Armenia: Labor Market Dynamics
(In Two Volumes)
Volume I: Overview

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CURRENCY EQUIVALENTS  
(Exchange Rate Effective January 8, 2007)

Currency Unit = Armenian dram (AMD)  
AMD 1,000 = $2.74  
$1 = AMD 365

FISCAL YEAR  
January 1–December 31

Abbreviations and Acronyms

ALMPs: Active labor market programs  
BEEPS: Business Environment and Enterprise Performance Survey  
CIS: Commonwealth of Independent States  
EBRD: European Bank for Reconstruction and Development  
EC: European Commission  
ECA: Europe and Central Asia  
EPL: Employment Protection Legislation  
EU: European Union  
FSU: Former Soviet Union  
GDP: Gross domestic product  
GNI: Gross national income  
ILCS: Integrated Living Conditions Survey  
ILO: International Labor Organization  
LFPR: Labor Force Participation Rate  
LFS: Labor Force Survey  
NES: National Employment Service  
NSS: National Statistical Service  
OECD: Organization for Economic Co-operation and Development  
SES: State Employment Service  
SME: Small and Medium Enterprises  
SOEs: State-owned enterprises  
SPAP: Social Protection Administration Project

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Armenia Labor Market Dynamics Study

Contents

Volume I Overview

Preface 5
Executive Summary 6
I. Labor Market Trends in Armenia 9
II. Improving Labor Market Performance 24
References 34
Annexes 37

Volume II Technical Report

Chapter 1 Macroeconomic Developments and the Labor Market
Chapter 2 Labor Market Trends
Chapter 3 Wage Dynamics and Unit Labor Costs
Chapter 4 Rural Employment
Chapter 5 Youth Employment and Unemployment
Chapter 6 Labor Migration
Chapter 7 Business Environment and Labor Markets
Chapter 8 Labor Legislation and Labor Market Institutions
Chapter 9 Policy Recommendations
References
Annexes

Tables and Figures

Tables
Table 1 GDP growth and labor force participation rates in selected transition economies and EU-15 countries, 2004 10
Table 2 Average monthly wage and minimum wage in Armenia, 1997–2004 18
Table 3 Bureaucratic cost of starting a business in selected countries 26
Table A1 Employment and wages in Armenia, by sector, 1995-2004 37
Table A2 Average wages, minimum wages, and pensions in CIS countries, 2003 and 2004 37
Table A3 Participation, employment, and unemployment rates, in urban and rural areas of Armenia, 1998/99-2004 38

Figures
Figure 1 Although Armenia’s main economic indicators have been strong, employment has fallen 9
Figure 2 The private sector has not created enough jobs to absorb the job
shading of the state sector

Figure 3  Job creation in industry is increasing and job destruction is decreasing, (1999–2003; in reporting enterprises)  

Figure 4  Productivity in agriculture remains below its pre-transition level  

Figure 5  Labor market participation is higher and unemployment lower in rural areas in Armenia than in urban areas  

Figure 6  Only about two-thirds of Armenian workers hold permanent full-time jobs  

Figure 7  A significant proportion of Armenians is self-employed or works as unpaid family workers  

Figure 8  The number of working-age people in Armenia is projected to grow  

Figure 9  Population pyramid of Armenia in 2025, Scenario I  

Figure 10  Population pyramid of Armenia in 2025, Scenario II  

Figure 11  Cumbersome tax administration, macroeconomic instability, and lack of adequate credit are the greatest obstacles to doing business in Armenia  

Figure 12  New labor legislation has raised labor flexibility in Armenia to the average level in the OECD
Preface

This study is intended to help Armenian policymakers better understand the main factors behind modest labor market outcomes and to identify policy options to create more and better jobs. The report is based on data from administrative statistics, labor force surveys, and household surveys. In addition, several surveys were conducted in 2005 for this study by AVAG Solutions Ltd., with support from the World Bank, including surveys of unemployed youth 16–24 registered at the State Employment Agency, students studying at primary vocational and secondary specialized education establishments, rural and agricultural workers, and managers of public employment services. Valuable insights on labor migration were obtained from the survey of labor migration from Armenia between 2002 and 2005, conducted in 2005 by Advanced Social Technologies, with support from the Yerevan office of the Organization for Security and Cooperation in Europe.

The report consists of two volumes. This volume provides an overview of the study and summarizes its conclusions. Volume II provides a more technical and detailed analysis of various aspects of labor market transition in Armenia.

This report was written by Arvo Kuddo (Task Team Leader, ECSHD). It relies on the background papers prepared by the team of Armenian experts from AVAG Solutions Ltd., including Vahram Avanesyan, Armen Yeghiazaryan, Nairuhi Jrbashyan, and Melik Gasparyan. The report uses the contributions provided by Louisne Qalantaryan, Head of Labor Market Division of the National Statistical Service of the Republic of Armenia (administrative and Labor Force Survey data), Sona Harutyunyan (Director), Anahit Parsadanyan and Hasmik Tadevosyan from the State Employment Service, and Gorana Krstic, the World Bank Consultant (Integrated Living Conditions Survey data). Tatyana Bogomolova and Asta Zviniene (HDNSP) helped prepare population forecasts. Diane Stamm edited the document.

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Executive Summary

The labor market situation in Armenia is generally starting to improve

There has been a massive reduction in the labor market since independence, as a precursor to private sector led growth. The decline in the labor force in the 1990s can be attributed to the collapse of many productive sectors in the economy, public sector downsizing and limited job opportunities in the formal sector. According to the NSS, the number of employed individuals in the country fell from 1.630 million in 1990 to 1105 million in 2005. This job loss partly reflects closure of many enterprises, as well as “defensive restructuring” by enterprises, a process in which redundant labor is shed in order to increase productivity, the gains from which are then translated into higher wages rather than higher employment. This difficult process, however, is necessary for setting the preconditions for a second stage of “strategic restructuring”, where growth is led by a dynamic private sector where new firms are being started and existing ones are expanding.

Armenia appears to be turning the corner with respect to job creation. The heavy phase of "job destruction" is ending, the bloated state sector is being slimmed down, and – not incidentally – job creation in leaner and more focused private firms is increasing. In the production sector, in 2003, the number of jobs created in the private sector surpassed the number of job cuts in the state sector for the first time since 1990. In 2005 and 2006, the National Statistical Service (NSS) reported an overall increase in employment, and the Integrated Living Conditions Survey (ILCS) recorded an increase in the employment rate and a significant decrease in the unemployment rate between 1998/99 and 2004. The open (registered) unemployment has also tended to decline in the past few years.

However, most employment is still concentrated in low-productivity jobs

More Armenians work in agriculture, which is generally of low productivity. During 1990–2005, the number of people employed in agriculture and forestry increased from 289,000 to 508,000. Agriculture, which grew more slowly than the rest of the economy during the 1990s, absorbed significant portion of the unskilled labor released in the process of economic transformation. Subsistence agriculture, which is susceptible to supply shocks, remains overmanned, and those who rely on it remain economically vulnerable.

Employment rates are much higher in rural areas (67 percent) than in urban areas (38 percent). The unemployment rate is 6.7 percent in rural areas and 29 percent in urban areas. But the better employment and unemployment rates in rural areas mask the fact that most jobs are low paid and seasonal.
As in other transition countries, there is a significant number of Armenians working in temporary and part-time jobs. Only about two-thirds of the employed population have permanent jobs, while one-tenth have temporary jobs and more than one-fifth work in seasonal (mostly agricultural) jobs. But the percentage of self-employed (29 percent of total employment) and unpaid family workers (13 percent) is relatively high by transition economy standards. Some 40-45 percent of the employed work in the informal sector -- where most perform marginalized economic activities in labor-intensive sectors such as agriculture, construction, retail trade, catering, and domestic services.

The salient features of unemployment in Armenia are its persistence, its long duration, and its prevalence among the young and less educated. In 2006, more than 70 percent of registered job seekers were out of job for more than 12 months, and the average completed unemployment spell was 14.6 months.

Changes in the business environment are needed to promote job creation

The economy needs to continue to grow rapidly enough to create enough jobs to absorb the large cohort of Armenians born in the 1980s. Just to maintain the current employment to population level of 56 percent, about 120,000 jobs need to be created by 2015. To raise the employment rate to the current EU-15 level of 65 percent, 340,000 jobs need be created; 470,000 new jobs are needed to reach the EU Lisbon target of 70 percent of employment of the able-bodied population, assuming no net migration.

