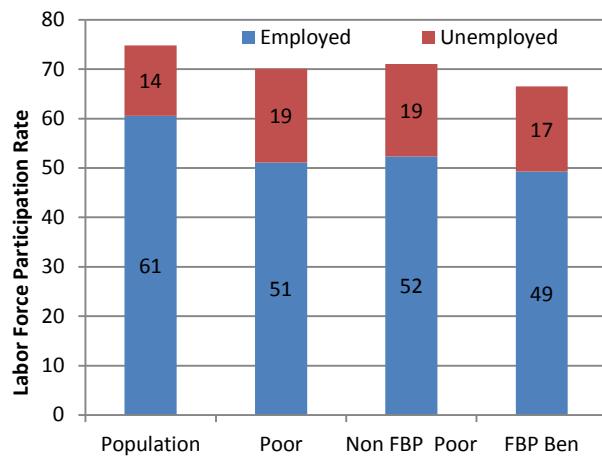
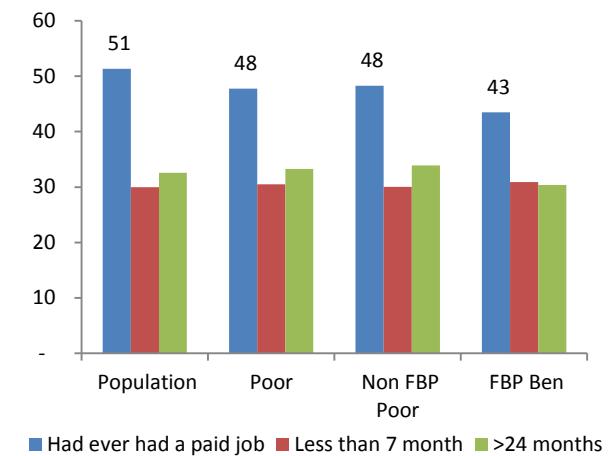


Figure 5. Characteristics of the unemployed



Source: Authors' calculations using ILCS 2011.

Among the employed, FBP beneficiaries are much more likely to work in informal and seasonal jobs, while working conditions of the poor are not much worse than all of the employed population. Figure 6 shows the incidence of some indicators of job quality across population groups. Overall, informality remains high in Armenia, at 58 percent (Rutkowski 2012), but it is nearly the norm among those FBP beneficiaries who are employed—87 percent of them work without any contract. FBP beneficiaries also tend to be more involved in seasonal work (43 percent versus 31 percent of the nonbeneficiary poor and 28 percent of the population) and to work fewer hours per week. Interestingly, poor people who do not receive family benefits tend to resemble the general population profile more closely, showing only slightly worse outcomes. Most likely, the skewed distribution of FBP coverage in favor of informal workers is driven by the program’s eligibility criteria, which is biased against formal labor incomes (which will be discussed further in Chapter 2).

Figure 6. Incidence of low-quality jobs among the employed population

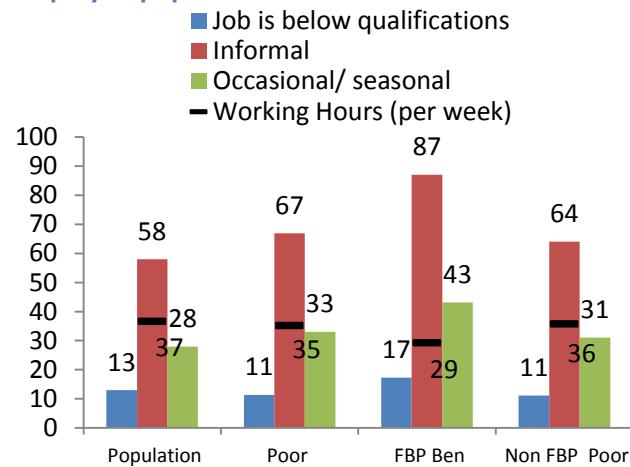
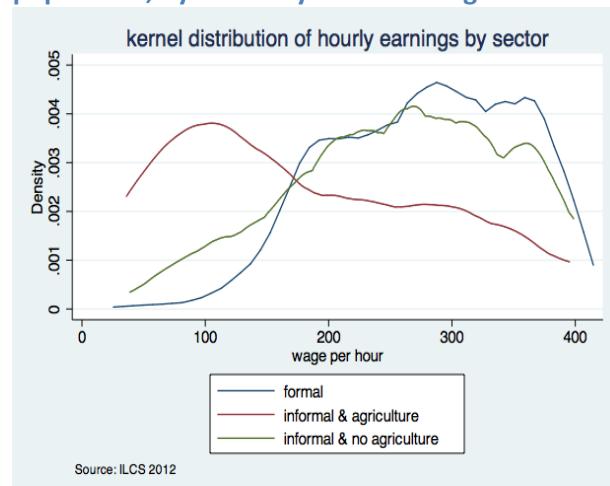


Figure 7. Distribution of hourly earnings in the population, by formality status and agriculture



Source: Authors' calculations based on ILCS 2011.

Source: Authors' calculations based on ILCS 2011.

Note: Job quality indicators are not mutually exclusive.

Informality is associated with lower earnings, primarily driven by those employed in agriculture.

Earlier analysis discussed how the wage dispersion in Armenia is relatively high (Rutkowski 2012). For the purpose of studying activation, it is also useful to examine the extent to which formal and informal jobs differ strongly in returns. However, a full analysis is beyond the scope of this report. Figure 7 compares the distribution of reported hourly earnings from labor across informal jobs in agriculture, informal jobs outside agriculture, and formal jobs. The graph indicates that agricultural employment is significantly lower paid than work in any other sector. On the other hand, formal and informal nonagricultural hourly earnings do differ, but less markedly, as shown in Figure 7.⁶ Yet, considering the lack of benefits associated with informal jobs (leave, sick leave, and, very often, contracts), formal jobs could still be considered on average of higher quality, and, as shown later (Figure 13), they are correlated with a lower risk of poverty.

There is suggestive evidence that most of the inactive labor population and those who have informal seasonal work would switch to permanent full-time jobs if these were available. Figure 8 shows that nearly half of the employed population reports that they wish to change their job, and this is particularly the case among SSN beneficiaries (53 percent) and especially FBP beneficiaries (63 percent). This might be directly associated with the fact that more than half of the FBP beneficiaries could not find a permanent job, in contrast with less than one-third of the total population (Figure 9). As informality entails avoidance of taxation and social contributions, it is often debated whether this is the result of workers' decisions (in collusion with employers, if in wage employment), or if this is an outcome that workers cannot avoid. In this case, it seems that those who face the worse employment outcomes could be ready to move to stable wage employment (presumably formal) if they were given the opportunity.

⁶ According to recent estimates (Armstat 2013), average monthly incomes in informal jobs were 82 percent of after-tax earnings of formal jobs in 2012. The differential is high in some sectors such as trade and food services, and less than 20 percent in other sectors such as construction, industry, and agriculture. Our computations, based on hourly earnings, are not directly comparable but yield similar findings. Obviously this information does not inform on whether individuals in informal jobs may be qualitatively similar or different than those in formal occupations.

Figure 8. Would like to change current job

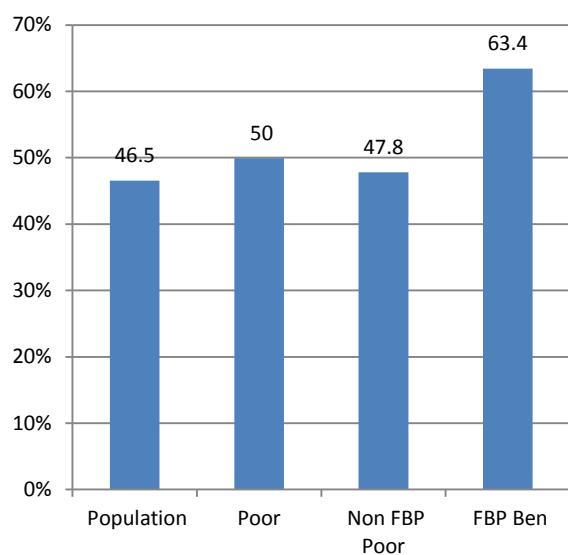
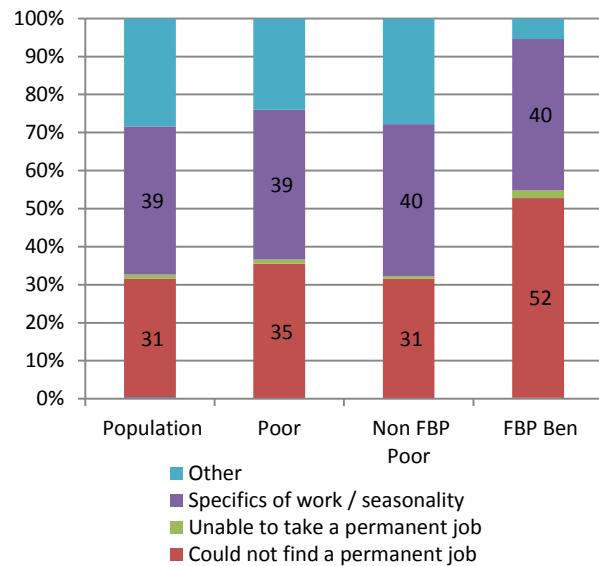


Figure 9. Reasons for not being in a permanent job



Low work intensity is a key factor for explaining poverty, except for FBP beneficiaries, who tend to earn considerably less than any other group. Figures 10, 11, and 12 show the wage distribution of different analytical groups. Surprisingly, the earnings of the poor are only slightly lower than the rest of the population; this suggests that the differences between poor and nonpoor households should not be attributed mainly to earnings differential. On the other hand, Figure 13 shows that the presence of household members without work is a key factor that determines poverty (discussed further in Rutkowski 2012). The situation is rather different for FBP beneficiaries at work; their hourly earnings appear particularly low compared to the rest of the poor (Figures 10 and 11) and so does their monthly take-home pay. In fact, labor income accounts for only 28 percent of total consumption among FBP beneficiary households, compared to more than 70 percent among the rest of the poor (see Annex 2). As discussed later, markedly lower earnings could be related to the composition of FBP beneficiary households as well as to some of the incentives given by the program to supply labor only in the *informal LM*.

Figure 10. Distribution of labor hourly incomes

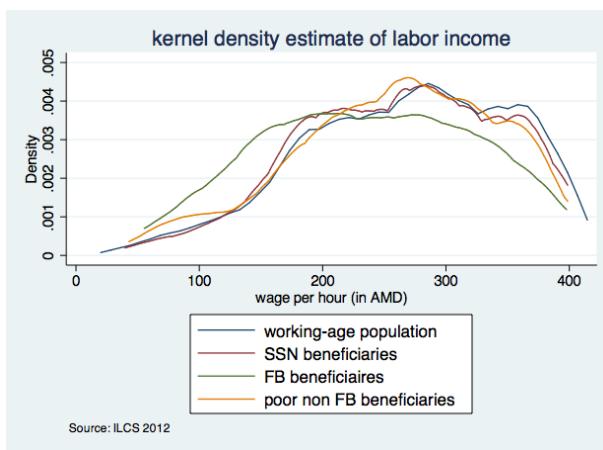


Figure 11. Wage quintile distribution by population group

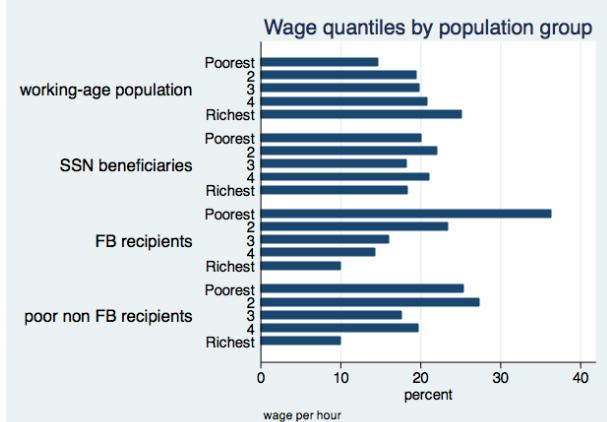


Figure 12. Distribution of monthly earnings

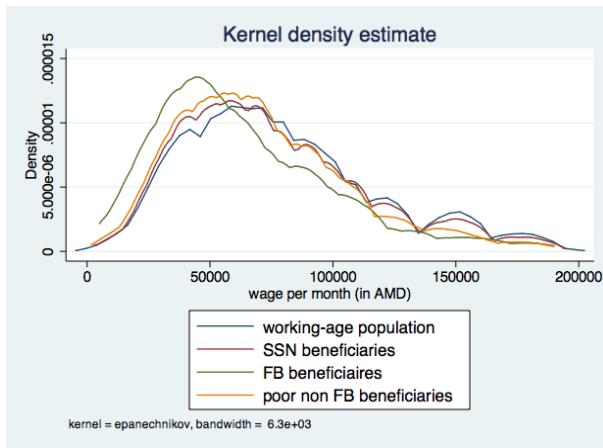
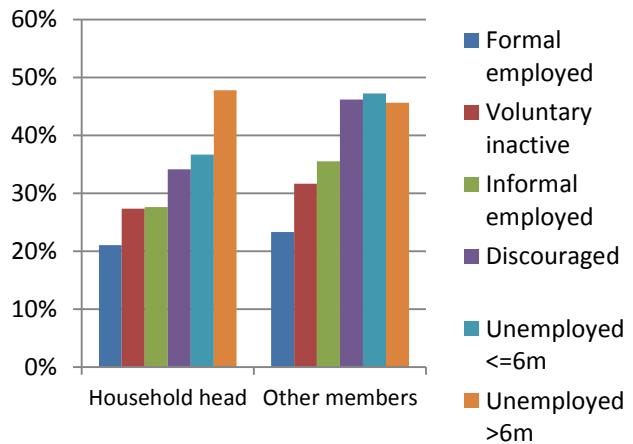


Figure 13. Incidence of poverty among workable, by LM status



Source: Authors' calculations based on ILCS 2011.

While most workers in Armenia are salaried employees, including most of the poor, FBP beneficiaries stand out for their much higher propensity to be self-employed or do unpaid family work. Safety net beneficiaries, in particular those who receive the family benefit, stand out compared to the rest of the vulnerable population in terms of employment typology. In particular, a majority of FBP recipients are self-employed (Figure 14), while among the rest of the population, wage employment is prevalent. This peculiarity is correlated with higher participation of FBP in agriculture, the sector with the lowest levels of productivity and wages (Figure 15). Interestingly, the sectoral composition of employment among the poor who do not receive family benefits is not as different from the population average. An important share (22 percent) of the working poor who are not covered by the FBP works for the public sector.

Figure 14. Distribution of employment status, by group

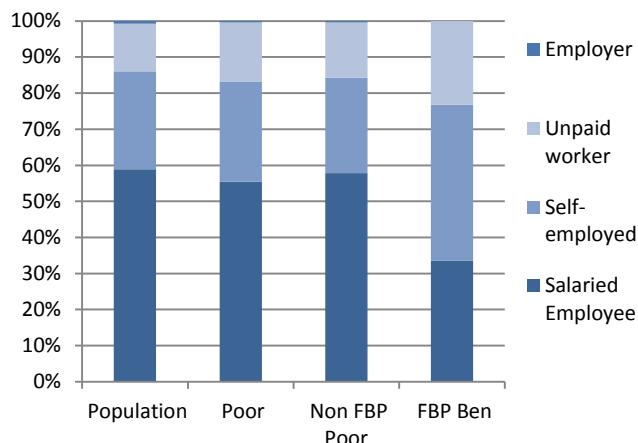
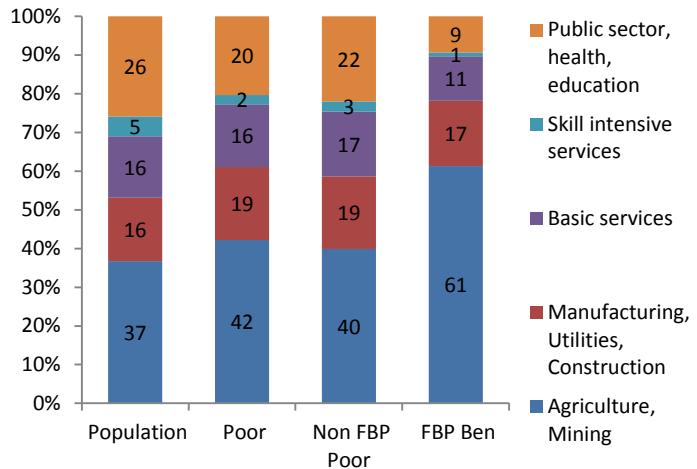


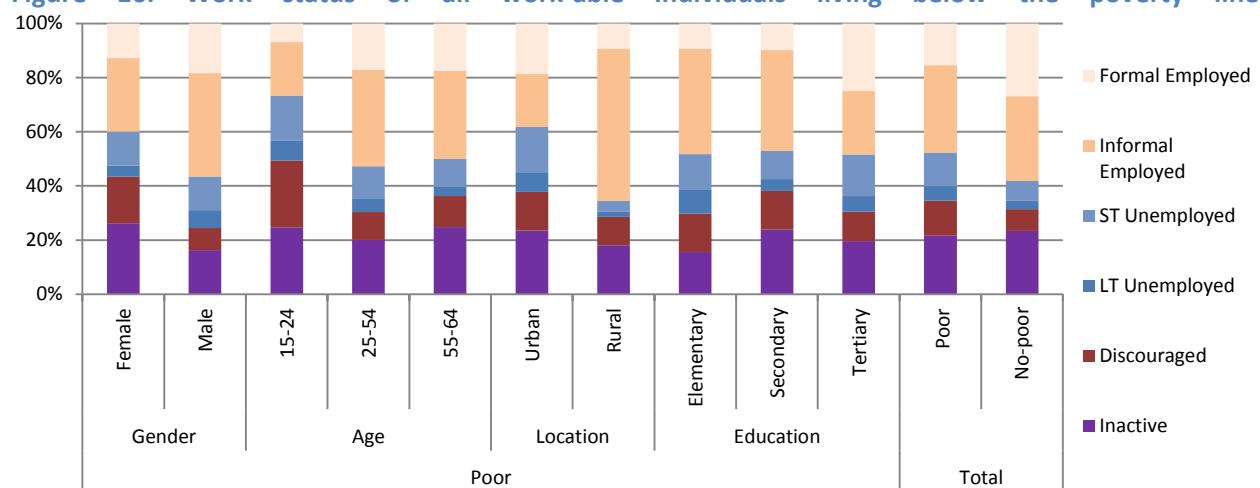
Figure 15. Sector of employment, by group



Note: 'Other employed' largely represents unpaid family work.

The distance of vulnerable groups from the LM is highly varied according to gender, age, and location, which suggests the importance of prioritizing interventions in the LM. Figure 16 displays the likelihood of different sociodemographic groups to be on a spectrum of LM states of decreasing distance from a good quality job. In the first place there are formal sector jobs—which earlier analysis showed to be of overall better quality—followed by informal employment (which includes agricultural work), unemployment of short and then long duration, and finally inactivity (divided between discouragement—which is involuntary—and voluntary inactivity). This illustration of LM distance can inform to some extent the broad targeting of interventions designed to confront specific LM challenges.

Figure 16. Work status of all workable individuals living below the poverty line



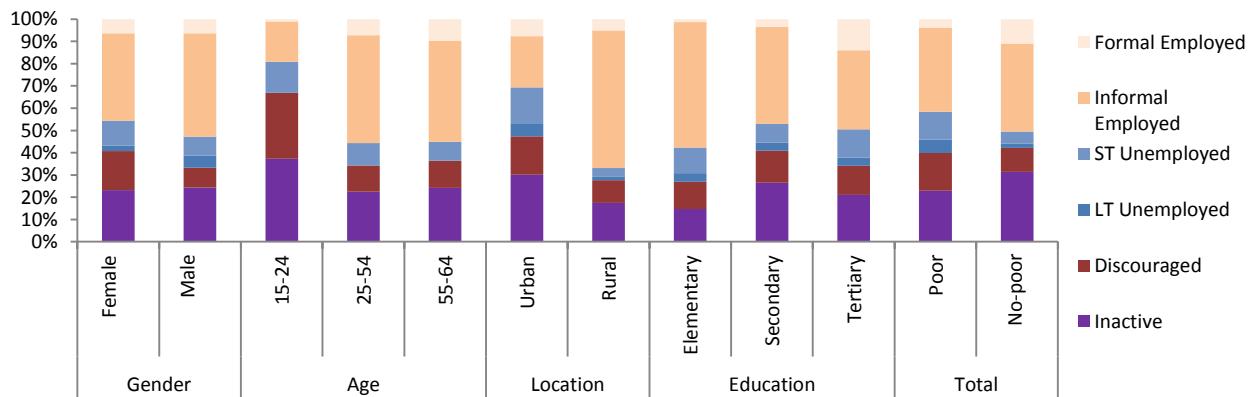
Source: ILCS 2011.

Note: Workable is defined as individuals of working age, able-bodied, and not in full-time education. ST = short term; LT = long term, more than 12 months.

Among the work-able poor, women and urban youth suffer the most from discouragement and unemployment. Compared to the rest of the work-able poor, the share of work-able who are not employed is particularly high among young people aged 15–24 years (72 percent out of work—and by definition—out of school) and women (Figure 16). Note that for both groups, the percentage of shadow unemployed (those who are out of the labor force because of discouragement) is even higher than those looking for work. In other words, a key reason for low participation in the labor force is the lack of suitable opportunities. In fact, a higher share of poor women are inactive or discouraged compared to poor men. More than 40 percent of poor women do not have a job and are not looking for one compared to 22 percent of poor men. At the same time, a larger percentage of working women are employed in the informal sector compared to the percentage of men working informally. Among the work-able individuals who receive FBP,

The rural poor are generally working but in low-productivity jobs or underemployed. Conversely, informal low-productivity employment characterizes the rural poor, especially male and elderly workers. Interestingly, education level is not directly associated with a different risk of unemployment, although the tertiary educated poor are much more likely to have a formal job. This suggests that program targeting is more likely to be effective through a gender-age-geographic level rather than only along skill levels.

Figure 17. Employment status of work-able individuals who receive FBP



Source: ILCS 2011.

Note: Work-able is defined as individuals of working age, able-bodied, and not in full-time education. ST = short term; LT = long term, more than 12 months.

Similar trends are visible within the FBP work-able population, although at higher levels of magnitude: joblessness reaches extreme levels among urban residents (70 percent) and youth (80 percent). Compared to the rest of the work-able poor and of young people who are poor but do not benefit from the FBP, inactivity is extremely high among FBP beneficiaries below the age of 25. As shown in Figure 17, 65 percent of the young people out of school are either inactive or discouraged: this group corresponds with the so-called NEETs (“not in education, employment, or training”). Conversely, informal, low-productivity employment characterizes the rural poor, especially male and elderly workers. Informal jobs particularly characterize poor FBP beneficiaries with elementary education who live in rural areas. Not surprisingly, the share of those with formal employment arrangements among FBP beneficiaries is

usually less than half of the share among the poor population. Among FBP beneficiaries, youth, rural informal workers, and urban unemployed are priority groups for active measures.

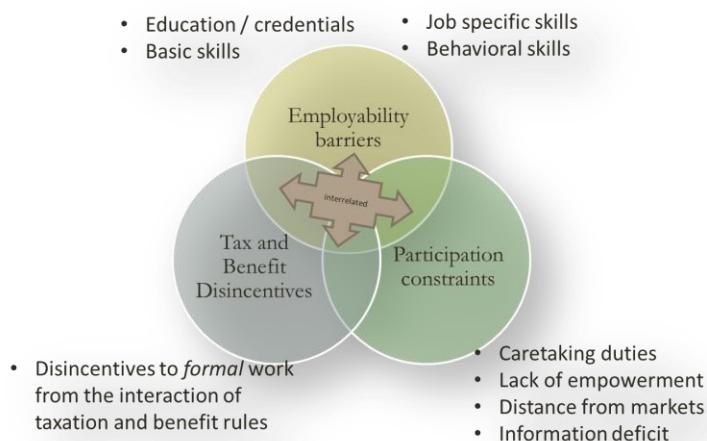
What can explain the bleak employment outcomes among poor and SA beneficiaries?

The demographic characteristics of the vulnerable groups tend to match those in the general population. Although employment and welfare outcomes tend to vary quite markedly between vulnerable groups and the average population, their demographic composition in terms of age, geographic, and gender structure is not markedly different. The share of traditionally more vulnerable age groups in the LM is similar: 15 percent of FBP beneficiaries and 17 percent of the general population are young (15–24 years) and out of school, while prime age individuals (55–64 years) are also close to the population average of 16 percent. The share of workable women who benefit from safety nets is nearly identical to that of all poor and to the general population (around 53 percent) (see Annex 2). Even in terms of geographic distribution, a third of the workable population lives in rural areas (34 percent), as does an identical share of the poor. The important exception is among FBP beneficiaries, whose coverage in rural areas is significantly higher (41 percent) (see Annex 2).

