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A WORLD BANK STUDY

Azerbaijan

INCLUSIVE GROWTH IN
A RESOURCE-RICH ECONOMY



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Harun Onder

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THE WORLD BANK
Washington, D.C.

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Executive Summary

Strong Growth Performance Reduces Poverty

Azerbaijan experienced a “golden age” in the last decade, during which the average growth rate reached record high levels and poverty decreased significantly. On average, the economy grew by 15.3 percent per year in real terms during this period, mainly driven by the oil sector (21.5 percent growth per year), but with a significant contribution from the non-oil sector (11.1 percent per year). As a result, poverty declined dramatically from 49.6 percent in 2001 to 15.8 percent in 2008—the latest year for which household survey data was available when this report was prepared.¹ An ongoing Programmatic Poverty Assessment, which employs information from a subsequent household survey (World Bank 2010), suggests that poverty and labor market indicators in the period after 2008 imply a much more difficult economic environment than the years covered in this report. Nonetheless, the change in the direction of poverty trends after 2008 confirms and enhances the main messages of this report, which emphasize the need for further inclusiveness, diversification, and jobs.

This report takes an inclusive growth approach to investigating the ways in which the country’s high growth was translated into significant poverty reduction. Chapter 1 summarizes the sources of growth in Azerbaijan with an emphasis on structural transformation and discusses highlights of the inclusive growth methodology. Chapter 2 explores how growth helped to reduce poverty. Chapter 3 analyzes the sustainability and inclusiveness of the recent growth. Finally, chapter 4 focuses on the structural obstacles that constrain further inclusive growth in Azerbaijan. The last chapter recommends some policies to overcome these obstacles.

The main findings of this report call for a careful strategy in promoting further inclusive growth in Azerbaijan. The mechanisms that facilitated drastic reductions in poverty in the last decade—a strong rise in fiscal transfers and in the real wage—were made possible by the oil boom. However, these mechanisms also reduced the pace of structural transformation in the Azerbaijan economy. Distorted incentives in demand and supply sides of the labor market have seem to weaken the correlation between productivity growth and employment shares. Given the projected decreases in oil revenues, these by-products of the oil boom need to be eliminated for a soft-landing in the medium term.

Structural transformation towards diversification and balanced growth stalls as the share of hydrocarbon sector grows in the economy. A sustained rise in employment together with reduced macroeconomic volatility can be achieved through accelerated growth in the non-oil sector. Diversification will more likely to occur if the absorption of oil resources into the economy is governed by a firm fiscal rule that allocates resources between domestic spending and accumulation into the Oil Fund. This report finds that the failure to follow a fiscal rule over the past decade has led to excessive domestic absorption with a resulting barriers against further development and diversification in the tradeables sectors (principally agriculture and manufacturing) and against employment creation within those sectors, as well as leading to an unsustainable growth in public expenditures, and to inadequate long-term public savings in the Oil Fund. Thus, the reassertion of a fiscal rule that constrains domestic absorption and promotes economic diversification is a necessary condition for achieving sustained inclusive growth.

The Poor Benefit from Rising Social Transfers and Real Wages

Azerbaijan's sharply increasing oil revenues made it possible to pay higher social transfers and to raise real wages. According to World Bank (2010), the poverty rate would have been around 25 percent in the absence of social transfers. Currently, 63.2 percent of households in Azerbaijan receive at least one type of social transfer; 81.2 percent of poor households and 92.6 percent for households in the lowest income decile do so. The type of transfer that has been particularly effective at reducing poverty is pensions. Over the last decade, the average pension rose from 42 percent of the subsistence level to 95 percent. The poor also benefitted from higher labor income. Average annual real wages grew by 13 percent in the same period. The government has also gradually raised the minimum wage from 5 Manats in 2000 to 85 Manats in 2010. On average, half of the poor population in Azerbaijan is employed, which means that increasing real wages have had a significant impact on the welfare of the working poor.

The Pattern of Growth Raises Concerns about Sustainability and Inclusion

Oil-financed transfers and real wage growth help reduce poverty rapidly, but are not sustainable. Reliance on oil-revenues exclusively counters the forces of economic diversification and employment growth. Moreover, oil revenues constitute more than half of the government's budget, but natural resource rents will stagnate on consensus price and volume projections. This will reduce the growth rate of the overall economy to the lower single digits in the next half decade. Current projections by the International Monetary Fund (IMF) show that buffers created by the Oil Fund Assets may erode soon under a tail risk scenario (Article IV Report 2012). Oil Fund assets are projected to decline from

\$28.7 billion in 2011 to only \$1 billion as early as 2016 if there is no change in the current fiscal stance in this case. This scenario looks likely to jeopardize the gains in poverty reduction that have been made in the last decade.

More inclusion is needed in allocation of benefits from growth. Certain groups have benefitted less from growth, these are (1) Azerbaijanis living in rural areas, especially those engaged in low-productivity agriculture; (2) Azerbaijanis living in small cities outside the capital who were unemployed or trapped in low productivity jobs; and (3) internally displaced persons (IDPs) who are insufficiently integrated into the economy. The poverty rate for IDPs is as high as 29.3 percent in certain locations, which is almost twice the average for Azerbaijan as a whole.

To further strengthen inclusiveness, there is a need for improvement in labor market outcomes. Working age population (WAP) in Azerbaijan has grown 1.6 percentage points faster than employment annually over the last decade, with a particular worsening in youth employment. The employment rate for the 15–24 age group has fallen from about 40 percent to about 30 percent in the same period. Rural employment has, however, risen despite a rise in rural labor force participation. Migration to cities—a key driver of growth in low-, middle-income countries—is constrained by the higher urban unemployment rate and lower employment ratio. Finally, IDP labor force participation is below 50 percent given weak skills and the lack of training opportunities. Government assistance is the major source of income for about three-quarters of IDPs, whereas only 8 percent receive their main income from employment in the public or private sectors.

Eliminating the Challenges to Job Creation Will Enhance Inclusiveness

Sectoral composition of recent growth is not conducive to employment creation. Reliance on oil revenues has constrained the non-oil tradeables sector, and employment in services has been dampened by specific policy distortions. Labor-intensive sectors with high employment elasticities—agriculture and manufacturing—grew much less than others. Agriculture employs 38 percent of the labor force but grew by only 3.7 percent per year over the last decade, and manufacturing grew by 6.7 percent in the last decade. Similarly, social and other services, which employ 26.9 of the labor force, grew by only 4.9 percent per year. On the other hand, those sectors that experienced the fastest growth have smaller shares of total employment and relatively smaller elasticities. For example, the third largest employer—the trade sector—has grown significantly by 12.9 percent per year but has one of the smallest elasticities of employment, 0.07, which is equal to the one in the oil sector.

There are four major areas where policy adjustments can unleash further growth in the non-oil economy. First, Azerbaijan’s integration into world markets is lower than in comparable countries, resulting from highly costly border crossings and poor trade logistics. Azerbaijan was ranked 177 out of 183 countries in

terms of the ease of trading across the borders in the World Bank's 2010 Doing Business Report. Second, overreliance on oil revenues has exposed the economy to macroeconomic volatility, thereby making business costly by increasing the risk premiums associated with long-term decisions. The absence of an operating firm fiscal rule causes sharp movements in the real effective exchange rate (REER) and leads to volatility in non-oil exports. Third, corruption creates an environment that is unfriendly to business and affects small- and medium-size firms disproportionately. Finally, current agricultural policies impose heavy distortions through subsidies and other transfer policies that encourage the production of low-quality crops, use of unproductive land and outdated labor-intensive techniques.

Removing the skill mismatches and distortionary tax incentives can further generate employment in fast-growing sectors. There is a mismatch between the skills acquired in education establishments and those demanded in the labor market, with an oversupply of graduates with degrees oriented to the public sector, such as education and health professionals. On average, 67 percent of tertiary-level graduates are employed in the public sector. In comparison, there is shortage of higher education graduates with vocational skills. Tax policies towards small and medium enterprises (SMEs) exacerbate labor market distortions. Currently, a simplified tax regime (STR) provides tax incentives to firms with turnover below 90,000 AZN. Combined with a high social security tax (SST) amounting to 22 percent of the payroll, these regulations contain a built-in incentive for firms to remain small and informal. As a result, the share of employees without an employment contract increased from 45.3 percent in 2003 to 59.5 percent in 2006.

Sustained Growth with Jobs Will Require New Policies

A broad strategy for promoting inclusive growth involves systematically addressing the challenges discussed above. The strategy has three elements. The *first* is a set of measures to generate diversification and growth in slow growing non-oil sectors with high employment potential. The *second* is a set of measures to remove distortions in the labor market that artificially suppress demand for labor and increase the employability of labor. The *third*, a set of special measures for IDPs.

A robust and long-term oriented fiscal rule that limits and smoothes the domestic absorption of oil revenues is crucial for diversification. This policy shift must be accompanied by a changing composition of public spending towards productive investment as well as greater economic integration into world markets. The latter will require measures to substantially reduce nontariff barriers such as simplifying trade documentation, reforming the corrupt customs administration, and abolishing informal trade restrictions. Agricultural output and rural jobs will be boosted by eliminating monopolies in the sale of inputs and outputs, improving the delivery of agricultural services such as irrigation,

seed supply, veterinary services, and food safety regulation, and reforming the subsidy program so that it no longer encourages the use of low-productivity land for low-value products.

Employment will rise when policies depressing the demand for labor are abolished. The current tax system encourages informalization and needs to be revised. In addition, procedures to start new business need to be simplified. There is also a need for greater coordination between tax offices, labor inspectorates, and the police to stop informal work arrangements. Second, job search and placement institutions need to be strengthened, particularly the National Employment Service (NES). Third, the quality of the labor supply needs to be improved. This will require the private sector to become more involved in the provision of tertiary education, targeted scholarships, and other assistance programs to reverse the high dropout rate and reduce youth unemployment. Finally, more investment is needed in supplementary education services in rural areas and in areas with a high incidence of poverty.

The government with the support of the Bank has already initiated a program to assist IDPs, and any subsequent actions should be designed in accordance with lessons learned from that program. The program has two components. The first consists of measures to improve and increase targeted social assistance. In this respect, the most critical need is to expand investment in IDP public housing and in the infrastructure that serves it. Although new settlements have been built to replace tented camps for housing IDPs, these settlements are located in remote areas and have infrastructure problems such as insufficient running water and access to health care. The second component consists of measures to create new employment opportunities to enable IDPs to participate fully in the economy. These measures include skills training, technical support, and micro financing to help individuals and community groups to start new micro enterprises, which are crucial to help IDPs build the social capital to improve their circumstances.

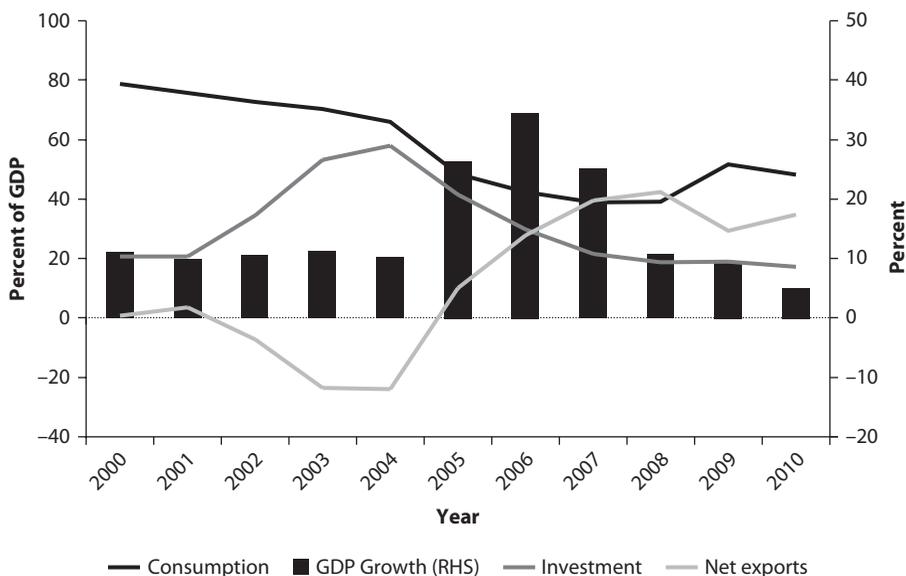
Note

1. The poverty and labor market statistics in this report covers the period between 2001 and 2008, whereas the trade and business environment statistics reach until 2010 because of the differences in data availability when the report was prepared.

Recent Growth Experience in Azerbaijan

Azerbaijan has experienced high economic growth and rapid poverty reduction over the last decade. Following a period of deep contraction and then slow recovery in 1990s, the economy grew at a remarkable rate during 2000s. The result of this acceleration was an average real gross domestic product (GDP) growth rate of 15.3 percent between 2001 and 2010, reaching a maximum of 34.5 percent in 2006 (figure 1.1). High GDP growth facilitated a substantial improvement in living standards and a large reduction in poverty. The aggregate poverty rate¹ declined from 49.6 percent of the population to about 15.8 percent between 2001 and 2008 based on the 2008 Living Standards Measurement Study (LSMS), the latest data available at the household level which was prepared jointly by the World Bank and the government of Azerbaijan. The data from a subsequent survey, the 2011 LSMS, has become available recently for analysis

Figure 1.1 Real GDP Growth and Expenditure Shares of GDP



under the Programmatic Poverty Assessment after this report was written. The results of the ongoing analysis of the 2011 LSMS suggest that poverty and labor market indicators reflect a much more difficult economic environment than in previous years, although the 2011 indicators are not directly comparable to those from the 2008 LSMS and from official data for reasons explained more fully in a forthcoming report. Nonetheless, the broad conclusions of this report continue to hold: the need to promote greater social inclusion, economic diversification, and job creation.

How poverty was reduced will also determine how sustainably it was reduced. The inclusive growth (IG) approach focuses on the long-term sustainability of growth and poverty reduction and is therefore mainly concerned with productive employment rather than income redistribution. This entails identifying the pace and pattern of growth, any changes in productivity and employment, and, finally, any constraints to further growth and to the participation of excluded groups in the market. The main features of this approach are summarized in box 1.1. This study will investigate the pattern of growth, identify how growth has affected

Box 1.1

What Is the Inclusive Growth Approach?

Inclusive growth (IG) focuses on the kind of *economic growth* that is a necessary and crucial condition for poverty reduction.

1. IG adopts a long-term perspective and is concerned with *sustained growth*.
2. For growth to be sustained in the long run, it should be *broad-based* across sectors. The question of structural transformation of the economy to enable it to diversify is therefore central. Some countries may be an exception and can continue to specialize as they develop due to their specific conditions (for example, small states).
3. It should also be *inclusive* of a large majority of the country's labor force, where inclusive-ness refers to equality of opportunity in access to markets, resources, and an unbiased regulatory environment for businesses and individuals.
4. IG focuses on *both the pace and pattern of growth*. How growth is generated is critical for accelerating poverty reduction, and any IG strategies must be tailored to country-specific circumstances.
5. IG focuses on *productive employment* rather than income redistribution. Hence the focus is not only on employment growth but also on productivity growth.
6. IG uses not only the firm but also *the individual* as the subject of analysis.
7. IG is in line with the *absolute definition of pro-poor growth*, not the relative one.
8. IG is *not* defined in terms of specific targets such as employment generation or income distribution. These are potential outcomes, not specific goals.
9. IG is typically fueled by market-driven sources of growth with the government playing a facilitating role.

Source: World Bank 2009a.

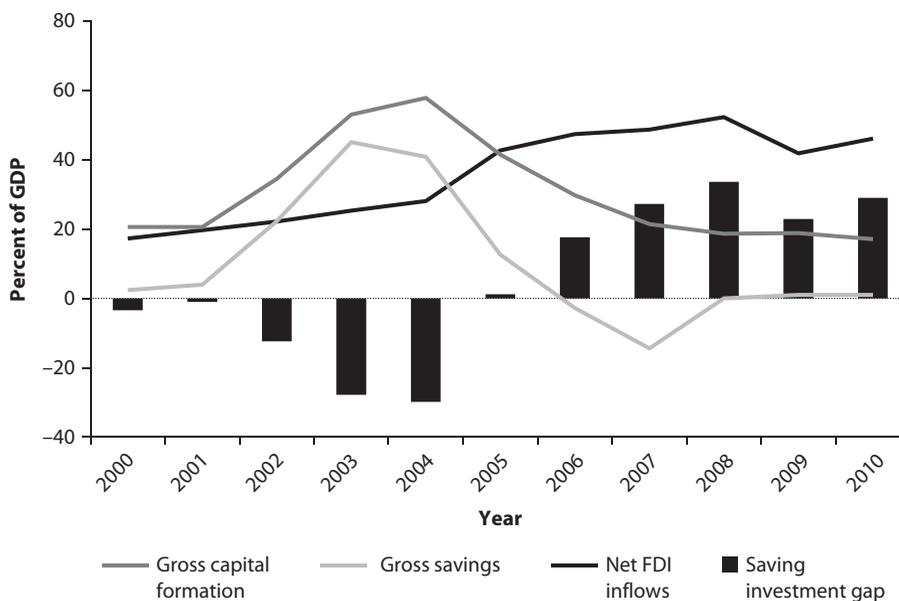
poverty reduction, and explore the shortcomings of this process and the structural reasons behind these shortcomings.