The gains will have to be in the private sector, since job losses in the traditional and government sectors will, and should, continue. In 2003, 4,300 jobs were lost, mostly in the overstaffed social service sectors. This is compared to a loss of 14,000 a year in the three previous years, so the worst may be over. Nevertheless, moves towards greater efficiency in providing public services will continue to be needed in the next few years. As a result, new jobs in the private sector will increasingly be needed to pick up the slack. To ensure that these jobs are in the formal sector, there is a need for further reforms in the business environment.

Several features of today’s business environment in Armenia hinder business establishment, growth and thus formal employment. Most complaints of local businesspeople are related to tax rates, regulatory policy uncertainty, and customs and trade regulations, which discourage them from expanding their businesses. Businesspeople also complain that maturities on commercial loans are short; interest rates and collateral required are high; and other financial instruments (such as micro-credit and small-business financing institutions, and leasing) are not widely available.

Policy changes could improve labor market conditions

Interventions both outside and within the labor market have significant potential to improve labor market performance in Armenia. To help ensure that this potential is realized, Armenia needs a National Action Plan for Employment, similar to that in EU member and accession countries. This plan should set forth a strategy for promoting
employment and identify priorities for action. Policies should include measures on both the demand and supply sides. While detailed recommendations on the demand side are beyond the scope of this report, policy reforms are needed to make it easier for Armenian businesses to be set up, to operate and to grow.

These measures have to be complemented by policies to continuously improve efficiency of Armenia’s labor markets in allocating labor resources. A menu of options would include the following:

- Improve the relevance of professional education and training, by tying it more closely to the needs of the private sector.
- Focus active labor market programs on job search assistance and counseling.
- Provide entrepreneurs, particularly young ones, with technical assistance in starting up businesses (business plans design, business set-up, etc.).
- Tackle long-term unemployment by combining training opportunities with active counseling and information on job opportunities.
- Ensure participatory approach in preparing labor legislation, developing professional training content, and monitoring the activities of the State Employment Service and vocational education and training institutions to make them more responsive to market developments.
- Develop modern labor inspectorates to enforce core worker rights, supervise the implementation of labor regulations, provide technical assistance and advisory services to enterprises, and possibly mediate labor disputes.
I. Labor Market Trends in Armenia

1.1. Armenia has been one of the fastest-growing transition economies in the past decade. Moderate but sustained economic growth in the initial years of the recovery (5 percent on average during 1994–2000) accelerated in the late 1990s, reaching an average annual rate of 12.3 percent between 2001 and 2005. But the record on formal employment is not as spectacular. Although recent years have brought improvements – the unemployment rate has fallen and the employment rate increased – the labor market is still characterized by low levels of labor market participation and employment, and high unemployment.

For many years, Armenia has experienced jobless growth

1.2. Like many other transition economies, for many years Armenia has experienced jobless or even job loss growth despite impressive economic growth rates (Figure 1). According to the National Statistical Service, employment declined by 32 percent between 1990 and 2005, from 1.630 million to 1.105 million. However, there are indications that the labor market situation has reached the turning point. The NSS reports an increase in the number of employed population from 1.082 million individuals in 2004 to 1.112 million on average in January-December 2006. Estimates based on the Integrated Living Conditions Survey (ILCS) show among the population 16 and over an increase in the employment rate: from 46.0 percent in 1998/99 to 48.7 percent in 2004, and a decrease in the unemployment rate from 27.0 to 19.3 percent respectively (World Bank and NSS, 2006). The number of registered unemployed job seekers declined from 147,000 at the end of 2003 to 88,900 in December 2006.

Figure 1: Although Armenia’s main economic indicators have been strong, employment has fallen (1991=100)


1.3. The ability to create jobs will be critical, if Armenia is to maintain recent positive trends in living standards. However, those trends will not be sustained simply through the creation of low-productivity jobs, predominantly in the informal sector. The
process must be based on increases in productivity through better allocation of resources including labor, technological change, and a more skilled workforce. This will establish the conditions for the creation of good jobs and higher wages while promoting competitiveness in view of Armenia’s deeper integration into world markets.

1.4. Labor market outcomes in Armenia are more modest than in many other transition economies (Table 1). The combination of unemployment and labor force withdrawal led to a substantial decline in the employment to population ratio. Among able-bodied people 15–64 years of age, only about 52 percent (according to 2004 ILCS data) or 41 percent (according to 2004 Labor Force Survey data) are employed. Limited job opportunities have led to discouragement and massive labor force withdrawal, especially among youth and women.

Table 1: GDP growth and labor force participation rates in selected transition economies and EU-15 countries, 2004 (percent, except where otherwise indicated)

<table>
<thead>
<tr>
<th>Item</th>
<th>Armenia</th>
<th>Georgia</th>
<th>Estonia</th>
<th>Czech Republic</th>
<th>Hungary</th>
<th>Poland</th>
<th>Serbia</th>
<th>Slovak Republic</th>
<th>EU-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP, average annual growth in 2000-2004</td>
<td>10.6</td>
<td>5.9</td>
<td>7.2</td>
<td>3.0</td>
<td>3.9</td>
<td>3.1</td>
<td>5.3</td>
<td>4.1</td>
<td>—</td>
</tr>
<tr>
<td>Purchasing power parity–based per capita GDP (dollars)</td>
<td>3,806</td>
<td>2,774</td>
<td>15,217</td>
<td>18,370</td>
<td>15,546</td>
<td>12,452</td>
<td>4,858*</td>
<td>15,066</td>
<td>—</td>
</tr>
<tr>
<td>Labor force participation rate</td>
<td>58.2</td>
<td>59.1</td>
<td>69.5</td>
<td>70.1</td>
<td>60.5</td>
<td>64.2</td>
<td>66.4</td>
<td>69.7</td>
<td>70.8</td>
</tr>
<tr>
<td>Employment rate</td>
<td>40.5</td>
<td>50.5</td>
<td>62.6</td>
<td>64.2</td>
<td>56.8</td>
<td>51.9</td>
<td>53.4</td>
<td>57.0</td>
<td>65.0</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>32.3</td>
<td>14.5</td>
<td>9.9</td>
<td>8.4</td>
<td>6.1</td>
<td>19.3</td>
<td>19.5</td>
<td>18.2</td>
<td>8.2</td>
</tr>
<tr>
<td>Males</td>
<td>27.1</td>
<td>15.1</td>
<td>10.7</td>
<td>7.1</td>
<td>6.1</td>
<td>18.5</td>
<td>15.9</td>
<td>17.3</td>
<td>7.5</td>
</tr>
<tr>
<td>Females</td>
<td>38.4</td>
<td>14.0</td>
<td>9.1</td>
<td>10.0</td>
<td>6.1</td>
<td>20.2</td>
<td>24.1</td>
<td>19.1</td>
<td>9.1</td>
</tr>
<tr>
<td>Youth (15-24)</td>
<td>57.6</td>
<td>28.3</td>
<td>21.7</td>
<td>20.4</td>
<td>15.5</td>
<td>40.8</td>
<td>48.1</td>
<td>32.7</td>
<td>15.6</td>
</tr>
<tr>
<td>Long-term unemployment rate</td>
<td>63.4</td>
<td>—</td>
<td>52.6</td>
<td>51.8</td>
<td>45.1</td>
<td>47.9</td>
<td>77.5</td>
<td>60.6</td>
<td>42.4</td>
</tr>
</tbody>
</table>

—a. Not available.

**Source:** National Labor Force Survey data, reproduced in OECD (2005); IMF online database; NSS (2005a); MED (2005). Data for Estonia and Serbia are from national statistical services.

1.5. Although in Armenia, different sources of data indicate different levels of unemployment for the same year, estimates are nonetheless uniformly high – and significantly higher than average indicators for developed countries and transition economies. Though the highest numbers are from the Labor Force Survey data and the 2001 population census (both of which show unemployment rates that exceed 30 percent), even the lower figures from the 2004 ILCS, which indicate that the unemployment rate among the able-bodied population 15-64 year of age is 20.7 percent, is high by transition economy standards.

1.6. Economic growth in Armenia has been predominantly associated with increases in labor productivity, partly spurred by job redundancies. The ratio of labor productivity to GDP per capita has increased in all sectors of the economy except...
agriculture, where productivity in 2003 was only 69 percent of its 1990 level. The largest increases in labor productivity were in sectors in which labor force reductions were most intensive. Between 1990 and 2003, productivity in construction increased fourfold, and productivity in industry doubled. Between 2001 and 2003, the largest gains in labor productivity were in medium-size enterprises (51-100 employees), where productivity rose by 70 percent. Productivity in large enterprises rose by 30 percent, with productivity in large manufacturing enterprises almost doubling.