Box 1. Unpacking Employability Barriers

Employability can be defined as the characteristics that “raise the probability of an individual moving from *nonemployment* to employment and lower the probability of moving from employment to *nonemployment*” (Card et al. 2011). These factors include personal characteristics that affect labor productivity (such as skills, certifications, and attributes); personal factors that influence the ability and willingness to supply labor (work culture, household composition, ability to decide to work); and market factors (such as labor demand) (McQuaid 2006; Rutkowski 2012). In the case of SA beneficiaries, an additional question relates to the incentives built into the benefit toward labor supply (explored in more detail in Chapter 2). The activity deficit observed earlier could be directly related to any of these issues or more likely be the product of their interaction.

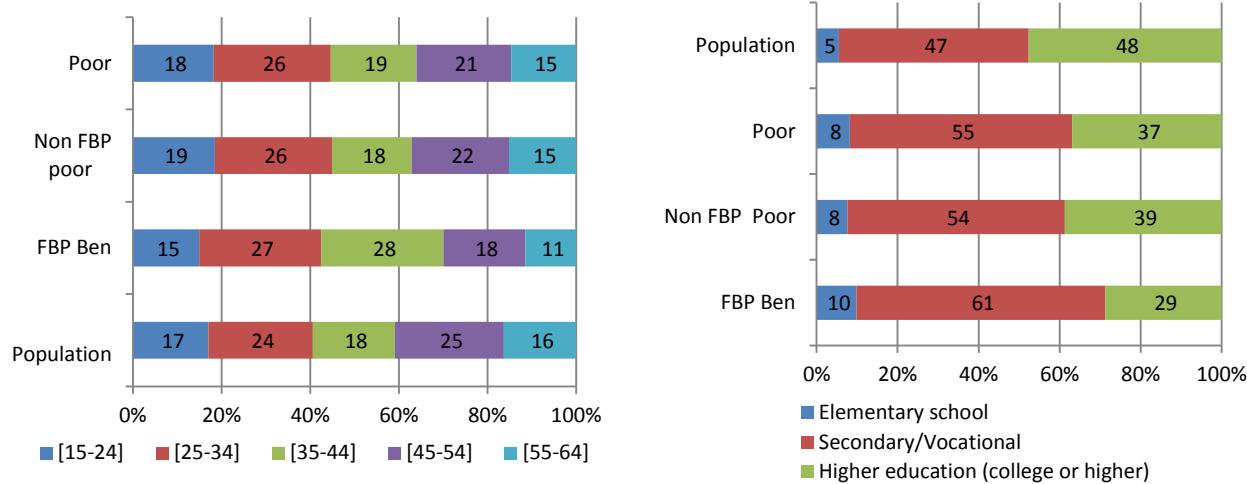
Figure 18. Analytical framework on supply-side barriers to productive employment



Source: Authors.

In terms of educational background, the profile of the poor and SSN beneficiaries does not differ starkly from the general population. Compared to other countries, such as those in the Western Balkans (World Bank 2014a), Figure 20 shows that more than 90 percent of individuals across groups completed secondary diplomas; just less than a third of FBP beneficiaries and nearly 40 percent of the poor have a tertiary education, which is remarkably good by international standards.

Figure 19. Age distribution, by population segment **Figure 20. Educational attainment, by population segment**



Unobserved differentials in cognitive and behavioral skills could be a factor that explains the poor LM outcomes of vulnerable groups. Although educational attainment is fairly similar across population groups, differences in the actual level of skills, as opposed to formal education certification, could be one of the factors affecting the observed differentials in employability. The recent Skills Survey for Armenia (World Bank, forthcoming) suggests that even controlling for the education and demographic characteristic, individuals at school age who lived in households with lower socioeconomic status displayed lower average reading skills and lower socioemotional skills as adults.⁷ This is particularly relevant for Armenia, where individuals' job-relevant skills, rather than their credentials, are highly rewarded in the LM. For instance, every additional year of education was found to increase hourly earnings by 4.7 percentage points, but "such rate of return virtually disappears when one accounts for different skill groups". On the other hand, this may be heartening to the extent that such skills can still be taught even outside formal education, for instance, through well-designed ALMPs.

In addition, household-level constraints are potentially very binding for women in poor households, who are care givers to more dependents than the general population. Figures 21–24 suggest that FBP beneficiaries are the population group with the highest share of single parents, and the highest number of children per household, compared to the other groups. Female-headed households are also higher among the FBP, at 35 percent, although this rate is generally high across the population (30 percent).

⁷ Cognitive skills include literacy, numeracy, and the ability to solve abstract problems; socioemotional skills include traits covering multiple domains (social, emotional, personality, behaviors, attitudes, and so on).

The disproportionate presence of dependents compared to the non-covered population, including the rest of the poor, shows the impact of the current design of the eligibility formula and its social vulnerability component in determining coverage (explored further in Chapter 2).

Figure 21. Single-parent households

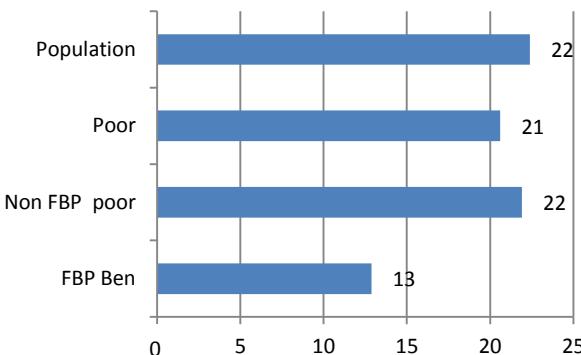


Figure 22. Households with 2 or more children aged 0–15 years

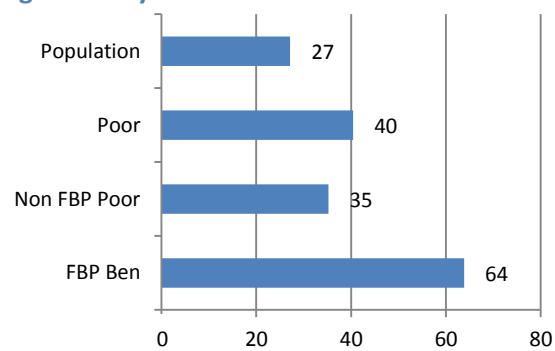


Figure 23. Households with one or more babies aged 0–2 years

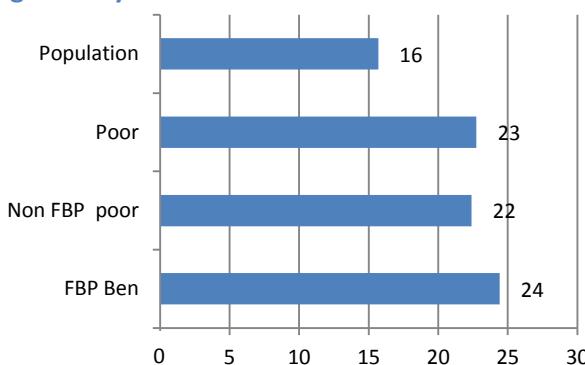
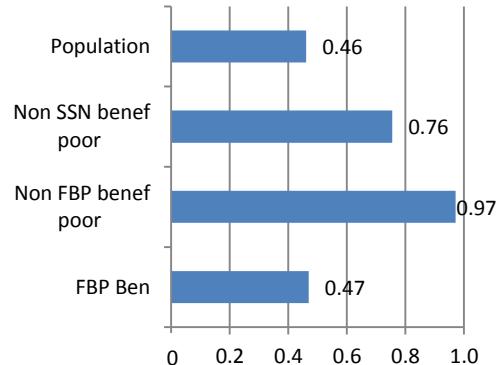


Figure 24. Dependency ratio



Source: Authors' calculations based on ILCS 2011.

Note: Ratio computed as the number of non-workable to the number of workable adults in the household.

Qualitative evidence suggests that the lack of decision-making power for women in the household is a significant constraint to their participation in work. A qualitative study (see Box 2) conducted among employed and unemployed men and women, as well as employers, revealed that social norms on women's role in the household is a significant factor that constrains women in entering the labor force. Interviewed women reported lacking the ability to decide autonomously whether they can work or not, with husbands and mothers-in-law pressurizing them to stay home. Women reported that they earned the respect of their peers by taking care of the house, the children, and any elderly family members. Interestingly, social norms also had an impact on male employment but through a different channel: men reported that stigma is attached to taking low-paid or unskilled jobs, which would be considered humiliating.

Box 2. Qualitative assessment of barriers to women in the LM

A qualitative study was commissioned to further understand the barriers that men and women face in obtaining productive employment. It relied on focus group discussions with employed and unemployed men and women in Yerevan and in key selected *marzes*, as well as on in-depth interviews with employers, policy makers at different levels, and civil society.

Barriers to work stemming from social norms. Men and women face different constraints to engage in employment. Husbands and mothers-in-law exert pressure on women to stay at home: “My husband does not let me work and I cannot do anything about it, even though I want to work; but he is the head of the family,” said an inactive woman in Gegharkunik. However, women also feel a more general social pressure that staying home is the best way to earn the respect of their peers: “There is always public critique toward women who are active and want to go further in their career, and not all women are ready to face this criticism and negative attitude from society,” said one inactive woman. Another inactive woman in Gegharkunik explained, “I am the best daughter-in-law in our family so I decided to stay at home and organized everything: take care of my children, sick mother-in-law, do housework, and I feel very happy that I did it. I was also very respected and accepted by the members of my family.”

Men, on the other hand, feel a lot of pressure to take up a job, but it has to be high paying. “Men dream about big money only; they want to be bosses, but instead it would have been much better to stand up from the couch and actually just do something to earn some money,” said an employed woman in Aragatsotn. According to an unemployed woman in Yerevan, “Unemployed men are in a more vulnerable position today than unemployed women because it is the man who should take all responsibility and provide for a family, not the woman.”

Barriers to work stemming from household responsibilities. Women are in charge of several household chores, such as taking care of children, the house, and the elderly, that leave them with less time to devote to productive work. As one unemployed woman in Yerevan put it, “I have so many things to do at home, it seems impossible to balance work and family duties.” Child care is expensive and women would use all their earnings to pay for it. Said an unemployed woman from Lori, “It is not worth it to work because you spend all your money on transportation and kindergarten.”

Social norms and household responsibilities affect employers’ perceptions of and actions related to women. Most employers are male, and despite recognizing that women have better skills than men for many jobs, they prefer not to hire women because they believe their place is at home or because their household responsibilities will interfere with work. As one employer said, “Almost every day we have some woman saying that I should go earlier to pick up my child from the kindergarten, I will be late tomorrow because I should take my child to the school, I should go to parents’ meeting at school today, etc.” In addition, staying at home makes it almost impossible for women to get back into the labor force. “People in their 40s, especially women who were busy bringing up children, got Soviet education, which is not competitive now, hardly have computer skills, and mostly don’t know English,” said one employer. “I realize, it is not good and I am contributing to the discrimination, but I don’t even look at the resumes of those who were born in 1965–70s.”

Social norms affect men’s perceptions of jobs, wages, and the jobseeking process. Because of these perceptions, men might be unwilling to accept job offers or be active in the job search. “I don’t have any hope that I will find a job; I am not looking anymore,” said an unemployed man in Yerevan. “Anyway, you either should have very influential connections or pay a bribe in order to find a job, so why should I even bother.” “How can a man work as a clerk? Clerks should make coffee for their bosses.”

Economic factors—such as the cost and scarcity of child care services and important gender wage gaps—support this traditional division of labor in the household. In addition to social norms, focus group participants added that high costs of private child care services and the scarcity of cheaper options make it harder for them to justify—on economic grounds—taking a job outside the house. This is especially the case for women with limited earning capacity.⁸ In fact, the findings from qualitative evidence are in line with the predictions of the theoretical simulation (the OECD tax and benefit model) that will be introduced in detail in the next chapter. The model shows that in light of the high opportunity costs of leaving one's home and the cost of child care, most women cannot afford to take low-wage jobs.

Implications for design and targeting of services

It is unlikely that a single approach across all the PES would be suitable, given the heterogeneity of barriers that the poor face. The operational implication of this profile analysis **will be further discussed in Chapter 3.**

⁸ As shown in Rutkowski (2012), Armenia displays very significant gaps in wages across genders, and thus many more women than men face only low-paying work prospects.

Chapter 2. Is the social protection system ready for activation?

Key Messages

Armenia's spending on SP is low by regional standards, and it is almost entirely allocated to individuals that are presumed unable to work.

- In 2012, Armenia spent 5.4 percent of the GDP on SI, 1.7 percent on SA, and about 0.1 percent on the LM, compared to about 8 percent, 2 percent, and 0.7 percent respectively in the average European or Central Asian country. The FBP is the paramount SA mechanism for protecting the poor, complemented by the one-time benefit.
- Programs intended to serve the work-able population as direct beneficiaries primarily include ALMPs and the FBP. As such, the share of the SP budget to support the population that could be active in the LM is only 6 percent of all SP spending. The limited protection for the vulnerable work-able may indirectly incentivize them to enter inactivity-focused programs such as disability pensions.

The targeting system builds on strong empirical and operational foundations, but it could be further strengthened to maximize coverage of the poor with a formula.

- The FBP has shown significant strengths in terms of benefit administration, eligibility determination, and outreach. However, still only about a quarter of all households living below the upper poverty line receive the benefit. This is the result of the stringent eligibility formula.
- Although fairly well performing, the formula could be updated to match the best performing programs in the region, given the high capacity already in place. Moreover the coverage of the benefit varies across *marzes* for reasons uncorrelated with poverty.
- Several reasons explain this mixed performance, but ultimately a formula that tracked proxies of consumption-poverty, rather than proxies of incomes, would be better placed to identify the poor in Armenia, where poverty is measured with consumption.

Most households currently covered by the FBP could potentially have one member participate in activation measures, if appropriate support services were in place.

- Going into activation, about half of the individuals who benefit from the FBP could be considered work-able, though many have high caretaking duties, especially women. However, even after accounting for caretaking needs, most FBP beneficiary households would have spare labor for activation.
- The existing information system does not identify the extent to which work-able individuals are already productively employed. In the administrative data, only 7 percent of the work-able are recorded as employed. This contrasts with the evidence from the ILCS, which shows that half of the work-able population in the FBP is employed.

However, the combination of taxes and of the current benefit formula could act as a disincentive to enter formal work at low-pay.

- Administrative data shows that new entrants in the FBP have about a 25 percent chance of exiting the program after 16 months, but graduation is largely happening for households that had a score very close to the eligibility threshold at entry, and not because the households' financial conditions have improved substantially.
- Mobility of beneficiaries in and out of formal jobs is minimal. This is consistent with the fact that the benefit formula's current design leaves limited space for work-able beneficiaries to experiment with returning to the LM without being quickly removed from the program. As new simulations using the OECD model shows, if an adult from a two-earners couple household take a formal job just above the minimum wage, most of their new income would be lost through the combination of paying new taxes and losing their previous benefits.
- In the context of activation, the formula may actually reduce incentives for household members to join ALMPs for fear of losing eligibility for the program.
- Finally program rules seem to favor households with more informal sources of income, while the accumulation of productive assets such as owning a car, opening a company, or acquiring livestock or land.

In addition, the supply of programs to activate individuals remains limited compared to the demand that introducing co-responsibilities would generate

- Very few of the beneficiaries who are not recorded as employed appear to be registered in the PES. The current benefit formula provides some limited incentive, but no obligation, for household members to register, unlike in most countries in the region.
- While increased coordination with the PES could be desirable, at the moment the system does not have the capacity to provide sufficient activation services even to one work-able beneficiary per household, due to the low availability of vacancies and of ALMPs.

In light of these capacity constraints, there is scope to enhance the level of profiling of beneficiaries to make the best use of a scarce supply of services.

Introduction

The purpose of this chapter is to analyze the extent to which Armenia's benefit system is geared to favor poverty reduction as well as for the active inclusion of the vulnerable population in the LM. This analysis is conducted in three sections. Section 1 provides a general overview of Armenia's benefit system, and takes a new look at the extent to which social expenditures are oriented toward an activation objective. Section 2 focuses on how effectively the system mitigates poverty. Finally, Section 3 analyzes on the one hand the potential for activation among safety net beneficiaries, from the perspective of administrative data, and on the other the readiness of the system for their activation. In particular, we take a systematic look at the extent to which the FBP favors the LM inclusion of its stock of beneficiaries, through a combination of empirical analysis of beneficiaries' graduation patterns and

simulations of the incentives generated by the benefit formula. Finally, we take stock of active LM policies currently in place, and the extent to which these are coordinated with SA.

Overall, this analysis suggests that Armenia's benefit system is heavily skewed toward the protection of those who are unable to work, as is customary in the region. Spending focuses on old age and disability pensions. Benefits to protect work-able individuals from poverty, as well as programs to facilitate their integration into the LM are limited compared to the need, which may put pressure on inactivity-related benefits such as disability. The FBP represents the main income protection tool for Armenia's poor and plays an important role in poverty reduction among the work-able. However, the program deteriorated slightly over time in terms of targeting precision, and the current benefit formula design displays important exclusionary filters that keep its coverage low and biased in favor of certain categories of households.

Although there is activation potential among SA beneficiaries, the benefit's design does not incentivize graduation, particularly among those with the highest potential. Once a household enters the FBP, its probability of graduating over time is rather low; even fewer households graduate because they effectively move out of poverty. While the program is not particularly generous by regional standards,⁹ the formula design could be improved to reduce potential disincentives to join *formal* jobs at low pay, and to incentivize participation in activation measures. SESA currently offers an array of ALMPs that appear to be effective in reducing unemployment, but their supply and number of private sector vacancies is low with respect to the need.

Main characteristics of Armenia's social assistance and labor benefit system

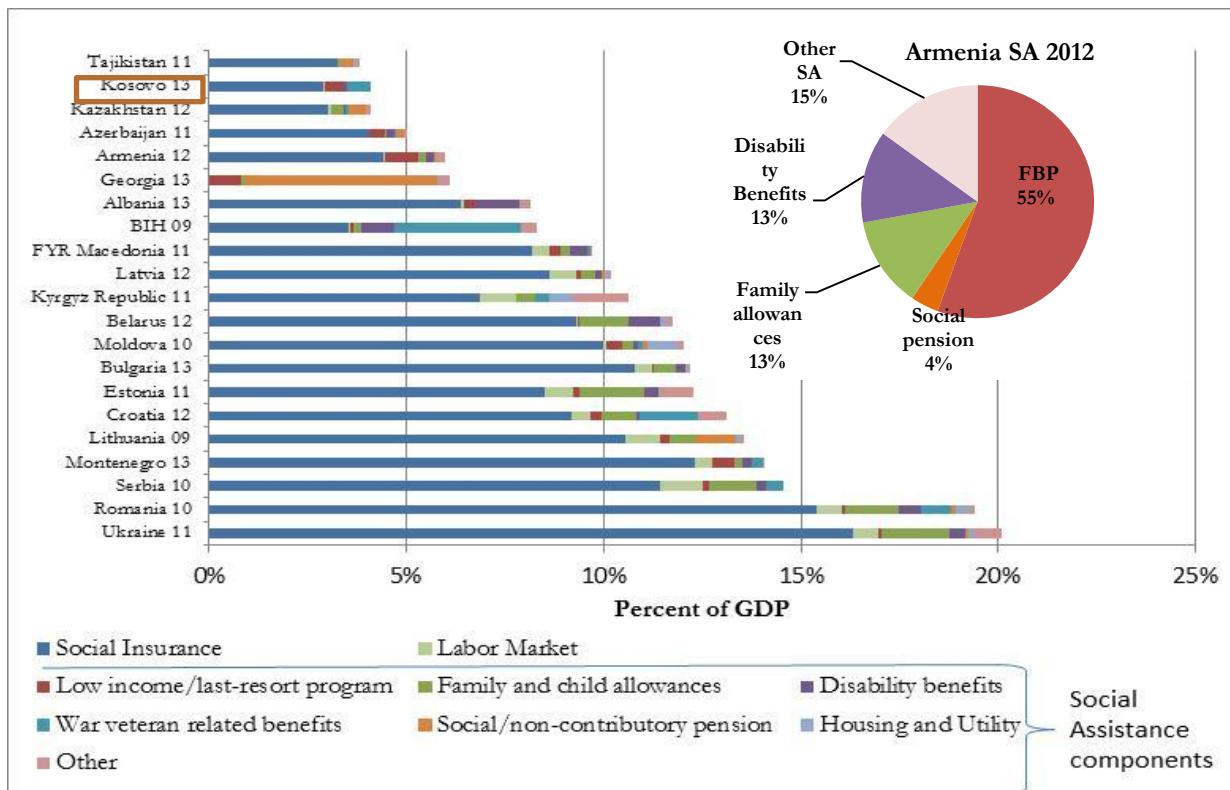
Like most other European and Central Asian countries, Armenia's SP system consists of three main pillars: SI, LM programs, and SA.¹⁰ This section reviews the main characteristics of the SP system, with a particular emphasis on those benefits and programs that cover the work-able population.¹¹ The overall SP system is administered by the Ministry of Labor and Social Issues (MOLSI) and implemented by specialized agencies. The State Social Security Service (SSSS) is in charge of state pension benefits; the SESA is responsible for active and passive LM policies; the territorial social services units (TSSUs) distribute SA benefits, including the FB; and the Social Medical Expertise Commission (SMEC) distributes disability benefits.

⁹ The FBP represents about 33 percent of the post-transfer total consumption aggregate of the beneficiaries in the poorest quintile. Generosity of LRSA programs in the Europe and Central Asia region varies between 8 percent (Romania in 2011) and 45 percent (Georgia in 2011) (ECA SPeeD 2014).

¹⁰ SI programs are designed to help households insure themselves against sudden reductions in income. SA programs are noncontributory transfer programs targeted in some way at the poor and those vulnerable to poverty and shocks. LM programs include active programs aimed at increasing skills, employment, and the long-run earning potential of participants, and passive programs that provide income support in the event of unemployment.

¹¹ The forthcoming Armenia Public Expenditure Review (World Bank 2014b) carries out a complete analysis of SP expenditures, from which this section has drawn some key elements to illustrate the main characteristics of the SP system.

Figure 25. Spending on SP in select European and Central American countries, and on SA in Armenia



Source: ECA SPeeD (2014). Latest available year used.

Compared to the rest of the region, Armenia's spending remains relatively low in terms of GDP. While on average, European and Central American countries spend about 8 percent of their GDP on SI, 2 percent on SA, and 0.5–1 percent on LM programs (both active measures and unemployment benefits [UBs]), Armenia spent 5.4 percent on SI, 1.7 on SA, and about 0.1 percent on LM in 2012 (Figure 25). Nevertheless, in Armenia the total spending on these three pillars accounts for a major share of the general government budget. According to the 2014 budget, spending on SP is expected to increase from 6.7 percent to 7.6 percent of GDP from 2013 to 2014. Table 1 provides a detailed breakdown of SP programs in Armenia, as well as 2012 figures for the share of spending relative to GDP and number of beneficiaries.

Table 1. Main SP and SI programs, 2012

Category	Programs	Targets Workable population	% of GDP	% of SA	Direct Beneficiaries	% of Poor Covered
Social insurance	All SI programs		4.4	73.7	n.a.	59.3
	Pensions	No	4	71	459,800	59.3
	Other social insurance (for example, paid sick leave, parental leave)	No	0.16	2.7	64,678	n.a.
Labor market	All LM programs		0.07	1.2	n.a.	n.a.
	ALMPs - training, employment incentives	Yes	0.01	0.1	2,225	n.a.
	Unemployment benefits		0.06	1	12,818	1
Social assistance	All SA programs		1.5	25.1	n.a.	23.7
	FBP and emergency benefit	Mixed (45% workable)	0.8	14	97,500	21.6
	<u>Social pension</u>	No	0.23	4.2	42,045 (disability) 9,820 (others)	n.a.
	- old age		0.01	0.2		n.a.
	- disability		0.18	3.2		n.a.
	- survivor		0.05	0.8		n.a.
	<u>Family allowances</u>	No	0.18	3.2		
	- childbirth grant		0.11	1.9	43,449	1.5
	- child care benefit		0.07	1.3	11,299	
	<u>Other social assistance benefits</u>		0.21	3.8		
	- funeral grants	n/a	0.11	1.9	23,275	n.a.
	- health care benefits	Mixed (45% workable)	0.1	1.8	97,500	n.a.
	Total		8% of direct beneficiaries	6.70	100	69.1
			6% of all expenditure			

Source: ECA SPeeD (2014).

Note: Percentages are rounded.