Decomposition of Growth

Azerbaijan's economic growth was mainly fuelled by foreign investment during the first half of the decade and by booming net exports in the second half. Investments in fixed capital reached a peak of 58 percent of GDP in 2004, an almost three-fold increase in only 2 years (figure 1.2). As a result, Azerbaijan was the only Commonwealth of Independent States (CIS) country to have increased its market-quality capital stock above its pre-transition level as of 2005. This surge in investments was mainly enabled by record high inflows of foreign direct investment (FDI) in the same period, most of which financed the infrastructure investment in extractive industries. Starting at 2.5 percent of GDP in 2000, FDI rapidly reached to a peak of 45.2 percent in 2003 before plunging back down to negative levels in 2006. The withdrawal of so much FDI caused investments to fall rapidly back down to their pre-boom levels. In the second half of the decade, on the other hand, the share of net exports in GDP steadily increased thanks to the oil boom. One result of the boom was a three-fold increase in savings, although this did not increase the share of domestic investments in GDP.

High GDP growth within the last decade was driven by the oil industry and related sectors. Over the period between 2002 and 2010, oil GDP in Azerbaijan grew by 21.5 percent per annum and non-oil GDP increased by 11 percent per annum. Within the non-oil sector, agriculture, which comprises nearly 15 percent

Figure 1.2 Savings, Investment, and FDI



Source: WDI and World Bank data.

Table 1.1 Sectoral Growth and Shares

	<i>Growth 2002–10 (%)</i>	<i>Sector share 2002 (%)</i>	<i>Sector share 2010 (%)</i>
Oil GDP	21.5	33.8	51.0
Non-oil GDP	11.1	66.2	49.0
Agriculture, forestry, and fishing	3.7	15.2	6.4
Oil industry	21.5	33.8	51.0
Industry	6.7	7.0	3.7
Construction	19.1	9.5	12.2
Trade: repair of transport means	12.9	8.1	6.8
Accommodation of tourists and public catering	26.9	0.4	0.9
Transport, storage, and communication	16.8	10.7	11.8
Social and other services	4.9	15.4	7.2
Economy total	15.4	100	100

Sources: SSC, World Bank data.

Note: GDP = Gross domestic product.

of the GDP, grew relatively slowly by only 3.7 percent per annum, whereas the construction and transport sectors, which are closely related to the oil industry, grew by 19.1 and 16.8 percent per annum, respectively. In the rest of the economy, social and other services—which mainly consist of health and education services—grew slowly by about 4.9 percent per annum. Table 1.1 shows the transformation in the structure of the economy over the decade as a result of these differences in growth rates. The share of agriculture has reduced significantly and the share of the construction sector has increased along with the rising share of oil GDP.

Growth, Productivity, and Structural Transformation

A decomposition of growth into the contributions made by changes in capital stock, labor force, and total factor productivity (TFP) confirms the differences between the dynamics of growth before and after 2005. In the first half of the decade, investment in the oil sector was substantial, which increased the capital stock relatively fast without contributing as much to total factor productivity. The picture changed after 2005 as average output growth driven by oil exports increased. Decreasing investments in fixed capital combined with slow growth in employment pushed up the contribution of TFP to overall growth to 97 percent (figure 1.3). See appendix A for an elaboration of this growth decomposition methodology.

The sheer scale of productivity growth, however, disguises the stalling structural transformation in Azerbaijan economy. A simple method to decompose the labor productivity growth is to separate the structural change from the productivity growth within a sector.² “Within” sector productivity growth reflects the impact of better organizational processes, investment in capital or technological change, whereas the structural change is defined as the reallocation of labor between the sectors. Figure 1.4 shows the decomposition of labor productivity growth in Azerbaijan. Between 2005 and 2009, almost all the productivity

Figure 1.3 Decomposition of Growth

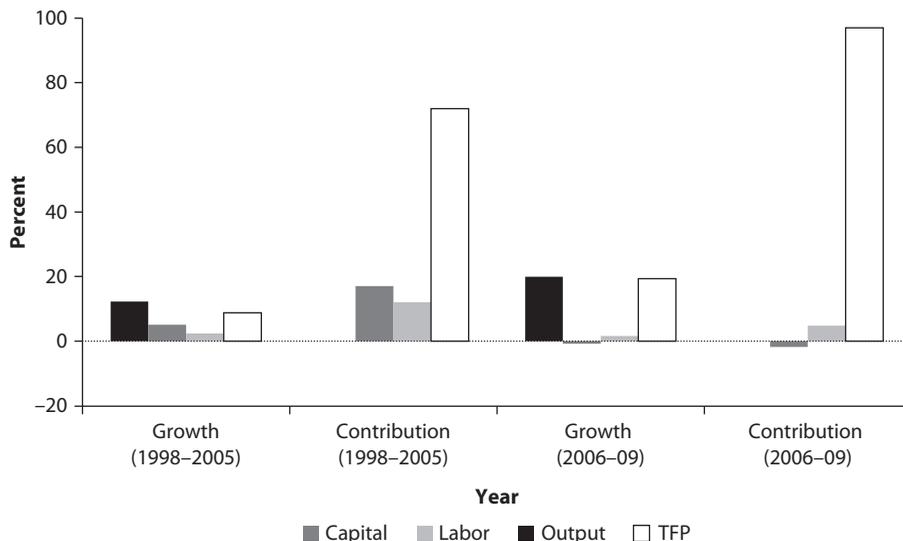
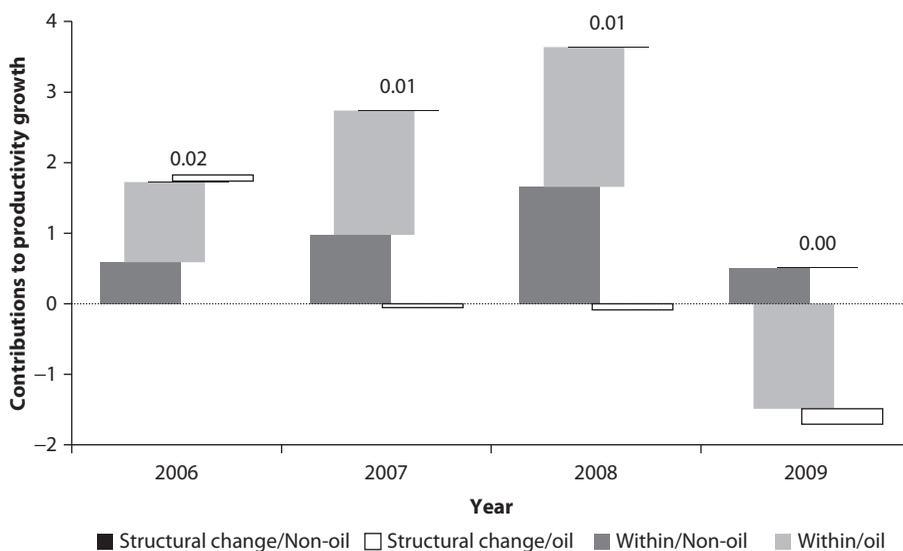
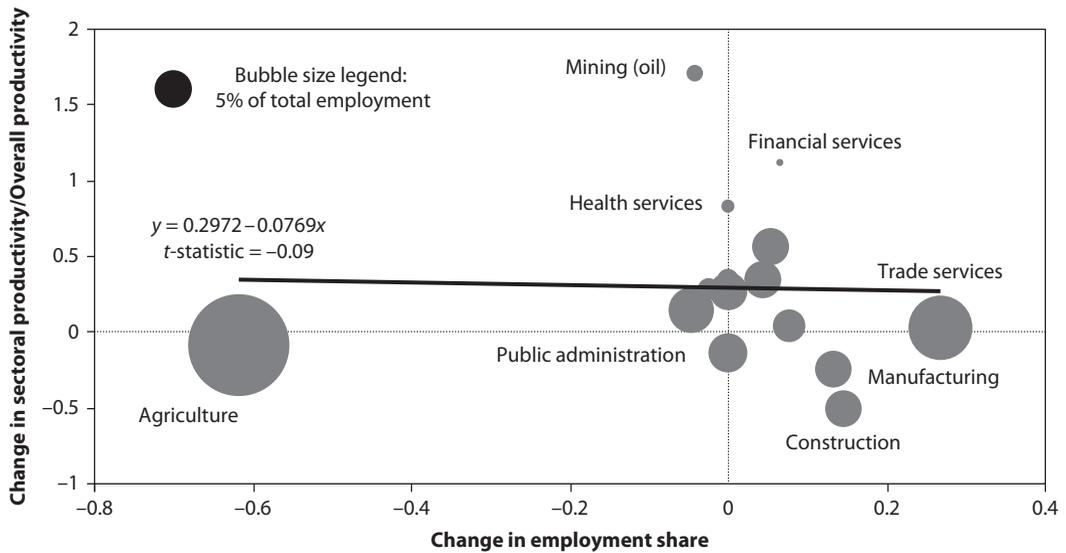


Figure 1.4 Productivity Decomposition



growth was accounted for by “within” component.³ Productivity growth within the oil sector, on the other hand, constituted more than half of the overall “within” component over the period of 2005–08. In 2009, where the within component of the oil sector plummeted, total labor productivity experienced negative growth. The structural change component in the non-oil sectors (highlighted with red borders) has been negligible throughout the period covered. Notwithstanding the “within” productivity growth, the oil sectors negative contribution to structural transformation has been considerable with the exception of a small positive contribution in 2006.

Figure 1.5 Correlation between Changes in Relative Productivity and Employment Shares, 2005–09

Source: Izyumov and Vahaly 2008; SSC, World Bank data.

Note: TFP = Total factor productivity.

An investigation of the productivity and employment dynamics at the sector level verifies the stagnant nature of the structural change. Figure 1.5 shows that there has been no significant correlation between the gains/losses in employment and productivity dynamics. The sectors with the largest improvement in productivity *vis a vis* the average productivity were mining (oil), health services, and financial services. Only the financial sectors labor share increased during the period covered. Most of the increase in labor share occurred in the sectors that did not exhibit any significant gains in productivity (trade services) or experienced significant losses in it (manufacturing and construction) compared to the average. The bubbles in the North-West quadrant of the figure denote the sectors that experienced a reduction in employment share despite exhibiting a greater productivity growth than the average (education, transport, communication, accommodation and real estate services, and utilities).

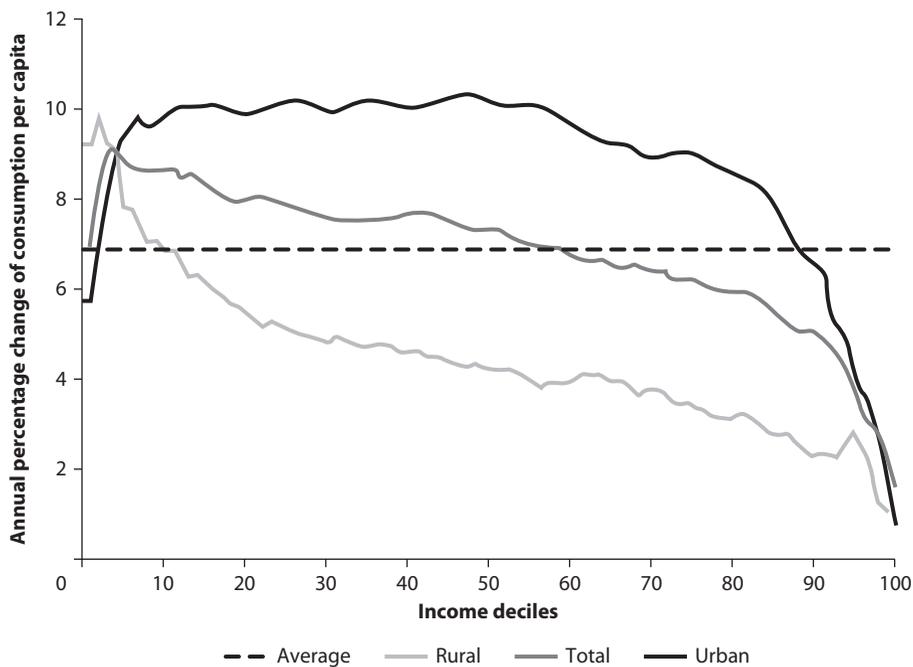
Notes

1. Poverty rates are calculated using the headcount index of poverty based on the 2001 poverty line of 24 AZN per capita per month. The poverty line in 2008 was 57.75 AZN.
2. See appendix A for mathematical methodology.
3. A more general analysis that covers a longer period was limited by missing data for sectoral distribution of employment before 2005 and value added in corresponding sectors after 2009 at the time this report was prepared.

How Did Growth Help to Alleviate Poverty?

High GDP growth has been accompanied by a substantial improvement in living standards and a reduction in poverty. The growth incidence curve displayed in figure 2.1 suggests that growth has had a broad-based impact on household consumption levels in both urban and rural areas. This growth in consumption expenditures has been pro-poor in rural areas and is almost uniform for all income deciles in urban areas. The reduction in poverty can be attributed to two factors. First of all, growing oil rents increased the fiscal resources available to the government, which was able to significantly increase

Figure 2.1 Broad Impact of Growth



Sources: World Bank (2010).

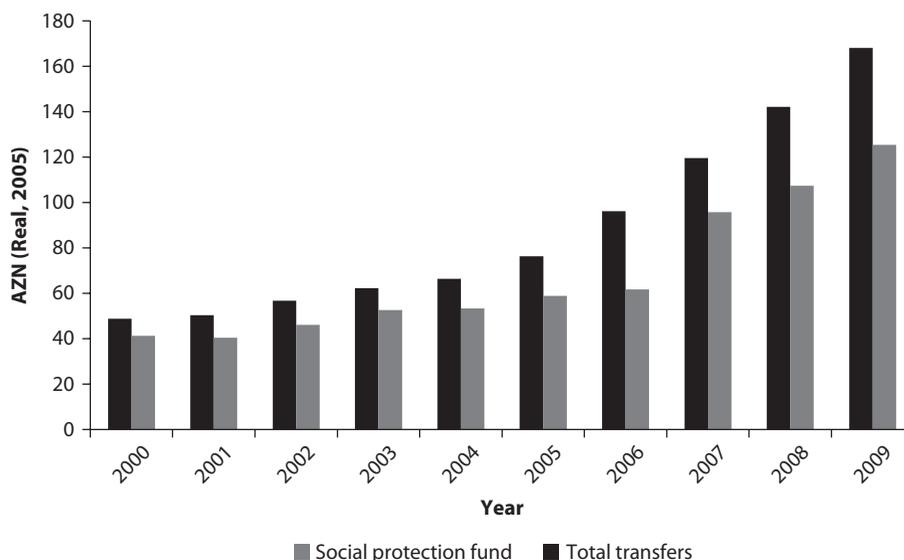
the value of the transfers made in its social insurance transfer programs. Second, the expansion in real wages pushed many of the working poor above the poverty line. In certain sectors such as services, real wages increased in response to increasing productivity, whereas in others such as agriculture the correlation is weaker. Increases in the minimum wage have also contributed modestly to the escalation in average wages.

Transfers Played a Leading Role in Reducing Poverty

Increased social transfers, made possible by growing oil revenues, have been the main way in which growth has led to poverty reduction. In Azerbaijan, there are currently two kinds of social protection program. The first kind consists of contributory social insurance programs such as pensions, sick leave compensation, and unemployment assistance. The programs in this category are managed by the State Social Protection Fund of Azerbaijan (SSPFA). Noncontributory social insurance transfers include benefits to war veterans, targeted social assistance to people with disabilities, and social pensions for elderly people who are not covered by the contributory insurance programs. In principle, contributory social insurance programs are financed mainly through social security contributions made by the employed population.¹ However, the SSPFA is increasingly relying on budget transfers to fund these programs. In 2008, budget transfers accounted for nearly 27 percent of the SSPFA's total revenue and are expected to have increased to 31 percent in 2010. Noncontributory insurance programs are financed through the budget, and these services are delivered through the relevant ministry or its regional offices. One major social insurance transfer program is the Targeted Social Assistance (TSA) Program, which was launched in 2006 and provides noncontributory cash transfers to low-income families. It is currently the most important social transfer program in Azerbaijan.

Despite the big increase in the value of per capita transfers in the last decade (figure 2.2), government expenditures on social transfers remain modest as a share of GDP because of rapid economic growth. In 2008, total expenditures on social transfers amounted to 4.8 percent of GDP, of which 4 percent of GDP was spent on contributory social insurance programs and 0.8 percent of GDP was spent on noncontributory social transfers. Pensions are the largest social transfer, amounting to 75 percent of all public spending on social protection.

The country's social protection programs have had a significant impact on poverty. According to World Bank (2010) the poverty rate could have been almost 60 percent higher in the absence of social transfers. In particular, the steady increase in pensions has been crucial in reducing poverty. In the earlier years of the decade, the average pension was substantially below the poverty line, and the minimum pension was only 42 percent of the minimum subsistence level. The government gradually increased the minimum pension, and by 2008, it had risen to 95 percent of the minimum subsistence level. This policy was instrumental in lifting pensioners out of the "officially poor" category by improving their income.