The private sector has grown, but it has not yet expanded enough to create sufficient number of jobs to replace those shed in the public sector

1.7. Today, private sector growth is fueled by new private enterprises, replacing privatization, which was the main factor between 1995 and 1999. The private sector currently accounts for about 75 percent of GDP. In 2003, 60 percent of all jobs in the nonagricultural sector were in the private sector, including 90 percent of jobs in industry, 90 percent of jobs in construction, and more than 99 percent of jobs in trade and catering. Beginning in 1999, when the first and largest wave of voucher privatizations was largely completed, new private enterprises gradually replaced privatization as the main factor responsible for the growth of the private sector.

Figure 2: The private sector has not created enough jobs to absorb the job shedding of the state sector

Source: NSS 2005b, and authors’ calculations.

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1 The ratio of labor productivity to GDP per capita was used to ensure the comparability of data for 1990 with data for subsequent years.

2 In 2005, 19.8 percent of all jobs were in the state sector, and 80.2 percent in the non-state sector. NSI 2006.
1.8. Privatization was also responsible for the bulk of job redundancies in the production sectors of the nonagricultural economy. The transfer of state-owned enterprises to private ownership, in parallel with the elimination or substantial restriction of hidden subsidies for most privatized enterprises and an increase in financial discipline, created excess labor.

1.9. Private employment is increasing, but the increase has not yet compensated for the labor shed in the state nonagricultural sector (Figure 2). On the contrary, between 1995 and 1999, about 375,000 jobs in the state sector (52 percent) were lost, while the number of private sector jobs increased by just 191,500. But, beginning in 2000, when the entry of new private companies intensified somewhat, more jobs were created in the private sector. In the production sector, in 2003, the number of jobs created in the private sector surpassed the number of job cuts in the state sector for the first time since 1990.

Structural shifts in the labor market since 1990 have favored new private enterprises

1.10. The number of people employed in industry and construction plummeted between 1990 and 2005, from 679,000 (41.6 percent of total employment) to 169,000 (15.4 percent of total employment). As described above, there has also been a change in the private-public mix in the production sector -- in 2003, the number of jobs created in the private sector (15,100) surpassed the number of jobs cut in the state sector (8,900) for the first time since 1990. The percentage of people employed in the service sector has been relatively stable, but the sector experienced a rapid decline in employment as well (Annex table A.1).

1.11. Job creation in industry in recent years has been concentrated in new private enterprises (Figure 3). Of the 26,500 jobs created in industry between 1999 and 2003, 22,000 (83 percent) were in newly created private enterprises. On the other hand, job elimination was concentrated largely in "formal" or pro-forma jobs, with employees on administrative leave dismissed first. Between 1999 and 2003, some 98,600 jobs were eliminated, 77 percent of them due to staff reduction. Of the 76,600 people made redundant, 45 percent were in the state sector. As a result, the share of people employed in state-owned enterprises in industry fell from 34.9 percent in 1999 to 16.5 percent in 2003.

1.12. Between 1990 and 2005, the number of people employed in agriculture and forestry increased, from 289,000 to 508,000. As in many other countries in the region, following the collapse of collective and state farming, the privatization of land, and the formation of small farms, many households that had not been in the agricultural sector undertook agricultural activities as the main strategy for cushioning the blow of the
transition. This resulted in about a doubling of employment in agriculture relative to the pre-reform period. This trend also reflects loss of employment in other activities in villages as well as out-migration from cities in Armenia and other CIS countries to rural areas.

Figure 3: Job creation in industry is increasing and job destruction is decreasing, (1999–2003; in reporting enterprises)

<table>
<thead>
<tr>
<th>Year</th>
<th>Jobs created in industry</th>
<th>Jobs eliminated</th>
<th>Jobs eliminated in public sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>4.4</td>
<td>-20.6</td>
<td>-17.6</td>
</tr>
<tr>
<td>2000</td>
<td>2.7</td>
<td>-22.4</td>
<td>-23.5</td>
</tr>
<tr>
<td>2001</td>
<td>7.0</td>
<td>-22.0</td>
<td>-21.0</td>
</tr>
<tr>
<td>2002</td>
<td>3.3</td>
<td>-14.4</td>
<td>-15.9</td>
</tr>
<tr>
<td>2003</td>
<td>4.7</td>
<td>-10.6</td>
<td>-15.9</td>
</tr>
</tbody>
</table>

Source: NSS 2005b and author calculations.

Employment outcomes in the rural sector are still weak

1.13. By 2004 labor productivity in agriculture was still below its pre-transition level. In 1994 labor productivity in agriculture was only 51 percent of the 1990 level. Although it improved subsequently, in 2004 it was only 81 percent of the 1990 level (Figure 4). More than 95 percent of agricultural output comes from subsistence farming on small farms.

1.14. Rural and agricultural employment is largely seasonal, temporary, or occasional. According to the 2005 Rural Employment Survey, nearly half of rural residents 15 and older are underemployed due to involuntary factors, such as the seasonal nature of farming. Moreover, about 34 percent of those currently employed would prefer to work full time. The average total monthly income per household (including consumption within the household) from crop production, animal husbandry, and

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3 Armenia implemented one of the most comprehensive land reform programs in the former Soviet Union. Land reform was initiated in 1991; by mid-1994, most agricultural land had been privatized (see World Bank 1995).
processing of agricultural products is about 45,000 drams a month, about equivalent to the average wage in Armenia of 43,400 drams per month in 2004.

**Figure 4: Productivity in agriculture remains below its pre-transition level**

![Graph showing productivity in agriculture](image)

*Source: NSS statistical yearbooks (various years) and author calculations.*

**Labor market participation has changed profoundly as a result of transition**

1.15. Despite some improvements in Armenia’s labor market in recent years, unemployment remained high. Estimates range from 21 to 32 percent of labor force in 2004, depending on the source of data (Integrated Living Conditions Survey for the former and Labor Force Survey for the later). This figure is high by transition economy standards: only FYR Macedonia and Bosnia and Herzegovina have higher unemployment rates.

1.16. Limited job opportunities have led to discouragement and massive labor force withdrawal, especially among younger and older people and among women. According to the 2004 ILCS, the economic activity rate of the population 15–64 was 66 percent—higher than in Georgia, Hungary, and Poland but lower than in the EU-15 countries. The combination of unemployment and labor force withdrawal led to a substantial decline in the employment to population ratio. Only about 52 percent (according to the 2004 ILCS data) of the able-bodied population 15–64 are employed.

1.17. Significant gender differences in labor market participation have developed since the early 1990s. According to the 2004 ILCS, the employment rate of females 15–64 is 45.0 percent—much lower than the 67.9 percent rate for males; for prime-age adults

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4 By the 2005 LFS data, the unemployment rate was 31.3 percent.
(aged 25–54), the rate for women is 53.1 and the rate for men 76.2. Given the rapid drop in fertility rates and gender differences in longevity, coping strategies and social protection systems based on the model of the male breadwinner may result in many older women receiving pensions well below the levels needed to protect them from poverty in the old age.

1.18. **As in other transition economies, unemployment rates are particularly high among youth (15-24), especially young women.** Young people are highly likely to be negatively affected by output shocks, because their productivity is generally lower than that of older workers, due to differences in skills and experience. Estimates of youth unemployment in 2004 range from 43 to 58 percent: about twice the overall unemployment rate. Young females are especially hard hit, with unemployment rates almost 50 percent higher than those of young males (World Bank and NSS, 2006). According to the 2001 census, a substantial percentage of people 15–24—as high as 35.5 percent—were neither studying nor employed; 35.8 percent were enrolled in education and 28.7 percent were employed.

1.19. **Employment is positively associated with education.** People 15 and older with higher education have significantly higher employment levels (73 percent) than people with secondary and primary professional education (59 percent) or secondary general education (63 percent). But unemployment among people with secondary and tertiary education is nevertheless high: 13.3 percent of people registered as unemployed have higher education and 81.5 percent have specialized or general secondary education (NSS 2005b).

1.20. **Many Armenians are inactive.** The vast majority of the economically inactive population 15 and older (about 75 percent according to the 2004 Labor Force Survey) does not want to work, cannot work, or is unable to work. This group includes students, retirees, disabled people, and household members taking care of children or other dependants.

1.21. **About one-quarter of the inactive population, however, can be considered discouraged workers.** These people want to and are ready to start working, but for various reasons are not actively looking for jobs. Most of these people have lost any hope of finding work or do not know where or how to do so. While the general labor market situation may improve, a large portion of the discouraged workers may enter the labor market, thus putting additional pressure on the workforce and wages.