Most SA is represented by the FBP, Armenia's flagship anti-poverty program, which is complemented by a set of non-means-tested benefits. About 0.79 percent of Armenia's GDP in 2012 was spent on the FBP, while the group of non-means-tested programs cost about 0.63 percent of the GDP. These programs include categorical disability programs, old age and survivor pensions (for those who do not qualify for the contributory tier), family allowances—including a child care allowance for employed mothers until a child is two years old, schooling assistance for children entering school, and a new large birth grant—as well as funeral grants.

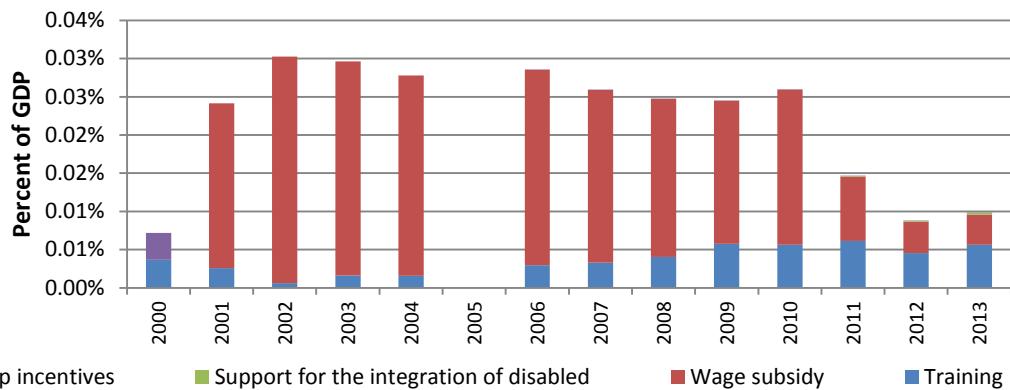
In the last ten years, Armenia has undertaken several reforms of the SP and insurance system, including increased emphasis on active support measures. Most SP and labor programs in Armenia have undergone major reform during this period. The recent public expenditure review on Armenia (World Bank 2014b) extensively discusses these changes. With the support of the World Bank, MOLSI has taken big steps toward greater integration of SP services, by locating all the services in Integrated Social Service Centers. These new centers feature a unified reception for benefit application and administration, and will soon introduce case managers. In the area of LM, in 2013 the government abolished the UB—which was first established in 2005—with the intention to substitute it with a jobseeker allowance that has greater job search conditionalities attached, and higher financing for

ALMPs. In addition, the 2014 reform of state benefits will institute generous birth grants to large families.

In spite of these changes, SP spending that is meant to sustain and incentivize the active and workable population represents a very small (and diminishing) share of SP expenditure. The programs that focus on the work-able population as direct beneficiaries include primarily ALMPs, passive labor income support programs, and, to some extent, SA benefits that cover the working population such as family benefits. Although pensions, disability benefits, and child care allowances might also indirectly benefit work-able household members, they are in general meant to replace incomes for individuals who are not self-sufficient and do not incentivize (or even prohibit) participation in theLM. As shown in Table 1, the share of the SP budget to support (either financially or with services) the population that is active or could be active in the LM is rather small, at 6 percent of all SP spending. The introduction of a more generous birth grant is set to even further increase the share of SA that is devoted to benefits not tied to the work-able population. Although the integration of social services is aimed at enhancing the active inclusion of the population and tackling the causes of poverty, financing for benefits that are pro-activity will need to increase substantially in order to provide a sufficient number of effective programs to more individuals.

Overall spending on LM policies, at 0.07 percent of GDP, is low by regional standards, and has been on a declining trend since 2010, although the abolition of the UB will increase absolute funding for active measures. Figure 26 shows the evolution of expenditures on LM policies by categories. Starting in the mid-2000s, public spending on ALMPs (mostly training-related) and on the UB rose substantially in Armenia. However, the number of people receiving benefits has decreased both in active and passive programs. In particular, in the last two years before program closure, the number of unemployed people covered by the UB had almost halved, driving down total expenditure. Part of this reduction was driven by a reduction in the unemployment rate; nevertheless the low level of assistance conflicts with the prevalent high levels of unemployment. The fall in ALMP spending was driven by the shrinking of wage subsidies and public works. Among the ALMPs, spending on integration of the disabled and on start-up incentives has a negligible contribution to the overall budget. While in 2006 most of the resources were directed to wage subsidies, in 2013 they were almost equally split between training and wage subsidies.

Figure 26. Expenditures on Active LM Policies



Source: ECA SPeeD (2014)

Note: Data for 2005 are not available.

Performance of the social assistance system in protecting from poverty

The FBP system is the paramount mechanism for income protection of work-able individuals and their families. Of all SA benefits, the FBP remains the largest and the best targeted. Unlike other minimum-income programs in Europe and Central Asia, the FBP was conceived as a last resort SA that targets households, which are both poor and socially vulnerable. Eligibility for the FBP is determined through its multiplicative formula that factors in incomes, a few proxies for poverty and ‘social vulnerability’ of members (see Box 3). To achieve the minimum eligibility score of 30, the household needs to score sufficiently high on the social vulnerability scale and display an income within an established threshold. A score of 0 is assigned to households that display either excessive formal income or because they own certain assets that are used as filters.

In addition, a more limited one-off benefit provides coverage to households that are not eligible for the FBP. Households with a score above 0 and below 30 do not qualify for the FBP but can be granted a one-off benefit at the discretion of social welfare offices. This benefit covers only about 9,000 households, or about 10 percent of FBP families. These households tend to have a substantially higher per capita recorded income than FBP beneficiaries (see Table 2). As shown in Figure 27, all households with a score of zero in the registry are among the nonbeneficiaries. This stresses the importance of vetting the fairness of the automatic disqualifiers associated with the formula.

Box 3. The FBP eligibility formula

Eligibility for the FBP is determined through a multiplicative scoring formula: households need to pass the threshold of 30 points to receive transfers. The amount of transfers depends on the households' exact score, number of children, and geographic area of residence. The formula takes into account three main factors: the social conditions of the household members, the actual and imputed incomes of the household, and other proxies of welfare. The first term of the formula is the household's mean social vulnerability. Each family member is categorized into a social group, to which a specific score is assigned. For example, children below the age of 5 receive 35 points; scores for disabled persons range between 28 and 48 points based on the disability level; employed adults receive the minimum score of 18 points; and the registered unemployed receive a score of 22. The average social vulnerability score of the household is augmented when disabled members are present. The second term considers family income averaged over the household, and the coefficient is calculated as 1.2–0.000033* (per capita income). Furthermore, housing conditions and geographic area of residence with respect to security are taken into account with scores ranging between 1 and 1.2 points. Finally, the formula contains a set of automatic disqualifiers: possession of a motor vehicle, acquisition of real estate by a family member, registration as a company, or electricity expenditure above a certain threshold. If one of these disqualifiers applies, the family automatically becomes ineligible for benefits, irrespective of the scores of the other formula components.¹²

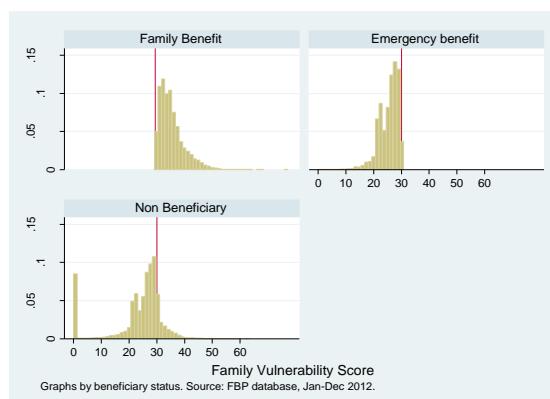


Table 2. Average number of households with evaluation scores above zero, and recorded income levels, 2012

	Frequency (h.h.)		Recorded per capita income
	Number	%	
Family benefit	96,867	80%	5,361
One-off emergency benefit	8,996	7%	14,739
Not a beneficiary	15,566	13%	13,592
Suspended benefit	399	0.3%	5,987
Total	121,827	100%	5,689

Source: MOLSI administrative data, January–December 2012.

Figure 27. Distribution of evaluation score in FBP database by beneficiary status in 2012



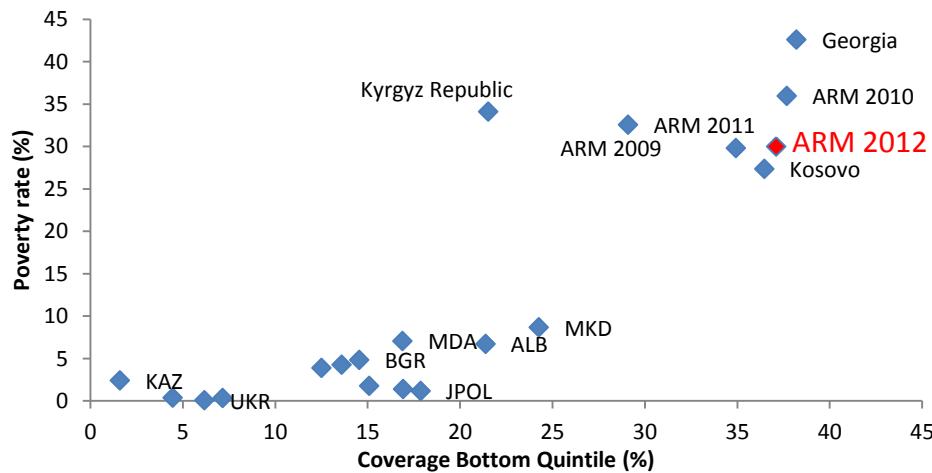
In 2012, 21 percent of all households living below the poverty line were covered by the FBP, and about 60 percent of beneficiaries were pre-transfer poor. Administrative data indicate that 96,867 households were covered by the FBP on average in 2012, amounting to about 400,000 beneficiaries. In terms of targeting, 60 percent of the program's beneficiaries lived below the national poverty line in 2012 (Figure 30).¹³ According to the ILCS, FBP beneficiaries represent 13.5 percent of the total

¹² For a detailed explanation of the eligibility formula see Karapetyan (2014).

¹³ This represents a decline compared to 2011, when 60 percent of beneficiaries were poor. This development could be in part explained by coverage expansion (beneficiaries increased by about 10 percent), or because some

population, and the program covers 36 percent of the pre-transfer bottom quintile, or 24 percent of all those living below the national poverty line (Figure 29). Although the program is larger than most countries in Europe and Central Asia in terms of share of the population covered, the program has much room to grow in light of the high poverty rates that Armenia continues to face.

Figure 28. Coverage of Last Resort Social Assistance (LRSA) programs in Europe and Central Asia and PPP harmonized poverty rates

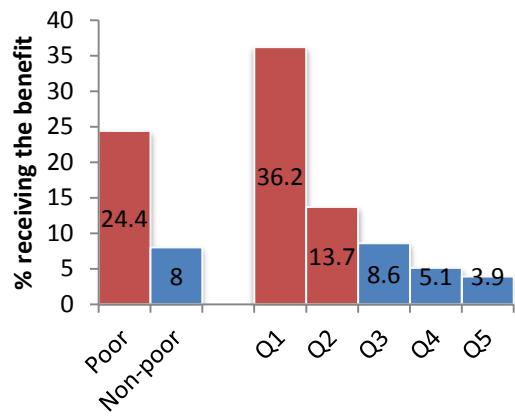


Source: ECA SPeeD (2014). Figure uses Europe and Central Asia harmonized poverty lines at US\$2.5 PPP per day. Welfare quintiles net of all SA transfers.

Note: Program coverage is the share of population in each group that receives the transfer. 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). Country codes: ALB-Albania, ARM-Armenia, BIH-Bosnia-i-Herzegovina, BGR-Bulgaria, HUN-Hungary, KAZ-Kazakhstan, MKD-FYR Macedonia, MDA-Moldova, POL-Poland, UKR-Ukraine.

of the existing beneficiary households may have improved their welfare as the economy recovered, and such change is not immediately captured in the recertification process.

Figure 29. Coverage of the FBP

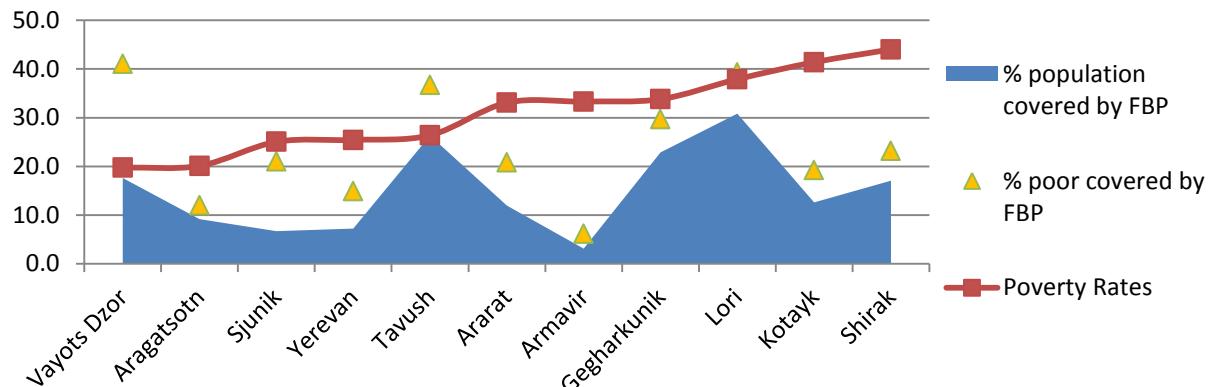


Source: ILCS 2012.

Note: Welfare level computed before the FBP transfer, and including any other transfer. Poor defined as individuals living below the upper poverty line.

Undercoverage of the poor is geographically uneven, and some of the poorest *marzes* have low coverage rates. Since the socioeconomic characteristics of poor households vary considerably across *marzes*, the undercoverage of the program is heterogeneous. Some of the *marzes* with the highest poverty rates such as Shirak and Kotayk display relatively low coverage, while Vayots Dzor, the region with the lowest poverty headcount in 2012, has the highest coverage rate of the poor.

Figure 31. Regional coverage of the FBP



Source: Authors' calculations based on ILCS, 2012.

Figure 30. Targeting accuracy of the FBP

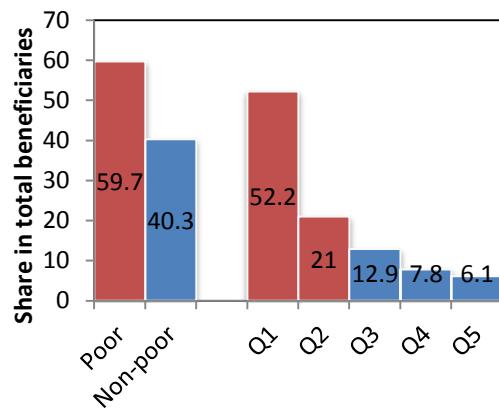
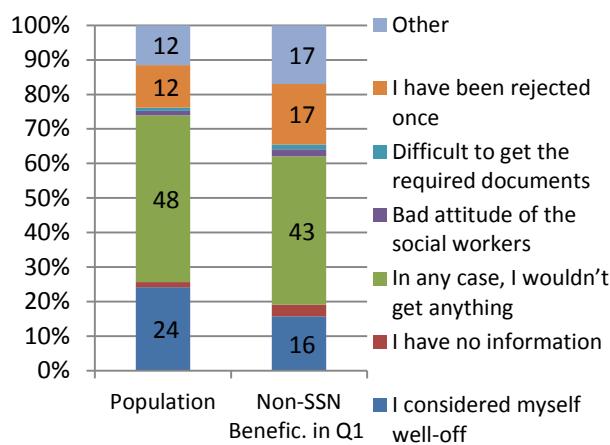


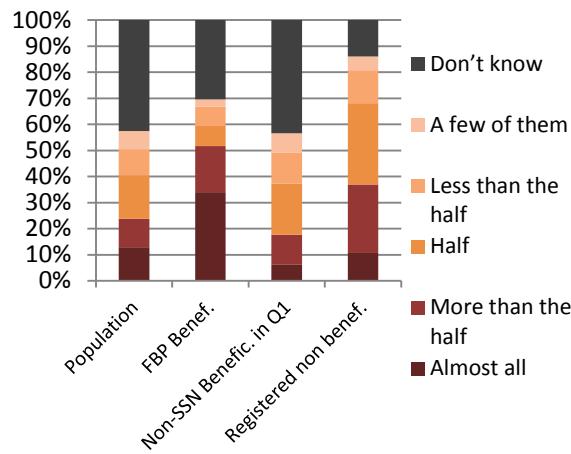
Figure 32. Reasons for not registering in the FBP database



Source: Authors' calculations based on ILCS, 2011.

Note: To gather the data for **Error! Reference source not found.**, the question was, "Which proportion of the FBP recipients do you think are vulnerable?"

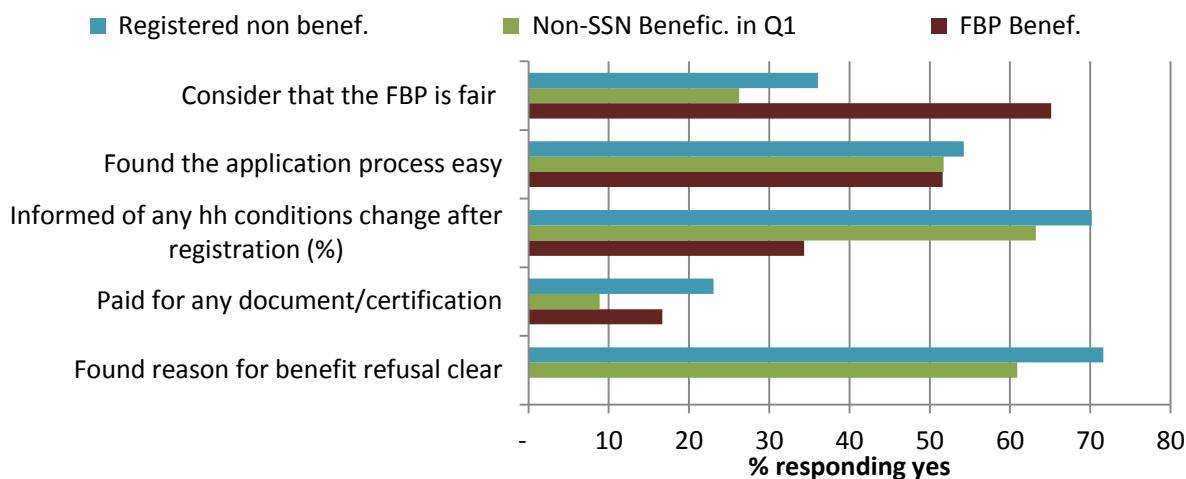
Figure 33. Perception about the proportion of FBP recipients that are vulnerable



Undercoverage is unlikely to result from information deficit, as the program is well known and most applicants understand the eligibility system in broad terms. The survey data indicates that overall, the population is familiar with the FBP, particularly the poor (Figure 32); almost no individual reported failing to register in the FBP because they did not know about it. This is matched by the qualitative research conducted in 2014 on a sample of 216 FBP beneficiaries (Rebosio 2014), which suggested that households are aware of the program's main eligibility requirements, including the filters that prevent access even to vulnerable households (cattle, cars, and electricity), and of the advantage brought by particular social conditions such as having a lot of children. For this reason, the program's low coverage cannot be explained by a lack of awareness among the eligible.

The overall perception is that the program's eligibility criteria are stringent, and it may not be worth applying given the uncertainty of the application process. Figure 32 shows that the most frequent reason the noncovered poor did not register in the FBP is because they believe that their chances of getting into the program are low, while only 17 percent reported to have applied and actually been rejected. Documentation burden is also rarely seen as an obstacle. Qualitative interviews complement this finding, and suggests that the documentation burden at application is perceived as an obstacle, not because getting documents is difficult (Figure 32), but because it represents a considerable costs in terms of time, while the outcome of the application process remains uncertain given the complexity of the eligibility formula.

Figure 34. Perceptions about the FBP program's application and implementation process



Source: Authors' calculations based on ILCS, 2011.

Note: All responses reported represent individuals 15–64.

At the same time, among nonbeneficiaries the perception of targeting accuracy is less positive than its actual performance. While most individuals seem to understand how the program is designed and believe that the targeting criteria are stringent, a large share may not regard its outcomes as fair. Quantitative data suggest that in 2011, only 40 percent of valid respondents¹⁴ in the population thought that a majority of the FBP beneficiaries were poor, which contrasts with the high targeting performance of the program in the same year (Figure 33). The perception of the program's targeting quality is polarized: among FBP beneficiaries, 70 percent of valid respondents believed that more than half of the beneficiaries are poor; among the nonbeneficiaries, 70 percent believe that less than half of the beneficiaries are poor. Similarly, less than a quarter of the noncovered individuals who are poor (quintile 1) believe the system is fair (Figure 34).

Effectively, as currently designed, the eligibility formula excludes many poor households, especially due to its automatic disqualifier filters, which nevertheless are important to keep the nonpoor out of the program. The following analysis of exclusion and inclusion errors of the FBP formula is based on a simulation conducted by the 2011 ILCS,¹⁵ which imputed an eligibility score to each household using all the criteria adopted by the FBP system that were available in the household survey. The simulated score had a significant margin of error in identifying beneficiaries,¹⁶ but is still indicative of the elements that can lead to high rates of exclusion of the poor. The simulation suggests overall, that the binary filters are more effective at excluding the nonpoor than the poor. However, these filters could potentially also be

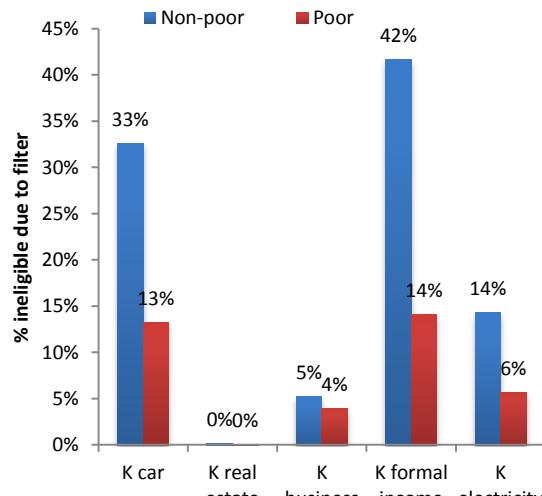
¹⁴ Excluding those who reported that they did not know the answer.

¹⁵ This section is based on Nikitin (2013).

¹⁶ The simulated eligibility score relied on the household information available in ILCS 2011, which is a subset of all criteria used by social workers. The simulated evaluation score resulted in coverage rates of 10.5 percent of the population—against 12 percent in reality—and it successfully identified 50 percent of the actual beneficiaries. Also, the difference in inclusion error is greater for the simulated score, as the FBP covered only 4 percent of total nonpoor, while the simulated covered 8 percent of the total nonpoor.

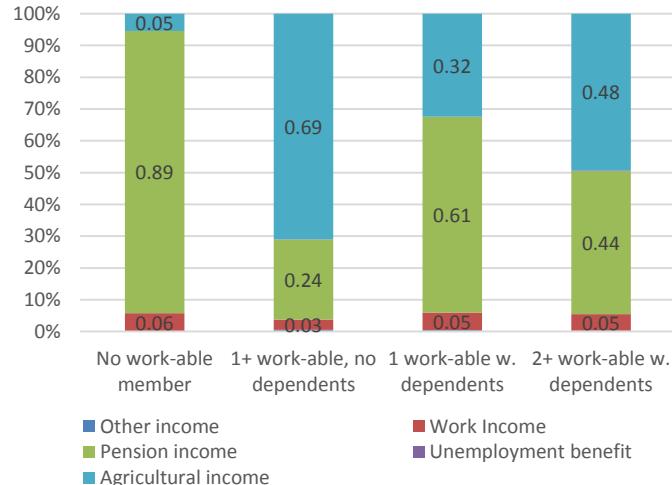
important barriers to access the program, as 14 percent of the poor are simulated to be excluded due to their formal incomes, and 13 percent due to car ownership (Figure 35).

Figure 35. Simulated disqualification of poor and non-poor at total poverty line



Source: Authors' calculation based on ILCS, 2011.