Figure 2.2 Transfers Per Capita (2005 AZN)

Source: WDI.

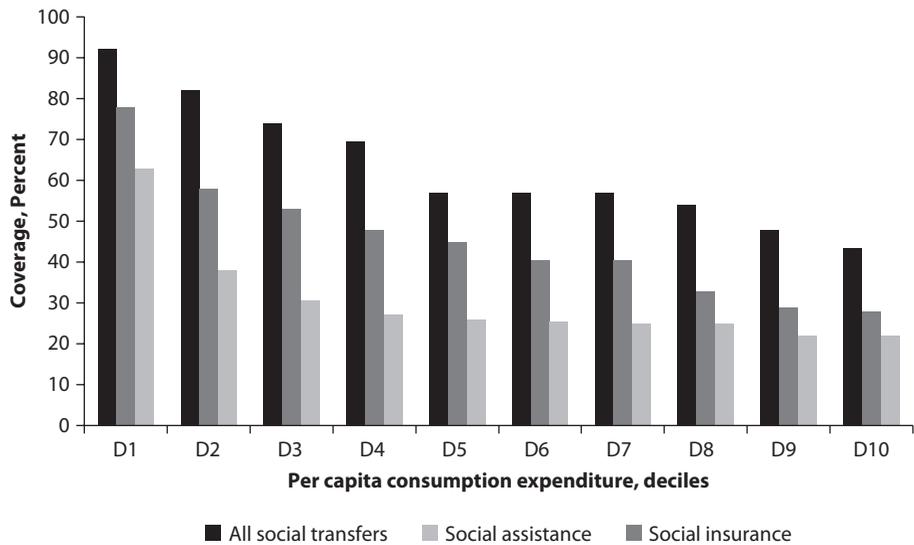
According to survey data, almost two-thirds (63.2 percent) of the population live in households that receive at least one social transfer. Pensions are received by households containing 45.3 percent of the population, while noncontributory transfers reach households containing 30.5 percent of the population. Of the noncontributory transfers, disability-related transfers reach 16.6 percent of the population, while the TSA reaches only 4.1 percent because of the low level of resources allocated to it. Table 2.1 shows that the targeting of these social transfer programs is effective. Almost all of the transfers cover a larger share of the poor population than of the nonpoor population. This is further illustrated in figure 2.3, which looks at population deciles

Table 2.1 Coverage of the Population by Social Transfer Schemes

Program	Overall coverage (%)	Coverage of poor population (%)	Coverage of non-poor population (%)
All social transfers	63.2	81.2	54.2
Social insurance	45.3	63.6	37.8
Pensions	45.3	63.4	37.8
Unemployment benefit	0.4	1.4	0.2
All social assistance	30.5	47.2	24.7
Disability-related	16.6	47.2	24.7
Child-related	2.3	4.2	1.7
TSA	4.1	12.4	1.7
Other	14.6	23.6	11.9

Source: World Bank (2010).

Note: TSA = Targeted social assistance.

Figure 2.3 Coverage of the Population by Social Transfers by Consumption Deciles

Source: LSMS 2008.

ranked by per capita consumption expenditure. In the case of all of the programs, it can be seen that coverage gets higher as the consumption decile gets lower. Among the poorest 10 percent of the population, 92.6 percent live in a household that receives a social transfer. In contrast, the coverage of the top decile is only 43.5 percent. Since the poverty rate almost overlaps with the bottom two deciles, 81.2 percent of the poor live in a household that receive at least one type of social transfer. In the case of the nonpoor, the coverage is 54.2 percent.

Higher Labor Income Also Reduced Poverty

The poor have also benefitted from increases in labor income resulting from economic growth. Labor income has expanded mainly because of increases in real wages and to a lesser extent because of the creation of additional employment. Growth in formal sector wages has generally kept pace with growth in incomes in the rest of the economy. Between 2000 and 2010, average nominal wages have grown by about 22.3 percent annually. This growth has been slightly higher than the growth in nominal per capita consumption (19.5 percent per annum) and slightly below the growth in per capita GNP (about 22.5 percent per annum). Similarly, average real wages grew by nearly 13 percent annually in the same period. As a consequence of the government's minimum wage policy, the minimum wage was raised in increments from 5.5 Manats per month in 2001 to 85 Manats per month in 2010. Nevertheless, the minimum wage is probably not an important determinant of individuals' wage and employment decisions in Azerbaijan. In 2007, fewer than 2 percent of full-time employees

Table 2.2 Growth in Average Nominal Wages

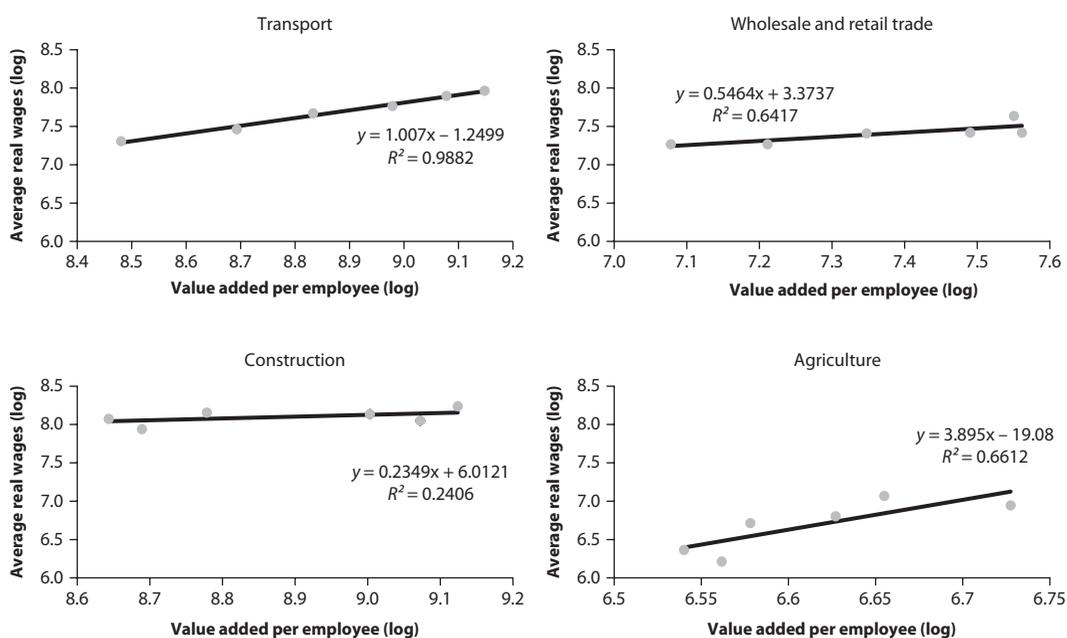
	Average wage (Manats per month) 2010	Growth in nominal wage (% per annum) 2002–10	Sector share in employment (%) 2010
Agriculture, forestry, and fishing	160.3	27.3	38.0
Oil industry	1,004.7	16.3	1.7
Industry	320.5	18.2	6.1
Construction	506	18.8	6.6
Trade: repair of transport means	283	13.1	14.4
Accommodation of tourists and public catering	334	14.6	1.1
Transport, storage and communication	463	19.3	5.4
Social and other services	397	23.6	26.9
Economy total	331	20.2	100

Source: State Statistical Committee of Azerbaijan (SSC) and staff estimation.

received wages lower than the minimum wage. Also, table 2.2 shows that neither the average wage nor the growth in the average wage between 2002 and 2010 has been uniform across sectors.

The growth in wages was generally facilitated by increasing labor productivity. Between 2005 and 2010, value added per employed person increased by as much as 182.7 percent in the oil sector, by 112.3 percent in hospitality services, and 95 percent in transport services. One immediate issue is whether or not workers received a share of the benefits arising from these productivity gains. Figure 2.4 shows that real wages were strongly correlated with average productivity in

Figure 2.4 Real Wage and Productivity Relations across Sectors (2005–10)



Sources: SSC, World Bank data.

transport, where a 1 percent increase in productivity was associated with a 1 percent rise in real wages. This was also the case in the wholesale and retail trade where a 1 percent increase in productivity was associated with a 0.55 percent increase in real wages. The correlation was particularly low in construction where a 1 percent rise in productivity generated only a 0.23 percent rise in real wages. Finally, the real wage growth in agriculture does not seem to be related to productivity. Between 2005 and 2010, average agricultural wages rose by 135 percent, while labor productivity has increased only by 9.8 percent. Appendix A explains the methodology used in these calculations.

Note

1. For instance, all nonagricultural employers make a contribution amounting to 22 percent of the payroll.

Inclusiveness of Growth: Key Characteristics

There have been a number of challenges associated with the impressive poverty reduction in the last decade that need to be addressed. First, the poverty reduction strategy that is largely based on oil financed transfers is not sustainable. The oil revenues, which have fuelled the recent growth in transfers and real wages, are projected to stagnate and decline in the near future. Second, certain groups have not benefitted from the growth process as much as others, including rural workers employed in low-productivity jobs and internally displaced persons (IDPs). Third, employment creation has not contributed very much to the reduction in poverty, particularly in the case of the more vulnerable segments of the population. For example, the World Development Indicators (WDI) statistics show that youth employment has dropped sharply, which cannot be explained by higher enrollments in school. Also, the labor market participation of IDPs remains significantly lower than the nation's average.

Sustainability of the Current Poverty Alleviation Strategy

Oil-financed fiscal transfers and other government spending are bounded by Azerbaijan's own reserve constraints. The Oil Fund (SOFAZ) was created to be a buffer zone to insulate public spending from short-term fluctuations in oil revenues. However, government spending has increasingly been financed by the transfers from the Oil Fund. In 2010, the transfers from SOFAZ accounted for about half of all government expenditure (figure 3.1). This trend cannot be sustained in the medium term as natural resource revenues are projected to decrease. Assuming an international oil price interval between \$76 and \$80 after 2012 and slightly increasing contracted domestic gas price from \$47.7 per million cubic meters (MCM) in 2011 to \$57.9 in 2014, World Bank projects that oil production will reach a maximum level of 65.7 million tons per annum by 2016 and decline afterwards to 35.8 million tons by 2024 (figure 3.2). Although the Bank does not project an equally sharp decline in natural gas production, this will not be sufficient to compensate for the losses in oil sector.

Figure 3.1 Oil Revenues and Transfers

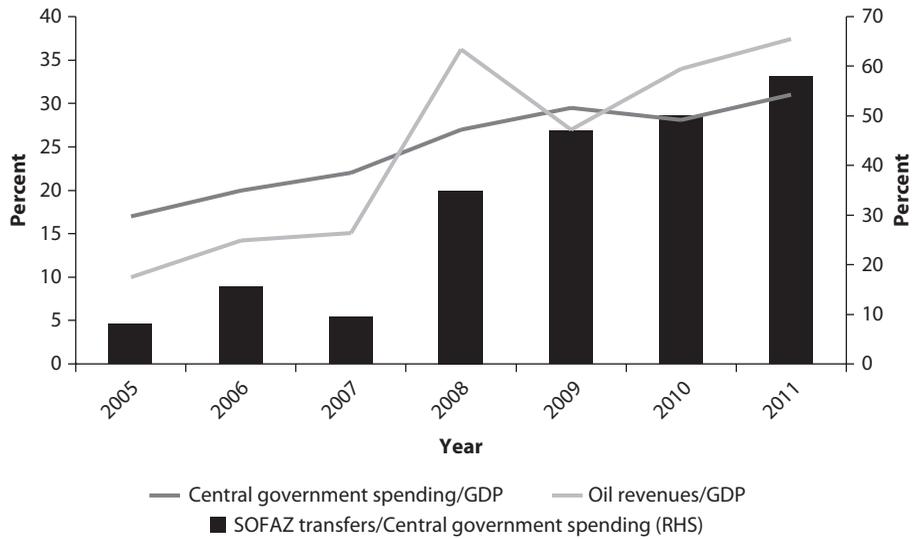
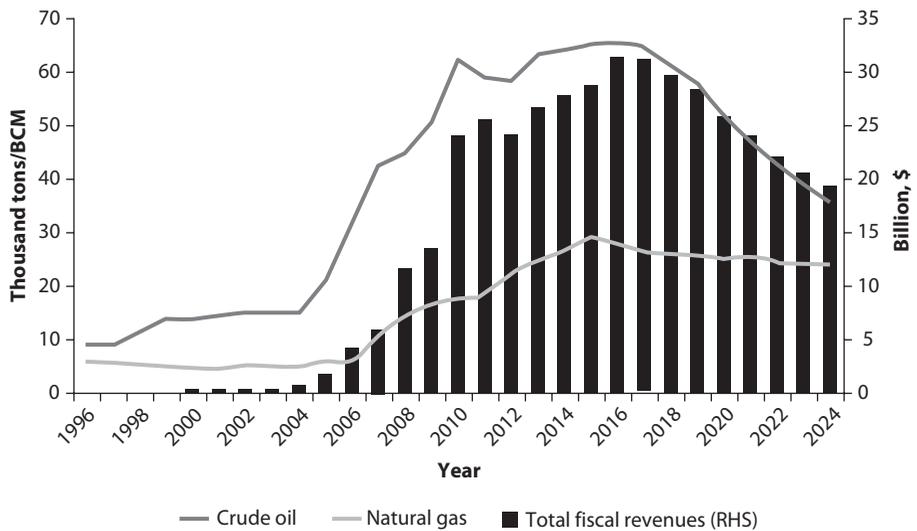


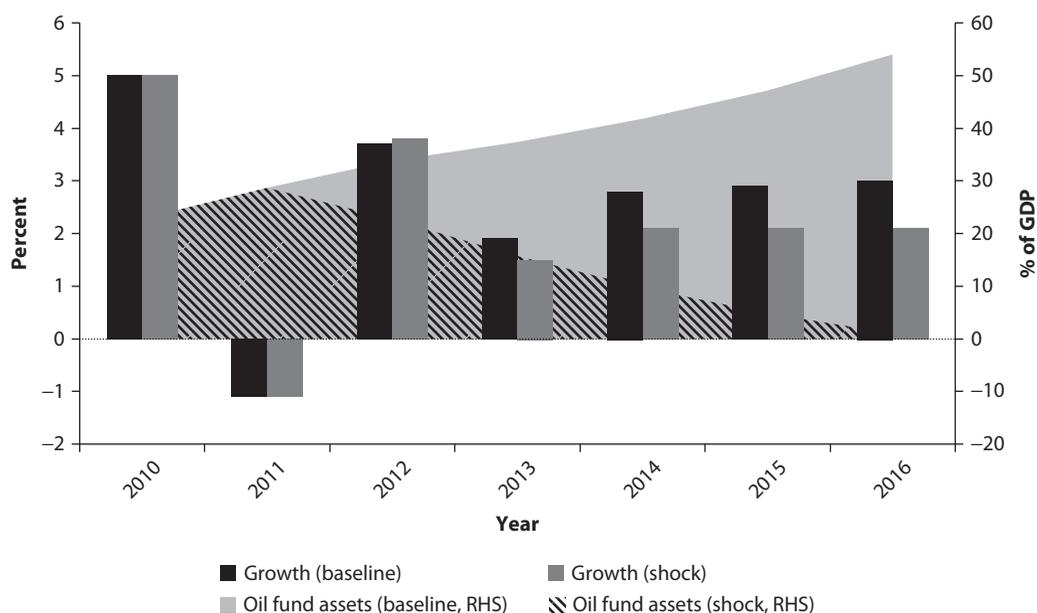
Figure 3.2 Projection of Oil and Gas Production



Following the peak production rate of 29.4 billion cubic meters (BCM) per annum in 2015, natural gas production is estimated to decline relatively slowly to around 24.0 BCM by 2024. Finally, fiscal revenues from oil and gas production, including the shares used in budget and transferred to SOFAZ, will peak at \$31.4 billion in 2016 and decrease after that, reaching \$19.2 billion by 2024.

A slowdown in growth in forthcoming years and possible oil price shocks driven by global risks are also likely to limit gains in poverty reduction. Recent projections by International Monetary Fund (IMF; Article IV Report 2012)

Figure 3.3 Simulating Oil Fund Assets



Sources: Government Authorities, IMF 2012, and World Bank data.

Note: GDEP = Gross domestic product.

show that growth in Azerbaijan is expected to be in the lower single digits during the next half decade (figure 3.3 and box 3.1). In the case of an oil price shock (a decline in the oil price to \$50 per barrel), growth will shrink to 2.1 percent annually. Given the current structure of public spending, this will cause SOFAZ assets to be reduced to 1 percent of GDP by 2016. A further deterioration in the global economy due to adverse conditions in the advanced economies may increase the likelihood of the crisis scenario in the medium term.