1.22. **The duration of unemployment in Armenia remains high, with nearly two-thirds of the unemployed looking for jobs for one year or longer.** In 2004 the average uncompleted unemployment spell was 13.8 months (13.1 months for men, 14.5 months for women), suggesting a stagnant unemployment pool. Long-term

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5 The Armenia Labor Force Survey may benefit significantly from better funding and is in need of technical assistance to develop further. One of its major disadvantages is that data on unemployment it generates do not represent a panel, so it is not possible to monitor the same individuals over time and investigate changes in their labor market status.
unemployment is a serious problem, since many of those who wait several years for a job eventually become inactive, wasting their human capital and imposing an additional burden on social funds and their families.

Labor force participation and employment rates are much higher in rural areas than in cities

1.23. Rural employment rates (67.2 percent) are almost 30 percentage points higher than urban rates (38.4 percent) (Annex table A.3). These data may not reflect the real dimensions of the disparities, however, since most jobs in rural areas are low paid and seasonal.

1.24. Unemployment is significantly higher in urban areas. Already in 1996, the urban unemployment rate (48.4 percent) was much higher than the rural unemployment rate (17.4 percent). Although 8 years later, in 2004 the situation has much improved, the disparity remained. According to the 2004 ILCS, the unemployment rate was just 6.7 percent in rural areas and almost 30 percent in cities (Figure 5).

Figure 5: In Armenia, labor market participation is higher and unemployment lower in rural than in urban areas (2004; population 16+)

Source: 2004 ILCS, as reported in World Bank and NSS (2006).

1.25. Labor force participation, education levels, and wages vary markedly across marzes (districts; Figure 5). The employment rate in Yerevan (38.0 percent) is much below the national average (48.7 percent) or the rate in any other marz in the country; the city’s unemployment rate (29.4 percent) is the highest in Armenia, almost equal to the employment rate of the able-bodied population. This finding is surprising, given that the capital has the highest concentration of professionals with higher or specialized secondary education. Regional differences in labor market outcomes across marzes are also large: 1.8-fold in employment rates, 2.2-fold in unemployment rates (according to 2001 population census data), and 1.7-fold in average wages.
The share of older workers in the working population is increasing

1.26. Employment and labor force participation rates of workers 55–64 are higher in Armenia than in comparator countries. Many of these workers are involved in subsistence agriculture.

1.27. One of the main reasons for older workers to continue working is a low pension they receive from the state social security system. Pensions are low both absolutely and compared with other CIS countries. Average pensions represent just 20 percent of average wages in Armenia—a lower ratio than in all other CIS countries except Georgia (see annex table A.2).

1.28. Although the 2002 Law on State Pensions gradually raises the retirement age for women from 60 in 2005 to 63 in 2011 (the retirement age for men has already reached this benchmark of 63 years), retirement is not mandatory, so those employees who desire so may continue working. The retirement age following service in harmful working conditions will rise from 55 in 2005 to 58 in 2011 for men and from 49 to 55 (and to 59 for less harmful working conditions) for women. Allowing older workers to remain in the workplace represents a positive step, as international evidence suggests that older workers can participate fully in the employment growth of expanding sectors and that young and older workers are not interchangeable (EC 2005).

Wages have fallen and the structure of wages changed

1.29. In the early years of the transition, real wages plummeted, falling to just 7 percent of their 1990 value in 1994. The decline reflected the decrease in output and labor demand and the erosion of wage levels by rapid inflation. The decline in real wages in absolute terms (and relative to output declines) was sharper in Armenia than in every other CIS country except Azerbaijan and Tajikistan (CIS STAT 2005).

1.30. In the early 1990s, wages (and working hours), not employment, were the main modes of labor market adjustment. Wage levels in Armenia started to rebound at a relatively rapid pace in 1995, but measured real wages still remain well below the pre-transition level: in 2004 average real wages equaled 35 percent of their 1990 value. However, in terms of purchasing power, real wages have probably increased more than wage statistics suggest.\(^7\)

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\(^6\) Consumer price inflation in Armenia was 174 percent in 1991, 729 percent in 1992, 1,823 percent in 1993, and 4,962 percent in 1994. Prices stabilized to single-digit levels beginning in 1998.\(^7\) The purchasing power of wages was overestimated under central planning, because the prices of many consumer goods were set below the equilibrium level, as attested to by widespread shortages. Therefore, the fall in real wages during the initial stage of the transition, when prices were liberalized, was probably overestimated (World Bank 2005a).
1.31. **The impact of growth on poverty has been strong.** With the sharp acceleration in growth since 2000, poverty has fallen massively, a trend to which a rapid growth in real wages, including wages in the public sector has contributed significantly. Income from agriculture increased as well, particularly in 2003 and 2004, driven by a combination of increased prices and growing agricultural production. Average pensions also increased by almost 80 percent in real terms during the last five years. Social assistance, in particular family poverty benefit, is empirically found to have played an important role in poverty reduction. Finally, a steady growth in remittances from Armenians leaving and working abroad is an important factor behind improved welfare of the Armenian population (World Bank and NSS, 2006).

1.32. **Changes in the structure of the economy—and thus changes in the demand for different types of labor—have created wage premia that were not widespread under central planning.** Deregulation of wages and wage policies was a part of the overall liberalization process in the transition economies. It has led to inequality in the dispersion of earnings but also to improved market efficiency, as wages have become better aligned with productivity differentials. Measured by the Gini coefficient, wage inequality in Armenia, is high, although it declined substantially between 1998/99 and 2004, from 0.44 to 0.37 (World Bank and NSS, 2006). According to the 2004 ILCS, the private sector offers a premium to specialized secondary education and tertiary education, while the public sector offers a premium to tertiary education only. Private sector employees with tertiary education earn 63 percent more than those with general secondary education or less, holding all other characteristics constant. This premium is 48 percent in the public sector (World Bank and NSS, 2006).

1.33. **The government affects the rate and dynamics of wages by setting minimum labor costs, establishing wage tariffs for payment of public sector salaries and determining direct taxes and social benefits (through parliamentary procedures).** The labor market impacts of minimum wages depend heavily on the level at which they are set and how well they are enforced. The minimum wage has been increased three times since 1997—in 1999, 2004, and 2006 (Table 2). According to the 2004 Labor Force Survey, only 11 percent of employees earned less than the minimum wage, and many of these may be part-time workers.

### Table 2: Average monthly wage and minimum wage in Armenia, 1997–2006

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2006*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Monthly Wages</td>
<td>18,000</td>
<td>20,200</td>
<td>22,700</td>
<td>24,500</td>
<td>27,300</td>
<td>34,800</td>
<td>43,400</td>
<td>60,600</td>
</tr>
<tr>
<td>Minimum Wages</td>
<td>1,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>13,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Ratio of Minimum Wages to Average Wages, %</td>
<td>5.6</td>
<td>24.8</td>
<td>22.0</td>
<td>20.4</td>
<td>18.3</td>
<td>14.4</td>
<td>30.0</td>
<td>24.8</td>
</tr>
</tbody>
</table>

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8 Under central planning, wages were set according to a centrally determined wage grid, the unified tariff schedule of wages and salaries. Wage differentials were very small and the earnings structure compressed.

9 In 2004 the minimum wage was defined in accordance with the general poverty line, as indicated in Armenia’s Poverty Reduction Strategy Paper. In 2006, the minimum wage was 15,000 drams.
Work arrangements in Armenia are among the most diversified and flexible in transition economies

1.34. A significant number of workers are employed in atypical work-hour arrangements, with 23 percent of the employed working part time. The figure largely reflects involuntary part-time employment: only 12 percent of those working part time were unwilling to take on full-time work, while 33 percent were unable to take full-time work, 49 percent were unable to find full-time work, and 7 percent worked part time on orders of their employer. The share of part-time workers in Armenia is much higher than in EU-15 countries and 7-10 times higher than in more developed Central European transition economies. Overtime work is also very common: 26 percent of Armenia’s workforce is working 51 or more hours a week.

Figure 6: Only about two-thirds of Armenian workers hold permanent full-time jobs

![Graph showing the distribution of job types among men and women.]

Source: NSS (2005a).

1.35. The greatest change since transition has been the shift from stable wages and salaried jobs to temporary and informal jobs and self-employment. Only about two-thirds of the employed have permanent jobs. One-tenth has temporary jobs, and more than one-fifth participate in seasonal (mostly agricultural) jobs (Figure 6). The percentage of self-employed (29 percent) and unpaid family workers (13 percent) is also very high by the standards of transition economies. Moreover, for 23 percent of employees (hired labor), their work arrangements are based on an oral agreement with their employer. These work arrangements do not typically include the payment of retirement benefits or health, disability, or unemployment insurance (NSS 2005a).
1.36. Flexible employment arrangements are largely involuntary, reflecting high and fluctuating unemployment trends. Many workers, including 63 percent of the self-employed are dissatisfied with their current employment status. According to the 2004 Labor Force Survey, 49 percent of those employed want to change their work situation—to work full time or have a permanent position. The dominant motivation of 81 percent of those who want to change their employment situation is to earn more, followed by the feeling that their work does not correspond to their specialty.