Figure 36. Income sources by household type



The reliance on formal income sources to identify welfare may skew coverage in favor of households with informal labor income and remittance recipients. According to the FBP administrative data, most households rely entirely on pensions or imputed revenues from land ownership or cattle as their income sources (Figure 36). In practice, however, a large share of poor households in Armenia relies on informal jobs outside agriculture, which the FBP is unable to capture. In fact, according to the ILCS, the share of labor earnings in total consumption for FBP beneficiary households is 25 percent, significantly less than for the poor nonbeneficiaries (75 percent), but more than the share of labor income reported in the FBP database. For this reason, program coverage is skewed in favor of informal workers (Chapter 1, Figures 6 and 14), and this translates into a lower probability of poor households being included, if they have formal labor incomes. A similar, though less stark, pattern emerges for poor remittance-recipient households, which have 6 percentage points higher inclusion rates than poor households without remittances (Figure 37). In rural areas, as shown in Figure 38, not having agricultural incomes or cattle slightly increases the likelihood of being covered by the program. Although these are relatively small differentials, qualitative research conducted on FBP beneficiaries (Rebosio 2014) also suggests that households act strategically in response to the formula's biases against formal and agricultural income and livestock; several respondents reported selling their livestock in order to secure their entry into the program (which undermines the family's long-term income sustainability) or refrain from entering low-paid formal jobs (an issue that will be explored in greater detail in the next section). A number of policy options, discussed in Chapter 3 of this note, could maintain the targeting property of the information collected through the current MIS, while moderating exclusion errors.

Figure 37. Coverage rate by presence of non-detected income sources, for poor and nonpoor households

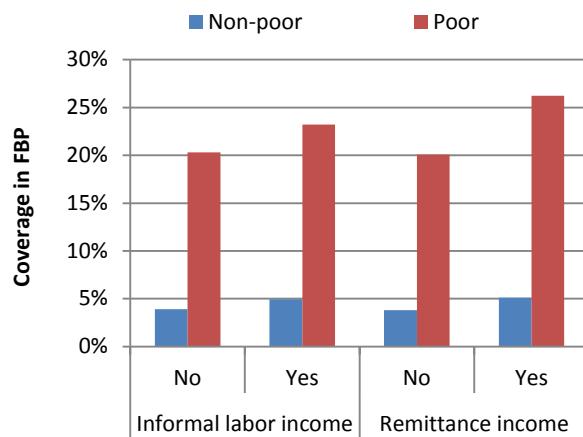
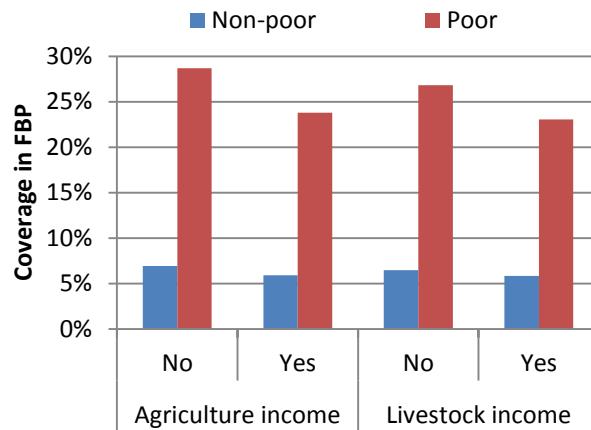


Figure 38. Coverage rate by income typology in rural poor and nonpoor households



Source: Authors' calculations based on administrative database on FBP beneficiaries.

Performance of the family benefit program in terms of activation

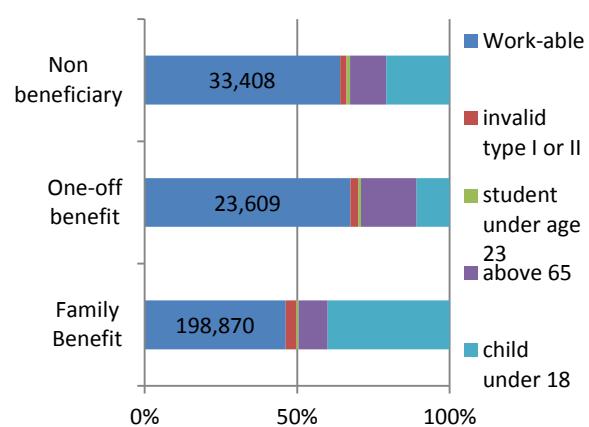
This section provides an in-depth assessment of the extent to which the FBP is facilitating entry into productive employment.¹⁷ Given the recent abolition of the UB, the FBP remains the only sizable transfer in Armenia focused on the workable population. This assessment is conducted largely by exploiting an anonymized section of the administrative database of the FBP beneficiaries, accessing data for the period October 2008 to October 2013. The descriptive statistics shown in this section refer to the situation in May 2013, at which time 430,459 individuals from 102,540 households were included in the database.

How much potential for activation exists in the family benefit program population?

About half of the individuals who benefit from the FBP could be considered workable. According to the administrative database, 49 percent, or about 200,000 individuals, could be considered workable; they are of working age (15–64) and not recorded as disabled or as students in the FB registry. This figure closely matches the share of workable derived from the 2011 ILCS (46 percent).

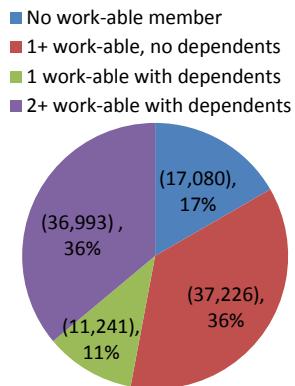
¹⁷ Incentives to labor supply have already been deeply investigated by Levin (2011) on 2009 data, who found no real difference around the simulated cut-off threshold. She did, however, find a slight difference in formality propensity, consistent with the profiles shown above. Methodologically, it is important to distinguish that benefit design incentives may differ depending on the outcome considered (formal employment versus labor force participation in general).

Figure 39. Beneficiary status by work ability



Source: Authors' calculations based on administrative database on FBP beneficiaries, May 2013.
Note: Absolute numbers in parenthesis.

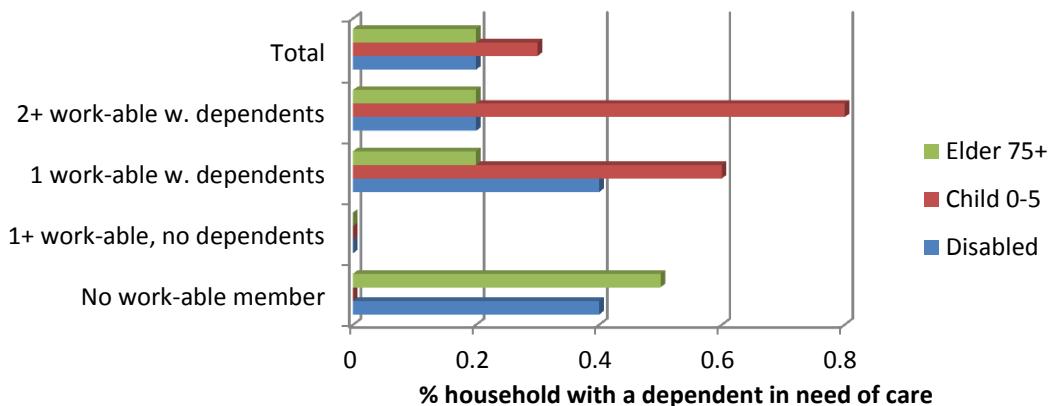
Figure 40. FBP beneficiary households' typology



Most FBP beneficiary households have at least one individual who could be considered workable, although many have important caretaking duties. In planning for potential activation measures to be attached to benefit receipt, it is useful to detect the extent to which households include a member who could be part of an activation requirement. Hence, households with workable individuals are catalogued in three further groups, based on the presence of members who are very likely to require caretaking from workable individuals. We define as dependents, individuals who suffer from a severe disability (category I or II), children aged 0–5 years, and elderly aged 75 years or more. According to this breakdown, a minority group of FBP beneficiary households (17 percent) have no member who could be presumed to work; most of these households include either a dependent elder person or a person with disability. Another 11 percent of households have only one workable individual but have at least one dependent, most often a young child or a person with a disability. On the other hand, 36 percent of households had at least one member who is workable and had no dependents, and an additional 36 percent included more than one workable member with dependents (in most cases the dependents are young children).

Thus, in theory, most FBP beneficiary households could be subject to activation measures, particularly those that exhibit spare labor after accounting for caretaking needs. However, it is important to note that different definitions of caretaking may strongly affect these household distributions. For instance, if one assumes that children up to the age of 18 are dependents who constitute an effective constraint to working, 75 percent of all households in the program have one such dependent. For the purpose of this study, it is assumed that any household with at least one dependent needs the attention of only one able-bodied adult caretaker. This implies that, irrespective of the reason for dependency (whether age or disability), the caretaker would not be available for any type of participation in the formal LM.

Figure 41. Caretaking duties by household typology



Source: Authors' calculations based on administrative database on FBP beneficiaries.

However, the existing information system is not tasked to identify the extent to which workable individuals are already productively employed. Given that the information system in the FBP is geared toward capturing formal income through social security records, solely for the purpose of income verification, its accuracy in detecting employment status is limited. Hence, while ILCS data suggest that half of the workable population in the FBP is employed, even if with lower intensity than the rest of the population in terms of hours and at lower pay, it is not surprising that only about 7 percent of the workable are recorded as employed in the FBP database.

Mobility and graduation patterns among social assistance beneficiaries

The administrative data suggest that a quarter of FBP beneficiary households exit at least once from the program by the 16th month. According to the ILCS, in 2011 the average FB recipient has been enrolled in the program for 6 years. To further analyze the patterns of persistence of households in the program, we apply survival analysis to the administrative data to follow, for 20 months, the 2,131 households that were newly registered in the program in January 2012.¹⁸ Figures 42 and 43 represent the probability of graduating from the program at different durations from enrollment in January 2012; by month 16 (April 2013), a quarter of households had left the program for at least 4 months. This rate is only slightly higher when taking one month as a definition of exit.

¹⁸The choice to follow households for 20 months was dictated by data availability. Because the administrative dataset does not report the actual date of permanence in the program, we define as new entrants those households that were registered in January 2012 but were not beneficiaries in the previous periods available to us—October 2011 to December 2011, and the month of October of 2008, 2009, and 2010.

Figure 42. Probability of exit from the FBP for at least 4 months among new entrants

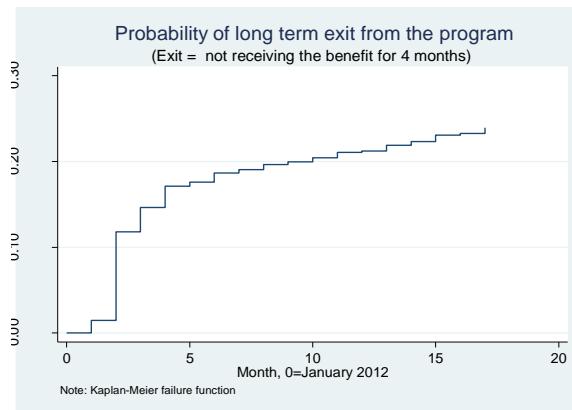
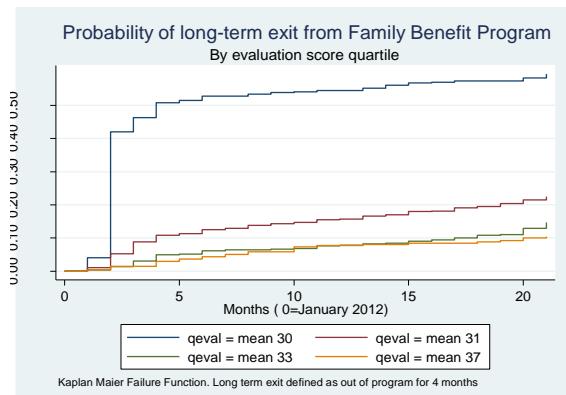


Figure 43. Probability of exit from the program by evaluation score at entry



Source: Authors' calculations based on administrative database on FBP beneficiaries.

Graduation from the FBP is highly associated with a household's evaluation score at enrollment, as a large share of exiting households seem to do so for administrative reasons rather than substantial changes in welfare. Figure 43 represents a similar survival analysis as in Figure 42, divided by beneficiary households according to their position in the distribution of evaluation score at enrollment. The bottom quartile is composed of households very close to the eligibility threshold (a mean evaluation score of 30). More than 40 percent of households in this group are likely to graduate by the 20th month, and by the 6th month a third had left the program. Surprisingly, graduating patterns are strikingly different for households that are just one point above those at the threshold: households in the second bottom quartile (with a score of 31) had a 15 percent chance of graduating by the 20th month. Finally, the chances of graduating among the top two quartiles were only around 10 percent. Although households must recertify every six months, the system is also able to perform routine updates by cross-checking other databases or demographic changes (such as age of members). Figure 44 suggests that higher income at entry is also associated with higher exit rates, which is in line with the finding that beneficiaries with lower vulnerability scores comprise the bulk of those leaving the program.

Households without dependents are more likely to be out of the program 20 months after enrollment. Error! Reference source not found. reproduces hazard rates of graduation, according to the household composition typology presented earlier. The graph suggests that up to a third of beneficiary households with work-able adults and no dependents will be nonbeneficiaries after 20 months. On the other hand, households with no work-able members, as well as those with only one potential earner and at least one dependent, have a smaller chance of exit (22 percent).

Figure 44. Probability of exit from the program by income quartile at entry

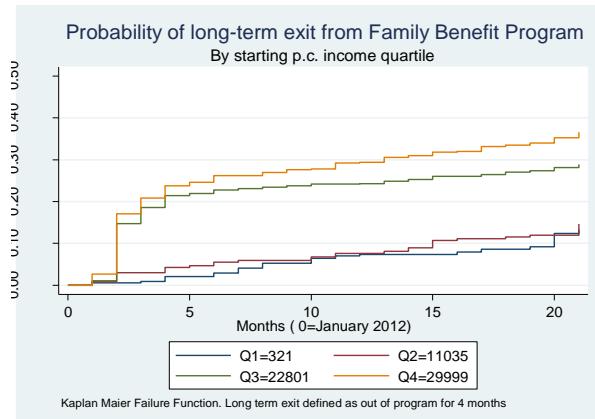
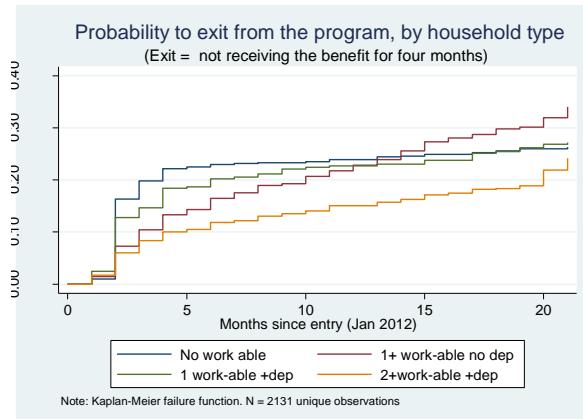


Figure 45. Probability of exit from the FBP by household type



Source: Authors' calculations based on administrative database on FBP beneficiaries.

Overall, mobility in and out of formal employment seems to be very limited. The average recorded employment rate among work-able household members does not vary over the months of the year, which indicates that seasonal work is not captured. Table 3 shows the average probability that a work-able individual who was in the program in October 2011 changed his or her employment status between one semester and the following. The table indicates that the average transition rate from out of work into employment was less than 1 percent, and similarly only 3 percent of those who were recorded as employed moved out of work.

Table 3. Formal employment transition matrix from one semester to the next over 5 semesters for work-able beneficiaries

Following Previous	Not formally working	Working formally	Total
Not formally working	99.65	0.35	100
Working formally	3.41	96.59	100
Total	93.92	6.08	100

Note: Average probability that an individual changes employment status between one semester and the following, between October 2011 and May 2013. The table includes only work-able individuals who were beneficiaries in October 2011.

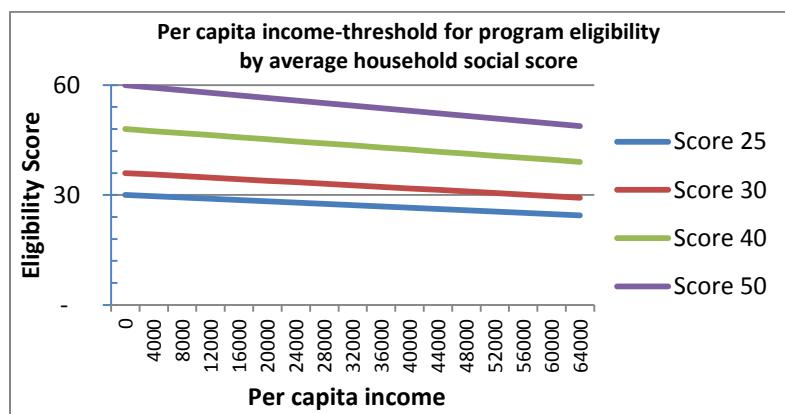
The low level of labor mobility can be explained at least in part by the design of the benefit formula, which leaves little room to acquire labor income without almost automatically losing the benefit. Box 4 describes in detail the income that a household is allowed to earn before being disqualified. Beneficiary households with the highest work potential are also those that can least enter the formal LM without losing their benefit. For instance, households with at least one work-able person and no dependents are much more likely to have an evaluation score close to the threshold of 30, compared to all other household types. On the other side of the spectrum, households that have no work-able

member or households with one single earner and many dependents are skewed toward higher evaluation scores, and thus with more room to earn a formal income without being disqualified.

Box 4. The FBP benefit formula prioritizes individuals who cannot be self-sufficient, but leaves limited space to experiment with the formal LM for work-able beneficiaries.

Unlike other guaranteed minimum income programs in the Europe and Central Asia region, the FBP was conceived as an LRSA program that targets households that are both poor and in socially vulnerable situations, through its multiplicative benefit formula (see Box 3 for more detail). A household is eligible only as long as it receives an evaluation score of 30 or above, and to achieve this it needs to score sufficiently high on the social vulnerability scale as well as have an income within an established threshold.

Figure 46. Income-threshold for program eligibility by household vulnerability score



Source: Authors' calculations based on administrative database on FBP beneficiaries.

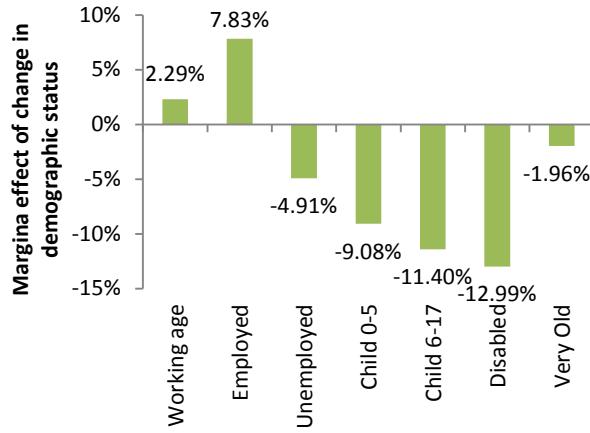
Holding other factors in the formula constant, the social vulnerability score determines the maximum level of income that can be 'disregarded'—that is, the amount of recorded income that the household is allowed to earn while remaining in the program. With minimal exceptions,¹⁹ a household should score at least 25 in terms of social vulnerability to be eligible. Hence, a household composed only of work-able unemployed adults would receive an average social vulnerability score of 22, and cannot qualify for the program even if it earns zero income. On the other hand, the level of income that a household is allowed to earn while remaining eligible ('disregarded' income) increases with the level of social vulnerability. For instance, a household composed of an unemployed parent, an old age pensioner, and an orphaned child would be evaluated at 37 points and could be eligible for an income of up to 28,000 AMD per capita.

Furthermore, the combined effect of benefit design and taxes can constitute a disincentive for some types of households to participate in future activation measures or accept low-paid formal jobs at employment offices. The OECD tax and benefit model for Armenia simulates the cost for a household member to move into a formal job, compared to not working or working informally, at different wage levels (Box 5). This modeling tool can shed light on the implicit costs faced by SA beneficiaries when

¹⁹ A household could potentially be eligible for the program even with a score below 25 if they had zero income and a geographic score above 1, which happens only for areas declared geographically distressed.

deciding whether to take jobs at low pay (around minimum wage [MW]), as many of the vacancies in the PES are. The model shows that a beneficiary in a two-parent household with children, where one parent decided to take up a formal job just above MW, would lose about 80 percent of additional gross earnings through the loss of family benefits and additional taxes. On the other hand, single-parent households (as are 33 percent of FBP households) are given a larger income allowance by the FBP formula. In such cases, the work able-able member would face lower marginal tax rates when entering work at low pay, and in addition would be able to retain eligibility for FBP. Nevertheless, the additional cost of child care could make entering the formal workforce not worthwhile. This may not be a major issue given the low availability of formal jobs in the market, in any case. However, the strict conditions could impact the willingness of beneficiaries to join activation measures, which provide small formal incomes, unless these are disregarded.

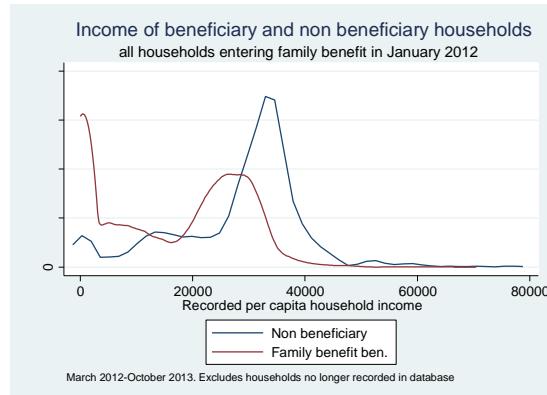
Figure 47. Change in demographic status of members and effect on exit from program



Source: FB beneficiary panel for periods May 2011 to May 2013.

Note: Results show marginal effects of changes in household member composition on probability to be in the program each semester, controlling for household fixed effects, and k-income coefficient.

Figure 48. Distribution of household per capita income by beneficiary status



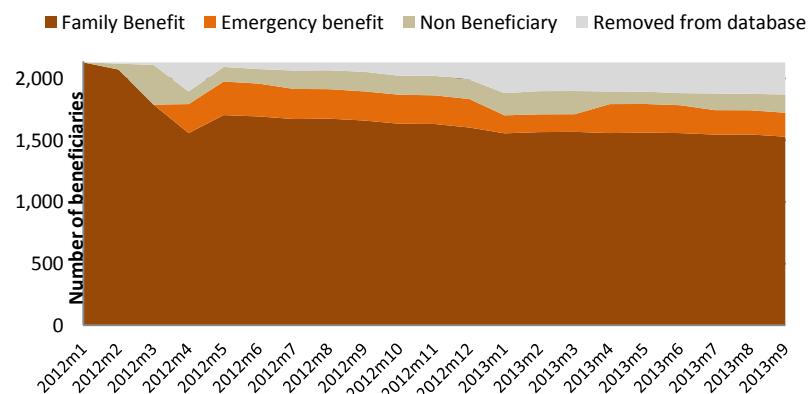
Source: Authors' calculations based on administrative database on FBP beneficiaries.

Empirically, entering into formal employment is directly associated with higher chances of graduation, although average income after exit does not differ very significantly. Empirical analysis suggests a similar finding to those in the tax-benefit simulation. Figure 47 illustrates the effect of having a change in social status for a household member, controlling for household-level idiosyncratic characteristics (fixed effects) and household income (k-income factor). Entry into formal employment on average increases the propensity to exit the program, even after controlling for changes in household income. In other words, not only does the formula make households graduate if their income changes above the allowed limit, but the social scoring factor further penalizes those who enter formal jobs. This can be a problem if earnings after exit remain low. Figure 48 suggests that this may be the case, though the

evidence is not conclusive.²⁰ After graduation, on average per capita household incomes are higher than during the program (as the two are correlated), but the difference is relatively small, at about 5,000 AMD per capita, which means that households that graduate on average have not substantially changed their economic condition.

Among those who leave the program, about one-third move to the one-off emergency benefit. Figure 49 complements the evidence above on exit probability by showing the simple share in household beneficiary status over time among the same sample of households that registered in January 2012. By the 20th month, about 71 percent of households were still benefitting from the FBP. About 10 percent of households had moved to emergency assistance. The remaining 19 percent were no longer beneficiaries, and most of these were no longer in the active registry (which means that they had not recertified their documentation at the welfare offices). This may suggest that social workers are able to mitigate the strict eligibility conditions by providing support to households that have been administratively excluded but remain vulnerable.

Figure 49. Beneficiary status of new entrants in the FBP in January 2012, over 20 months



Source: Authors' calculations based on administrative database on FBP beneficiaries.

Table 4. Formal employment transition matrix over one year for work-able beneficiaries

Status in May 2012	Status in May 2013				
	Family Benefit	One-off	Nonbeneficiary	Suspended from FBP	Total
Receives one-off benefit	9.77	49.56	40.49	0.18	100
Suspended from FBP	12.24	2.93	84.6	0.23	100

Half of the recipients of the one-off benefit remain in the system for a long period of time (one year or more). Table 4 represents a transition matrix of the status in May 2013 of 111,000 beneficiary households that were enrolled for the one-off benefit in May 2012. The table suggests that half of all

²⁰ The differential in formal household incomes does not necessarily reflect total household income or consumption, for the reasons explained earlier. In addition, the differential in incomes may be downward biased because some households that graduate are no longer registered in the database and their incomes are not visible.

recipients of the one-off benefit remained beneficiaries 12 months later. Moreover, this benefit is likely to be used as a temporary measure to protect individuals until they can re-enter the FBP program (10 percent did so over the observed period).