Box 3.1

Fiscal Sustainability and Oil Fund Transfers

Notwithstanding the *raison d'être* of the Oil Fund (SOFAZ), Azerbaijan has increasingly been using oil revenues to finance the public expenditures. A rule based approach that smoothes the transfers from oil fund regardless of the oil price movements is conducive to promoting diversification and employment. However, in Azerbaijan, these transfers have increased from \$130 million in 2004 to \$9 billion in 2011 in current prices following an increase in the oil prices and production capacity. Despite the high GDP growth rates, this escalation in oil fund transfers constitutes more than a ten-fold increase as a share of GDP in the same period. In 2011, oil revenues financed about 57 percent of the government spending (Table B3.1.1).

(box continues on next page)

Box 3.1 Fiscal Sustainability and Oil Fund Transfers (continued)**Table B3.1.1 Government Revenues and Expenditures (% of GDP)**

	2004	2005	2006	2007	2008	2009	2010	2011
Total state budget revenues	17.36	16.41	20.64	21.18	26.81	29.00	27.43	31.36
o/w transfer from the oil fund	1.52	1.20	3.12	2.06	9.47	13.81	14.23	17.98
Tax revenues	n.a.	14.03	16.80	18.38	16.75	14.40	12.67	12.77
Total expenditures	17.60	17.09	20.22	21.46	26.77	29.50	28.30	30.75
o/w general government expenditures	1.44	1.34	2.15	1.65	1.65	2.13	1.91	2.14
Public order and safety	1.83	1.65	1.49	1.52	1.33	1.82	1.61	1.42
Education	3.45	2.97	2.56	2.55	2.44	3.22	2.84	2.53
Health	0.86	0.92	0.86	0.91	0.86	1.13	1.03	0.99
Social protection and social security	2.77	2.44	1.82	2.10	2.11	2.96	2.70	2.99
Culture, mass media, sport and religion	0.45	0.40	0.36	0.34	0.35	0.44	0.41	0.38
Economy	3.41	3.55	6.65	8.29	12.35	12.29	11.76	13.59
Other	3.39	3.82	4.33	4.11	5.68	5.51	6.04	6.72

Source: Government Authorities, World Bank data.

Note: n.a. = not applicable

Current projections by IMF confirm the concerns about increasing oil dependence in Azerbaijan's fiscal policies. The favorable fiscal forecasts in the baseline scenario changes significantly in the case of a sharp and sustained decline in oil price (Table B3.1.2). Under this crisis scenario, where the oil price is reduced to \$50 a barrel in 2012 and remains at that level in real terms until 2016, the reduction in overall GDP growth does not exceed a percentage point per annum *vis a vis* the baseline scenario. However, the pressure on fiscal balances is projected to be substantial if there is no change in the prevailing policies. Total revenues diminish by more than 10 percentage point as a share of GDP per annum, and the overall balance moves from a surplus of 4.78 of GDP in the baseline case to a deficit of 4.7 percent of GDP on average over the projection period in the crisis scenario. The oil fund assets, on the other hand, are projected to decrease to a modest \$1.0 billion in the latter case.

Table B3.1.2 Baseline and Crisis Scenarios and Their Fiscal Implications

	2010	2011	2012	2013	2014	2015	2016
		Baseline scenario					
GDP growth (%)	5.0	-1.1	3.7	1.9	2.8	2.9	3.0
o/w oil sector (%)	4.8	-10.9	1.0	-2.6	-0.1	-0.1	0.0
Non-oil sector	7.6	9.1	6.0	5.5	5.0	5.0	5.0
Total revenues (% of GDP)	46.7	38.1	43.0	39.8	37.8	36.9	36.9
Overall balance (% of GDP)	15.0	8.5	6.3	3.7	4.0	4.5	5.4
Non-oil primary balance (% of Non-oil GDP)	-37.6	-44.0	-39.5	-36.0	-30.4	-26.4	-23.1
Oil fund assets (US\$, billion)	22.8	28.7	33.8	37.4	41.8	47.2	54.0
		Crisis scenario					
GDP growth (%)	5.0	-1.1	3.8	1.5	2.1	2.1	2.1
o/w oil sector (%)	4.8	-10.9	1.0	-2.6	-0.1	-0.1	0.0
Non-oil sector	7.6	9.1	6.2	4.8	3.8	3.6	3.6
Total revenues (% of GDP)	46.7	48.4	26.1	25.8	26.1	26.9	27.6
Overall balance (% of GDP)	15.0	8.6	-10.6	-10.6	-8.3	-6.4	-4.8
Non-oil primary balance (% of Non-oil GDP)	-37.6	-44.2	39.6	36.5	-31.6	-28.1	-25.1
Oil fund assets (US\$, billion)	22.8	28.7	22.7	15.7	9.7	4.8	1.0

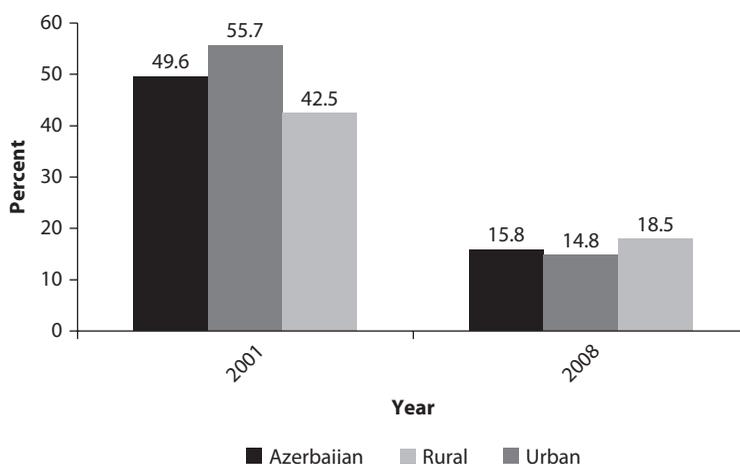
Source: IMF Article IV Report 2011.

Growth and Inclusion

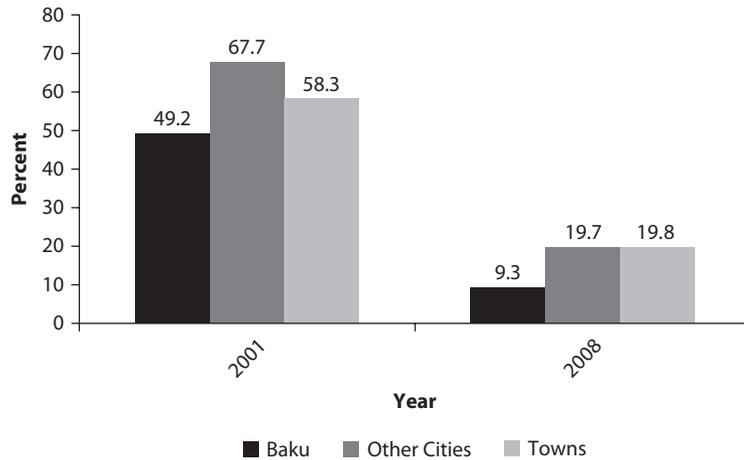
While the aggregate reduction in poverty between 2000 and 2008 was impressive, three groups of Azerbaijanis benefitted less from this growth than the rest of the population. These are (1) Azerbaijanis living in rural areas, especially those engaged in low-productivity agriculture, (2) Azerbaijanis living in small towns outside Baku who are unemployed or are trapped in low-wage jobs, and (3) internally displaced persons (IDPs) who are less integrated in the economy and the labor market than other Azerbaijanis. The growth incidence analysis presented in figure 2.1 shows the urban bias in the consumption growth. The per capita consumption of those in most deciles of the urban population, except the very rich, has grown at a significantly higher rate than average per capita consumption. At the same time, the per capita consumption of nearly all of the rural population (except the very poor) has grown at a significantly lower rate than average per capita consumption. Consequently, while rural poverty substantially declined in 2008, it remains higher (18.5) than urban poverty (14.8) (figure 3.4). Similarly, figure 3.5 shows that the ratio of poverty reduction is higher in Baku, which means that poverty reduction in Azerbaijan is pro-urban and pro-Baku.

Internally displaced persons (IDPs) present a special problem. The average incidence of poverty among IDPs is similar to or higher than that of the rest of the population. IDPs constitute 11 percent of the population, and 10.5 percent of IDPs are poor. However, this average masks the fact that in cities outside Baku, where Azerbaijan's poverty is concentrated, the poverty rate among IDPs is about 18.3 percent on average but is as high as 29.3 percent in some locations. Because IDPs are less integrated into the economy, they are more vulnerable to poverty. Up to 50 percent of the IDPs currently live in collective centers (public buildings and dormitories) and temporary housing shelters in which conditions

Figure 3.4 Reduction in Poverty, 2001–08



Source: World Bank data.

Figure 3.5 Reduction in Poverty in Baku and Other Urban Areas

Source: (World Bank 2010).

are harsh. Almost 73 percent of IDPs report that government assistance is their main source of livelihood, while only 8 percent receive their main income from employment in either the public or private sector. Over 50 percent of working age IDPs are not actively participating in the labor force compared to 36 percent of general population. The main reasons for this unemployment or inactivity are the lack of jobs and training opportunities as well as the inadequate skills of the IDPs (IDMC 2010).

Employment Creation

The main instrument of sustainable and inclusive growth is productive employment. The analysis in this chapter shows that high growth has not translated into high levels of productive employment. As discussed below, many important indicators of labor market conditions, such as labor force participation rate, employment rates, and unemployment rates, are worse for the excluded groups than for the rest of the population. Rural workers are trapped in low-paying, low-productivity jobs while not enough jobs are being created for urban workers, workers aged 15–24, first-time jobseekers, or people with only a general secondary education or vocational training.

Despite high growth in Azerbaijan's economy, labor market indicators have shown only modest improvements. First, labor force participation (LFP, which measures the number of people currently employed or willing to work as a share of the working age population) has declined from its 1990 level of about 67 percent but has been roughly stable since 2000 at about 63 percent.¹ Female LFP rate has increased while male LFP has decreased or remained flat (figure 3.6). But in 2009, the female participation rate (59.5) was still lower than the male participation rate (66.8). Second, the female employment ratio increased during

Figure 3.6 Labor Force Participation

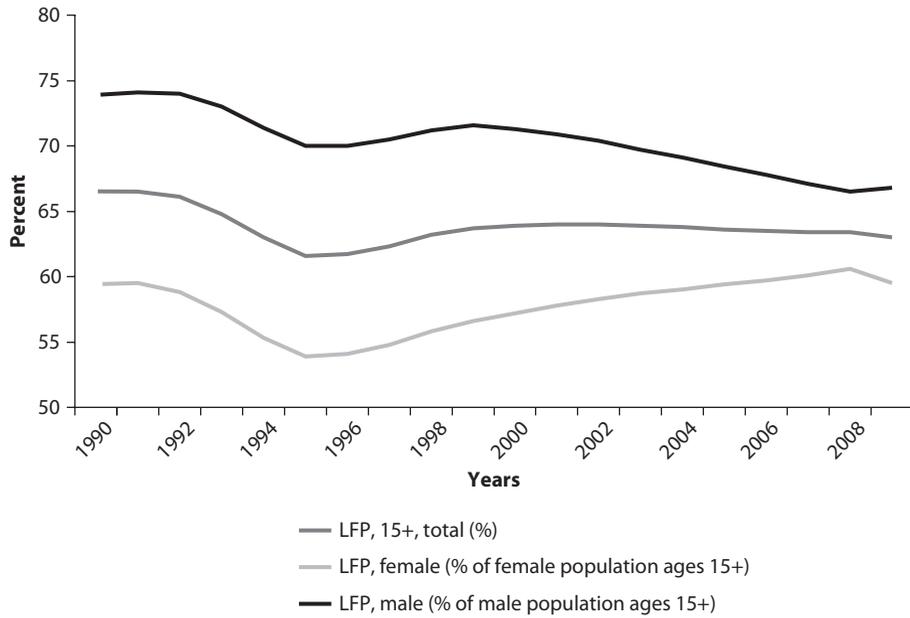
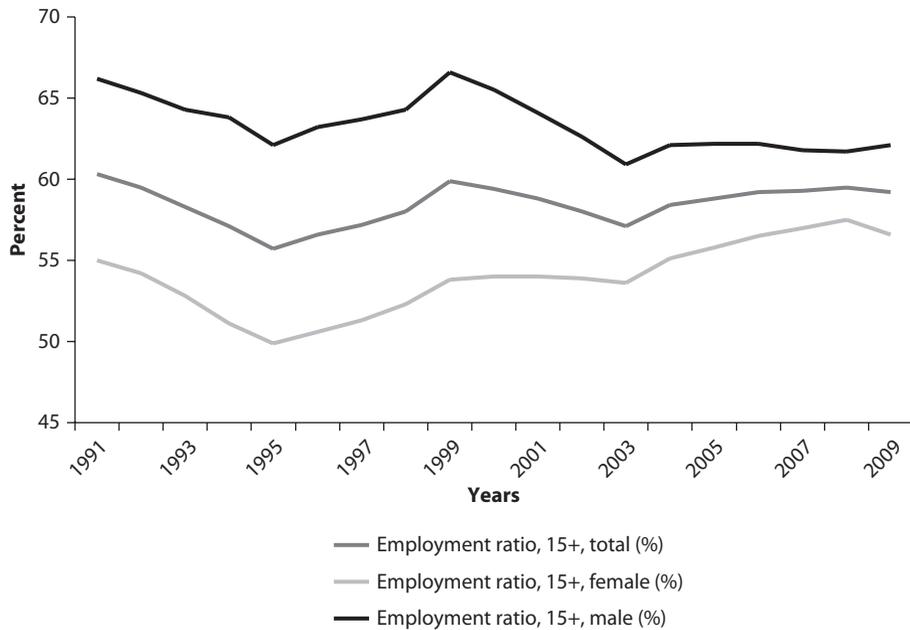
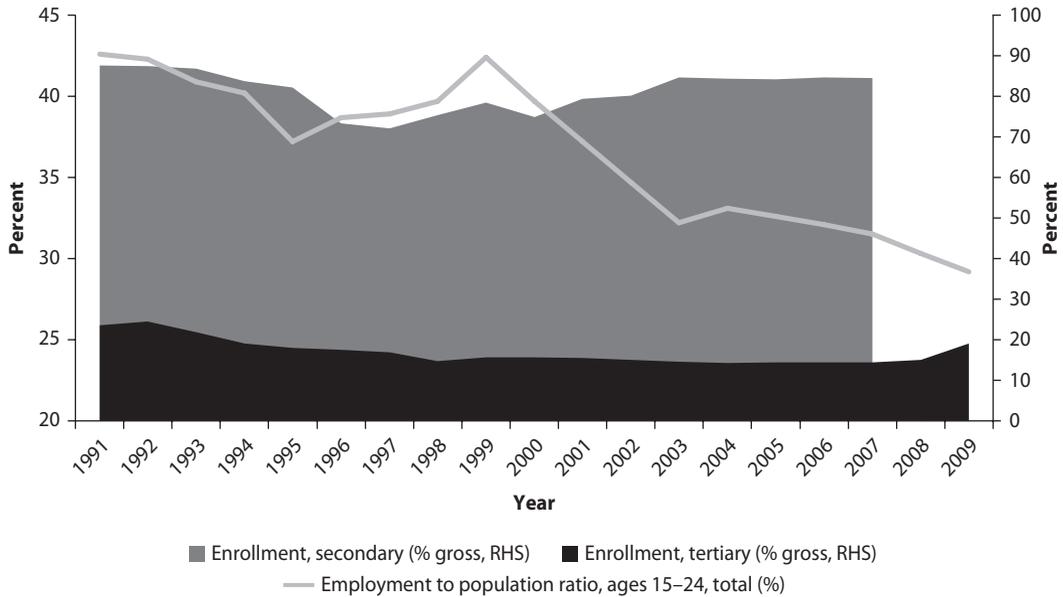


Figure 3.7 Employment Ratios



the 2000s while the male employment ratio decreased (figure 3.7).² However, most of the growth in female employment has occurred in rural areas where women are likely to be employed at low-wage sectors or as self-employed workers in agriculture. Third, employment rates have also fallen sharply for young

Figure 3.8 Youth Employment and School Enrollment

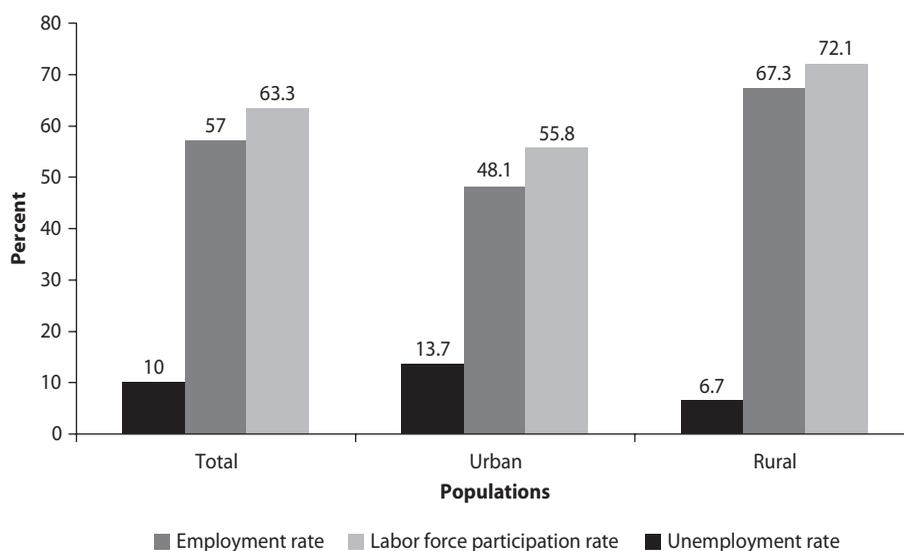
Source: World development Indicators.