1.37. A significant proportion of jobs—40 to 45 percent—is in the informal sector. The majority of workers in the informal sector perform marginalized economic activities in labor-intensive sectors such as agriculture, construction, retail trade, catering, and domestic services. Self-employment, especially in subsistence agriculture, accounts for the bulk of employment in the informal sector (Figure 7).

The level of out-migration and remittances is high

1.38. Armenia experienced out-migration of about 600,000 people between 1989 and 2001. Between 2002 and 2005, about 9.2 percent of Armenia’s economically active population is estimated to have left the country in search of work. (AST 2005). In 2004 and 2005, for the first time, the net flow of migrants registered at the border was positive— but it is premature to say whether this reflects a shift in the trend or a one-time occurrence.

1.39. Armenia has a very large Diaspora community and receives large remittance inflows. Remittances include funds from Armenians working temporarily abroad as

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The Armenian Diaspora is estimated at 6-8 million, much larger than Armenia’s population of 3.2 million. The Diaspora is spread across the world. It is largest in the Middle East, the United States, the Russian Federation, and Western Europe.
well as funds from those who have permanently emigrated and have become legal residents or citizens of other countries. The official estimate of remittance inflows was $289 million in 2003, but U.S. Agency for International Development (USAID) experts estimate remittance inflows at roughly $900 million annually.\textsuperscript{11} Remittances may represent up to 30 percent of GDP in Armenia, three times the official figure.

1.40. **Remittances play an important role in economic recovery and in mitigating the impact of the transition on the welfare of households.** They are an important financing component of external imbalance that enables Armenia to run large deficits with the outside world and maintain living standards and investment. During the boom of the past three years, the volume of remittances increased at an average rate of 23 percent a year, according to official estimates. Their role in financing the trade deficit has also grown, partly due to the fact that exports have grown very rapidly and the trade deficit has fallen: remittances grew 117 percent between 1998 and 2003, while exports grew by 146 percent.

**Modest social protection is provided for the unemployed**

1.41. **Armenia provides temporary cash assistance to the unemployed and operates active labor market programs, including training, job counseling, and public works.** Regulation of employment is handled by the State Employment Service, a national body of the executive branch that operates under the auspices of the Ministry of Labor and Social Affairs.

1.42. **Spending on labor market programs is modest both in absolute and relative terms.** Allocations to labor market programs in recent years amounted to just 0.4-0.5 percent of current expenditures from the consolidated budget, less than 0.1 percent of GDP. Annual expenditure on employment services is very limited, amounting to less than 5,000 drams per job seeker in 2004 in about 80 percent of employment centers. Average spending per job seeker for all regional centers was less than 2,000 drams (less than $4).

1.43. **Only a small percentage of the jobless receives cash unemployment benefit, and the average benefit is low.** About 10,000 people (or 11 percent of the registered unemployed) received unemployment benefit in December 2006, and the average benefit was 8,600 drams (about $20) a month. The benefit replacement ratio was 57 percent of the minimum wage and 14 percent of the average wage. Another 24,000 job seekers (2004) received financial assistance equal to 30 percent of the base unemployment benefit. The low number of beneficiaries is explained largely by the fact that most of the unemployed have exhausted their eligibility for unemployment benefits. In 2006 more than 73 percent of the registered unemployed had been out of work for more than 12

\textsuperscript{11} Officially reported remittance estimates are derived from wire transfers and are usually reported in the official balance of payment or central bank data. These figures are widely regarded as underestimating actual remittance flows. The USAID estimate includes informal remittances, including the stock of cash, other financial assets, and real property that emigrants who return to Armenia bring back with them (USAID 2004).
months; another 13 percent had been out of work 6-12 months. None of these people is eligible for benefits, which are provided for a maximum of six months. (NSS 2006).

1.44. **The Law on Employment and Social Protection in Case of Unemployment, adopted by the National Assembly in October 2005, proposed a new formula for calculating the benefit replacement rate.** The new benefit will be 60 percent of the minimum wage. The Law anticipates the minimum duration of benefit payment as 6 months, with the possibility of a 1-month extension for each additional three years of insurance contribution payments; the overall benefit duration is not to exceed 12 months.

1.45. **Public works programs are the main active labor market program in Armenia.** Public works have been, and continue to be, an important tool in the government’s employment policy (World Bank 2003). In 2004, 11,800 job seekers participated in the Benefit for Work program, and 555 projects were implemented. About 5.0-7.5 percent of officially registered job seekers participated in paid public works during 2001–03; less than 0.3 percent participated in training programs.

**More jobs are needed to absorb the growing number of working-age people**

1.46. **During the next decade, the labor supply will increase significantly, as people born at the birthrate peak in the 1980s enter the labor force** (Figure 8). Under the base projection, the population 15–64 is expected to increase from 2.12 million in 2001 to 2.45 in 2015.

1.47. **Armenia’s population age structure is distorted.** Three age cohorts are smaller than normal: people 0–10, reflecting lower fertility rates in the 1990s; people 20-40, reflecting high out-migration; and people over 60, reflecting the decline in birthrates during World War II. The size of the working-age population will increase in the near future, but the shrinking number of new labor market entrants will have a significant impact on labor supply and the structure of the working-age population (Figures 9-10).

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12 Poor families in Armenia are eligible for targeted social assistance in cash (called family benefit). Eligibility is tested using a proxy-means targeting mechanism. The benefit is awarded for a period of one year.
13 On January 1, 2006, the minimum wage was 15,000 drams a month.
14 Two projections are presented. The first is based on the assumption that the average fertility rate of 1.176 between 1999 and 2003 and mortality rates will remain stable in the foreseeable future. The second assumes that total fertility rate increases to 1.475 between 2011 and 2020 and to 1.65 between 2021 and 2030 and that age-specific mortality rates decline slightly. Net migration is assumed to be zero under both scenarios.
Figure 8: The number of working-age people in Armenia is projected to grow

![Graph showing the number of working-age people in Armenia projected to grow over time.](image)

*Source:* Author’s calculations based on NSS data.

1.48. Given the current age structure of the population, the Armenian economy will need to continue to grow rapidly, with a focus on labor-intensive sectors and activities, to absorb the increasing supply of workers. To maintain the current employment to population level of 56 percent, about 120,000 jobs need to be created by 2015. To raise the employment rate to the current EU-15 level of 65 percent, 340,000 jobs need be created; 470,000 new jobs are needed to reach the EU Lisbon target of 70 percent of employment of the able-bodied population, assuming no net migration. An increase in labor productivity and labor shedding are prerequisites for transforming the agricultural sector from subsistence farming to agricultural business. To maintain high employment rates in villages, more nonagricultural jobs in rural areas also need to be created.

Figure 9: Population Pyramid of Armenia, 2001 Population Census

![Population Pyramid of Armenia, 2001 Population Census](image)

II. Improving Labor Market Outcomes

2.1. **Improving labor market outcomes in Armenia needs actions to both increase the demand for labor and to help job seekers improve their capacity to find existing jobs.** This section first lays out an agenda to improve the business environment in a way that would lead to better job creation, and then lays out a menu of options for interventions that would help improve labor supply.

2.2. **Insufficient demand for labor in Armenia requires efforts aimed at expanding the economic base and making labor market incentives more market friendly.** Structural problems—insufficiently broad-based growth, the poorly functioning credit market, biases against small and medium-size enterprises, inadequate public investment in infrastructure—need to be addressed.\(^{15}\) The new sector comprising small firms, which is the primary source of new jobs, has yet to develop the critical mass needed to generate enough jobs to offset job losses in the old sector. Facilitating the entry of new firms and the growth of small enterprises is hence a prerequisite for faster job creation, employment growth, and the eventual reduction of unemployment.

**Creating a favorable business environment is a prerequisite for economic growth and private sector development**

2.3. **Barriers imposed by rules, licensing procedures, taxes, and other constraints to investment and job creation hinder the establishment of new firms and the development of existing ones.** One of the priorities of Armenia’s economic policy should be to

\(^{15}\) Public infrastructure has largely benefited from funding from the Lincey Foundation to reconstruct roads and other public infrastructure, and investments associated with the celebration of 1,700 years of Christianity in 2001.
eliminate financial and organizational barriers that are mostly bureaucratic in their nature, in order to foster entrepreneurship development.

