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TAJIKISTAN

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Strategic Framework for Jobs

WORLD BANK GROUP
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CONTENTS

ABBREVIATIONS VI

OVERVIEW 2
ECONOMIC GROWTH AND JOBS ........................................................................................................................ 2
THE WORKFORCE ............................................................................................................................................... 3
LABOR DEMAND IN THE FORMAL SECTOR ......................................................................................................... 5
STRATEGIC FRAMEWORK FOR JOBS IN TAJIKISTAN ..................................................................................... 9

INTRODUCTION 14

1. ECONOMIC GROWTH AND JOBS 18
Economic growth since the early 2000s has improved welfare, but Tajikistan remains poor ......................... 18
Tajikistan’s economic model has become increasingly reliant on remittances as a source of growth ............ 20
Job creation during the past decade has been weak ......................................................................................... 21
Structural transformation is lagging .................................................................................................................. 21
Despite economic growth, labor productivity remains low ................................................................................ 23
Recent macroeconomic developments have exposed vulnerabilities in the existing growth model ............ 24
Yet several structural features continue to shape jobs outcomes ....................................................................... 25

2. THE WORKFORCE 28
Demographics and labor force participation _________________________________________________ 28
The potential workforce is growing at a steady clip ........................................................................................... 28
Too many working age adults are not in the labor force ................................................................................. 29
Outmigration has become a crucial source of jobs for Tajik workers ................................................................. 32
Employment and job types _________________________________________________________________ 33
Among labor force participants, employment rates are relatively high ............................................................... 33
A majority of jobs are in the informal sector ...................................................................................................... 33
And many jobs are seasonal or temporary ........................................................................................................ 35
Public sector employment remains sizable ......................................................................................................... 36
Inequality in labor market outcomes ________________________________________________________ 36
Youth have weaker jobs outcomes .................................................................................................................... 36
Women are at a disadvantage in employment, and the trends are not encouraging ........................................ 36
The most desirable jobs are in Dushanbe .......................................................................................................... 40
Workers from richer households have better quality jobs .................................................................................. 41
Micro-determinants of job outcomes ________________________________________________________ 42
The micro-determinants of employment outcomes are revealing ................................................................. 42
Education, skills, and labor market outcomes ......................................................................................... 44
Skills and education are particularly important; however, access to education is not equitable .................... 46
3. LABOR DEMAND IN THE FORMAL SECTOR

Profile of formal sector labor demand in Tajikistan
The formal private sector is squeezed between large public and informal private sectors
Tajik entrepreneurial potential is not fully utilized

Profile of formal sector firms and employment
Private sector formal firms are small and relatively young, especially compared to SOEs
Formal employment is concentrated in larger and older firms
SOEs' presence in most sectors of the economy can have negative implications for efficiency and competition
There are some regional differences in distribution of private sector firms and SOEs as well

Firm growth and employment
Private sector firms grow as they age, but to a lesser extent than private firms in other countries or SOEs
Job creation appears concentrated in larger firms, while small firms saw job losses

Productivity and employment
There is a wide dispersion in labor productivity by type of firm, suggesting possible allocative inefficiency
Larger firms are not more productive in Tajikistan and they increase productivity by laying off workers

4. STRATEGIC FRAMEWORK FOR JOBS IN TAJIKISTAN

Pillar 1: Promoting private sector growth
Ensure macro fundamentals are conducive to private sector growth
Improve the business environment and governance to promote firms’ entry and growth
Reduce transport and logistics costs and improve facilitation to expand trade
Expand access to finance, especially for SMEs, to enable firms to grow
Attract foreign direct investments to enable more jobs

Pillar 2: Improving productivity and earnings, and access to formal jobs
Strengthening local value chains and support to rural SMEs
Improve incentives for formal jobs

Pillar 3: Connecting people to jobs
Promote enabling policies to increase labor force participation
Use labor market policies to improve access to jobs
Scale up policies and programs to better leverage migration