Note: LFP = Labor force participation.

people aged between 15 and 24 from about 40 percent at the start of the decade to about 30 percent in 2009, even though education enrollment rates did not increase (figure 3.8). Therefore, it seems that it is harder for this age group to get jobs, resulting in higher unemployment rates and lower employment rates than for other members of the working age population.

Labor market outcomes are better in rural areas than in urban areas, but the same is not true for incomes. In 2008, according to the World Bank's LSMS data, employment rates in rural areas were about 9 percent higher than in urban areas, while LFP rates were 8 percent higher and unemployment rates were about 3.7 percent lower (figure 3.9). However these data do not reflect the true dimensions of the disparities in overall living standards since most rural jobs are low-paying and seasonal. Median earnings per employed person in 2008 were AZN 120 per month in urban areas and for nonagricultural work, while they were only AZN 75 in rural areas. For agricultural work, the earnings were even less—on average, only AZN 51 per capita per month.

Although over time the total unemployment rate has fallen, this understates difficulties faced by Azerbaijanis in trying to find a job. According to the LSMS data, the unemployment rate in 2008 was about 9.9 percent of the labor force, which is high for an economy growing at roughly 20 percent per annum. The actual unemployment rate is probably higher than this if the discouraged unemployed are included (defined as those unemployed people who wish to

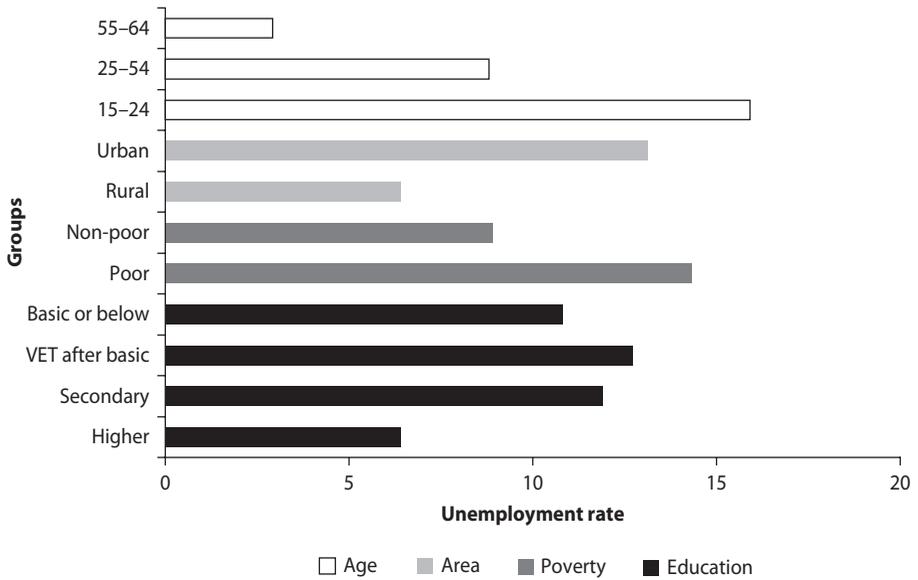
Figure 3.9 Labor Market Characteristics of Workers aged 15–64

Source: World Bank (2010).

work and are currently to do so but who are not actively seeking work because they do not believe they can find a job). An analysis of the 2008 household survey (HHS) data indicates that, if the discouraged unemployed were to be included, the total unemployment rate could be as high as 15 percent.

The nature of unemployment in Azerbaijan is indicative of the problems faced by the rural population, people with few marketable skills, and the young. Because unemployment is higher in urban areas than in rural areas, this suggests that the rural population face formidable constraints to migrating to cities to try to access jobs in the higher paying formal labor market. Second, unemployment spells tend to be of long duration. The LSMS data indicate that, out of the total number of registered unemployed (in 2007), nearly 64 percent had been out of work for more than 12 months.³ This suggests that any new jobs being created are requiring new skills. Third, unemployment is concentrated among the young. The unemployment rate for the 15 to 24-age group is almost 16 percent (figure 3.10) compared with the overall unemployment rate of 10 percent. This suggests that the skills possessed by young people entering the labor market are not the type or quality that are demanded by a fast changing economy. Fourth, unemployment rates are higher among those with least educated. As indicated in figure 3.5, unemployment rates are highest among vocational training graduates and those with a general secondary education. Those who have basic education either do not participate in the labor market or tend to be self-employed. Those with a postsecondary education have the best chance of landing a job and, therefore, have the lowest unemployment rate.

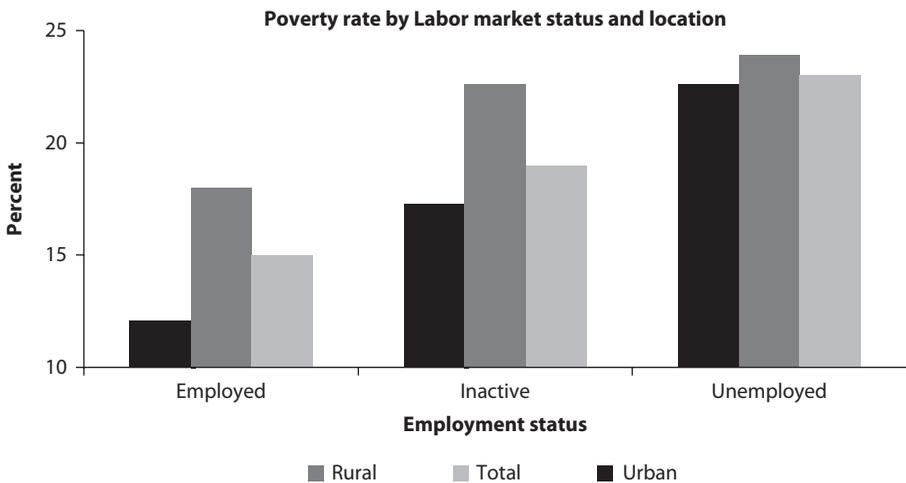
Figure 3.10 Profile of the Unemployed



Source: LSMS 2008.

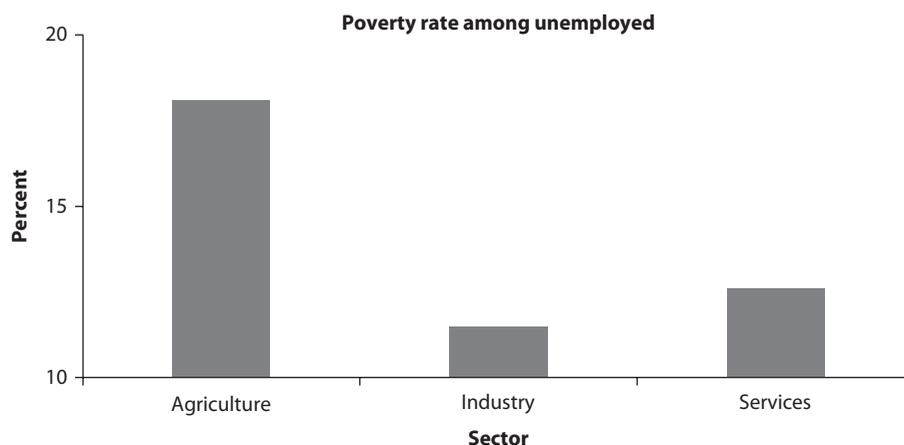
There is a high correlation between unemployment or nonparticipation in the labor market and poverty. Nearly 24 percent of the unemployed are poor. The LSMS data also show how the rural agricultural labor force is poorer than those working in industry and services (see figure 3.11). While labor force and employment rates in rural areas are higher than in urban areas, this does not translate into better earnings. Poverty rates are higher in rural areas for all groups of the

Figure 3.11 Poverty Rates by Employment Status and by Sector



(figure continues on next page)

Figure 3.11 Poverty Rates by Employment Status and by Sector (continued)



Source: World Bank (2010).

Table 3.1 Percentages of Rural and Urban Poor who are Employed, Unemployed, or Inactive (2008)

	Rural (%)	Urban (%)	Total (%)
Employed	60.2	39.1	50.0
Unemployed	5.5	9.9	7.6
Inactive	34.3	51.9	42.4
Total	51.2	48.8	100

Source: World Bank (2010).

working age population, for the employed, and for the unemployed and inactive. Table 3.1 shows that the opposite is also true, in other words, a large proportion of the poor are unemployed. However, there are important rural/urban differences. Nearly 60 percent of the poor in the rural areas are employed, whereas only 39 percent of the urban poor are employed. This suggests that a large proportion of the rural poor are in fact trapped in low-wage, low-productivity employment.

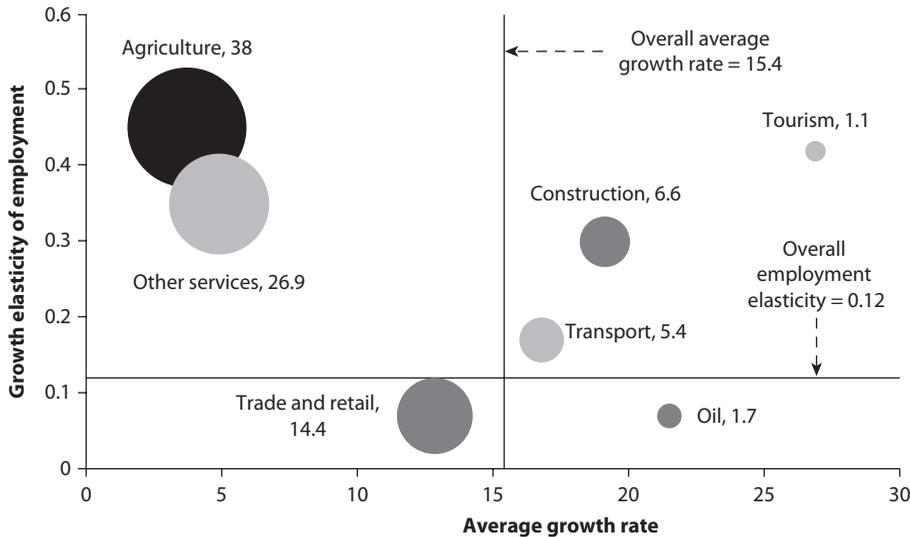
Notes

1. The estimates in this paragraph are based on World Development Indicators data.
2. Sectoral data also show higher employment elasticities for women than for men.
3. According to the LSMS survey data, only 15 percent of the unemployed were searching for a job for more than 12 months, indicating that many long-term jobseekers had dropped out of the labor force or had become discouraged unemployed.

Challenges to Further Inclusive Growth

The pattern of growth exhibited bias against further employment. The overall employment elasticity between 2002 and 2010 was only 0.12, which means that doubling the economy only resulted in a 12 percent increase in employment. Within the overall economy, sectors can be classified in four quadrants based on their patterns of growth and employment creation compared to the economy-wide averages (figure 4.1 and table 4.1). The sectors in the north-east quadrant in the graph, such as tourism, transport, and construction, grew faster than average and had greater employment elasticities than average. Nevertheless, these sectors did not have much impact on overall employment as they account for relatively small shares of employment. The oil industry, the only sector in the south-east quadrant, grew by about 21.5 percent annually between 2002 and

Figure 4.1 Growth, Employment Elasticity, and Employment Shares by Sector



Sources: SSC, World Bank data. The bubble size indicates each sector's employment share in 2010.

Table 4.1 Employment Elasticities by Sector

Economic activity	GDP		Employment		Elasticities			Productivity	
	Growth	Share (%)	Growth	Share (%)	2002–06	2006–10	2002–10	2002 AZN prices	
	2002–10	2010	2002–10	2010				2006	2010
Agriculture, forestry, and fishing	3.7	6.4	1.66	38.0	0.33	0.63	0.45	657.1	684.1
Oil industry	21.5	51.0	1.50	1.7	0.17	–0.13	0.07	67,752.0	124,357.4
Non-oil industry	6.7	3.7	1.43	6.1	0.23	–0.02	0.21	2,349.6	2,464.2
Construction	19.1	12.2	5.65	6.6	0.14	0.54	0.30	1,731.6	8,333.3
Trade: repair of transport means	12.9	6.8	0.85	14.4	0.14	–0.02	0.07	5,794.4	7,426.6
Tourism and public catering	26.9	0.9	11.17	1.1	0.19	0.68	0.42	1,197.3	1,907.2
Transport, storage, and communication	16.8	11.8	2.77	5.4	0.11	0.23	0.17	2,586.8	3,396.3
Social and other services	4.9	7.2	1.72	26.9	0.4	0.32	0.35	5,664.1	8,790.8
Total	15.42	100	1.89	100	0.1	0.16	0.12	913.6	1,074.0

Source: SSC data, World Bank data.

2010 but had an employment elasticity of only 0.07, which is significantly lower than the national average. Similarly, the trade sector, which grew by nearly 12.9 percent per annum and accounted for about 15 percent of total employment in 2010, had a low employment elasticity of only 0.07. On the other hand, agriculture and social services (in the north-west quadrant), which together employ about 65 percent of all workers and have relatively high employment elasticities of 0.45 and 0.35, grew by only 4.8 and 5 percent per annum, respectively.

The Need for Diversification

Government policies can have substantial impact on employment by unleashing the growth potential in labor-intensive sectors. There are four areas in which adjustments in government policies can boost growth in the sectors with high employment potential (1) substantially lower integration into the world markets than comparable countries; (2) macroeconomic volatility fuelled by overreliance on oil revenues; (3) corruption; and (4) sector-specific policies in agriculture.

Azerbaijan's economy is not well-integrated into the world market. Because its domestic market is small, access to foreign markets is needed for private business to flourish, but several indicators show that this is not the case. This is the principal reason behind the sluggish growth in the non-oil exports sector, which has the potential to create a large number of jobs. Overall, the share of non-oil exports in GDP has fallen significantly within the last decade. Only a very small percentage (4.3 percent) of firms is exclusively in the export business or uses inputs or supplies of foreign origin, the second lowest percentage

in the Europe and Central Asia (ECA) region. A substantial share of the firms who export is state-owned. Moreover, both the share of exporter firms and the share of firms using inputs or supplies of foreign origin have steadily been declining in the last decade (figure 4.2 and 4.3). A major determinant of this unfavorable trend is the nontariff barriers that trading firms in Azerbaijan face. Although Azerbaijan has a low average tariff rate, it is one of only two countries

Figure 4.2 Openness Indicators in Azerbaijan and Comparable Countries

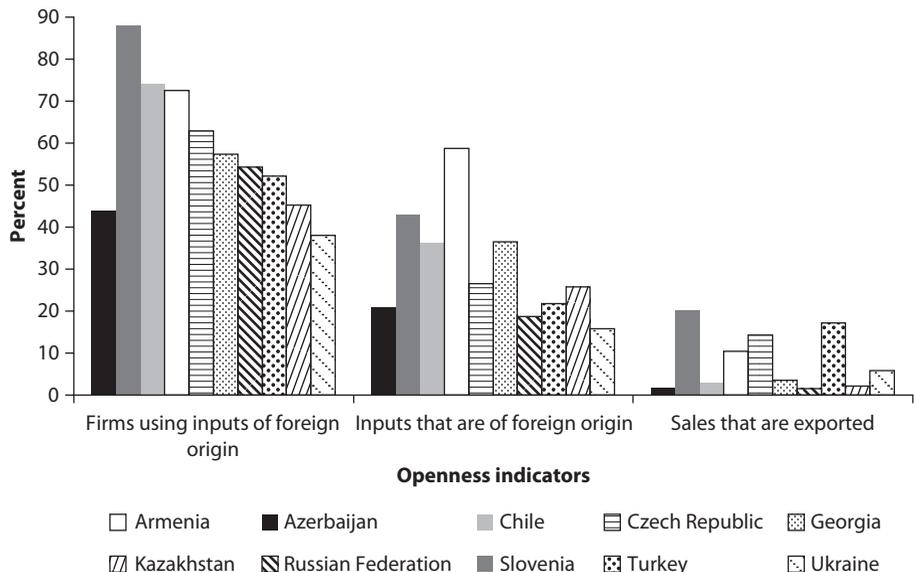
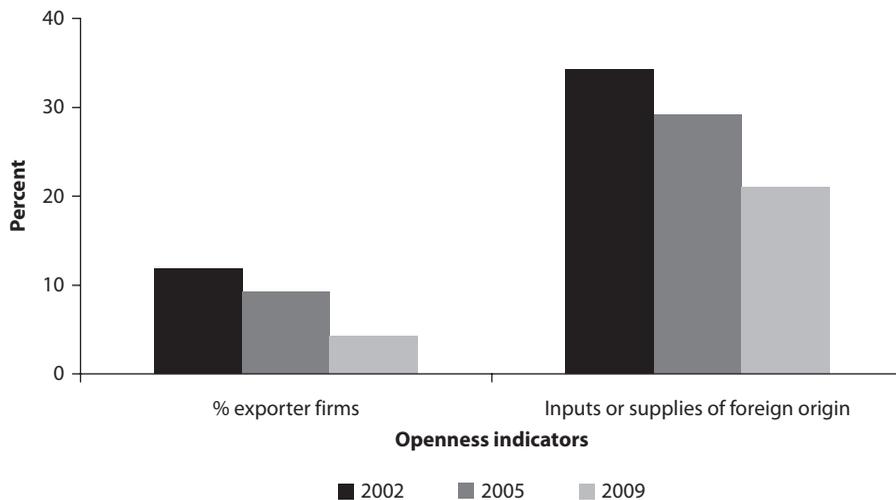