2.4. Enterprise surveys indicate potential for employment growth. Average capacity use in Armenian firms (as surveyed by the 2005 Business Environment and Enterprise Performance Survey) equals 82 percent, indicating that new jobs could be generated using the available capital stock. Raising the level of employment to the optimal level would imply expanding the workforce by 12.1 percent. This is more than the average in the European and Central Asia Region of 8.6 percent of potential new employment in existing firms. GDP growth is expected to be more employment intensive than it has been in the past, because the rate of growth in the service sectors is expected to rise. Firms are actively involved in innovations: 72 percent of surveyed firms in Armenia indicated that they have developed a major new product line, upgraded an existing product line, introduced new production technology, or obtained a new licensing agreement in the past three years (World Bank, 2005a). These data suggest that most firms are actively adjusting to market realities.

2.5. Some key aspects of Armenia’s business environment have improved in recent years. The ratio of firms indicating concerns about uncertainty in regulatory policies declined from 63 percent in 2002 to 36 percent in 2005, and the ratio of firms complaining about customs and trade regulations declined from 51 percent to 29 percent (Figure 11). Major improvements have been made in infrastructure in the past three years, the share of firms complaining about the poor quality of telecommunications services dropped from 26 percent to 12 percent, complaints about electricity cuts fell from 30 percent to 10 percent, and dissatisfaction with the transportation network declined from 19 percent to 13 percent. By the World Bank Doing Business 2007 data, in terms of Ease-of-Doing-Business ranking, Armenia moved from 37th place in 2005 to 34th in 2006, being the best performer among CIS states, and fourth among transition countries. Nevertheless, a number of economic issues, such as macroeconomic instability, tax administration and tax rates, competition policy, customs management, and the cost of and lack of access to financing, remain key constraints for doing business in Armenia.

2.6. Some aspects of the business environment remain problematic. Despite annual double-digit growth rates in the 2000s, the share of businesses indicating macroeconomic instability as a problem increased from 52 percent in 2002 to 56 percent in 2005. About half of firms complain about high tax rates, the poor performance of tax administration, and the high cost of and lack of access to financing (EBRD-World Bank 2005). 16 Total amount of taxes payable by the business, except for labor taxes (e.g., the corporate income tax, the value added tax and social security contributions) of 42.5 percent is below average by transition economies standards but still a high level.

16 The Business Environment and Enterprise Performance Survey (BEEPS) reflects subjective views of local employers. Taxes represented 14 percent of GDP in 2004, about a third as much as in many Central and Eastern Europe countries. Despite this, many respondents identified tax rates as a problem.
Figure 11: Cumbersome tax administration, macroeconomic instability, and lack of adequate credit are the greatest obstacles to doing business in Armenia

![Bar chart showing the percentage of firms reporting problems with various aspects of doing business in Armenia.]


2.7. Even though Armenia fares well relative to other countries in transition, launching a business there is still a challenge. On average the process involves 9 steps and takes 24 days. The aggregate cost of starting up a business represents 5.1 percent of gross national income (GNI) per capita, and entrepreneurs collectively must deposit at least 3.3 percent of GNI per capita in a bank before obtaining business registration numbers (Table 3). Because business start-ups internationally account for a large portion (from 25 to 50 percent) of new job creation, excessive obstacles to entry risk translate into lower employment growth. Even more complex procedures are reportedly required to comply with licensing and permit requirements for ongoing operations.

Table 3: Bureaucratic cost of starting a business in selected countries in 2006

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of procedures</th>
<th>Time (days)</th>
<th>Cost (percent of income per capita)</th>
<th>Minimum capital (percent of income per capita)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>9</td>
<td>24</td>
<td>5.1</td>
<td>3.3</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>15</td>
<td>53</td>
<td>9.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Georgia</td>
<td>7</td>
<td>16</td>
<td>10.9</td>
<td>3.7</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>10</td>
<td>24</td>
<td>8.9</td>
<td>36.8</td>
</tr>
<tr>
<td>Hungary</td>
<td>6</td>
<td>38</td>
<td>20.9</td>
<td>74.2</td>
</tr>
</tbody>
</table>
Poland & 10 & 31 & 21.4 & 204.4 \\
Slovak Republic & 9 & 25 & 4.8 & 39.1 \\
Europe and Central Asia & 9.4 & 32.0 & 14.1 & 53.9 \\
High-income countries & 6.2 & 16.5 & 5.3 & 36.1 \\
Best performer & 2 (Australia, Canada, New Zealand) & 2 (Australia) & 0 (Denmark) & 0 (66 countries) \\


2.8. Access to external financing on reasonable terms is viewed as a major constraint to business growth and increased employment. Respondents to the 2002 and 2005 Business Environment and Enterprise Performance Surveys (BEEPS) cite stringent conditions on financial markets as one of the major constraints to expansion: maturities on commercial loans are short, interest rates and collateral required are high, and other financial instruments (micro-credit, small business financing institutions, leasing) are not commonly available.\textsuperscript{17}

2.9. Labor taxes in Armenia are among the lowest in transition economies. In 2004 the tax wedge on average wages of 43,400 drams was estimated at 24.8 percent of labor costs.\textsuperscript{18} Non-wage labor costs were estimated at 19.6 percent. The low wage tax burden in Armenia has contributed to employment, but it has been insufficient to offset the impact of other market factors that have reduced employment.

2.10. Few employers in Armenia complain about the rigidity of labor legislation. The BEEPS, which surveyed 200 employers in Armenia, confirms that labor relations are less problematic than in most other transition economies. However, as found in other CIS countries, this may be because some more rigid labor regulations are easily evaded. There is nevertheless potential for employment growth through labor market policy measures, such as a more effective job search assistance or job counseling.

2.11. Since 2005, labor relations in Armenia’s labor market have been regulated by the new Labor Code adopted by the National Assembly of Armenia in November 2004, one of the most flexible among the transition economies. The new Law on Employment and Social Protection in Case of Unemployment was adopted by the National Assembly in October 2005. This new legislation facilitated significant progress in ensuring labor market flexibility.

\textsuperscript{17} Armenia has about the same income as Bolivia, but domestic credit to the private sector (as a share of GDP) in Bolivia is more than five times as high as in Armenia (World Bank 2005a).

\textsuperscript{18} Non-wage labor cost is defined as the ratio between payroll taxes and gross wages. The tax wedge on labor is the difference between the labor cost to the employer and the take home pay (net wage) expressed as a percentage of total labor cost.
2.12. **The level of labor market flexibility in Armenia has increased significantly.** The index for rigidity of employment protection legislation declined from 3.2 to 2.3—an average ranking for OECD countries (Figure 12). In assessing individual indicators of the rigidity of employment protection legislation in Armenia, fixed-term employment arrangements received the highest coefficients of rigidity. The main reason for this is that the institution of so-called “temporary work agency” is not defined in either the old or the new legislation, although no direct restrictions are provisioned either.

2.13. **Employers in Armenia are more satisfied than employers in most other transition economies with the skills and education of their workers.** Only 13.5 percent of firms in the 2005 BEEPS identified lack of skills or education as a constraint to business expansion. The figure is much lower than in other countries in Europe and Central Asia, especially new EU member countries, indicating that labor in Armenia is still employed largely in low-skill but labor-intensive sectors of the economy.

2.14. **But relative to the rest of the region, fewer firms in Armenia offer training, and spending on training is also low.** According to the World Bank Investment Climate Survey, 65 percent of firms in Armenia offer formal training; the average for Europe and Central Asia is 75 percent. Only about 17 percent of permanent skilled workers had received training the previous year, compared with 26 percent in countries in Europe and Central Asia (and up to 72 percent in the Slovak Republic) (http://rru.worldbank.org/InvestmentClimate). Armenian firms spend a relatively small amount of total labor costs on training and retraining their employees—just 0.4 percent.
on average between 1998 and 2003 (NSS data). “Savings” on upgrading of the labor force may negatively affect further improvements in labor productivity and the movement of labor from low-productivity to high-productivity jobs.

**Improving labor market institutions is critical to laying the foundation for job creation and productivity growth in the long run**

2.15. Labor market interventions have significant potential to improve labor market performance. Although institutional reform is not a sufficient condition for rapid employment recovery, ensuring that the labor force has the ability to avail of increased labor demand will assure the sustainability of employment growth. Thus, there are several sets of measures that could be taken to ensure that the potential of labor market interventions to improve labor market outcomes is realized. The report presents a menu of options from which the government should choose those that it can afford, in order to lay the foundation for more and better jobs in Armenia.