Box 5: Modeling the cost of entering formal jobs for low-earners through the OECD tax benefit model

The combination of taxes and benefit rules pose significant disincentives for some beneficiary households to enter the formal LM. The OECD tax benefit model illustrates the costs and benefits for individuals when they take up formal employment based on the fiscal and benefit legislation in 2012 in Armenia (see annex 3 for full assumptions and formula). The basic opportunity costs taken into account are the reduction in earnings arising from income taxes²¹ and the withdrawal from family benefits. In addition, the model can also factor in the child care costs incurred by single parents and spouses whose partner is already working, and lost income from informal labor. The analysis focuses exclusively on the incentive to take up a formal employment that pays minimum and below-median wages, which are the most common options for the FBP population. The OECD model is applied to four standard household types in which all adults are assumed to be workable: (1) a household with one workable person taking up formal employment; (2) a household with two married workable adults, in which one spouse remains inactive and the other spouse takes up formal employment; (3) a household with a workable single parent with two children; and (4) a household with two workable adults, of whom one is employed and one is not, and two children. In Armenia's case, only the household types with children have sufficient points to qualify for the family benefit. Note that this model assumes that the household has no formal income sources other than labor earnings, family benefits, and UBs.²²

Taking into account the combined effect of taxes and the FBP criteria, a beneficiary in a two-parent household with children, where one decided to take up a formal job just above MW, would lose about 80 percent of additional gross earnings. The first scenario considers the effect of taxes and benefit rules for households taking up a job at 33 percent of average wage (AW), which corresponds to 613,831.7 AMD, or about 1.1 times the MW of 45,000 AMD per month in 2013. Families with two children and two workable adults, in which one spouse remains inactive and the other spouse takes up work at 33 percent of AW, will lose the family benefit. As a consequence, their opportunity costs of formal employment are over 80 percent. In other words, from 100 AMD additional earnings less than 20 AMD contribute to family income. A similar situation emerges at 50 percent of AW. Yet, higher labor income counterbalances parts of the loss of the family benefit, which explains the lower opportunity costs at 50 percent.

Single-parent households with children face fewer disincentives from tax and benefits, but if child care costs are incurred, moving to a formal job may be a net loss. The opportunity cost from taking up a job is relatively low (26.4 percent) for a single parent with two children, mainly because, even at 33 percent of AW, the household does not face a complete withdrawal from family benefits (Figure 50). This household type, however, is likely to incur child care costs if it cannot rely on other forms of help. Table 5 indicates that single parents would spend nearly 100 percent of their net income, if they took up a job just above minimum wage, which required them to

²¹ Since 2013 wages up to 120,000 AMD per month are subject to a unified tax rate of 24.4 percent, combining both income tax and social security contributions.

²² Taking into account other forms of income such as pensions and imputed agricultural incomes, which are accounted for in the FBP eligibility formula, the withdrawal of the FBP would take place at lower levels of additional income than shown in this model. In May 2013 FBP beneficiary households reported 20,000 AMD in nonlabor income per month.

take their children to private kindergarten. Even using community child care, 43 percent of their additional income would be forgone. Child care costs do not vary with income, therefore they constitute a relatively higher burden for low-income earners; and their impact is lower for women who take up slightly better paying jobs at 50 percent of AW.

Figure 50. Share of gross earnings taxed away at 33% of AW

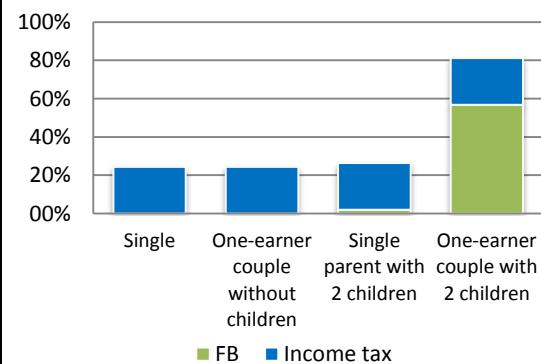
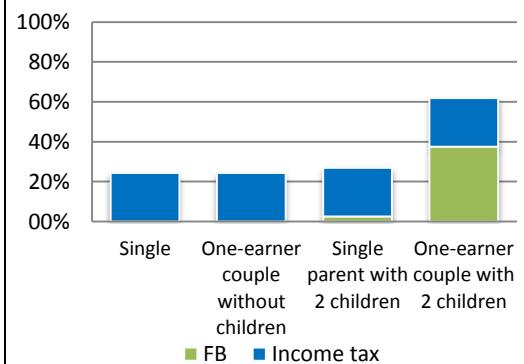


Figure 51. Share of gross earnings taxed away at 50% of AW



Source: Authors' calculations based on ILCS, 2012.

Table 5. Share of gross earnings that is taxed away with and without child care costs

One adult with 2 children	Gross earnings foregone due to taxes and child care costs		
	None	Public kindergarten*	Private kindergarten**
Taking up a job at 33% AW ¹	26.40%	42.50%	93.90%
Taking up a job at 50% AW ¹	27%	37.70%	71.50%

Source: Authors' calculations based on ILCS, 2011.

Notes: Simulation does not take UBS into account;

*49,649 AMD per child per year; **207,223.2 AMD per child per year.

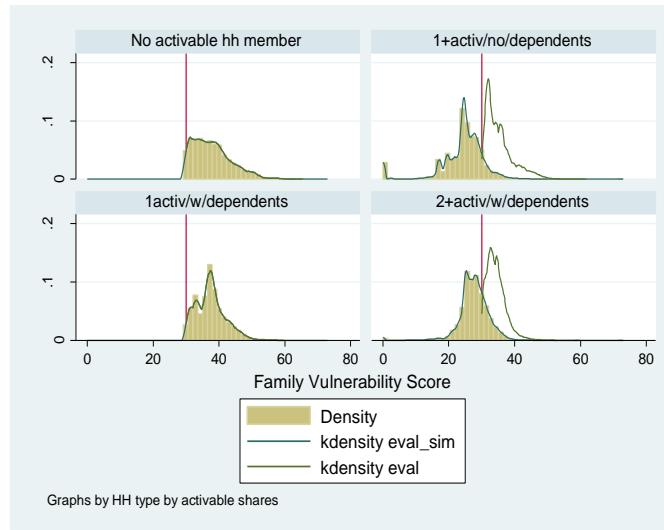
The model could be also updated with additional scenarios that take into account the opportunity cost of relinquishing one's informal earnings after taking a formal job (see annex 3). After making certain assumptions, the average person who is married with two children and receives the family benefit would not find it worthwhile to enter the formal LM at 33 percent of AW, if this implies giving up his informal job.

Could activation measures enhance graduation of social assistance beneficiaries?

If activation measures were applied to one work-able individual in each household with spare labor, nearly 50 percent of households would 'graduate' from the program without necessarily being better off than before. Figure 52 shows the impact of a potential application of activation measures to all beneficiary households where there is at least one spare work-able member (households with two or more work-able members, and households with one work-able member and no dependents). If one member in each of these targeted households (or about 74,000 in total) was offered, and was required

to take on, a formal job at minimum wage (or public works paying minimum wage), the additional earnings would push more than 50 percent of these households below the eligibility threshold. As shown in the tax benefit model, these households would not necessarily be better off than they were with the benefit, and could run a net loss if the newly employed individuals had an informal job that they relinquished. Chapter 3 will discuss the policy solutions adopted in other countries to avoid such sharp losses of eligibility when entering work at low wages.

Figure 52. Impact on program eligibility of applying a mandatory activation measure on one workable member per household not busy with caretaking duties

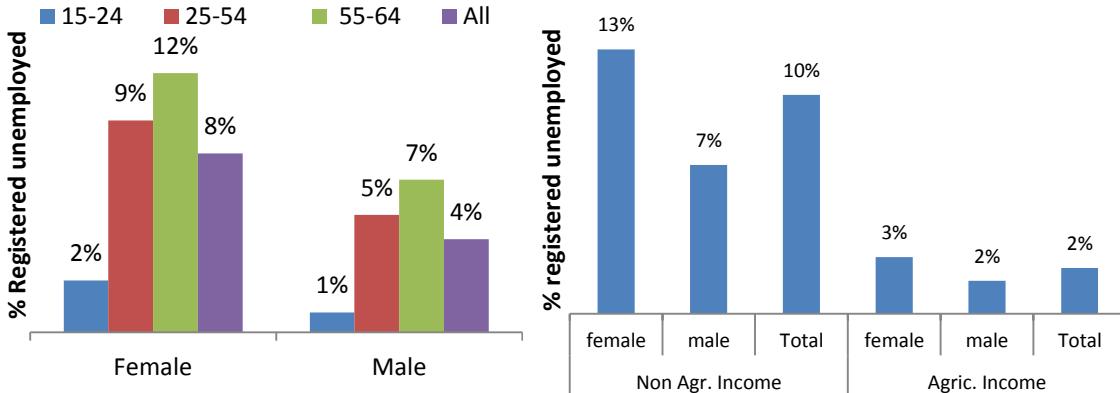


Source: Authors' calculations based on administrative database on FBP beneficiaries.

Note: Distribution of households' FBP vulnerability scores in May 2012 (eval), and simulated distribution of the new vulnerability score (eval_sim) if one workable member per household was forced to take a minimum wage job.

Currently, few of the FBP workable not recorded as employed appear to be registered with the PES. A potential way to help those who are not formally employed find better work could be to require registration with SESA, as is customary for LRSA programs across most European and Central Asian countries. However, the information system reveals that only a minority of the 186,000 workable individuals who are not recorded as working were actually registered as unemployed in 2012 (see Figure 51). Part of these individuals could be assumed to be workers in the agriculture sector and therefore uninterested in moving to other jobs, and in fact the registration rates among households not relying on agriculture is 10 percent, compared to only 2 percent among households that own agricultural assets. Interestingly, women tend to make larger use of employment services than men. In practice however, the current benefit formula provides few incentives for household members to register with employment services. Households that have reached a sufficiently high score to qualify without registering their members with SESA have no incentive to participate in SESA activities once they are in the program.

Figure 53. Workable beneficiaries registered as unemployed according to their social score, May 2013

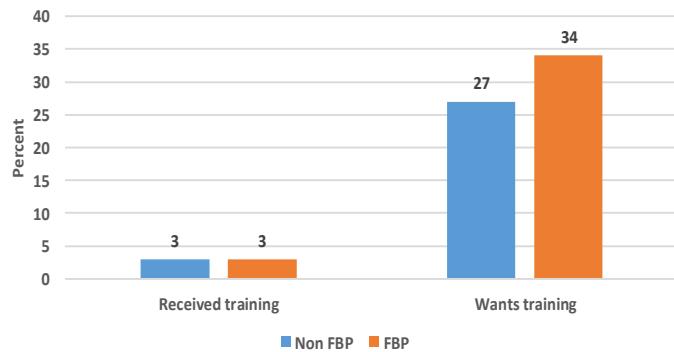


Source:

Note: Work-able beneficiaries registered as unemployed in May 2013. An individual is counted as registered unemployed if he or she receives the corresponding social score in the database.

At the moment, the PES would not have the capacity to impose activation on one work-able beneficiary per household, due to the low availability of vacancies or ALMPs. Among the pool of registered unemployed observed during one month, only 3 percent received training. As many as 30 percent of the registered unemployed, however, reported to be interested in receiving vocational and business development training. Similarly, the number of filled vacancies or job placements through SESA in 2012 was 11,538.²³ While this number is impressive given the LM conditions, it is limited compared to the total registered (62,000 in 2012). This stock of services would be even more inadequate if all work-able FBP beneficiaries not formally employed (186,000), or even just one work-able person per household (85,000), were required to register in the PES.

Figure 54. Training incidence by beneficiary status



Source: Authors' calculations based on the administrative database on registered unemployed GORTS (October 2013).

Among the registered PES beneficiaries, FBP beneficiaries are equally likely to get an ALMP than other individuals. Both FBP and non-FBP beneficiaries were equally likely to receive training, but the demand is more pronounced among FBP recipients. While 27 percent of the non-FBP recipients are interested in receiving some type of training, 34 percent of the FBP recipients are interested (see **Error! Reference source not found.**). This suggests that the FBP recipients are aware of the importance of training to

²³ Official data provided by SESA in 2013.

receive job offers and are willing to take this next step, and many of them would probably not see the system of mutual obligations as a burden if useful services were provided.

These results suggest there is scope for more profiling to solve supply constraints and to better target beneficiaries of training to maximize effectiveness. The supply constraint immediately raises the question of who should receive training first. One can think that those with the most urgency—measured in terms of a higher risk of vulnerability—should receive training first. Also, it can be argued that those for whom the training will most increase the probability of receiving a job offer should get it first. Although not necessarily mutually exclusive, the first argument favors equity while the second favors efficiency. Whatever policy makers decide, implementation would require a mechanism that allocates people into training. For this the PES will need to develop a profiling tool and assess the quality of the collected information (discussed in Chapter 3).

Chapter 3. Priorities for a nascent activation system

Key Messages

The impact of SP spending on poverty and inclusion could be maximized through improvements at the program and system levels.

- The targeting system for SA benefits could be reformed to increase the focus on the poor, facilitate coordination across different programs, and improve incentives to join formal jobs.
- The structure of the Armenian economy suggests that a PMT formula would be more suitable to identify the consumption poor and thus reduce the error of inclusion.
- A PMT formula would also provide an evidence basis to target different benefits at different thresholds of welfare, so as to allow the integration of all programs into a single system.
- In terms of in-kind service provision, significant strides were made in the integration of social services through the creation and rolling out of the ‘one-stop shops’.
- As a next step, the GoA will need to ensure that the designs of different programs are mutually reinforcing and compatible, and that a single coordinating figure can assess needs of household members and coordinate the interventions of specialized agencies.

The benefit system could incentivize employability of the work-able, but this would require a substantial expansion of specialized services and a strong profiling system

- Activation programs for work-able beneficiaries combine financial assistance, services, and sanctions to direct individuals toward LM integration.
- Introducing conditionalities in Armenia would require a number of system level improvements: (i) strengthening the incentives to utilize existing services; (ii) investing in the expansion of the capacity of PES to serve a large number of work-able beneficiaries, both in terms of vacancies collected and of ALMPs; and (iii) modifying the benefit formula to reduce disincentives from entry into formal jobs or ALMPs.
- In light of capacity constraints, a strong profiling system will be important to help case managers deal with the increased inflow of beneficiaries, and prioritize access to services.
- In addition, the provision of services would need to be tailored to beneficiaries’ needs in order to make conditionalities enforceable and fair. Services would need to relieve female participants from caretaking duties, include options for self-employment in light of the low level of wage employment in many target areas, or address basic skill deficits of some participants, in addition to building job-specific skills.

Conditionalities of benefits could also be used to preserve and increase the human capital of children.

- SA could also be leveraged to build children’s human capital, help break intergenerational poverty, and lower future dependency on transfers.

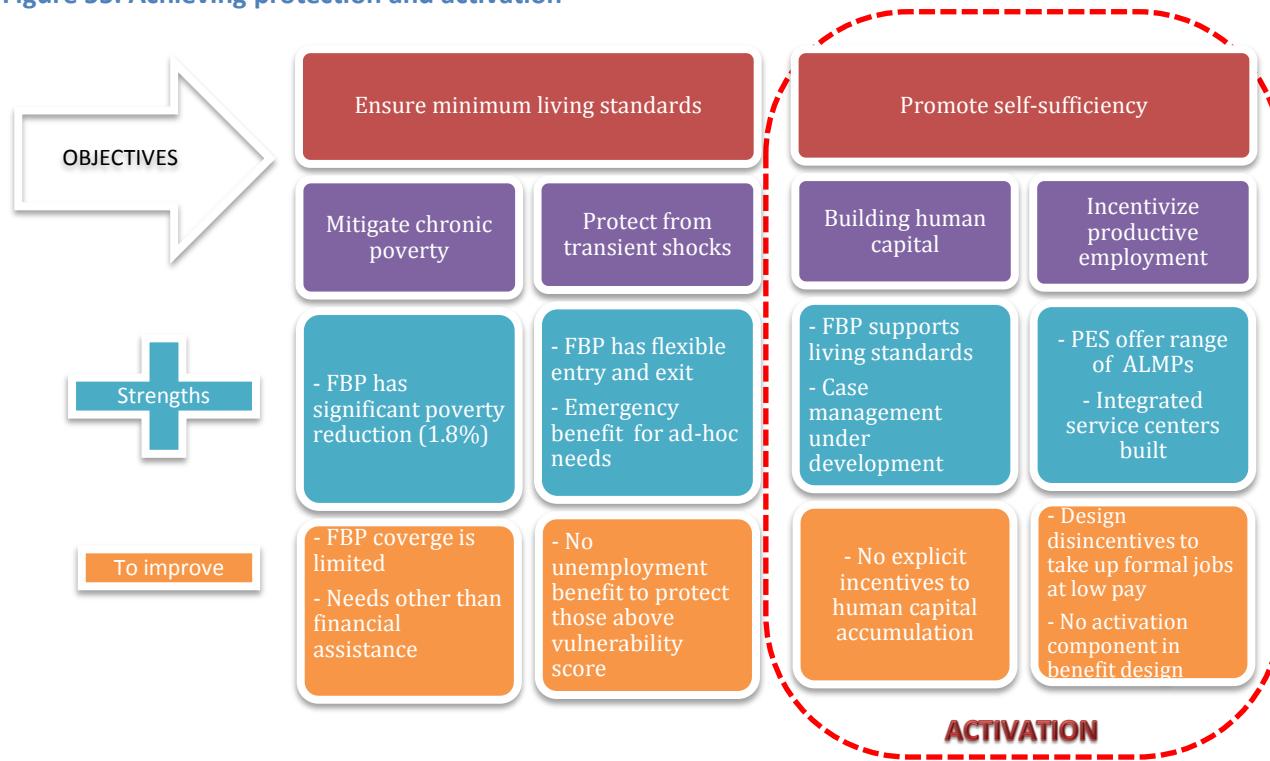
- Unconditional cash transfers (UCTs) have by themselves been found to have significant positive impacts on child health and education. However, programs that condition benefit receipt to the utilization of services that build human capital, and where utilization would otherwise be low, could increase the returns of such an investment.

Possible forms of human capital conditionality could include requiring teenage students to attend secondary schools, or requiring mothers and children to attend regular health checks. In all these areas poor children in Armenia have shown a gap with respect to children born in nonpoor households.

Introduction

The previous chapters detail the main strengths and weaknesses of the SA system in terms of fulfilling its basic function of protecting individuals from temporary shocks and alleviating poverty and supporting the vulnerable work-able population in entering productive employment. The assessment indicated that the system already has a number of important strengths to build on, in terms of programs, infrastructure, and resources, as summarized in Figure 55. However, the impact of social expenditure on the work-able population and their households could be further maximized through a number of improvements at the program and system level.

Figure 55. Achieving protection and activation



Source: authors

In particular, in light of the findings of this analysis, activation for vulnerable groups could be facilitated by the following three sets of actions:

- (i) Develop a new targeting system to maximize the poverty impact of programs and align their incentives with activation objectives.
- (ii) Prepare social services for activation, through an integrated functional model, a profiling methodology, and the expansion of services.
- (iii) Improve the design of SA programs to incentivize and support the activation of workable individuals and of the future workforce.

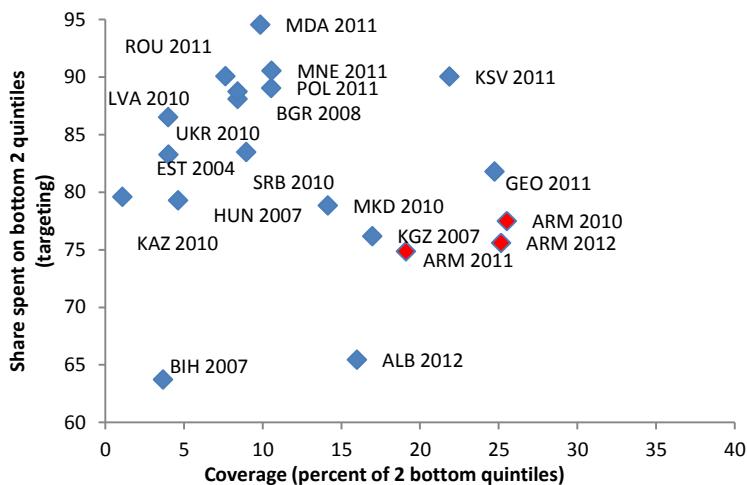
Redesign the targeting system to reduce coverage gaps and enhance coordination

The design of the FBP's targeting formula captures the program's aspiration to address vulnerability under an income dimension and a social vulnerability dimension. However, as shown in Chapter 2, the current design suffers from two main shortcomings: (i) biases in program coverage favor certain categories of households (such as those with informal urban workers, remittance recipients) and (ii) potential disincentives to join the formal labor force at low wages or ALMPs out of fear of becoming ineligible for the program. In light of its low generosity, the program was not found to disincentivize participation to the labor force in general.

Some high-income countries have tried to address the issue of disincentivization by raising the level of non-taxable labor income and/or have targeted such exemptions specifically to SA beneficiaries. In other words, beneficiaries are allowed to earn more while in the program than the maximum amount allowed when they enter the program. For example, in France, beneficiaries continue to receive minimum income benefits while getting paid up to 750 hours per year (lasting up to 12 months); in the Netherlands' internship program for young unemployed, a one-time remuneration of €450 for a three-month internship does not disqualify beneficiaries from receiving the UB. Other countries like the United States have introduced permanent tax credits for low-income workers. However, these measures are likely to be fiscally more costly than alternatives, unless such income exemptions are temporary in nature. In addition, high-income countries tend to couple benefits with strong mutual obligations to ensure that beneficiaries make all efforts to find a sufficiently well-paying job but also as a way to discourage applicants who are not in need (discussed in the next section).

Alternatively, many middle-income countries use PMT schemes to target their safety nets, which are inherently less sensitive to changes in formal labor incomes. PMT targeting is widely used in middle-income countries, including Albania, Georgia, Kosovo, Moldova (with a hybrid formula including means and proxy-means testing), or large programs such as *Oportunidades* in Mexico or *Juntos* in Peru. While this method is used less in Europe and Central Asian countries, each type of design has advantages and disadvantages that have been extensively discussed by academics, policy makers, and development organizations, including the World Bank (Grosh and Baker 1995; Tesliuc et al. 2014). Thus, it is not the objective of this note to review the pros and cons of each design but simply to highlight the main expected gains and costs of switching targeting methods, given the current needs of the FBP. Some of these programs, such as in Georgia and Kosovo, perform extremely well in terms of targeting while maintaining a high coverage of the bottom quintile, as in the case in Armenia (see Figure 56).

Figure 56. Coverage and targeting performance of countries in the Europe and Central Asia region



Source: ECA SPeeD (2014). Figure uses Europe and Central Asia harmonized poverty lines at US\$2.5 PPP per day. Welfare quintiles net of all SA transfers.

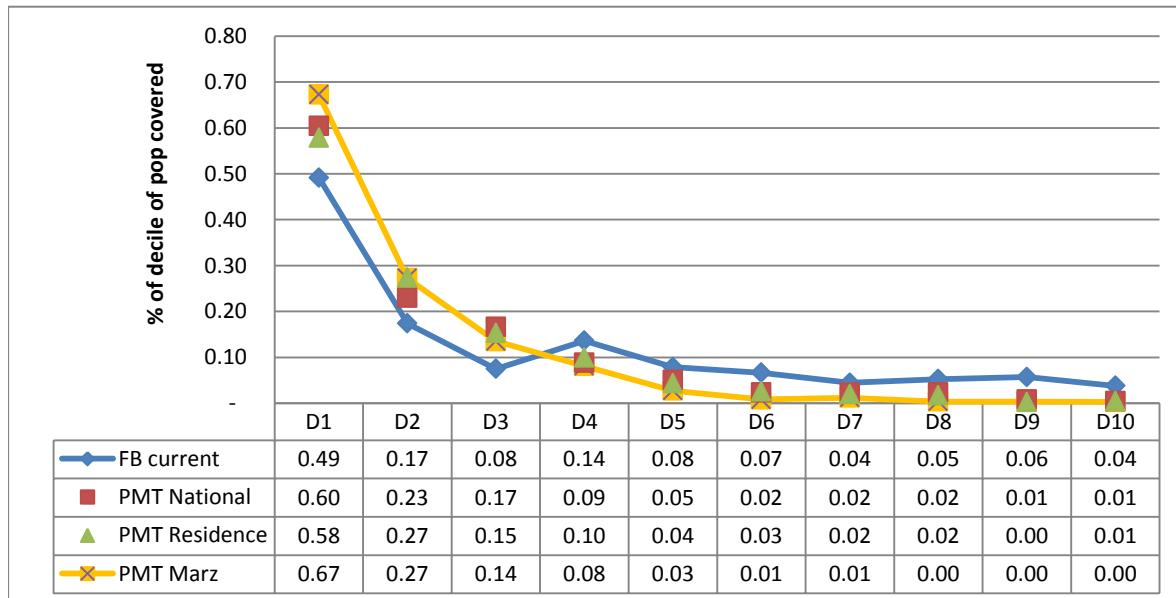
PMT formulas combine information on assets; household composition; traceable expenditures (such as utilities); and incomes (transfers, wages) to compute the probability for a household to be at a specific consumption level through statistical techniques. In theory, a PMT is more likely to avoid direct disincentives to join formal jobs or ALMPs among households close to the eligibility threshold because labor income is just one of multiple factors taken into account to estimate program eligibility, rather than acting as a binary filter, as is currently the case in Armenia. Households graduate only once their overall economic situation improves—as shown by assets accumulation.