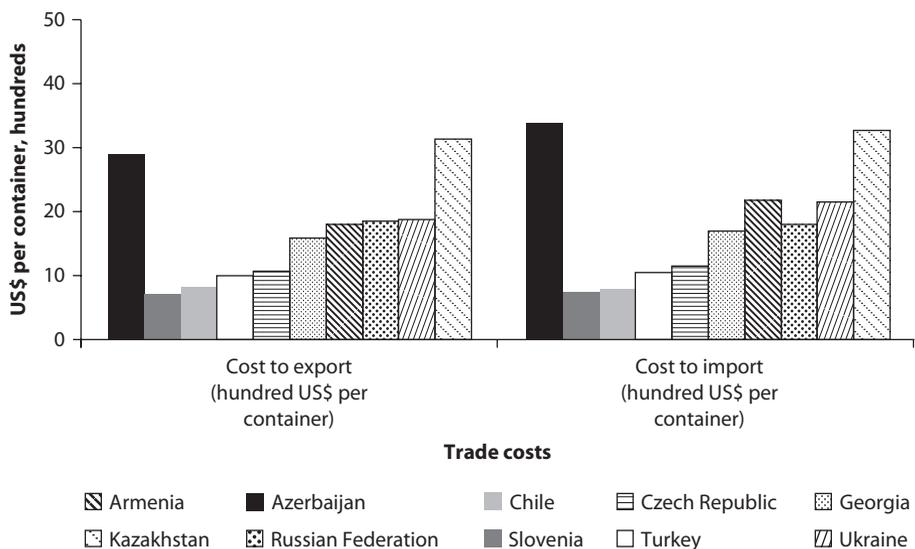
Figure 4.3 Trend in Openness



in the Europe and Central Asia region that increased average tariffs between 2002 and 2008. Azerbaijan was also not successful in attracting FDI in the non-oil sectors, which is crucial for fostering inclusive growth, creating jobs, promoting diversification, and generating employment as well as for providing access to advanced technologies and know-how. FDI to non-oil sectors in Azerbaijan is significantly lower than in other countries in the region and finances very few greenfield projects.

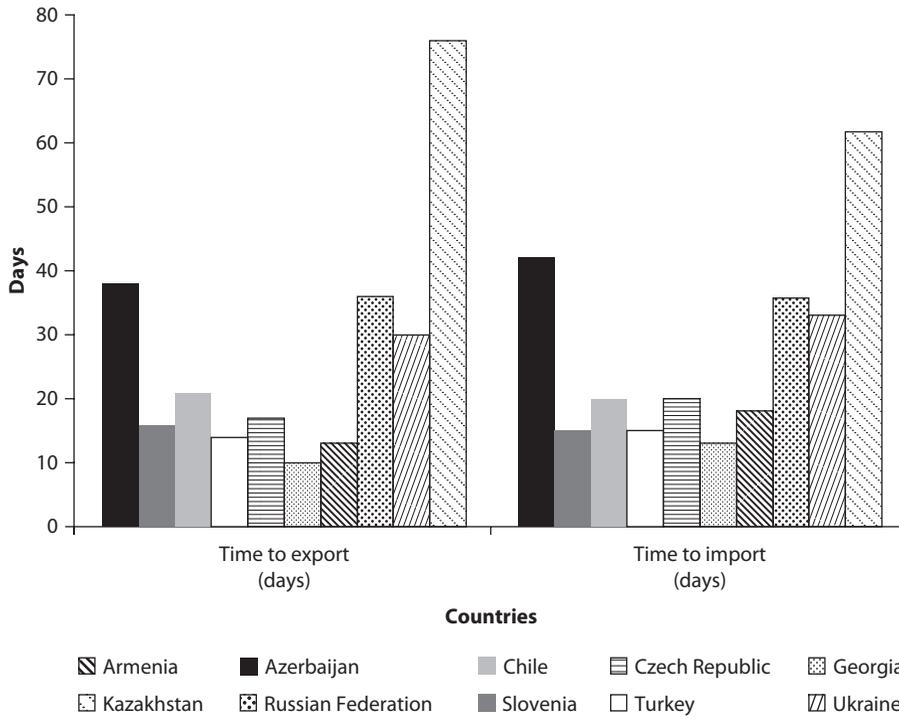
Customs problems and trade costs are significant obstacles to Azerbaijan’s further integration into the world market. The country is one of the worst performers in the world in terms of import/export procedures and trade costs (see figure 4.4). In the World Bank’s 2010 Doing Business Report, Azerbaijan ranked 177 out of 183 in the ease of trading across borders. Similarly, Azerbaijan ranked third to last (after the Russian Federation and Uzbekistan) among the former Soviet Union (FSU) and Europe and Central Asia countries in the U.S. Agency for International Development’s (USAID’s) Trade Freedom Index, which measures the restrictiveness of countries’ nontariff barriers arising from import and export controls, subsidies, arbitrary customs administration, and regulatory conflicts of interest. The costs of exporting and importing a container in Azerbaijan are almost five times higher than in Slovenia. This reduces the competitiveness of the country’s exporters in two ways. First, exported output comes at a higher cost and with greater uncertainty about delivery schedules. Second, imported inputs are often incorrectly priced or even completely missing, which further increases firms’ production costs. Therefore, reforming Azerbaijan’s customs procedures and institutions is likely to pay high dividends in the form of smoother trade and increased exports in the non-oil sectors.

Figure 4.4 Trade Costs in Azerbaijan and Comparable Countries



(figure continues on next page)

Figure 4.4 Trade Costs in Azerbaijan and Comparable Countries (continued)



Source: World Bank's Doing Business surveys.

Macroeconomic volatility also hinders growth in the non-oil sectors. Despite the buffer zone created by the Oil Fund (SOFAZ), the economy is exposed to macroeconomic fluctuations as there is no rules based approach regulating transfers from the fund. Sharp fluctuations in macroeconomic fundamentals that are fuelled by increasing oil financed public spending which increase risk and make it more difficult for firms and households to plan ahead, thus dampening the prospects of diversification and employment generation. This is important as the Azerbaijani economy experienced significant volatility between 2000 and 2010 (figure 4.5 and 4.6). High average levels of growth achieved after the transition have not followed a smooth path. For example, the oil GDP growth rate varied from a high of 66.3 percent in 2005 to a low of 1.8 percent in 2010. Non-oil GDP reached its maximum growth rate of 14.9 percent in 2003 and was down to 7.9 percent by 2010. These sharp variations in growth rates have been accompanied by large fluctuations in current account and fiscal deficits and large swings in inflation rates. Non-oil exports were similarly volatile during the same period. The first half of decade was characterized by the depreciation of the REER and a lagged response (of about a year) in the form of non-oil export growth. The average growth rate in non-oil exports in this period was 36.4 percent. In the second half of the decade, starting in 2005, there was continuous appreciation of the

Figure 4.5 Output Gap Fluctuations

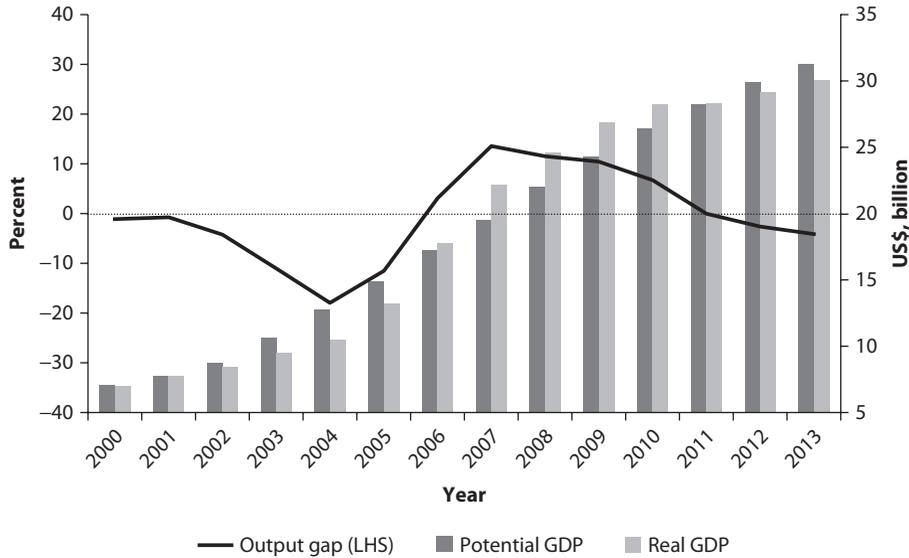
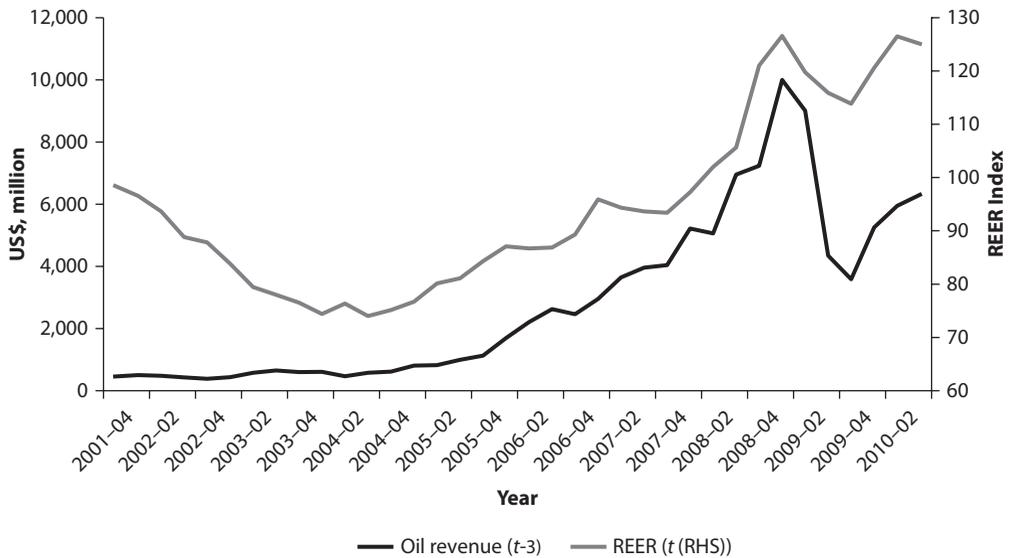
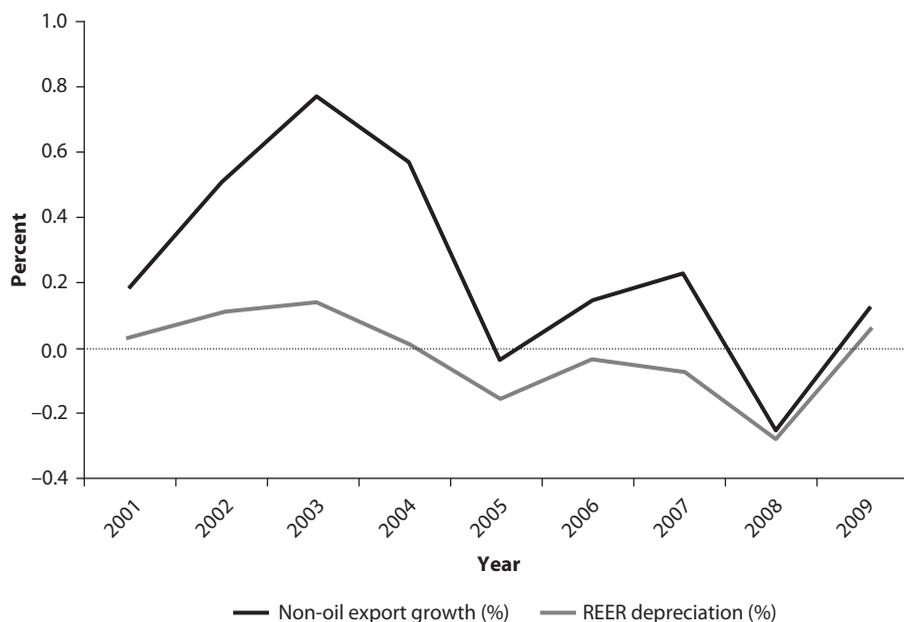


Figure 4.6 Oil Export Revenues and the REER



REER, while the growth performance of non-oil exports was patchy. The average of growth rate in non-oil exports was a modest 4.5 percent. Overall, the exchange rate has had a lagged but strong impact on non-oil exports with a correlation coefficient equal to 0.85 (when the impact is lagged by 1 year (figure 4.7)). The appreciation in the REER may also have had adverse

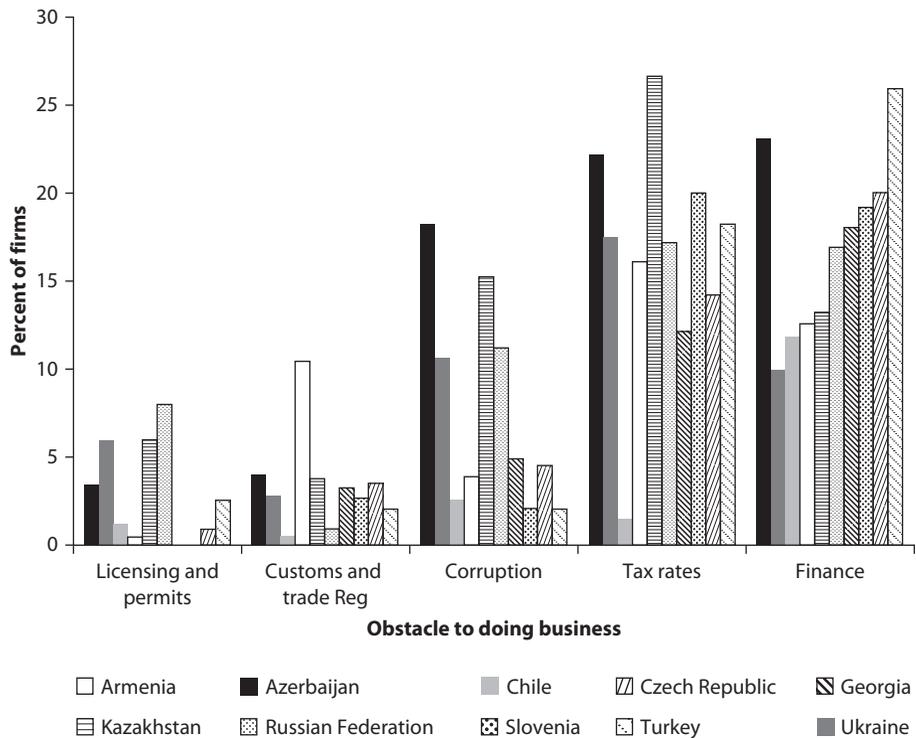
Figure 4.7 Lagged REER (1 year) and Non-oil Exports

Sources: SSC, World Bank data.

Note: GDP = Gross domestic product, REER = Real effective exchange rate.

employment consequences if the non-traded sectors such as services have failed to absorb the labor released from the shrinking tradable sectors.

Corruption is widespread and is a major obstacle to developing a more vigorous private sector. In the World Bank's Enterprise Survey, 18.2 percent of the firms listed corruption as the most problematic factor in Azerbaijan as opposed to 15.2 percent in Kazakhstan, 11.2 percent in Russia, and only 2 percent in Turkey. The share of Azerbaijani respondents who chose customs and trade regulations as the major obstacle is not much higher than in comparable countries in Europe and Central Asia, but this is due to a self-selection problem (figure 4.8). The share of firms involved in export activities is significantly lower than in the comparable countries, so the problems related to exporting are not applicable to most Azerbaijani firms. The results of the Enterprise Survey also indicated that small and medium-sized enterprises (SMEs) are more affected by corruption than larger firms, as evidenced by the fact that a larger proportion of SMEs reported making informal payments to officials. One important consequence of corruption is the growth of the informal economy. Azerbaijan ranks the 101 in the World Economic Forum's Global Competitiveness Report in terms of the absence of irregular payments and bribes, whereas all of its comparable countries in the region rank higher (Kazakhstan ranks 93rd, Malaysia ranks 55th, and Turkey ranks 76th). Azerbaijan also ranks 94th in terms of the efficiency of the legal framework in settling disputes, 95th in the reliability of police services, 107th in the protection of minority shareholders' interests, and 112th in the

Figure 4.8 Firms' Perception of the Biggest Obstacle to Doing Business

Source: World Bank's Enterprise Surveys.

strength of auditing and reporting standards. These unfavorable business conditions discourage investment and reduce entrepreneurial incentives to create new firms or invest in innovation.