**Involving social partners in decision making**

2.16. Social partners—trade unions and employers—could be given a greater role in determining employment relations. They and other partnership groups can identify local solutions to the challenges of economic and social transformations. It is especially important for local offices of the State Employment Service to develop partnerships with other public or private bodies in order to craft and implement local job creation strategies. Involving social partners can help ensure broad participation in preparing legislation, developing training content, and monitoring the activities of the State Employment Service and vocational education and training institutions to make them more responsive to market developments.

2.17. Employers should be involved in vocational education and training. Following the VET Reform Strategy approved in 2004, in July 2005 a new law on vocational education and training was adopted, which improves the position of social partners. They are now recognized as full partners in the vocational education and training system. Involving employers’ organizations would help reduce skills mismatches in the labor market. Employers should help define occupational standards, or employment specifications, following procedures agreed upon by all stakeholders. Training standards, or learning specifications, could be used to define curricula in training institutions.

**Enforcing labor laws**

2.18. Armenia needs to develop modern labor inspectorates to effectively enforce core worker rights, supervise the implementation of labor regulations, provide technical assistance and advisory services to enterprises, and perhaps participate in mediating labor disputes. The Law on Labor Inspectorates was adopted in 2004. However, the Inspectorates are still understaffed, and a detailed legislative framework regulating their
daily activities is still undeveloped – which may, as explained earlier, be a reason for employers not feeling that this legislation is a constraint.

**Focusing on cost effective active labor market programs**

2.19. **International experience suggests that even under the best scenarios, payoffs to active labor market programs are modest,** although they may work for specific groups.\(^{19}\) Even in EU countries with large budgets for active labor market programs and years of experience, a high percentage of program participants return to unemployment. Lessons learned from cross-country experience include the need for early identification of job seekers’ needs and the tailoring of active labor market programs to these needs.

2.20. In OECD countries, increases in the intensity of spending on active labor market programs (defined as the percentage of GDP allocated to active policies divided by the unemployment rate) account for 10-20 percent of the total increase in the employment rate observed during 1997–2002. **The expenditure category with the most significant and positive impact on the employment rate is spending on public employment services and administration (that is, job search assistance)** (EC 2005).

2.21. Taking into account the empirical evidence from OECD, Armenia should refocus all its efforts on activation policies.\(^{20}\) Good activation policies involve: (i) improving personal, social, and vocational skills and competencies, and facilitating social integration; (ii) individually tailored ways to participate in ALMPs, taking into account such factors are the person’s age, experience, needs and priorities; (iii) taking advantage of the resources and strengths of the beneficiary; (iv) networking with labor market services, social services, health services, housing sector, and communities; and (v) cooperation and interaction between the beneficiary and the agency in the planning, design, and implementation. For that, extensive capacity building of the State Employment Service—currently understaffed, ill-equipped and poorly motivated—is required. As far as other forms of active labor market programs are concerned, **Government should be especially selective in its decisions to expand them, giving priority to the most cost-effective ones.**

**Providing assistance to entrepreneurs**

2.22. **Support for self-employment is usually an effective way to help unemployed people with entrepreneurial abilities (admittedly a relatively small group) start their own businesses.** Programs can provide financial and advisory support for start-ups or

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\(^{19}\) See the recent World Bank review of active labor market programs around the world, based on 152 evaluations (Betcherman, Olivas, and Dar 2004). These reviews were based almost exclusively on the experience of industrial countries, because very few evaluations exist elsewhere in the world (see also Dar and Tzannatos 1999).

\(^{20}\) Activation policies encourage certain unemployed individuals to step up their job search after an initial spell of unemployment, with a later obligation to participate in various programs. Eventually, the etivation principle makes the receipt of benefits conditional on participation in programs, in the process shifting the balance between the rights and obligations of the unemployed. See EC 2006.
support the operating costs of small businesses. Small business advisory services usually provide assistance in business planning, including bookkeeping, financial, legal, marketing, and sales services; assistance in contacting local authorities; short-course (one- to two-week) training; and other consulting services to unemployed entrepreneurs who intend to start or who have started businesses during the past six months. Government assistance in self-employment and in starting a business is currently absent in Armenia.

**Supporting youth employment programs**

2.23. One of the critical tasks for labor market policies in Armenia is to enhance the employability and increase the employment rates of unemployed or inactive youth. Intervening early is likely to be more effective than attempting to deal with youth employment problems after they emerge. As part of the Social Protection Administration Project (SPAP) supported by the World Bank, a Youth Professional Orientation Center is being opened in Yerevan to provide specialized job counseling, job placement, and professional orientation services to unemployed youth.

2.24. Policies should emphasize basic education and basic skills and promote innovative approaches for improving the employment situation of young people in the informal sector. Preventive policies should include increasing the overall demand for labor, relaxing labor regulations (especially setting minimum wages at a lower level for young people or eliminating them altogether, improving the national education and training system, and especially improving functional literacy among 15- to 24-year-olds (Godfrey 2003). In many European countries, apprenticeships have also proven effective in making youth labor attractive to employers.

**Addressing the needs of older and disabled workers**

2.25. The Government has already taken steps to encourage the employment of older and disabled workers. As part of the SPAP project, a Job Rehabilitation Center is scheduled to be opened in Gyumri City with the objective of providing job rehabilitation, advisory, professional orientation, training, and job placement services for the disabled.\(^{21}\)

2.26. Older workers need to receive as much training as workers in other age groups. The productivity potential of workers declines largely as a result of skill obsolescence, not age.

2.27. Only lifelong learning will provide workers with the necessary skills to adapt to changes in the employment market across their lifespan. Other measures for preventing declines in productivity include vocational rehabilitation, adaptation of working places, training, retraining, and active employment services for older workers or workers with disabilities.

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\(^{21}\) Guymri is located in the region most affected by the 1988 earthquake.
Making training more relevant

2.28. A mismatch between the supply of and demand for different skills is probably the most common problem of vocational training, in Armenia and around the world. The mismatch usually reflects the lack of communication between enterprises and schools about the skill requirements of the workplace. The choice of specialization by students in VET schools is mainly based on the interest of young people in the given specialty (83 percent of surveyed students) rather than on labor market considerations, but in 12 percent of cases the lack of alternative options or financial means also played a role in selection of a specialty. Although youth with medical and pedagogical specialities have the highest unemployment rates, these specialities are still among the most popular areas of study in vocational schools and higher educational establishments. This indicates that vocational school students and their parents do not have a good understanding of the demand in the labor market.

2.29. To prevent mismatches, curricula need to be assessed to ensure that training is linked to the skill needs of the private sector. Links to the private sector could be encouraged through greater use of on-the-job training programs targeted to specific disadvantaged groups of unemployed, such as youth or women.

2.30. Vocational training should be based on the needs of regional and local labor markets. Labor markets change largely based on local demand and regional development plans. Local vocational education and training institutions may have a better perspective on the direction in which the local economy is moving.

Reducing long-term unemployment

2.31. High unemployment in Armenia is compounded by its long duration. Many of these jobless have no qualification, and/or a low level of education. They may have multiple employment barriers, including cognitive and health-related barriers, and difficult home lives (for example, lack of transportation, many children, child care problems, domestic violence), which makes their employability a problem. To tackle long-term unemployment, a policy mix combining training opportunities with active counseling and information on job opportunities has proved effective in a number of European countries (EC 2005). The experience of some transition economies, however, shows that such measures are often insufficient.

2.32. Effective strategies for employing the long-term unemployed include combining temporary employment (public works or subsidized employment), on-the-job training, and regular job-placement assistance (Egger 2003). To reduce the duration of unemployment and maintain employability, unemployed youth should be provided with job search assistance or active labor market measures within the first six months of unemployment; unemployed adults should be provided with these services within the first 12 months of unemployment. Early interventions include profiling job seekers to identify which are susceptible to long-term unemployment. Programs for
vulnerable groups typically include employability and training plans, job and career counseling services, aptitude tests, and vocational assessment tests.

Addressing regional disparities

2.33. Disparities across regional labor markets caused by uneven development potential are widening in Armenia, as they are in many other transition economies. There is an increasingly important role for regional development strategies and the involvement of key local actors in crafting employment and education policy.

2.34. Many European countries have established regional economic development planning services. These services help communities develop the local economy and generate new employment and investment by identifying and marketing regional resources, potential areas of development, and opportunities for potential investors (EC 2004). Local partnerships could help link training programs and the development plans of the local economy. Studies of local economic potential—local Action Plans for Employment—have been initiated to identify labor market resources, promote and market local products and services, and develop promotional materials on local economic potential and investment projects.