The literature has found negligible effects of PMT-targeted programs on the labor supply of recipients, with few exceptions. In the current literature, evidence on this issue remains overall limited, and it has been recently summarized (Tesliuc et al. 2014). In the case of PROGRESA, Alzúa et al. (2012) found a small positive effect on the number of hours worked by female beneficiaries, while Skoufias and Di Maro (2008) found no significant impact on the same programs. No effects were found in either Nicaragua or Honduras (Alzúa et al. 2012). A recent impact evaluation in Georgia (Kits et al. 2014) found that labor force participation rates of young women from households benefitting from targeted SA was significantly lower than women from similar households that are just above the eligibility threshold. The higher income provided by the program was the likely cause for lower participation and only among women who had caretaking duties.

Box 6. Targeting benefits with a PMT formula: a preliminary simulation based on ILCS 2013

Preliminary simulations suggest there is potential to revise Armenia's targeting system for improved performance. The PMT would rely on data from the ILCS on assets; household composition; traceable expenditures (such as utilities); and incomes (transfers, formal labor) to compute the probability of a household being at a specific consumption level. This formula would rely on data that can be verified by social welfare officers through the solid database that is already in place in Armenia and through a household visit. The formula can be tested ex ante in its capacity to successfully identify households that are poor at different thresholds. Figure 57 graphically shows the change in coverage that would take place. A PMT targeting formula would increase coverage among the bottom deciles while reducing coverage on all welfare deciles that are beyond the upper poverty line. Most of the gains would take place by increasing inclusion among the people in the second and third deciles of the distribution. The formula appears to be particularly capable of identifying poor households in the bottom quintile of the score distribution. Compared to the actual FBP, the best-performing PMT model would allow increasing coverage of the bottom quintile from 33 percent to 47 percent and of the poor from 23 percent to 33 percent. Results assume that the program covers the bottom 12.2 percent of the individuals in the PMT distribution. The best performing model (PMT Marz) would increase, by about 14 percentage points, the coverage of the bottom 20 percent. The biggest numerical change would occur in terms of coverage of the total poor, with a 30 percent increase in coverage from 23 percent to about 33 percent. The Residence model, though less performing, would also allow improving coverage of the poor by about 25 percent (from 23 to 31 percent) while making only a more limited impact on the improved coverage of the bottom 20 percent.

Figure 57. Distribution of beneficiaries with simulated PMT and current FBP system



Source: Authors' calculations based on ILCS 2013

In addition, several programs allow the household to reach a level of income that is higher than at entry, with the view of incentivizing income generation. Chapter 2 highlighted how most graduating households in Armenia do so because they are very close to the eligibility threshold at entry, but even after graduation, their level of recorded income has changed little. In addition, households find

graduation an unpredictable event that they can hardly prepare for, and they are wary of experimenting with new entry in the LM if this might cause immediate disqualification. On the other hand, several established programs around the world, such as *Oportunidades* in Mexico or *Bolsa Família* in Brazil, have in place a comprehensive graduation strategy that combines the following elements: (i) the use of a higher threshold for program graduation than the one used for program eligibility, so that households stop relying on the transfer only when they have established a sustainable livelihood out of poverty rather than being eliminated by any temporary increases of income; (ii) several months' advance notice before the household loses the benefit even when they have stopped qualifying, so that households can be prepared and are less afraid to experiment with new jobs; (iii) the offer of a transitory package of benefits, less generous than the full package given to the poorest households, to facilitate a more gradual transition. In addition, as discussed later, most of these programs combine cash with other human capital interventions that are meant to support long-term poverty reduction by also removing the nonfinancial constraints to poverty.

A renewed PMT formula in Armenia could improve targeting precision and facilitate a differentiation of benefit eligibility according to the target groups' needs, to tailor graduation strategies at different thresholds. Preliminary simulations indicate that using a PMT formula in Armenia could help reduce inclusion error of SA, thus allowing more poor individuals to be covered with the same budget (see Box 6). Having a flexible formula that allows different benefits to be targeted at different income thresholds—some more geared toward subsistence, others more focused on facilitating graduation—would reduce the implicit costs of leaving the program for beneficiaries. The main reason for the superior performance of a PMT over the current formula in targeting the poor is that the FBP at present also targets socially vulnerable individuals, who are not necessarily income-deficient. Therefore, a change in the formula would require identifying other means to give preferential access to vulnerable groups such as orphans and single parents—as the FBP does at the moment. In addition, since a PMT score does not adequately capture households that fall into poverty due to temporary loss of labor income, it would remain important to provide in parallel a flexible safety net for people who lose their job; in Armenia, this role could be played by the existing one-off benefit.

Enhance program design to improve employment prospects of work-able individuals and the human capital of the future workforce

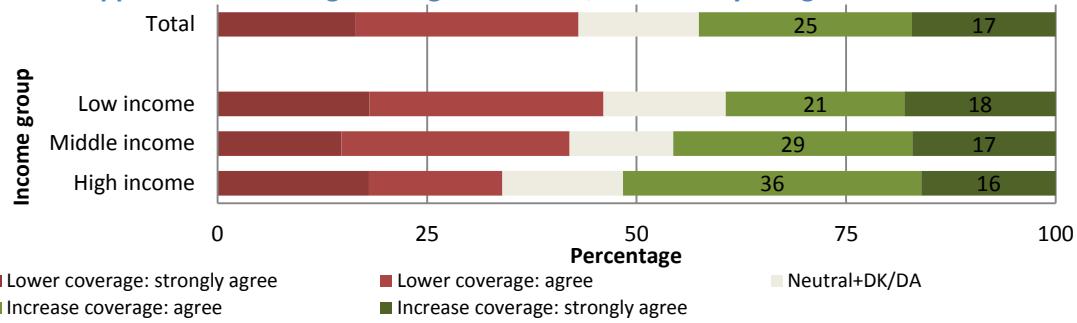
The Armenian population is evenly divided between supporters and opponents of expanding coverage of the FBP in its current design. In 2013, questions were added to the regular public opinion survey called the South Caucasus Barometer (CRRC 2014) to elicit preference from the Armenian population on the design and coverage of safety nets. The first question asked the population whether they would like to see a greater share of the poor covered by the FBP in a fiscally neutral way (even at the cost of higher taxes or cuts in other social services).²⁴ Figure 58 shows that there is no unanimous support of public

²⁴ Respondents were asked to take a position on the following two options: Option 1: SA should cover fewer poor families than it does today, and the savings should be spent on other public services or go toward lowering taxes.

opinion to expand coverage of the FBP as it is currently designed. About 42 percent of respondents were either strongly or mildly inclined toward greater coverage, but a similar share was against it.

High income groups are those showing greater concern for increasing the protection of the poor by safety nets. Fifty-two percent of high-income households were supportive of coverage expansion. Surprisingly, middle- and low-income households seem to be less supportive of an expansion of the program, perhaps in fear that other essential services (currently with universal access) could be penalized, while an expansion of coverage would not guarantee that the individual household could become a beneficiary.

Figure 58. Support for increasing coverage of the FBP, as currently designed

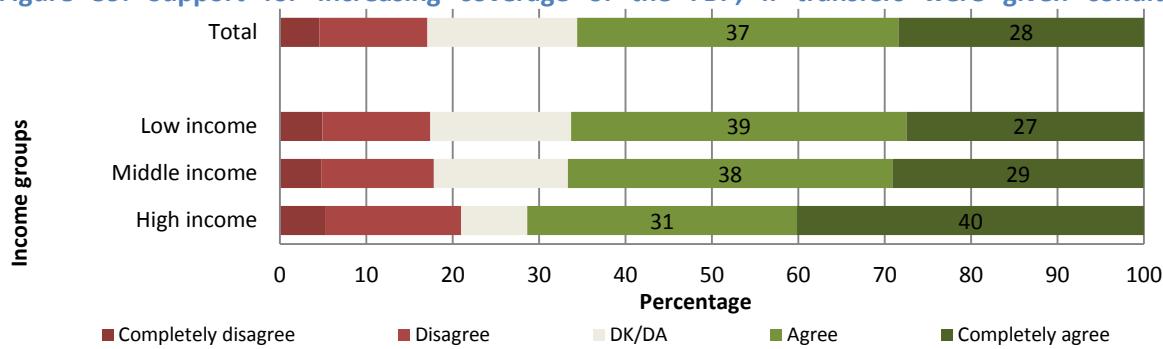


Source: Authors' calculations based on the CRRC South Caucasus Barometer - 2013.

However, support for coverage of the poor by the FBP would significantly increase if benefits were provided on the condition that beneficiaries fulfill actions that increase human capital. The mixed support shown by the Armenian audience for greater coverage of safety nets would change if these programs came with some human capital conditionalities, such as school attendance or job searching (Figure 59). As many as 65 percent of respondents favored having higher coverage, even at the cost of lowering other services or higher taxes, if SSN beneficiaries were asked to participate in other activities. In contrast, the share of those supporting lower coverage decreases to 16 percent, from the previous 44 percent. While the introduction of conditionalities enhances support across income groups, it is interesting to note that low-income individuals are those who show the highest net increases in their level of support under this new policy scenario. Conditionalities have played an important role in building public acceptance for the expansion or preservation of safety nets both in Latin America, and, with a different angle, also in Europe and the United States.

Option 2: SA should cover more poor families than it does today, even if this results in having fewer public services or higher taxes.

Figure 59. Support for increasing coverage of the FBP, if transfers were given conditionally



Source: Authors' calculations based on the CRRC South Caucasus Barometer - 2013.

Note: Respondents were asked: "To what extent do you agree or disagree with extending the number of poor families included in the FBP in exchange for requiring some actions from recipients, like searching for work or sending children to school?"

The preferences of Armenian citizens are in line with the experience of minimum income programs in middle- and high-income countries, which include mutual obligations principles. Respondents in favor of introducing conditionalities for benefit receipt were also asked which benefit conditionality they would support, including job searching, attending mandatory health check-ups, participating in public works, or mandatory school attendance for children.²⁵ The South Caucasus Barometer survey results show generalized support for any of these measures, including among the poor. This suggests that the potential beneficiaries of safety nets are ready to engage in more demanding program designs as long as useful services are made available.

The following sections explore two main sets of changes at the program level that Armenia could consider to enhance the impact of cash transfers through the introduction of conditionality. A first set of programs are widely used in OECD countries (referred to here as activation programs); these target work-able adults and focus on increasing the demand for services that should either assist them in finding a job or in moving to a more productive one. A second set of programs (known as conditional cash transfers [CCTs]) have been very popular in middle-income countries across Latin America, and they are emerging in some European and Central Asian countries. These are meant to increase the human capital of dependents, particularly the future labor force.

Activation programs for the labor market insertion of work-able beneficiaries

Activation programs originated in OECD countries with the objective of facilitating work-able SA recipients' entry into employment and thus reduce reliance on benefits. In Western Europe, major reforms took place in Germany in 2003–2005 called “Commission for Modern Services in the Labor Market,” more commonly known as the Hartz Reforms and in the U.K. as the “New Deal.” Nordic countries, notably Denmark and Norway, also reformed at about the same time (Almeida et al. 2012; Eichhorst and Konle-Seidl 2008; Van Berkel and Borghi 2008). These programs rely on the mutual obligations principle, which is an example of program conditionality that involves public investment in the provision of services (such as counseling, training, and on-the-job apprenticeships) in exchange for

²⁵ These conditions were drawn from among the most common examples around the world.

beneficiaries' commitment to make use of the newly available opportunities in the most effective way. Titles of successful activation programs often already reflect the incentives and project the image of rewarding reintegration into the LM; for example, in the U.K.'s "New Deal," these are called Jobseekers Allowance; Income Support; and Employment Support Allowance.

Common design features include registration with the PES and mandatory participation in social and employment services if deemed necessary. Annex 1 illustrates a full set of country-specific behavioral requirements attached to the receipt of SA. The primary requirement, which in Armenia's case remains optional, is the registration of all workable adults with public employment offices. Most programs also include an explicit obligation to search for a job and, if necessary, to participate in social integration activities. Refusal to participate in these activities implies a temporary termination of benefits.

These programs require the presence of trained case managers and ideally a set of services that address also psychosocial needs and caretaking duties of beneficiaries. Most OECD programs rely on case management. A case manager is a social worker who is trained to (1) take an individualized approach to beneficiaries, one that is based on their specific situation and potential; (2) determine which activation services would work best; (3) facilitate effective referral; and (4) track beneficiaries' progress and introduce remedial action when needed. A good case manager is able to secure beneficiaries' trust and full involvement in designing and implementing a personal graduation plan. Maintaining regular contact and providing psychological support are important when dealing with hard-to-serve recipients. Since SA recipients often face multiple barriers to entering the LM, activation also benefits from supplementary services that help mitigate other constraints to participation, such as child care, abuse counseling, and psychological support. The quality of supplementary services is critically important.

There are several reasons for cautious optimism with respect to the benefits of introducing activation in Armenia, compared to the results seen in OECD countries. The overall body of existing evidence (from high-income countries) suggests that the introduction of activation conditionality has a significant impact on work resumption rates of SSN beneficiaries (Almeida et al. 2012; Eichhorst and Konle-Seidl 2008). However, it is important to note that reforms across OECD countries were introduced against the backdrop of generous welfare states, while the FBP program's level of generosity (at less than 60 percent of the consumption of the bottom quintile) would not allow individuals to survive off the transfer alone, and it is less likely per se to cause labor supply disincentives. This means that the success of activation in Armenia will depend on the supply of quality services rather than on a significant change in job search incentives. Secondly, global evidence suggests that the availability of sufficient labor demand is an important determinant of the success of ALMPs (Betcherman et al. 2007; Betcherman et al. 2004) as well as of exit rates from SA (Cappellari and Jenkins 2008). Thus, the impact of activation in Armenia is likely to also be determined by such contextual factors. However, it is heartening to see that in other countries the introduction of incentives and services to aid job seeking can have significant employment effects even in a very slack LM, such as the one in Portugal during the economic crisis (Martins and Costa 2014).

Activation in Armenia should be introduced at an appropriate pace to avoid damaging the protective function of existing programs. Given the essential role that safety nets play in Armenia in poverty reduction, *it is crucial that the introduction of any conditionality is matched by sufficient capacity to serve new clients and that the services offered are effective*. The risk of not doing so is to waste scarce public resources or even to deprive households of essential income support. In general, all the behavioral requirements to which SA beneficiaries are subject internationally are well known by the Armenian PES in the context of the (now eliminated) UB program. The question is whether such behavioral requirements could also be tested for workable SA beneficiaries, who are a much larger number (an estimated 200,000) and face, in general, more constraints than the 12,000 beneficiaries of UBs in 2012. A paced approach could first introduce light behavioral requirements for one workable individual per household (about 85,000), especially those near the graduation thresholds, after having appropriately profiled all members and identified those who have work potential but are out of work. Alternatively, this approach could be first tested on households without young dependents (the beneficiaries of the new ‘social benefit’), which constitute about a third of the total households (see Chapter 2) and are likely to face fewer constraints in joining active measures.

While the supply of ALMPs and vacancies should continue to grow, a strong profiling system will be necessary to prioritize the neediest among the large inflow of new jobseekers. As shown in Chapter 2, the current stock of ALMPs and vacancies represents a fraction of the existing clients of the Armenian PES. Jobseeker profiling is used in a growing number of OECD countries to assess the strengths and weaknesses of unemployed clients, estimate their chances of finding work, and design corresponding intervention strategies. A profiling system is all the more essential in cases such as Armenia, where the number of available interventions is a fraction of the potential beneficiaries. Hard-to-place categories of jobseekers are usually offered services at higher intensity.

In a country like Armenia, this prioritization could take place through a statistical profiling model applied to all newly registered PES beneficiaries. Loxha et al. (2014) provide a typology of the approaches used by employment services in the OECD to profile jobseekers. Simple profiling methods segment customers either at the full discretion of jobseekers and case managers or strictly according to administrative rules (such as the duration of unemployment or age groups). Advanced profiling methods make a deeper use of data to either guide, or determine, profiling categories. For instance, countries such as Germany and Denmark make use of both software and interview-based tools that assist case managers in identifying hard-to-place cases. This qualitative process requires significant capacity of case workers to derive information from jobseekers in structured interviews and combine it with other objective data sources to make a personal assessment.

Box 7. Piloting a statistical profiling model in Armenia's employment services

The World Bank team partnered with the Armenian State Employment Service Agency to pilot the feasibility of a statistical profiling model based on the agency's information system (GORT). The project used the anonymized records of current and past registered jobseekers in October 2013 (270,304 individuals) to build a binary model that would predict the probability of individuals' exit from the registry at 6, 12, and 18 months since registration, which could be considered different measures of long-term unemployment (LTU). Being female, being elderly, being disabled, having basic secondary and postgraduate education, receiving UBs, receiving family benefits, and having a long contributory history were factors that were significantly correlated with higher probability of unemployment duration, while stated interest in entrepreneurial activity and in engaging in some ALMPs had the opposite effect.

For illustration purposes, Table 6 shows the predicted probability of exit from the registry in 12 months for individuals who entered the registry in the period April–June 2012. At an 80 percent cutoff (that is, among the individuals at the top 20 percent and at the bottom 20 percent of the distribution of predicted probability of LTU), 97 percent of those predicted to be in LTU actually ended up in LTU 12 months later, and 67 percent of those predicted to leave the registry ended up leaving before the 12th month. However, the model's predictive power proved to be greater when computed on waves of unemployed who registered in the year 2012, when economic recovery in Armenia was taking place after a deep recession in 2009–2010, compared to waves of unemployed who registered during periods of economic stagnation. The model proved to have a similar degree of precision as the models used in countries such as Ireland (at the 50 percent cutoff rate).

Table 6. Predictive precision of statistical model for males who registered in April–June 2012

Cutoff	0.5	0.6	0.7	0.8
Total new registered in April–June 2012	2,492	1,952	1,410	623
Correctly predicted 12 months later	1,814	1,522	1,180	561
Percentage correctly predicted	0.73	0.78	0.84	0.9
Stayers correctly predicted	0.82	0.89	0.95	0.97
Leavers correctly predicted	0.58	0.58	0.58	0.67

Source: Nagler, Morgandi, and Dahlen (2014). Building a Statistical Profiling Model for Registered Unemployed in a middle-income country. A feasibility study with the Armenian GORT dataset.

Statistical profiling models, on the other hand, are automated and less human resource-intensive: they attribute a 'score' to new registrants, based on their observable characteristics at registration, and allow them to be divided into 'categories', which in principle reflects the risk that they will become long-term unemployed. This in turn allows determining—at least to some extent—the level of service that should be offered. In general, individuals who show the highest probability of becoming long-term unemployed could be immediately targeted with intensive activation and support measures (as is currently the case in Sweden), while those individuals who are likely to find a job on their own could be immediately directed to self-services and job searches. In Ireland, the profiling tool was used to automatically define the timing of the first in-depth interview with case managers (See Loxha et al. 2014 for a full

illustration). Recently, the Bank worked with SESA to assess the suitability of the GORT dataset to develop a statistical profiling model for Armenia (see Box 7), which produced encouraging results.

The different labor vulnerable groups described in the statistical profiling model face different barriers to participate in the LM, which calls for specific services and programs to best serve their needs. As a matter of fact, women's participation in the Armenia LM is lower than for men due to both economic and social reasons that need to be addressed through distinct interventions to encourage more women to join the workforce. Among the FB beneficiary population, 64 percent of the households have two or more children 15 years old or younger, stressing the care-giver duty needs of women in these households. Furthermore, in terms of program outcome, international evidence shows that employment and training programs have a larger employment impact on women than on men.

The rural/urban dichotomy also implies service differentiation. Rural workers will need support to boost productivity as self-employed and diversify income sources from agriculture to minimize risks or assistance on job intermediation when they move to urban areas. Traineeships and employer training are unlikely to be feasible. Urban workers' activation services, on the other hand, could use intermediation and training to link the unemployed to existing jobs as well as to improve wage worker's employability. Additionally, first-time jobs seekers need programs that can provide them with opportunities to build the first job experience while targeted entrepreneurship training and financing could boost new enterprises and generate jobs.

Conditionalities to enhance human capital accumulation of the future generation

UCTs, such as the FBP, by themselves have significant positive impacts on the health and education outcomes of young members of poor households. Under certain conditions, cash transfers with no additional conditionality are sufficient to enhance the investments of poor households on the health and education of their members, especially children. This is particularly the case when (i) the supply of services, such as schools and clinics, is sufficient and (ii) households naturally have a preference (demand) for using these services if they can afford to and finances are the only constraint that may prevent them from doing so. In such contexts, cash transfers enhance the accumulation of human capital of dependents (like school attendance) through an income effect and also by smoothing consumption during income shocks. While the majority of research has focused on CCT programs, which are most common in developing countries, a handful of studies also explored the impact of UCT programs and proved that often, households' main constrain is indeed mainly financial (see Box 8). In light of the legacy of universal health and education coverage, Armenia could be a case where, in most areas, households, if they can afford to, will naturally make decisions in favor of pursuing children's education and ensuring proper nutrition and healthcare access. In such contexts, cash can be essential; there is evidence that Armenian households with limited smoothing mechanisms have been forced to cut down on essential expenditures including food, which risks children becoming malnourished (Makaryan and Zatikyan 2012); withdrawing children from school; or cutting medical expenses. Such shocks have irreversible damages on children's development and high long-term costs for society. For this reason, cash transfers already in place should be considered an essential public investment to be maintained and, if possible, expanded to improve coverage of the poor.

Increasing the next generation's human capital translates into higher earnings in the future and presumably less dependency on SA. The evidence is still scarce as there are very few CCT programs that have been implemented for a long enough period to explore the long-term effects. Evidence from PROGRESA indicates that the observed investments in education have long-lasting effects in terms of higher wages. The long-term effects of PROGRESA show a reduction in work for younger youth consistent with continuing education, an increase in the labor force participation of young girls, and a shift from agricultural to nonagricultural employment (Berhman et al. 2011).

In the area of education, a possible form of conditionality in Armenia would be to tie receipt of the family benefit to teenage children attending upper secondary education. Conditionalities could further increase the returns of cash transfers, if they incentivize accumulation of human capital in areas where the demand for services would otherwise be low. In the case of Armenia, attendance of upper secondary education is an area where demand could be incentivized. ILCS 2012 shows that teenagers in poor households have significantly lower graduation rates than those in better off families, and completion rates could drop further in the wake of the enactment of the new secondary education reform.²⁶ Recent estimates based on ILCS 2012 suggest that failing to complete upper secondary education could cost as much as 22 percent of lifetime earnings for young men and 29 percent for young women (relative to primary education), if upper secondary diplomas become the standard in the Armenian LM for secondary education completion (World Bank 2014c, 56). Table 7 shows a range of CCT programs that had an impact on beneficiaries' secondary education completion rates across the world. Among the programs that focus on secondary education in Europe and Central Asia it is worth noting the case of Macedonia, where the Social Financial Assistance is conditional on regular enrollment and attendance in secondary school; the program resulted in an increase of 10 percentage points in enrollment rates and reduced dropout of those closer to graduation.

Box 8. Recent evidence on UCTs and CCTs

Impact evaluations that explicitly disentangle the effect of imposing conditionality on beneficiaries from those of the cash transfer itself are rare. The emerging evidence, however, suggests that conditionality may not always be necessary, or it may be substituted by enhanced awareness raising on the benefit of specific behavior, to have an impact. School enrollment conditionality was tested in a recent experiment in Morocco. The experiment was run on two treatment subgroups: one received a small cash transfer to fathers of school-age children in poor rural communities. The transfer was not conditional on school attendance but labeled as an education support program (called a labeled cash transfer, or LCT); another subgroup received a conditional transfer implemented by the government, the usual CCT. The analysis showed that adding conditionality and targeting mothers made almost no difference in terms of school participation (Benhassine et al. 2013). A second example comes from an experiment in Malawi that had the objective of empowering young women to stay in school longer (Baird et al. 2012). One group received a monthly stipend conditioned on attending school (a CCT) while the other group simply received the cash without any conditionality (a UCT). It was found that both the women in the UCT and those in the CCT groups were less likely to drop out of school compared to women without transfers, which was the control group.