Sector-specific policies in agriculture have also delayed a structural transformation in the Azerbaijan economy. In 2010, agriculture accounted for 6.4 percent of GDP but dominated the labor market, accounting for nearly 38 percent of employment. Real agricultural growth between 2002 and 2010 was around 3.7 percent per annum. This growth, however, was not accompanied by increased yields and productivity. Agricultural land yields for most crops (in metric tons per hectare) have remained flat since 1985. When comparing yields in Azerbaijan in 2009 with those in similar countries, it becomes clear that yields in Azerbaijan are considerably lower, particularly in high-value products such as dairy and vegetables. Similarly value added per worker remained essentially flat between 2002 and 2010, though employment elasticity in agriculture increased.¹

There are several reasons why productivity growth in agriculture has been flat and why a large number of workers remain trapped in low-wage, low-productivity activities. First of all, the land reform that took place in late 1990s resulted in a dramatic structural change in land ownership and in the size of farms, with large agricultural enterprises being replaced by small family farms. The crop area cultivated by family farms increased from less than 30 percent

in 1997 to more than 90 percent in 2010. Family farms use labor intensively, but less than 3 percent of the total workforce in agriculture is officially classified as being employees and informal contracts are widespread. Second, in addition to cross-sectoral factors such as access to finance, corruption, barriers to trade; there are a number of agriculture-specific barriers that inhibit land consolidation and private investment, both of which would increase competitiveness and productivity in agriculture. For example, a small number of wholesalers dominate regional markets, resulting in a growing discrepancy between farm gate and retail prices. Agricultural services such as irrigation, seed supply, input supply, machinery services, veterinary services, and food safety regulations remain weak and need to be strengthened. Finally, the government's subsidies program may have inadvertently enabled low-wage, low-productivity activities in agriculture to continue. Currently, government subsidies, which account for 12–14 percent of annual public expenditures, include (1) area payments on all crops; (2) additional area payments on wheat and rice; and (3) input subsidies on fertilizer and wheat. In their current form, these subsidies have had the unintended consequences of creating incentives that keep productivity low and shift farmers away from profitable activities by using less productive land. The subsidies also favor rice and wheat production, which is less profitable than the production of fruits, vegetables, and potatoes. As a result the subsidy program also encourages families to stay locked in livelihood-based, low-productivity farming. While some of those engaged in low-productivity agriculture lack the skills or the access to finance to get a nonfarm job or invest in other activities or sectors, the current subsidies give those who may be able to leave an indirect incentive to remain in agriculture. This has slowed down the process of rural transformation in which workers move away from agriculture to more productive activities while the farmers who remain adopt more productive larger-scale types of farming.

Challenges to Growing Jobs

In addition to the factors that limit further growth in different sectors, there are several policy-related factors that reduce the extent to which growth creates employment. There are two broad areas in which current policies actually hinder the creation of new employment (1) problems with the labor supply, education, and exclusion and (2) labor market distortions created by policies targeted at SMEs. Government policies in these areas have discriminated against labor as a factor of production and have also reinforced the exclusion of three groups identified in the previous chapter.

Labor Supply, Education, and Exclusion

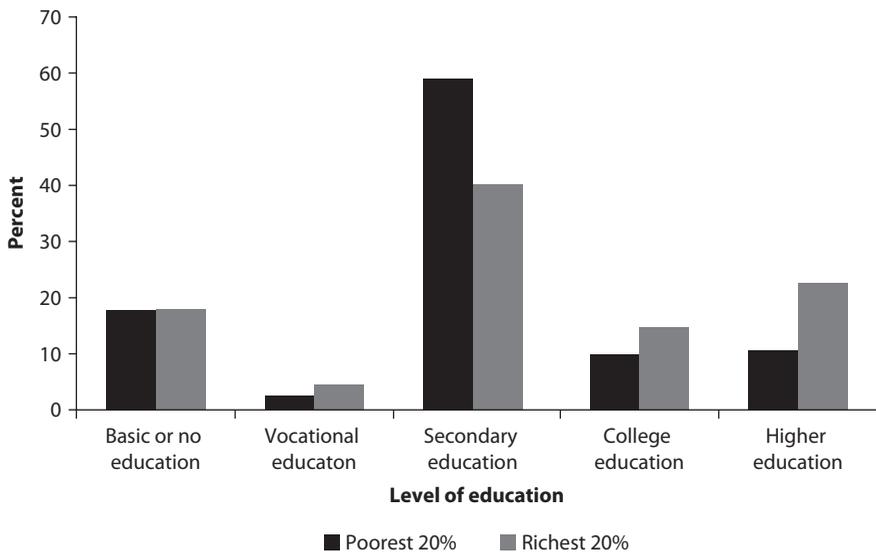
There is a positive relationship between acquiring education and improving living standards in Azerbaijan, but this is mainly because of the job security and other benefits associated with formal employment. The skill premium associated with higher education in Azerbaijan is not highly significant in

monetary terms. Those households with a head who has a tertiary education consume on average 25 percent more on a per capita basis than similar households with a head who has no more than a basic education. Education also has direct links with employment outcomes. LSMS 2008 data indicate that individuals with a basic education or less have lower employment rates and lower labor force participation rates than individuals who have completed secondary education.

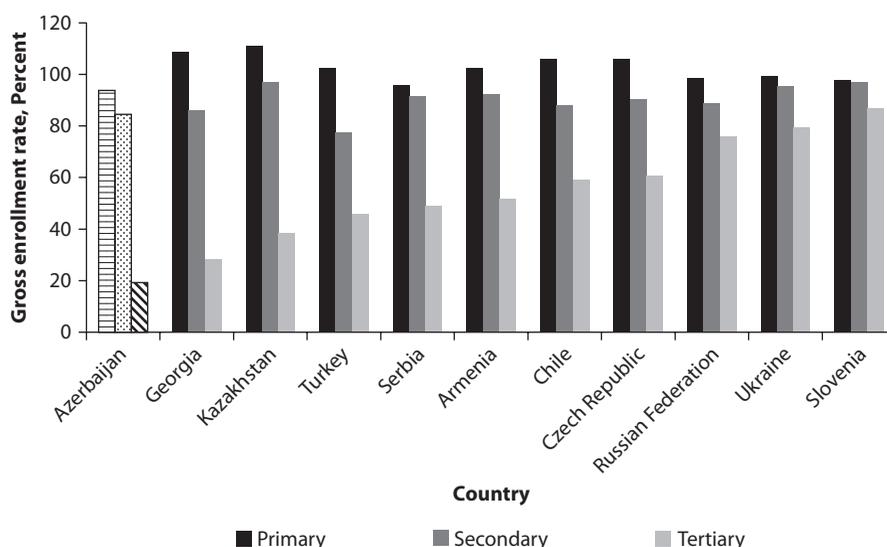
Attaining a postsecondary education is a key to escaping poverty because of the higher likelihood of securing employment. Wage earnings increase by 7–10 percent for each additional year of schooling. Individuals who attain only a basic education or less will earn wages that are below the poverty line. It is only when an individual has 11 years of education (in other words, completes secondary education) that he or she can earn wages that are significantly above the poverty line. The education profile of the poorest and richest 20 percent of population underlines this argument. As figure 4.9 shows, a higher share of people in the richest quartile has a college degree or a higher education than in the poorest quartile.² The number of students in tertiary education is very low in Azerbaijan compared to other countries in the region. In 2008, only 18 percent of secondary school graduates enrolled in tertiary education, including vocational education. This enrollment rate is the second lowest in the Europe and Central Asia region (see figure 4.10). Low and stagnating tertiary enrollment is a result of several factors including the government’s tightly controlled student quotas. The quota to admission ratio has been declining since

Figure 4.9 Education Profile of the Richest and Poorest Quartiles

percent of working age population



Source: World Bank (2010).

Figure 4.10 Comparison of Gross Enrollment Rates, 2010

Source: World Bank's Jobs Database.

the mid-1990s. As a result, fewer young Azerbaijanis have graduated from universities and technical vocational colleges than in their parents' generation.

There is a mismatch between the skills held by graduates coming out of professional education establishments and the needs of the economy (see table 4.2). Tertiary education currently overproduces specialists in areas such as education, health, and manufacturing, whereas few graduates specialize in the services sector or in agriculture. There is also an excess supply of workers with a general secondary education and no vocational skills. In 2009, only 23 percent of new high school graduates enrolled in tertiary education, while the remaining 77 percent entered the job market equipped only with purely academic and general knowledge. The excess supply of workers with only a general secondary education is an important factor behind the skill mismatch

Table 4.2 Skills of Graduates versus the Structure of Employment (2009)

<i>Economic activity</i>	<i>Secondary specialized education (%)</i>	<i>Higher education (%)</i>	<i>Structure of employment (%)</i>
Total	100	100	100
Industry and construction	21.2	22.5	13.0
Transport and communication	3.4	3.8	5.1
Agriculture	8.2	1.9	38.1
Economics	7.5	15.3	0.0
Health and sports	15.8	7.6	4.7
Education	34.2	45.4	8.5
Art and cinematography	9.6	3.7	0.0
Other (services)	—	—	30.6

Source: SSC.

Note: — = not available.

in the labor market. An indicator of this mismatch is the job fair outcomes. In the last few years, job fairs in Baku achieved a very low level of job placement, failing to fill approximately 70 percent of the jobs on offer. The average wage offered for the jobs available at these job fairs exceeded the national average, which the General Employment Department (GED) within the Ministry of Labor and Social Protection regarded as acceptable. The GED's analysis of this failure is that many of the jobs required skills that are not usually well-developed in the education curriculum, such as computing skills and English. Another factor was that younger job seekers had no interest in the technical industrial jobs that were available (ETF 2006).

The government's student admission quotas (by specialization for university and technical vocational colleges) have not been effective in predicting the growing needs of the increasingly dynamic labor market. This central planning model has overproduced specialists in sectors such as education, health, and manufacturing that have limited job opportunities, whereas very few graduates have been skills relevant to agriculture and services, from where much of the new demand for employment is coming. In particular, a large majority of graduates (67 percent among the 25–34 age group) continues to find employment in the public sector, while the private sector in Azerbaijan faces a shortage of highly educated workers with relevant skills.

Rural areas and the poor have less access to higher education, which puts them at a considerable disadvantage in the labor market. In Azerbaijan, participation in schooling follows an inverted U shape. Enrollments are very low in preschool. Enrollments in elementary and basic education are almost universal but are followed by a precipitous decline in upper secondary and higher education. The drop is especially marked in rural areas and in the case of the poor. For instance, net university enrollment rates are nearly 70 percent for individuals in the richest quintile compared to only 35 percent for those in the poorest quintile. Finally, there are significant regional differences in enrollments in higher education (see table 4.3). Richer regions such as Baku, Absheron, and Nakchivan have significantly higher enrollment rates in postsecondary education than poorer regions such as Daghylyg Shirvan, Aran, and Yukhari-Karabakh. Baku city has by

Table 4.3 Regional Net Enrollment Rates

	<i>Upper secondary</i>	<i>University</i>
Daghylyg Shirvan	31.5	40.9
Aran	54.8	45.7
Yukhari-Karabakh	58.8	49.1
Quba-Khachmaz	52.9	56.4
Ganja-Qazakh	51.5	57.1
Absheron	44.2	60.1
Lankaran	59.4	65
Shaki-Zaqatala	55.8	65
Baku City	54.7	71.1

Source: World Bank (2010).

far the highest enrollment rate in higher education among all urban areas. Indeed, an analysis by the World Bank indicated that the enrollment gap in postsecondary education between Baku and the national average had widened between 2002 and 2007 (World Bank 2010).

Affordability is the main reason cited by survey respondents for dropping out after completing compulsory education. Completion rates are very high (ranging between 95 percent and 99 percent) for compulsory education, but thereafter completion rates drop to about 70–80 percent for secondary education and then drop off even more sharply for postsecondary education. Within this overall drop off, completion rates for the poor and those in rural areas are significantly lower (about one-third) the rates for the rich and those in urban areas. LSMS data indicate that a lack of funds is the main reason why students dropping out after completing compulsory education. The data also indicate that for one student a poor household would need to allocate nearly 80 percent of its total income to pay college tuition and 52 percent of its income for a tutoring service, which is clearly unaffordable. The same is true for those IDPs who would like to enter higher education. Although young people with IDP status can attend universities for free, they and their families cannot afford the high living costs that prevail in urban areas.

Labor Market Distortions

The government's tax policies on SMEs give them no incentive to hire more workers and instead create an implicit incentive to remain small and informal. For example, in agriculture only those farmers who formally registered their farms have to pay taxes. In 2009, there were only about 2,500 registered private farms in Azerbaijan. In other sectors, under the current simplified tax regime (STR), firms pay 2 percent on turnover below AZN 90,000 per annum, whereas firms with turnover over AZN 90,000 have to transition to the new value added tax (VAT) system (World Bank 2009b). All firms in Azerbaijan have to pay a social security tax (SST) amounting to 22 percent of their payroll. Given that the transition from the STR to the new VAT regime is expensive and administratively complex, there is a built-in incentive for firms to remain small and/or to split their operations into smaller units. The simulation exercise summarized in table 4.4 shows that a firm's total tax burden can increase by more than 100 percent when it loses STR status. In addition, since employers have to pay the SST on the basis of their formal salary bill, the system gives them an incentive not to issue formal labor contracts.

As a result, informal employment remains high and is growing. According to the Labor Force Survey, between 2003 and 2006, the share of workers without a written contract increased from 45.3 percent to 59.5 percent of the workforce (see table 4.5). The Ministry of Labor and Social Protection estimates that only one-fourth of the workers in the construction sector have a written contract with their employer. Contract workers are not covered by contributory social insurance and often work under precarious conditions.

Table 4.4 The Tax Burden Impact of STR on Firms, a Simulation

	Turnover	STR	CIT assuming 22% profit on turnover	VAT w/40% value added on turnover	SST w/two employees & annual salary of AZN 12,000 each	Total tax
Firms below threshold—Baku	90,000	3,600	n.a.	n.a.	5,280	8,880
Firms below threshold—non-Baku	90,000	1,800	n.a.	n.a.	5,280	7,080
Firms just above threshold	100,000	n.a.	3,058	6,100	5,280	14,438

Source: World Bank 2009b.

Note: STR = Simplified tax regime, CIT = Corporate Income Tax, VAT = Value added tax, SST = Social security tax, n.a. = not applicable.

Table 4.5 Employment by Contract Type, 2003 and 2006

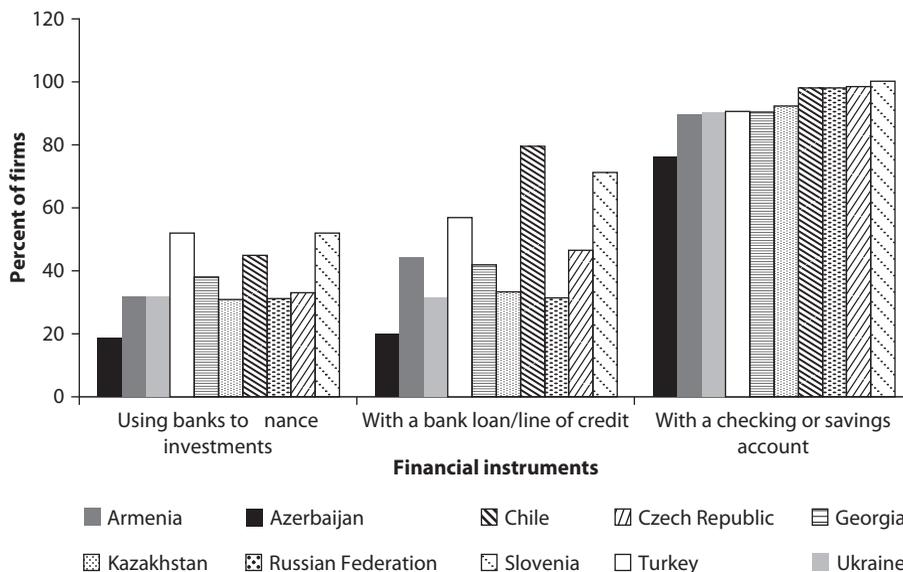
	With employment contract		Without employment contract	
	2003	2006	2003	2006
Total	54.7	40.5	45.3	59.5
Males	56.2	47.8	43.8	52.2
Females	52.6	32.4	47.4	67.6
Urban	81.9	60.9	18.1	39.1
Rural	26.7	29.1	69.4	70.9

Source: LFS 2003, 2006.

This high level of informality reduces efficiency leads to efficiency problems and is likely to lead to social and fiscal problems in the future when almost one-sixth of the country's population reaches retirement age with no social or health protection. One immediate consequence of firms responding to the incentive to remain small and informal is that they have little access to finance. As can be seen in figure 4.11, compared to comparable countries, Azerbaijan has the lowest share of firms using banks to finance investments (19 percent), with a bank loan or a line of credit (19.9 percent), and with a checking or savings account (75.9 percent).