Providing better labor market information

2.35. The state of the labor market should be thoroughly analyzed, in order to move from a supply-driven to a demand-driven model of vocational education and training and to help labor market institutions make informed decisions. The analysis should cover new forms of employment, underemployment, and unemployment; components of labor force growth; age structure; industry and occupation structure; labor market segregation (by age or gender, for example); and regional imbalances. This type of analysis allows general trends to be identified and projections of labor supply and demand to be made. Employer-based surveys that focus on actual and planned job creation and destruction and on key determinants of hiring and firing can be part of this analysis. Tracer surveys of displaced workers can be used to trace changes in labor market status (earnings, employment compared with unemployment, career developments). The labor market can also be monitored by tracking school leavers over a period of years. Currently, the data on overall employment and unemployment levels in Armenia can be derived from the labor module of the Integrated Living Conditions Survey (ILCS), as well as from the data from the Labor Force Surveys (LFS). Other data can be collected from administrative records and register-based statistics. However, the quality of labor market related data needs significant improvements.
REFERENCES


Annex

Table A1. Employment and wages in Armenia, by sector, 1995-2005

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of people employed (thousands)</th>
<th>Percent of total</th>
<th>Number of people employed (thousands)</th>
<th>Percent of total</th>
<th>Number of people employed (thousands)</th>
<th>Percent of total</th>
<th>Percentage of females in employment</th>
<th>Average monthly wage (drams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1476.4</td>
<td>100</td>
<td>1277.7</td>
<td>100</td>
<td>1097.8</td>
<td>100</td>
<td>45.6</td>
<td>43445</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>302.9</td>
<td>15.7</td>
<td>179.7</td>
<td>14.1</td>
<td>134.6</td>
<td>12.3</td>
<td>30.9</td>
<td>60727</td>
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<tr>
<td>Agriculture and forestry</td>
<td>551.9</td>
<td>42.5</td>
<td>566.7</td>
<td>44.4</td>
<td>507.6</td>
<td>46.2</td>
<td>45.8</td>
<td>30473</td>
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<tr>
<td>Construction</td>
<td>76.0</td>
<td>4.2</td>
<td>46.5</td>
<td>3.6</td>
<td>34.6</td>
<td>3.2</td>
<td>13.3</td>
<td>59121</td>
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<tr>
<td>Transport and communication</td>
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<td>3.8</td>
<td>46.6</td>
<td>3.6</td>
<td>49.7</td>
<td>4.5</td>
<td>27.4</td>
<td>56349*</td>
</tr>
<tr>
<td>Trade and public catering</td>
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<td>8.5</td>
<td>106.9</td>
<td>8.4</td>
<td>108.9</td>
<td>9.9</td>
<td>50.4</td>
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<td>Housing and utilities</td>
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<td>3.2</td>
<td>37.0</td>
<td>2.9</td>
<td>34.4</td>
<td>3.1</td>
<td>25.6</td>
<td>45044</td>
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<td>Health, physical education,</td>
<td>85.5</td>
<td>5.8</td>
<td>80.7</td>
<td>6.3</td>
<td>50.6</td>
<td>4.6</td>
<td>61.7</td>
<td>19770</td>
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<tr>
<td>and social security</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education, culture, and arts</td>
<td>180.2</td>
<td>11.6</td>
<td>153.9</td>
<td>12.0</td>
<td>119.0</td>
<td>10.8</td>
<td>76.0**</td>
<td>29164***</td>
</tr>
<tr>
<td>Science and related services</td>
<td>22.8</td>
<td>1.3</td>
<td>15.1</td>
<td>1.2</td>
<td>14.0</td>
<td>1.3</td>
<td>40.7</td>
<td>33590</td>
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<td>Credit and finance</td>
<td>8.5</td>
<td>0.3</td>
<td>7.1</td>
<td>0.6</td>
<td>6.1</td>
<td>0.6</td>
<td>54.0</td>
<td>152991</td>
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<td>Administration</td>
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<td>2.2</td>
<td>27.4</td>
<td>2.1</td>
<td>28.2</td>
<td>2.6</td>
<td>42.6</td>
<td>67243</td>
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<tr>
<td>Other sectors</td>
<td>13.7</td>
<td>0.9</td>
<td>10.1</td>
<td>0.8</td>
<td>10.1</td>
<td>0.9</td>
<td>26.7</td>
<td>47918</td>
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</tbody>
</table>

*- Wages in transport; in communication, average wages were 58,917 drams;
** - Females in education.
*** - Wages in education; average wages in culture were 19,798 drams, and in arts, 20,007 drams.
Source: NSS (2005c); NSS (2005e); www.armstat.am.

Table A2. Average wages, minimum wages, and pensions in CIS countries, 2003 and 2004

<table>
<thead>
<tr>
<th>Country</th>
<th>Average wage, 2004</th>
<th>Minimum wage 2004</th>
<th>Ratio of minimum wage to average wage, 2004</th>
<th>Average nominal monthly wage converted in U.S. dollars</th>
<th>Average pension, 2003</th>
<th>Ratio of average pension to average wages, 2003*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azerbaijan (mantas)</td>
<td>483,400</td>
<td>100,000</td>
<td>0.207</td>
<td>14.1</td>
<td>98.4</td>
<td>119,111</td>
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<tr>
<td>Armenia (drams)</td>
<td>41,976</td>
<td>13,000</td>
<td>0.310</td>
<td>17.4</td>
<td>78.7</td>
<td>7,452</td>
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<tr>
<td>Belarus (Belarusian rubles)</td>
<td>350,200</td>
<td>128,390</td>
<td>0.367</td>
<td>65.5</td>
<td>161.8</td>
<td>113,943</td>
</tr>
<tr>
<td>Georgia (lari)(2003)</td>
<td>126</td>
<td>—</td>
<td>—</td>
<td>10.5</td>
<td>—</td>
<td>16.5</td>
</tr>
<tr>
<td>Kazakhstan (tenge)</td>
<td>28,200</td>
<td>6,600</td>
<td>0.234</td>
<td>78.5</td>
<td>207.3</td>
<td>6,617</td>
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<tr>
<td>Kyrgyz Republic (soms)</td>
<td>2,203</td>
<td>100</td>
<td>0.045</td>
<td>34.0</td>
<td>51.7</td>
<td>553</td>
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37
<table>
<thead>
<tr>
<th>Country</th>
<th>Total</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moldova (lei)</td>
<td>1,104</td>
<td>100 0.091</td>
<td>31.8 89.5</td>
</tr>
<tr>
<td>Russia (rubles)</td>
<td>6828</td>
<td>600 0.088</td>
<td>103.7 237.0</td>
</tr>
<tr>
<td>Tajikistan (somoni)</td>
<td>64</td>
<td>7 0.109</td>
<td>8.6 21.5</td>
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<tr>
<td>Turkmenistan (mantas)</td>
<td>1750,000</td>
<td>—</td>
<td>...</td>
</tr>
<tr>
<td>Uzbekistan (sums)</td>
<td>—</td>
<td>6,530 35.8</td>
<td>—  —  —</td>
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<tr>
<td>Ukraine (grivnas)</td>
<td>590</td>
<td>237 0.402</td>
<td>49.8 110.8</td>
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</tbody>
</table>

— Not available.

a. Average pension in 2003 is calculated as an average of end-year 2002 and end-year 2003 pensions. Depending on the timing of the pension increase during the calendar year, the actual average pension for 2003 may differ.


### Table A3. Participation, employment, and unemployment rates, in urban and rural areas of Armenia, 1998/99-2004

<table>
<thead>
<tr>
<th>Item</th>
<th>Total</th>
<th>Urban</th>
<th>Rural</th>
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<tbody>
<tr>
<td></td>
<td>Total urban</td>
<td>Yerevan</td>
<td>Other urban</td>
</tr>
<tr>
<td>Participation rate</td>
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<td></td>
</tr>
<tr>
<td>1998/99</td>
<td>63.0</td>
<td>56.3</td>
<td>55.0</td>
</tr>
<tr>
<td>2004</td>
<td>60.3</td>
<td>53.8</td>
<td>53.8</td>
</tr>
<tr>
<td>Employment rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998/99</td>
<td>46.0</td>
<td>30.4</td>
<td>28.4</td>
</tr>
<tr>
<td>2004</td>
<td>48.7</td>
<td>38.4</td>
<td>38.0</td>
</tr>
<tr>
<td>Unemployment rate</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1998/99</td>
<td>27.0</td>
<td>46.0</td>
<td>48.3</td>
</tr>
<tr>
<td>2004</td>
<td>19.3</td>
<td>28.7</td>
<td>29.4</td>
</tr>
</tbody>
</table>