²⁶ This may stem from a number of reasons, including the high cost of tutoring, the perception that this additional diploma may have no additional returns on the LM, or perceived low quality of education.

However, dropout was more mitigated in the group with conditionality. On the other hand, beneficiaries of UCTs performed better in terms of delaying marriage and pregnancy (Baird et al. 2012).

A larger body of international evidence, including a recent meta-analysis of existing studies, exists for CCT programs. CCTs that are conditional on school enrollment and attendance positively impact these outcomes (Fiszbein and Schady 2009; Saavedra and Garcia 2012). In addition, CCTs have been found to have an impact on other areas of child development (not necessarily through the conditionality but likely through the income effect). In Mexico, larger cumulative transfers to the household significantly improved outcomes in many aspects of child physical, nutritional, cognitive, and language development (Fernald et al. 2008). When looking at the impact on educational achievement (rather than attendance), the picture is more nuanced. For example, in Cambodia, there was no effect on math or language among the recipients. One explanation could be that the conditionality attracts low performers and thus we should not expect a positive effect on education achievement (Filmer and Schady 2009). Instead, in Turkey, a positive impact was observed among low-income primary education students (Ahmed et al. 2007).

Table 7. Selected cases of cash transfers with impact on secondary education

Country	Program Name	Target	Condition	Program Impact
Macedonia	Social Financial Assistance	Secondary education youth	Secondary education attendance	10 percentage points on enrollment
Colombia	<i>Familias en Accion</i>	Children aged 8–17 years	Attendance rate of >80% of school days confirmed by teacher	5.5 percentage points on enrollment
Jamaica	Program of Advancement through Health and Education (PATH)	Children aged 7–17 years	Attendance rate of >85% of school days confirmed by teacher	Higher school attendance rate
Mexico	<i>Oportunidades</i> (rural youth)	Children in grade 0–9	Attendance rate of >85% of school days confirmed by teacher	No change in attendance, modest increase in mean grades completed (+4.4%)
Turkey	Social Risk Mitigation Project	Children in primary school and secondary school	School attendance and regular visits to health clinics by the beneficiaries	10 percentage points on enrollment, 5 percentage points on attendance

Sources: Attanasio et al. (2005); Levy and Ohls (2007); Ahmed et al. (2007); World Bank (2013a).

If supply was adequately expanded, conditionality for pre-primary education would meet the dual goals of supporting female labor force participation and improving children's life-long learning outcomes. Educational research has reached a consensus that accumulation of human capital at early ages produces higher life-long returns than any other intervention later in life. Thus, incentivizing pre-primary education is potentially an important investment in Armenia's future labor force. At the same time, this could help activate women, given the strong social pressure to stay home and take care of children (see Chapter 1). However, for this conditionality to be effective, the government would need to

ensure the availability of preschools, and their design should be tailored to the working women's needs in terms of hours, so that they can balance family and work.

Although less common, conditionalities on health utilization have also been impactful. Strong impacts have been found in CCT programs that are conditional on preventive health services. Most of the health services are directed toward children (and are very focused on vaccinations) and pregnant women. Most CCT programs in Latin America with health checks conditionality for children, such as *Red de Protección Social* (Nicaragua) and *Familias en Acción* (Colombia), have shown positive impacts in terms of increased use of health care programs, especially among poor households (Attanasio et al. 2005). Other programs are conditional on activities that are related to productivity or health improvements, especially through mandatory participation in informational talks or preventive health care for adults. For example, adult male health is an area for improvement in Armenia. Although the evidence from many experiments to reduce sexually transmitted infections in African countries is still unfolding, there are some other exercises that are closer to the interests of Armenia. For example, there have been experiments in the United States to offer financial incentives to encourage weight loss (Finkelstein et al. 2007; Cawley and Price 2011).

Box 9. Chile *Solidario*

Chile *Solidario* was a management model to coordinate all the country's institutions responsible for providing social welfare that provided comprehensive support to the approximately 225,000 poorest families —about 5 percent of Chile's population of 17 million. It aimed for households to achieve 53 minimum living conditions across 7 dimensions, including individual and property identification, health, education, family dynamics, housing, employment, and income. This represents a holistic and unique approach to supporting extremely poor families. Trained counselors undertake personalized diagnostics of a household, its assets, and its constraints and goals, and help draw up plans that families commit to following to achieve targets across the seven dimensions. Social workers monitor families and help them achieve goals by advising and linking them to a range of services, including health, education, psychosocial support, microcredit, and public employment services. Cash benefit payments begin after signing an individual contract; payment is limited to two years, during which the value of the benefit gradually declines. Women receive benefits on behalf of families, and sanctions apply in the event of noncompliance with commitments.

Chile had to reform its public employment services to serve *Solidario* beneficiaries who face multiple barriers to employment. This work included activation elements such as improving employability through provision of adult literacy courses, training, and skills development. Employment counselors had to be retrained to work proactively with clients who have no strong attachment to the LM.

Source: Gotcheva 2014.

Successful poverty reduction programs have also experimented with a household-centered approach, incorporating multiple interventions steered by case managers. While so far we have discussed the introduction of specific conditionalities for specific target groups, modern social policy programs apply this principle to the household level and form a plan for the entire household in a multidimensional approach. The steps for such an approach include the assessment of needs and constraints of different household members; the development of a personal or family plan (programs and services not directly

related to the LM are likely to be important); the establishment of referrals to different specialists; service integration; counseling; and follow-up. Frequent and personalized interventions of agencies during an individual's unemployment spell are also a feature. One salient example is the case of Chile *Solidario* (Box 9), which has implemented this holistic approach to reduce poverty in ultra-vulnerable households.

These international experiences could be a reference for the development of a new functional model of integration in Armenia. Armenia has already made significant strides in integrating its services into one-stop shops, as a basis to build more synergies across SP functions.²⁷ As a next step, integration of these functions will ensure that the incentives and design of different programs are mutually reinforcing and compatible. A salient opportunity for further integration could be the development of a holistic poverty reduction program with the household at the center and case managers steering multiple interventions. Case managers could rely on a quantitative targeting system, such as the one illustrated earlier, to define eligibility criteria at entry and at exit, while exercising their discretion in the identification of appropriate interventions.

²⁷ Under the SPAP I and in its incipient follow-up investment, SPAP II, the GoA has invested in the colocation of all its SP service functions across the country, with new or upgraded facilities, an integrated management information system, the introduction of new case management procedures, and building up innovative interventions (two new ALMPs and a career orientation service).

References

- Ahmed, A., M. Adato, A. Kudat, D. Gilligan, and R. Colasan. 2007. "Impact evaluation of the conditional cash transfer program in Turkey: Final report." International Food Policy Research Institute, Washington, DC.
- Almeida, R., J. Arbelaez, M. Honorati, A. Kuddo, T. Lohmann, M. Ovadiya, L. Pop, M.L. Sanchez Puerta, and M. Weber. 2012, March. "Improving access to jobs and earnings opportunities: the role of activation and graduation policies in developing countries." World Bank, Washington, DC. <http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/430578-1331508552354/1204.pdf>
- Alzúa, María Laura, Guillermo Cruces, and Laura Ripani. 2012. "Welfare Programs and Labor Supply in Developing Countries: Experimental Evidence from Latin America." *Journal of Population Economics* 26 (October): 1255–1284.
- Arias, Omar S., Carolina Sánchez-Páramo, María E. Dávalos, Indhira Santos, Erwin R.Tiongson, Carola Gruen, Natasha de Andrade Falcão, Gady Saiovici, and Cesar A. Cancho. 2014. *Back to Work: Growing with Jobs in Europe and Central Asia*. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/16570>
- Attanasio, O., E. Fitzsimmons, and A. Gomez. 2005. "The impact of a conditional education subsidy on school enrollment in Colombia." The Institute of Fiscal Studies, Report Summary Familias 1.
- Baird, S.J., R.S. Garfein, C.T. McIntosh, and B. Özler, B. 2012. "Effect of a cash transfer programme for schooling on prevalence of HIV and herpes simplex type 2 in Malawi: A cluster randomised trial." *Lancet* 379: 1320–1329.
- Behrman, Jere R., Susan W. Parker, and Petra E. Todd. 2011. "Do conditional cash transfers for schooling generate lasting benefits? A five-year follow-up of PROGRESA/Oportunidades." *Journal of Human Resources* 46 (1): 93-122.
- Benhassine, N., F. Devoto, E. Duflo, P. Dupas, and V. Pouliquen. 2013. "Turning a shove into a nudge? A 'labeled cash transfer' for education. National Bureau of Economic Research, Cambridge, MA.
- Betcherman, G., A. Dar, and K. Olivas. 2004. "Impacts of active labor market programs: New evidence from evaluations with particular attention to developing and transition countries." World Bank, Washington, DC.
- Betcherman, G., M. Godfrey, S. Puerto, F. Rother, and A. Stavreska. 2007. "A review of interventions to support young workers: Findings of the youth employment inventory." Social Protection Discussion Paper 715, World Bank, Washington, DC.

- Cappellari, L., and S.P. Jenkins, S.P. 2008. "The dynamics of social assistance receipt: measurement and modelling issues, with an application to Britain." Discussion Paper no. 3765, Institute for the Study of Labor (IZA), Bonn.
- Card, D., P. Ibarrarán, F. Regalia, D. Rosas-Shady, and Y. Soares. 2011. "The labor market impacts of youth training in the Dominican Republic." *Journal of Labor Economics* 29 (2): 267–300.
- Cawley, John, and Joshua A. Price. 2011. "Outcomes in a Program That Offers Financial Rewards for Weight Loss." In *Economic Aspects of Obesity*, edited by Michael Grossman and Naci Mocan, pp. 91–126. National Bureau of Economic Research and University of Chicago Press, Chicago.
- De Walque, Demian. 2014. "Risking your health: causes, consequences, and interventions to prevent risky behaviours." World Bank, Washington, DC.
- Doepeke, Matthias, and Michèle Tertilt. 2014. "Does Female Empowerment Promote Economic Development?" NBER Working Paper 19888, National Bureau of Economic Research, Cambridge, MA.
- Europe and Central Asia Social Protection Expenditure and Evaluation Database (ECA SPEED). 2014. World Bank, Washington, DC.
- Eichhorst, W. and R. Konle-Seidl. 2008. "Contingent convergence: a comparative analysis of activation policies." Institute for the Study of Labor (IZA), Bonn.
- Ersado, L. 2012. "Poverty and distributional impact of gas price hike in Armenia." World Bank, Social Protection Discussion Papers, Washington, DC.
- Fernald, Lisa C. H., Paul H. Gertler, and Lynnette M. Neufeld. 2008. "Role of Cash in Conditional Cash Transfer Programmes for Child Health, Growth, and Development: An Analysis of Mexico's Oportunidades." *Lancet* 371 (9615): 827–37.
- Filmer, D., and N. Schady. 2009. "School Enrollment, Selection and Test Scores." World Bank, Washington, DC.
- Finkelstein, Eric A., Laura A. Linnan, Deborah F. Tate, and Ben E. Birken. 2007. "A Pilot Study Testing the Effect of Different Levels of Financial Incentives on Weight Loss among Overweight Employees." *Journal of Occupational and Environmental Medicine* 49 (9): 981–89.
- Fiszbein, Ariel, and Norbert Schady. 2009. "Conditional cash transfers: Reducing present and future poverty." World Bank, Washington, DC.
- Gotcheva, Boryana and Ramya Sundaram. 2011. Social Safety Nets in the Western Balkans. Design Implementation and Policy Options. World Bank. Europe and Central Asia Region.
- Grosh, Margaret E., and Judy L. Baker. 1995. "Proxy means tests for targeting social programs: Simulations and speculation." World Bank. Washington, DC.

Integrated Living Conditions Survey (ILCS) of Households. 2012. *Armenia—Integrated Living Conditions Survey 2012*. Yerevan: National Statistical Service of the Republic of Armenia. http://microdatalib.worldbank.org/index.php/catalog/5261/related_materials.

Levin (2011). Armenia: Social Assistance Programs and Work Disincentives. The World Bank.

Levy, D., and J. Ohls. 2007. "Evaluation of Jamaica's PATH program: Final report." Mathematica Policy Research Inc, Washington, DC. <http://www.mathematica-mpr.com/~media/publications/PDFs/JamaicaPATH.pdf>

Levy, Santiago, and Norbert Schady. 2013. "Latin America's Social Policy Challenge: Education, Social Insurance, Redistribution" *Journal of Economic Perspectives* 27 (2): 193–218.

Loxha, A., and M. Morgandi. 2014. "Profiling the unemployed: A selective review of OECD experiences and implications for emerging economies." The World Bank Social Protection Discussion Papers.

Makaryan, A., and A. Zatikyan. 2012. "Strategies for Coping with the Effects of the Global Financial Crisis in Rural Armenian Households." Norwegian Institute of International Affairs, Oslo.

Maluccio, John, and Rafael Flores. *Impact evaluation of a conditional cash transfer program: The Nicaraguan Red de Protección Social*. Intl Food Policy Research Institute, 2005.

Martins, P.S., and S.P. Costa. 2014. "Reemployment effects from increased activation: Evidence from times of crisis." <https://www.nuim.ie/sites/default/files/assets/document/Convoc%202014-05-19.pdf>

McQuaid, R.W. 2006. "Job search success and employability in local labor markets." *The Annals of Regional Science* 40 (2): 407-421.

Nagler P., M. Morgandi and F. Dahlen (2014). Building a Statistical Profiling Model for Registered Unemployed in a middle-income country. A feasibility study with the Armenian GORT dataset.

Nikitin. 2013. "Quantitative assessment of the poverty scoring formula used by Armenia's family benefit program." Background paper, based on ILCS 2011.Mimeo

Rebosio, Michelle. 2014. "Qualitative Study: Attitudes Toward Energy Reforms in Armenia." World Bank, Washington, DC.

Rutkowski, Jan J. 2012. "Armenia: Promoting productive employment." World Bank, Washington, DC.

Saavedra, J.E., and S. Garcia. 2012. "Impacts of Conditional Cash Transfer Programs on Educational Outcomes in Developing Countries: A Meta-analysis." RAND Labor and Population Working Paper WR-921-1, Rand, Santa Monica, CA.

Skoufias, E., and V. Di Maro. 2008. "Conditional cash transfers, adult work incentives, and poverty." *Journal of Development Studies* 44: 935–960.

Teixeira, Clarissa Gondim. 2009. "What Is the Impact of Cash Transfers on Labour Supply?" International Policy Centre for Inclusive Growth (IPC-IG), Brazil.

Teixeira, Clarissa Gondim. 2010. "A heterogeneity analysis of the Bolsa Família Programme effect on men and women's work supply." Working Paper, International Policy Centre for Inclusive Growth, Brazil.

Tesliuc and GroshTesliuc, E., Pop, L., Grosh, M., Yemtsov, R., 2014. Income Support for the Poorest: A Review of Experience in Eastern Europe and Central Asia. World Bank Publications.

Van Berkel, R., and V. Borghi, V., 2008. "Introduction: The governance of activation." *Social Ppolicy and Society* 7:, 331–340.

World Bank, forthcoming. "Armenia: Education, skills, and labor market outcomes of 15–64 year old adults living in urban areas." World Bank, Washington, DC.

World Bank. 2013a. "Mid-term Review of the Macedonia Conditional Cash Transfers Project (CCTP)." Unpublished.

World Bank. 2013b. "Republic of Armenia: Accumulation, Competition, and Connectivity. Poverty Reduction and Economic Management Unit, Europe and Central Asia Region, World Bank, Washington, DC.
<https://openknowledge.worldbank.org/bitstream/handle/10986/16781/811370revision0Box0379837B00PUBLIC0.pdf?sequence=1>

World Bank. 2014a. "Activation and Smart Safety Nets in the Western Balkans: Toward an Integrated Approach." World Bank, Washington, DC.

World Bank. 2014b. "Republic of Armenia: Public Expenditure Review. Expanding the Fiscal Envelope." World Bank, Washington, DC.

World Bank 2014c. "Project Appraisal Document, Republic of Armenia Education Improvement Project." Annex 6, page 54. The World Bank, Washington DC.

Annex 1. Behavioral requirements and benefit sanctions in selected OECD and Eastern European countries

Country	Registered as unemployed	Job search requirements	Job acceptance and exceptions	Work and/or social integration requirements	Implications of refusal/sanctions	Other behavioral conditions
Albania	Required	No	Required	Yes	Denial of benefit	n.a.
Australia	Required	Yes, proof every two weeks	n.a.	Yes	From 'warning' to 100% benefit withdrawal	Behavioral requirements can be extended to other family members
Austria	Required	Yes	'Reasonable' work, exceptions related to age (men over 65; women over 60)	n.a.	Denial of benefit	Cooperation with employment services
Belgium	Required	Demonstration of willingness to work and evidence of job search	Obligation to accept 'suitable' job; exceptions are possible for health reasons	Yes	Benefit (integration income) can be denied to a person who is unwilling to work	Participation in employment, social integration, or individualized social integration project offered by the municipality
Bosnia-i-Herzegovina	Yes	No	No	Yes, focus made on social inclusion first, then labor activation	n.a.	n.a.
Bulgaria	Required for at least 9 months before claiming SA	To have not rejected any jobs offered or qualification courses offered by the employment offices	Exceptions for able-bodied with care responsibilities, health conditions, full-time students, and pregnant women	Work - required	Denial of benefit to the person who has refused job or training, first refusal - 1 month; second - 1 year	Could be identified and included in the Individual Employment Plan
Canada	Required	Yes	Yes	Yes	Up to 100% withdrawal	Regular confirmation of circumstances; verification periods vary by provinces
Czech Republic	Recipients, unless employed, must register with the labor office as jobseekers	No specific independent job search requirement, but willingness to work is basic condition for being treated	Accept any job, even short-term or less paid; exclusions due to age, health status, disability, or family situation	Yes	Participation is obligatory and subject to verification; refusal to participate results in exclusion from SA	To actively look for a job, accept any employment, participate in active employment programs, public works, and public

Country	Registered as unemployed	Job search requirements	Job acceptance and exceptions	Work and/or social integration requirements	Implications of refusal/sanctions	Other behavioral conditions
		as a person in material need	(care responsibilities)		receipt	service
Denmark	Required	Required for both spouses	Appropriate job	Work - required	Payment is suspended if the beneficiary or his/her partner refuses without sufficient reason to participate in activation measures or repeatedly fails to report on job searches	Behavioral requirements are extended to other family members
Estonia	Required registration with the Estonian Unemployment Insurance Fund	Required	To be available for suitable work	Yes	Refusal to grant the benefit to those capable of work and between 18 and pensionable age, who are neither working nor studying and have repeatedly refused, without reason, training, or suitable work or have refused to take up social or employment services	Fulfillment of other conditions and activities can be agreed in an individual job search plan
Finland	Required	Required	Required, suitable job	Work - required	100% benefit withdrawal for 60 to 90 days	Action plans mandatory for certain groups; regular confirmation of circumstances
France	Required	Obligation to look for work	Suitable job	Work - required SI - required	n/a	To take the necessary steps to generate one's own activity or to participate in integration activities
FYR Macedonia	Proof of no work is required	No, only training and retraining	Required	Yes	Benefit suspension for 6–12 months; more for refusing to participate in public works than for not taking up active LMmeasures	Monthly confirmation of circumstances
Germany	Required	Required for	Take up a	Yes	From 10% to	Specific

Country	Registered as unemployed	Job search requirements	Job acceptance and exceptions	Work and/or social integration requirements	Implications of refusal/sanctions	Other behavioral conditions
	beneficiaries capable of working and persons living with them in a domestic unit	reasonable job; exemption for people with a disability and those taking care of children under 3 years		100% withdrawal for 1.5 to 3 months	conditions for (a) the basic security benefit—to take part in all work-oriented inclusion measures; to enter into an integration agreement with the job center; (b) occupational integration benefits; (c) the starting allowance and loans for self-employed beneficiaries. Taking up of services provided by the local authorities for the care of minor or disabled children and for home care of family members; debt counseling, psychological support, and addiction counseling. Update of action plan every 6 months.	
Hungary	Required for benefit for persons in active age/employment substituting benefit	Required	Suitable job	Work - required	The entitlement to the benefit is terminated if the person is deleted from the registry of jobseekers due to his/her own fault, if (s)he refuses a proper job, works, cannot prove that in the previous year (s)he pursued a gainful activity, or took part in training or a LM program for at least 30 days	To cooperate with the public employment services; to participate in training programs, guidance, and programs which help to prepare for work. Proof of independent job search every 3 months
Ireland	Required	Jobseeker's	Required	Yes	Temporary 100%	All persons

Country	Registered as unemployed	Job search requirements	Job acceptance and exceptions	Work and/or social integration requirements	Implications of refusal/sanctions	Other behavioral conditions
		allowance recipients must be available for, capable of, and genuinely seeking work			benefit withdrawal	unemployed for 3 months must participate in the National Employment Action Plan aimed at helping them enter or re-enter the LM; confirmation of circumstances - every 4 weeks
Japan	Not required	Required	n.a.	Work - no SI - no	From warning to 100% withdrawal	Confirmation of circumstances every 4 weeks
Kosovo	Required	No	Required	Yes, participation in employment counseling, public works, and other employment programs	n.a.	Re-registration with unemployment office every 3 months; re-application to benefit every 6 months
Latvia	Required	Yes	Suitable job	Work - required SI - required	Total amount of benefit is reduced by the part corresponding to the person who has refused	Beneficiaries are obliged to cooperate with social workers in order to overcome their situation through provision of information, personal attendance, participation in measures promoting employment, acceptance of medical examination, and participation in medical and social rehabilitation
Lithuania	Required registration with the local office of labor exchange or another employment	Required	Required	n.a.	Refusal of job offer, training, public duties or works supported by the Employment Fund may cause suspension of, or	n.a.

Country	Registered as unemployed	Job search requirements	Job acceptance and exceptions	Work and/or social integration requirements	Implications of refusal/sanctions	Other behavioral conditions
	service					refusal to grant social benefits
Montenegro	Required	Required to access services provided by employment agency	Not required by law	'Soft' requirements to participate in activation-related activities, to take a job or training offer while still in unemployment	From denial to participate in activation programs to denial of benefit	Monthly confirmation of circumstances; there are no legal guarantees for reentry into SA if the activation does not render self-sufficiency and independence
Netherlands	Required registration with the Institute for Employee Benefit Schemes	Required; the partners of unemployed should also look for work	Required acceptance of suitable employment	Yes	Cut or reduction of benefit in case of noncooperation. Medical and social factors are taken into account, as are child care obligations	The parent is obliged to attend training courses. If the children are aged 5 years or older, cases are examined individually to determine the exemption from this obligation. If all attempts are unsuccessful, social services will help find work or training.
Poland	Required	Required	Obliged to undertake offered work	Work - required SI - required	Refusal to grant or withdrawal of SA benefit; reduction of integration allowance	Cooperation with social services; regular confirmation of circumstances; in certain cases proof of independent job search; individual plan
Portugal	Registration with job center is required	Required	Required, any offered job	Work - required SI - required, with exceptions	Cancellation of registration with the job center	To obtain the benefit, the claimant must accept the obligations stemming from the integration contract. The obligations contained in the integration contract include: accept proposed jobs and vocational

Country	Registered as unemployed	Job search requirements	Job acceptance and exceptions	Work and/or social integration requirements	Implications of refusal/sanctions	Other behavioral conditions
						trainings; attend courses; participate in occupational programs or other temporary programs stimulating LM integration or meeting social, community or environmental needs; undertake professional counseling or training actions; take steps regarding prevention, treatment, or rehabilitation of drug addiction and incentives to take up self-employment.
Romania	Required	No	Acceptance of community work; exemptions for non-prime age recipients, attending vocational training, or professional or other activity	Work required; one family member is obliged to work in the interest of the local authority	Failure to comply results in suspension of the social aid	
Serbia	Required	Required	Yes, suitable job	Yes	Sanctions exist for recipients who refuse a job offer or do not participate in activation measures, but they do not apply to non-workable family members; sanctions are rarely applied	Assistance is granted for 9 out of 12 months a year; eligibility must be recertified every 12 months
Slovakia	Registration with the Office of Labor, Social Affairs, and Family is	Required for activation allowance	Suitable work	Taking suitable work, training, or community work is optional for	The person receives only the basic benefit in material need	The taking up of activation allowance is conditional on participation in training,

Country	Registered as unemployed	Job search requirements	Job acceptance and exceptions	Work and/or social integration requirements	Implications of refusal/sanctions	Other behavioral conditions
	mandatory for activation allowance			the beneficiary but obligatory for getting the activation allowance		municipal works, or other suitable work
Slovak Republic	Required	Required	Required acceptance of any job after receiving SA for a certain time, that is, 9 times in the last 12 months		Refusal to grant the benefit or benefit withdrawal in case of voluntary termination of employment, refusal of job offer, or refusal/abandonment of ALMPs	
Spain	Required	Required	Yes, suitable job	Yes	100% withdrawal from 4 weeks to indefinitely	Confirmation of circumstances every 3 months and intensive interviews every 3 months
Sweden	Required	Required	Required	Yes	Sanctions exist, they vary by municipality	SA is conditional to participation in ALMPs; also on intensive interviews, regular confirmation of circumstances, individual action plans
United Kingdom	Required	Required	Required - to be available for 'all work'	Yes	Termination of benefit from 2 weeks to 26 weeks	For jobseekers' allowance—must sign a jobseekers' agreement detailing the type of work, hours, and activities to be undertaken by the jobseeker in their search for work; initial intensive interview with quarterly follow-ups, confirmation of circumstances every 2 weeks, proof of independent job search every 2 weeks;

Country	Registered as unemployed	Job search requirements	Job acceptance and exceptions	Work and/or social integration requirements	Implications of refusal/sanctions	Other behavioral conditions
						requirements can be extended to other family members after recognizing caring responsibility
United States	Required (for food stamps)	Required (for food stamps)	Required (for food stamps)	Required (for food stamps)	100% withdrawal for minimum of 1 month	Confirmation of circumstances rules vary by state; proof of independent job search can be required; requirements are extended to other family members as well

Source: Gotcheva et al. 2011. Social Safety Nets in the Western Balkans. Design Implementation and Policy Options. Europe and Central Asia Region. Based on data from European Commission (2012) and national legislation.