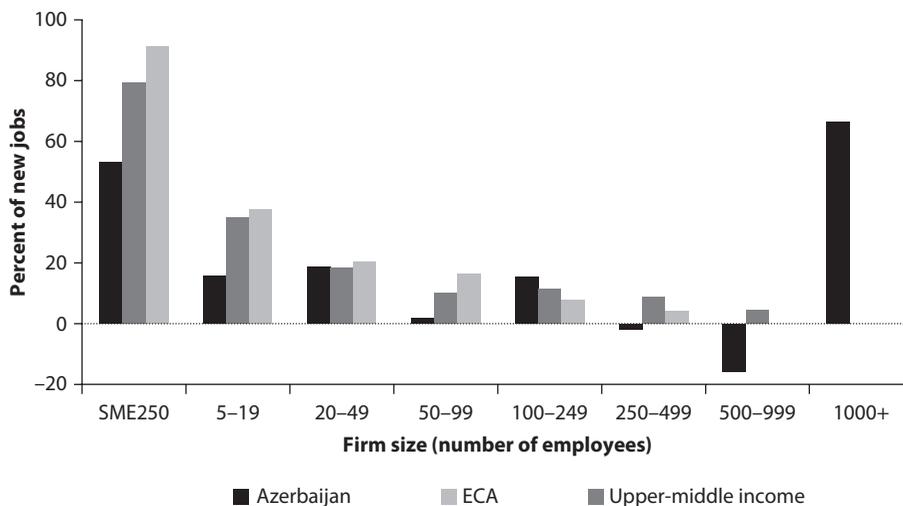
Constrained by adverse incentives, SMEs in Azerbaijan create fewer new jobs and constitute a lower share of employment than firms in comparable countries. While SMEs are crucial for generating jobs in developing countries, Azerbaijan has been lagging behind in this crucial area. The SMEs that employ fewer than 250 workers created about 53 percent of the new jobs in Azerbaijan in 2009 as opposed to about 92 percent in Europe and Central Asia as a whole (see figure 4.12). Most new jobs were created by enterprises that employed more than a 1,000 workers in the same period. Looking at the stock of jobs in these two sets of firms, the former employ about 43 percent of all workers in the private sector (compared to the Europe and Central Asia average of 65.5 percent), while the latter employ 43 percent (whereas the Europe and Central Asia average is 14 percent)—see figure 4.13.

Figure 4.11 Firms' Access to Financial Services



Source: World Bank's Enterprise Surveys.

Figure 4.12 Job Creation by SMEs in Azerbaijan and in Other Europe and Central Asia Countries



Source: World Bank 2011a.

Non-oil industries are directly affected by the policies that discriminate against labor as a factor of production. Non-oil industry, especially SMEs within the manufacturing sector, have the potential to be a source of high-value jobs for workers moving away from the agricultural sector. However, the manufacturing sector is small, accounting for less than 4 percent of GDP, and had a low employment elasticity of 0.2 between 2002 and 2010. The adverse conditions

Figure 4.13 Employment Shares of SMEs in Azerbaijan and in Other Europe and Central Asia Countries



Source: World Bank 2011a.

which constraint the development of SMEs have important consequences in the case non-oil industry in Azerbaijan. SMEs that employ fewer than 100 workers are more capital-intensive in Azerbaijan than in comparable countries in Europe and Central Asia. They provide less than 30 percent of all manufacturing jobs and create only 35 percent of new jobs as opposed to averages of 52 and 74 percent respectively in the rest of the Europe and Central Asia region.

Notes

1. In 2010, agriculture required more labor input to produce the same value added than it did in the 1980s.
2. In urban areas, this difference is even wider.

Promoting More Inclusive and Sustainable Growth: Policy Recommendations

The Broad Strategy for Generating Inclusive Growth Involves Three Elements

- Improving the pattern of growth by eliminating policies that constraint the development of slow-growing sectors with high employment potential, especially agriculture, small-scale manufacturing, nontraditional exports, and services. This involves creating an environment for output diversification by limiting oil rent absorption through a long-term fiscal rule and establishing neutrality in incentives for resource flows in the economy such that the bias against employment creation is eliminated
- Implementing policies to improve labor market outcomes. This would include policies to remove distortions in the labor market that artificially suppress the demand for labor by adding to the cost of hiring. Other key policies would be those that increase the employability of labor by increasing and improving the skill mix taught in the education and training system
- Implementing policies to integrate of IDPs into the rest of the economy.

Policies to Generate Growth in Slow-Growing Sectors

The first and most crucial step would be to increase Azerbaijan's integration into the world market. As discussed in chapter 4, both agriculture and small and medium-sized manufacturing, especially those producing nontraditional exports, have suffered because Azerbaijan is not well-integrated into the world market. The key to changing this would be to adopt macroeconomic policies that prevent the appreciation of the REER and that minimize macroeconomic volatility. Although its current tariffs are low, Azerbaijan is one of only two countries in the Europe and Central Asia region that have increased average tariffs in the past two years. Any further increase in tariffs, especially on competitive imports, needs to be avoided. However, the real problem facing firms trying to import

into and export from Azerbaijan is nontariff barriers such as the large number of documents required for trading, arbitrary customs administration, and regulatory conflicts of interest. A number of informal restrictions also increase the cost of trading. It would be useful to conduct a comprehensive and transparent assessment of all trade agencies to find ways to reduce the costs of trading across Azerbaijan's borders. Finally, the government could also actively encourage more FDI in the non-oil manufacturing sector, including by simplifying administrative requirements.

The second step would be to introduce both supply and demand-side measures to reduce corruption. As discussed in chapter 4., the prevalence of corruption has been identified as a major constraint to doing business in Azerbaijan. In the past few years, the government has made efforts to control corruption by enacting new laws and programs. The most recent of these was the adoption of the National Strategy for Increasing Transparency for 2007–11. More recently, the government has launched information campaigns and improved the enforcement of existing anticorruption laws, which has resulted in the dismissal of a number of staff employed by state organizations and in an increase in the number of corruption-related criminal cases. However, the corruptions perceptions survey results indicate that more needs to be done to strengthen these initiatives.

On the supply side, the government could consider reforming the pay and compensation system for civil servants to make it comparable with salaries paid in the private sector, strengthening e-government procurement systems, and introducing conflict of interest legislation that includes a requirement for all high-level government officials to make asset declarations. On the demand side, it could aim to make the private sector a partner in and an advocate for governance reform and to encourage civil society organizations to act as watchdogs for anticorruption laws.

The third step would be to adopt sector-specific policies in the agriculture and construction sectors. In addition to the cross-sectoral policies discussed above, there are sector specific policies that would help to encourage growth in agriculture and construction, both sectors with considerable employment potential. In agriculture, specific measures might include:

- Breaking up monopolies in the fruits and vegetables and cold storage sectors
- Improving the delivery of agricultural services such as irrigation, seed supply, input supply, machinery services, veterinary services, advisory services, and food safety regulation¹
- Increasing access to agricultural finance, encouraging the provision of credit by the private sector, and reducing interest rates to borrowers by reducing the risks involved in agricultural lending
- Improving the working of the National Entrepreneurship Fund and creating a level playing field in agriculture for private leasing companies vis à vis Agrolizing, the public sector leasing finance company

- Making the subsidy program more effective by reducing subsidies for food security and instead pursuing long-term bilateral and multilateral agreements for wheat imports, improving the logistics of overland rail and road trade corridors, and relying on warehouse receipts rather than physical inventories for food stocks.

The construction sector also has the potential to create considerable employment as well as to absorb large numbers of low-skilled workers who are moving out of agriculture. Growth in construction activity is derived from the growth in overall investment and housing. In addition to those policies that encourage growth in general, there are two policies that would promote construction activity. First, it would help if the number of inspections and permits required for construction were reduced. Second, the construction sector is beset with monopolistic practices. The small number of cement producers and importers of construction materials have kept costs high and reduced the incentives for firms to grow or for new firms to enter in the sector. One way to address this would be to target the reduction of non-trade barriers and the anticorruption measures to the importers of cement and construction materials, at least initially. Also, it would be useful to conduct a specific study of the barriers to entering the cement and construction material trade.

Policies to Improve Labor Market Outcomes

The policies to improve labor market outcomes can be broadly divided into the following three areas (1) reducing the distortions in the labor market that artificially suppress the demand for labor; (2) setting up reliable labor market institutions including those that specialize in job search and placement; and (3) improving the quality of the labor supply. The government has been well aware of the need to improve the functioning of the labor market and has launched a number of initiatives in recent years. In 2005, it adopted the Employment Strategy for the Republic of Azerbaijan for 2006–15, which put into operation through the National Action Plan. The strategy involved strengthening the National Employment Service (NES) and modernizing the education system. The government also launched the Decent Work Country Program for 2006–09 in cooperation with the International Labour Organization (ILO). The main aims of this program were to improve employment policies, create jobs, strengthen social dialogue, and advance the implementation of international labor standards. The government has also launched a labor market reform supported by the World Bank's Social Protection Development Project. Under this reform program, the government aims to (1) modernize labor market institutions; (2) improve National Employment Services; (3) facilitate the school-to-work transition for the young; and (4) improve career counseling services. Given that the government is already taking a wide range of appropriate actions, the reforms suggested here are meant to reinforce and accelerate some aspects of these ongoing efforts.

Reverse Distortions in the Labor Markets that Artificially Suppress Demand for Labor

Most surveys of business enterprises carried out to date have shown that employers do not consider labor regulation as a problem. In other words, there are very few regulations that restrict the hiring or firing of workers, minimum wage laws are not binding, and the labor code is not onerous. Moreover in the context of the Bank's ongoing Social Protection Development Project, the government is working on improving occupational safety, the labor inspectorate, and the functioning of the labor market information system.

While the liberal labor regulation has promoted labor flexibility, in combination with the tax system discussed in chapter 3, it has led to growing informalization, low wages, the growth of in-kind remuneration, and wage arrears. Therefore, reducing informalization should be a top priority, which would require the following three measures:

- Simplifying procedures and reducing the taxes involved in starting a new business or growing an existing business
- Strengthening surveillance and applying sanctions to those enterprises that use informal labor. Better coordination is needed between tax offices, labor inspectorates, and the police
- Raising public awareness about the negative effects of undeclared work for worker's social security.

Improve Labor Market Institutions, Especially Institutions Providing Job Search and Placement Services

The government has initiated the modernization of the labor code, adopted more labor laws including migration regulations, built capacity within the Ministry of Labor departments responsible for the labor market, and developed occupational safety standards. Despite these efforts, career counseling services remain weak. The National Employment Service (NES) has little to offer. Only a small fraction of those looking for a job seek its help, and few employers advertise their jobs through it. Further efforts to strengthen the NES might include:

- Developing a nationwide automated information system to make information available on all vacancies being advertised in all local NES offices
- Encouraging the organization of local and national job and placement fairs
- Improving the management of and increasing the resources for the NES to develop clear operating manuals for its staff
- Developing training programs and decentralized training centers.

Improve the Quality of the Labor Supply

Improving the quality of the workforce would require the following measures:

- Increasing the involvement of the private sector in the provision of tertiary education is key to identifying and filling the skills gap

- To reverse the large postsecondary education dropout rates among the poor, the government should consider creating targeted scholarships and other assistance programs for the young. Reducing dropout rates is also crucial to stemming the high unemployment rates for young people aged 15–24
- The government should target financing and scholarship programs to individuals from poorer socioeconomic groups and to IDPs to help them to afford of the tuition and non-tuition costs of tertiary education
- The government could promote vocational education and training as an alternate career path for those high school graduates who cannot make it into tertiary education
- To close the quality gap between poor and nonpoor children and to give poor children greater access to tertiary education, the government could invest in supplementary education services in rural areas and in regions with a high incidence of poverty and/or a high concentration of children with special needs
- The government should consider investing in higher education institutions to promote attendance and to improve the learning environment and the quality of teaching.

A Special Program for IDPs

The government already has initiated a program to assist IDPs supported by the World Bank.² The program has two components. The first consists of measures to improve and increase targeted social assistance. In this respect, the most critical need is to expand investment in IDP public housing and in the infrastructure that serves it. Although new settlements have been built to replace tented camps for housing IDPs, these settlements are located in remote areas and do not include running water, electricity, or access to health care. The second component consists of measures to create new employment opportunities to enable IDPs to participate fully in the economy. These measures include skills training, technical support, and micro financing to help individuals and community groups to start new micro enterprises. The program also provides assistance with the design and implementation of a wide range of community-driven activities, which are crucial to help IDPs build the social capital to improve their circumstances. Any subsequent actions should be designed in accordance with lessons learned from evaluating the success of this program.

Notes

1. Details available in World Bank (2011b).
2. The Bank is involved in this process through the Internally Displaced Persons Living Standards and Livelihood Project.

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Mathematical Methodology

Growth Decomposition

To investigate the contributions made by capital formation and total factor productivity (TFP) to economic growth, we start with the standard formulation of the aggregate production function in the neoclassical model:

$$Y = AF(K, L)$$

where Y , K , and L denote real gross domestic product (GDP), the capital stock, and the labor and A represents TFP. Specializing this function to Cobb-Douglas yields:

$$Y = AF^\alpha L^{1-\alpha}$$

Here the terms α and $1 - \alpha$ measure the shares of capital and labor in GDP and, following Izyumov and Vahaly (2008), α is assumed to equal 0.4.

To estimate the contributions of capital and labor to economic growth, we use logarithmic differentiation of the Cobb-Douglas function to express the rates of change of the variables involved. This yields the following:

$$\frac{\Delta Y}{Y} = \frac{\Delta A}{A} + \alpha \frac{\Delta K}{K} + \frac{(1-\alpha)\Delta L}{L}$$

where the notation $\Delta X/X$ is used to denote the rate of growth of variable X .

Given the time-series data for real GDP, capital formation, and employment, we use this formula to calculate the rate of change of TFP as a residual. The contributions of capital, labor, and TFP are then computed as the rate of growth of each relative to that of real GDP.

Structural Change

Following MacMillan and Rodrik (2012), we decompose the change in labor productivity as follows:

$$\Delta Y_t = \sum_{i=n} \theta_{i,t-k} \Delta y_{i,t} + \sum_{i=n} y_{i,t} \Delta \theta_{i,t}$$

Where Y_t denotes the economy wide labor productivity, and $y_{i,t}$ denotes the labor productivity in sector i at t and Δ denotes the change in a given variable.

The first term on the right hand side of the equality, therefore, represents the sum of productivity changes “within” sectors. The second term, on the other hand, shows the change in labor productivity due to reallocation of labor across the sectors, holding the productivities constant. When the labor share of sectors that exhibit greater productivity growth than others increase, the structural change term will get a positive value. This, in turn, will enhance the overall labor productivity growth.

Analysis of Labor Productivity and Real Wages

The analysis in figure 2.4 is based on wage and labor productivity data available from the Azerbaijan State Statistical Committee. We converted nominal monthly wages into real annual wages by multiplying the former by 12 and using data on consumer prices to transform the nominal wages into real wages with 2005 as the base year. Labor productivity is proxied by the sectoral data on value-added per year per employee in 2005 prices. The panels in figure 2.4 plot the logarithm of sectoral average real wages (vertical axes) against the logarithm of labor productivity (horizontal axes).

We used OLS to estimate this equation:

$$\ln(w) = \beta_0 + \beta_1 \ln(v) + u$$

where v and w denote the log of productivity and the log of real wages. Here the estimated value of β_1 measures the effects of a 1 percent increase in labor productivity on average real wages in a given sector.

ECO-AUDIT

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Azerbaijan experienced a "golden age" in the past decade, during which the average growth rate reached record-high levels and poverty decreased significantly. On average, the economy grew by 15.3 percent per year in real terms during this period. As a result, poverty declined dramatically from 49.6 percent in 2001 to 15.8 percent in 2008.

This study takes an inclusive growth approach to investigating the ways in which the country's high growth was translated into significant poverty reduction. The first chapter examines the sources of growth in Azerbaijan, with an emphasis on sectoral composition and structural transformation, and the second chapter explores how growth helped to reduce poverty. The third and fourth chapters analyze the sustainability and inclusiveness of more recent growth and focus on the structural obstacles that constrain further inclusive growth. Finally, the last chapter recommends a set of policies to overcome these obstacles.

The main findings of this study call for a careful strategy in promoting further inclusive growth in Azerbaijan. Poverty is found to be reduced mainly by oil-financed social transfers and real-wage growth, both of which were made possible by Azerbaijan's sharply increasing oil revenues. However, as the share of the hydrocarbon sector grew, structural transformation toward diversification and balanced growth stalled. Moreover, the sectoral composition of recent growth has not been conducive to employment creation. To further strengthen inclusiveness, there is a need for diversification and improvement in labor market outcomes.

This study also identifies areas in which policy adjustments can unleash further inclusive growth in the non-oil economy. These include the promotion of greater economic integration into world markets, introduction of a robust and long-term-oriented fiscal rule that limits and smoothes the domestic absorption of oil revenues, removal of the skill disparities and distortionary taxes that may create adverse incentives in the labor market, and improvement in institutional aspects of the business environment. A broad strategy for promoting inclusive growth involves implementing these policies in a systematic fashion.

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