Annex 2. Statistical profile of vulnerable groups

	Male and Female					
	Whole Population	Work-able Population	Work-able poor	Work-able SSN Ben	Work-able FBP Ben	Work-able Non FBP benef poor
Source: ILCS 2011						
Population shares						
Sample size	31,024	18,961	6,314	2,808	1,487	5,543
No of individuals	3,162,084	1,928,609	632,700	317,344	152,022	548,183
Share in the Total Population	100.00	60.99	20.01	10.04	4.81	17.34
Share in Poor Population			55.38	27.78	13.31	47.98
Labor Status and Characteristics^a						
Employed	52.18	60.54	51.09	49.70	49.28	52.37
Salaried Employee	55.57	58.86	55.44	54.55	33.51	57.80
Employer	0.64	0.71	0.36	0.78	-	0.41
Self-employed	29.77	27.18	27.68	30.96	43.29	26.44
Zero Income	14.03	13.25	16.52	13.70	23.20	15.35
Unemployed	11.87	14.31	19.01	21.87	17.22	18.70
Out of labor force	35.95	25.15	29.90	28.42	33.49	28.94
Housewife	24.86	44.61	42.76	41.00	40.96	43.95
Disabled	7.40	-	-	-	-	-
Military service	0.05	0.10	0.14	0.23	0.22	0.16
Persons with other receipts	21.04	9.89	8.33	13.32	6.78	8.82
Discouraged	24.20	42.90	46.91	43.92	50.78	45.08
Other	22.44	2.50	1.86	1.53	1.26	1.99
Labor Occupation						
Agriculture, Forestry, Fishing + Mining, Quarrying	40.24	36.71	42.18	39.32	61.28	39.92
Manufacturing	6.63	7.07	8.74	7.27	4.82	9.17
Electricity, Gas, Water, Steam Sewerage, Waste management	3.00	3.15	3.05	3.65	1.01	3.35
Construction	5.73	6.18	7.07	8.44	11.10	6.20
Wholesale and retail trade, repair of motor vehicles	9.45	10.11	10.43	10.25	7.44	10.74
Transportation and Storage	4.13	4.40	4.70	4.73	2.81	5.07
Accommodation and Food Service Activities	1.09	1.12	0.86	0.44	0.66	0.84
Information and Communication	1.46	1.62	0.76	1.10	-	0.85
Financial and Insurance Activities	0.76	0.83	0.59	1.31	0.35	0.62
Real State Activities	0.17	0.18	0.06	-	-	0.07
Professional, Scientific and Technical activities	1.68	1.61	0.41	1.57	-	0.46
Administrative and Support Service Activities	0.86	0.88	0.59	0.90	0.66	0.59
Public Administration and Defence	6.75	7.12	6.59	5.14	2.05	7.32
Education, Health, Art & Recreation, other services activities	17.79	18.74	13.75	15.32	7.29	14.69
Activities of HH as employers of domestic personnel	0.24	0.27	0.18	0.56	0.54	0.07
Working Hours (per week)	35.35	36.55	35.12	34.55	29.24	35.72
Work doesn't comply with qualifications	12.80	13.01	11.32	15.53	17.31	11.10
Informal Job^b	60.15	57.97	66.92	64.10	86.99	64.00
Ocasional/seasonal jobs	28.71	27.96	33.06	34.78	43.09	31.09
Had ever had a paid job	49.70	51.36	47.78	54.69	43.49	48.30
Feel that need more training to be competitive in the labor market	26.13	28.66	31.05	26.89	29.30	31.72
Length of time looking for a job (for those unemployed)						
Less than 7 month	30.46	29.98	30.47	31.58	30.91	30.02
7 to 12 months	16.87	16.95	16.47	12.50	11.83	16.98
13 to 24 months	20.15	20.50	19.81	22.39	26.85	19.12
>24 months	32.53	32.57	33.24	33.54	30.41	33.88
Method of job search^c						
Method 1: through labor office	7.59	8.02	8.53	31.46	9.93	8.56
Method 2: through friends/relatives	89.95	90.35	90.19	86.63	95.60	89.07
Method 3: others	44.94	44.84	44.84	36.51	39.12	45.96
Registered in labor market programs (training) or Labor Offices	0.70	1.13	1.61	6.85	1.80	1.54
In Training or received training during the last year	0.36	0.37	0.62	0.37	0.37	0.65

	Male and Female					
	Whole Population	Work-able Population	Work-able poor	Work-able SSN Ben	Work-able FBP Ben	Work-able Non FBP benef poor
Source: ILCS 2011						
Socio-demographic characteristics						
Male	47.80	47.43	46.56	46.03	44.04	46.98
Age ranges						
[15-24]	17.09	17.06	18.18	14.85	14.96	18.54
[25-34]	14.72	23.53	26.49	24.72	27.49	26.38
[35-44]	11.56	18.46	19.31	21.50	27.61	18.01
[45-54]	15.67	24.64	21.40	23.33	18.50	21.96
[55-64]	10.92	16.31	14.62	15.59	11.45	15.12
Marital Status						
Married/Cohabitation	62.35	69.85	71.45	72.79	74.82	70.71
Divorced/separated	2.68	3.26	3.49	4.66	5.75	3.13
Widow/er	10.74	4.51	4.46	5.51	6.56	4.25
Single	24.22	22.38	20.60	17.04	12.88	21.91
Has a Disability	3.43	-	-	-	-	-
Educational Level						
Never attended	0.63	0.03	0.07	0.08	0.16	0.07
No education completed	4.61	0.00	0.01	-	-	0.01
Elementary school	14.34	5.46	8.17	7.90	9.79	7.58
Secondary/Vocational	39.58	46.84	54.93	48.34	61.34	53.63
Higher education (college or higher)	40.85	47.65	36.83	43.67	28.71	38.70
Household Size and Structure						
Lives in Urban Area	66.26	66.19	66.58	71.85	58.84	67.32
Household size	3.89	4.26	4.96	4.69	4.95	4.89
Single parent HH	36.38	31.59	30.90	34.92	40.82	29.11
Female-Headed Household	30.85	27.29	26.40	30.78	35.42	24.92
Elderly-Headed Household (65+)	34.88	25.83	29.65	22.71	24.33	29.48
Total number of dependents						
Children (0-15)	0.72	0.83	1.17	1.25	1.78	1.03
Elderly	0.50	0.38	0.45	0.30	0.30	0.46
Disabled	0.13	0.12	0.17	0.18	0.23	0.15
Usage of preschool (if child present in hh)	26.52	26.52	21.48	24.40	23.51	21.71
Socioeconomic Characteristics						
Poor (upper poverty line)	30.59	31.70	100.00	53.67	71.83	100.00
Share of work related incomes in Total Consumption	57.95	66.19	66.85	42.87	28.43	74.34
Household beneficiary of:						
SSN beneficiary	16.88	17.09	24.69	100.00	100.00	10.73
Social assistance (FBP)	9.38	8.84	15.64	51.70	100.00	-
Disability allowance	2.20	2.54	3.72	14.86	4.14	3.65
Child allowances	0.74	0.85	0.62	5.00	0.25	0.73
Scholarships and fellowships	2.40	2.53	2.28	14.80	2.16	2.42
Unemployment Benefit	1.13	1.30	1.68	7.61	0.52	1.89
Number of times HH received Emergency benefits (12 mon)	2.53	2.56	2.17	2.56		2.17
Generosity of SA + SI benefits in Total Consumption	25.25	17.23	26.13	29.90	37.38	22.28
Generosity of SSN benefits + Unemp. Ben in Total Consumption	3.15	3.01	5.84	17.61	23.99	1.52
Years being entitled to Family Benefits	6.12	5.94	6.32	5.94	5.94	
Main reason for not being registered in FBP						
I considered myself well-off	23.02	23.91	15.96	20.69		15.96
Has no information	1.54	1.49	2.03	1.80		2.03
In any case, I wouldn't get anything	48.43	48.53	48.61	51.24		48.61
Bad attitude of the social workers	1.68	1.36	1.76	0.46		1.76
Difficult to get the required documents	1.06	0.84	1.35	1.13		1.35
I have been rejected once	13.08	12.30	16.53	13.97		16.53
Other	11.20	11.57	13.76	10.71		13.76

	Female Only					
	Whole Population	Work-able Population	Work-able poor	Work-able SSN Ben	Work-able FBP Ben	Work-able Non FBP benef poor
Source: ILCS 2011						
Population shares						
Sample size	15,899	9,734	3,323	1,494	826	2,894
No of individuals	1,650,641	1,013,881	338,091	171,275	85,064	290,626
Share in the Total Population	100.00	61.42	20.48	10.38	5.15	17.61
Share in Poor Population	275.17	169.02	56.36	28.55	14.18	48.45
Labor Status and Characteristics^a						
Employed	44.45	51.32	40.08	39.08	39.74	41.52
Salaried Employee	51.57	54.97	48.22	45.23	20.43	51.63
Employer	0.29	0.33	0.26	0.20	-	0.29
Self-employed	29.27	26.53	26.83	32.26	43.36	26.05
Zero Income	18.87	18.18	24.69	22.30	36.20	22.03
Unemployed	11.00	13.41	16.88	20.29	14.30	16.91
Out of labor force	44.55	35.27	43.03	40.64	45.96	41.57
Housewife	35.25	55.53	52.16	48.50	47.79	54.27
Disabled	5.10	-	-	-	-	-
Military service	-	-	-	-	-	-
Persons with other receipts	19.38	7.45	6.15	10.98	5.28	6.28
Discouraged	23.08	36.16	41.14	39.46	46.09	38.88
Other	17.18	0.86	0.55	1.07	0.84	0.56
Labor Occupation						
Agriculture, Forestry, Fishing + Mining, Quarrying	45.81	42.28	50.67	51.08	76.67	47.20
Manufacturing	4.80	5.29	6.52	4.05	2.88	6.77
Electricity, Gas, Water, Steam Sewerage, Waste management	1.19	1.21	0.78	0.86	0.95	0.88
Construction	0.23	0.24	0.31	0.20	-	0.34
Wholesale and retail trade, repair of motor vehicles	8.77	9.47	10.21	8.54	5.50	10.57
Transportation and Storage	1.27	1.40	1.27	1.25	0.22	1.42
Accommodation and Food Service Activities	1.23	1.33	1.07	0.67	1.33	0.92
Information and Communication	1.11	1.23	0.38	0.45	-	0.43
Financial and Insurance Activities	0.81	0.90	0.92	1.42	-	1.03
Real Estate Activities	0.10	0.11	-	-	-	-
Professional, Scientific and Technical activities	1.54	1.59	0.34	0.89	-	0.38
Administrative and Support Service Activities	0.54	0.58	0.57	0.44	0.31	0.65
Public Administration and Defence	4.29	4.51	4.24	4.47	1.43	4.76
Education, Health, Art & Recreation, other services activities	27.94	29.44	22.53	25.14	10.69	24.44
Activities of HH as employers of domestic personnel	0.36	0.39	0.14	0.54	0.02	0.15
Working Hours (per week)	30.95	32.09	30.49	28.05	22.77	31.36
Work doesn't comply with qualifications	12.51	13.00	12.37	16.83	19.90	11.56
Informal Job^b	59.15	56.72	67.07	62.77	85.93	64.22
Ocasional/seasonal jobs	24.63	23.26	27.36	27.94	33.12	26.47
Had ever had a paid job	45.76	44.63	40.67	47.04	30.77	42.45
Feel that need more training to be competitive in the labor market	27.04	29.04	31.52	28.60	31.18	31.97
Length of time looking for a job (for those unemployed)						
Less than 7 month	27.02	26.30	25.22	28.23	24.16	24.67
7 to 12 months	15.53	15.26	15.18	11.63	9.07	16.16
13 to 24 months	21.10	21.44	23.53	22.58	28.11	22.90
>24 months	36.36	37.00	36.07	37.56	38.66	36.28
Method of job search^c						
Method 1: through labor office	10.18	10.71	11.91	41.62	14.35	12.20
Method 2: through friends/relatives	89.28	89.66	88.62	84.54	93.29	87.72
Method 3: others	44.73	44.47	44.71	32.57	34.04	46.88
Registered in labor market programs (training) or Labor Offices	0.91	1.48	2.16	8.76	2.49	2.10
In Training or received training during the last year	0.43	0.54	0.95	0.53	0.66	1.00

	Female Only					
	Whole Population	Work-able Population	Work-able poor	Work-able SSN Ben	Work-able FBP Ben	Work-able Non FBP benef poor
Source: ILCS 2011						
Socio-demographic characteristics						
Male	-	-	-	-	-	-
Age ranges						
[15-24]	16.22	15.40	17.58	12.68	14.29	17.83
[25-34]	14.34	22.84	26.46	26.05	31.56	25.68
[35-44]	12.15	19.50	19.82	21.73	24.23	18.73
[45-54]	16.09	25.26	21.08	24.00	17.62	22.14
[55-64]	11.31	17.00	15.06	15.54	12.30	15.62
Marital Status						
Married/Cohabitation	58.20	69.13	70.26	70.24	70.46	69.97
Divorced/separated	4.19	5.20	5.64	7.78	9.03	5.06
Widow/er	16.59	7.53	7.10	9.31	10.87	6.74
Single	21.02	18.14	17.00	12.67	9.65	18.23
Has a Disability	2.84	-	-	-	-	-
Educational Level						
Never attended	0.70	0.04	0.06	0.15	0.29	0.06
No education completed	4.17	0.00	0.01	-	-	0.01
Elementary school	13.10	4.22	6.69	6.06	8.19	6.06
Secondary/Vocational	37.55	43.49	52.08	46.46	59.49	50.59
Higher education (college or higher)	44.48	52.25	41.16	47.33	32.04	43.28
Household Size and Structure						
Lives in Urban Area	66.07	65.98	66.46	71.71	58.08	67.21
Household size	3.96	4.33	5.01	4.74	5.02	4.94
Single parent HH	34.74	30.28	30.30	33.69	39.46	28.56
Female-Headed Household	31.65	27.06	26.09	30.86	35.87	24.52
Elderly-Headed Household (65+)	34.11	24.94	29.20	22.69	24.64	28.94
Total number of dependents						
Children (0-15)	0.74	0.86	1.19	1.27	1.82	1.05
Elderly	0.49	0.37	0.44	0.30	0.30	0.45
Disabled	0.13	0.11	0.16	0.17	0.23	0.14
Usage of preschool (if child present in hh)	26.52	26.48	21.48	24.40	23.51	21.72
Socioeconomic Characteristics						
Poor (upper poverty line)	31.08	32.06	100.00	53.80	71.66	100.00
Share of work related incomes in Total Consumption	58.86	66.90	67.45	43.67	29.09	75.06
Household beneficiary of:						
SSN beneficiary	16.95	17.37	25.03	100.00	100.00	10.99
Social assistance (FBP)	9.39	8.96	15.78	51.56	100.00	-
Disability allowance	2.22	2.50	3.70	14.42	3.13	3.71
Child allowances	0.76	0.89	0.64	5.11	0.25	0.75
Scholarships and fellowships	2.39	2.63	2.34	15.14	2.22	2.49
Unemployment Benefit	1.15	1.28	1.72	7.39	0.53	1.94
Number of times HH received Emergency benefits (12 mon)	2.33	2.40	2.22	2.40	-	2.22
Generosity of SA + SI benefits in Total Consumption	24.35	16.36	25.23	29.28	36.59	21.22
Generosity of SSN benefits + Unemp. Ben in Total Consumption	3.14	3.02	5.87	17.40	23.69	1.54
Years being entitled to Family Benefits	6.18	5.97	6.38	5.97	5.97	-
Main reason for not being registered in FBP						
I considered myself well-off	22.98	23.57	15.52	20.77	-	15.52
Has no information	1.47	1.45	2.11	1.30	-	2.11
In any case, I wouldn't get anything	48.46	48.65	48.40	52.88	-	48.40
Bad attitude of the social workers	1.62	1.40	1.80	0.42	-	1.80
Difficult to get the required documents	1.18	0.99	1.57	1.65	-	1.57
I have been rejected once	13.32	12.71	17.05	12.77	-	17.05
Other	10.97	11.23	13.55	10.19	-	13.55

Source: ILCS, 2011.

Notes:

Definitions: Work-able - population of working age (age 15–64) not disabled or in formal education.

 SSN beneficiaries - recipients of FBP, nonregular benefits, child allowance, and UBs.

 Poor - population living below the national upper poverty line.

^a For the whole population (Group 0) the labor-related variables are only defined for those between 15 and 75 years old.

^b Informality: unpaid family worker; employee with verbal agreement; employee with a written contract but not entitled to paid annual leave or paid sick leave; self-employed or employer with no registered business.

^c Not exclusive categories, more than one method is allowed.

Annex 3. Tax and benefit model: Additional simulations

In addition to the simulation on tax benefit incentives for individuals who join the LM while in benefits presented in Chapter 2 (Box 5), this annex illustrates additional simulations that factor in the cost of an UB (which could also be an ALMPs stipend), or informal labor income. Moving out of UBs (or other programs that pay a similar stipend) to low levels of earnings entails high opportunity costs, but only temporarily. The loss of employment benefits when finding a job normally entails a (temporary) higher marginal tax rate attributed to the benefit withdrawal; however, this can constitute a strong barrier to activation when the combined effect of taxes and benefits makes a person worse off while working than as a beneficiary of activation programs.

Figure A1 shows that for a household with two workable adults and two children on the family benefit, if one adult member moved to a job paying just above the minimum wage, more than one Armenian dram would be taxed away for every additional dram earned. Such a net loss would also occur if, instead of UBs, the family member was part of ALMPs paid at the same rate (18,000 AMD) and not disregarded from the FBP income accounting. However, it should be pointed out that in light of the recent employment law, the UB is set to become a jobseeker allowance for the duration of only three months, and therefore the labor supply disincentives may be negligible or null given the likely high value placed by the jobseeker on securing a longer-term income source. At higher levels of AW, opportunity costs remain above 80 percent but no longer cause a net loss of family income, if an adult takes up work.

Figure A1. Share of gross earnings taxed away at 33% of AW

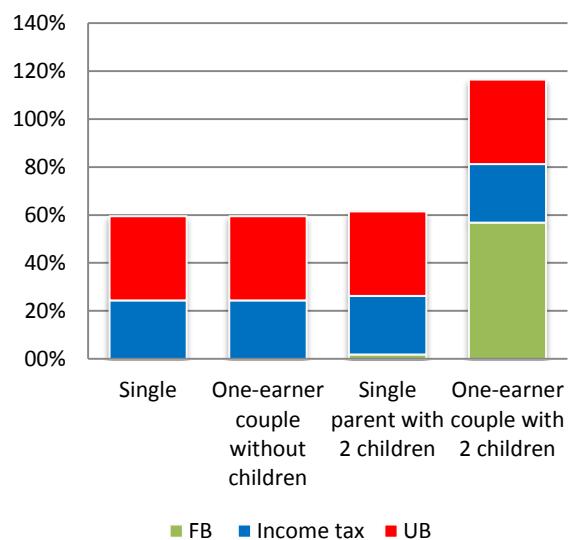
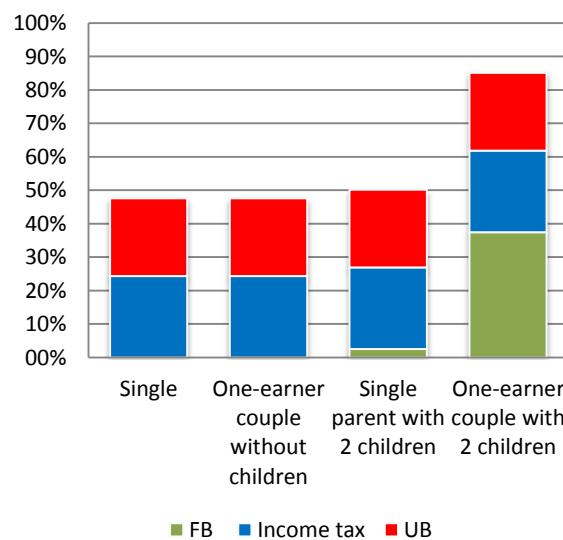


Figure A2. Share of gross earnings taxed away at 50% of AW

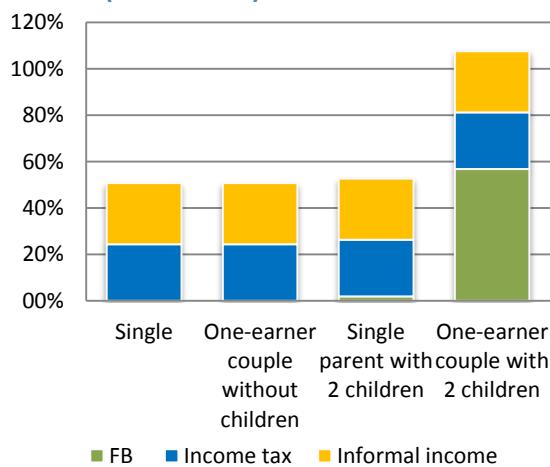


Source: Authors' calculations based on ILCS 2012.

Including the opportunity cost of the potential income earned in the informal LM while receiving benefits increases the cost of moving to formal employment further. In our final scenario, workable

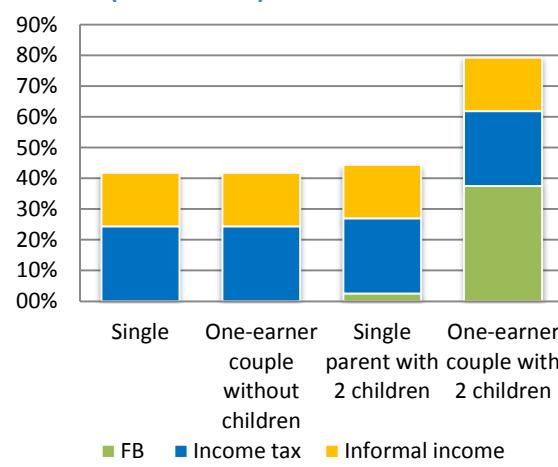
individuals who move to formal jobs are assumed to lose the average income earned by the working age population in Armenia on the informal LM.²⁸ At 33 percent of AW, in the case of married couples with two children, taking up a formal job becomes no longer worthwhile. Although opportunity costs decrease with increasing income from formal employment, they remain above 50 percent for single parents who earn the average wage and for married couples with children with one earner earning the average wage . Unless formal work pays these families more than the average wage, for every two Armenian dram earned, more than one is taxed away. Consequently, adding the opportunity cost of informal labor income constitutes an added disincentive to take up a formal job for a large number of households.

Figure A3. Share of gross income taxed away at 33% AW (without UB)



Source: Authors' calculations based on ILCS 2012.

Figure A4. Share of gross income taxed away at 50% AW (without UB)



²⁸ This is computed as the mean annualized informal wage income (562,650 AMD), discounted by the incidence of informal employment among the working age population (28.8 percent) (ILCS, 2011).