ANNEX A. LABOR SUPPLY ANALYSIS SUMMARY TABLES
ANNEX B. FINAL SAMPLE AND DATA USED IN LABOR DEMAND ANALYSIS
ANNEX C. FIRM AND EMPLOYMENT DISTRIBUTIONS BY FIRM SIZE, AGE AND SECTOR
ANNEX D. STRATEGIC FRAMEWORK FOR JOBS AND NATIONAL DEVELOPMENT STRATEGY
ANNEX E. BENCHMARKING OF INSTITUTIONAL CONSTRAINTS
BIBLIOGRAPHY
ABBREVIATIONS

EBRD .......... European Bank for Reconstruction and Development
ECA ............. Europe and Central Asia
ECAPOV .......... Europe and Central Asia Poverty Monitoring Project
ECATSD .......... Europe and Central Asia Team for Statistical Development
EU .............. European Union
FDI ................. Foreign Direct Investment
GAO ................. Gross Agricultural Output
GBAO ............ Gorno-Badakhshan Autonomous Region
GDP ............... Gross Domestic Product
GIZ ................ Deutsche Gesellschaft für Internationale Zusammenarbeit
GNI ............... Gross National Income
ICT ................. Information and Communications Technology
ILO ................. International Labor Organization
ISIC ............... International Standard Industrial Classification
KILM .............. Key Indicators of Labor Market
LFS ................. Labor Force Survey
LTI ................. Large Taxpayers Inspectorate
MFI ................. Micro-finance Institution
MoEDT .......... Ministry of Economic Development and Trade
MoT ............... Ministry of Transport
NBS ............... National Bureau of Statistics of the Republic of Moldova
NBT ............... National Bank of Tajikistan
NDS ............... National Development Strategy
NEET .............. Not in Education, Employment, or Training
NPL ................ Non-Performing Loan
OECD ............ Organization for Economic Co-operation and Development
POS ............... Point of Sale
PPP ............... Purchasing Power Parity
QFA ................. Quasi-Fiscal Activities
RICA ............... Rural Investment Climate Assessment
RRP ............... Regions of Republican Subordination
SCISPM .......... State Committee on Investment and State Property Management
SME ............... Small and Medium-sized Enterprises
SOE ............... State Owned Enterprise
TajStat .......... Agency of Statistics under the President of Tajikistan
UN ............... United Nations
UNCTAD ........ United Nations Conference on Trade and Development
VAT ............... Value-added Tax
WB ............... World Bank
WTO ............... World Trade Organization
WDI ............... World Development Indicators
OVERVIEW

Jobs need to be positioned at the center of economic development in Tajikistan. Although remittance-driven growth since the early 2000s has led to a steep decline in the poverty rate, poverty remains high. Strong economic growth in the last decade has not resulted from structural transformation that can lead to sustained improvements in the standard of living. Jobs have been created, but these are mainly in low-productivity activities, often in the informal sector. In addition, there are major inequalities in terms of labor market outcomes between population groups and across regions. The objectives of this report are twofold. First, it analyzes the main challenges facing the country in terms of jobs at the macro, firm, and household levels. Second, it outlines a set of policies and programs that can facilitate structural transformation to achieve the country’s development objectives through: i) a higher rate of job creation in the formal sector; ii) improvements in the quality of jobs, particularly those in the informal sector; and iii) better access to jobs among vulnerable population groups.

ECONOMIC GROWTH AND JOBS

The Tajik economy is not creating sufficient jobs for its growing workforce. Between 2003 and 2013, GDP grew by an average of 7.2 percent per year. Employment, however, expanded only at 2.1 percent annually. At the same time, fertility rates in Tajikistan remain high and the working-age population (15–64 year olds) rose from 3.31 million in 2000 to 5.23 million in 2015, with an average of 40,000 people entering the labor force each year.

The lack of jobs in Tajikistan led to increased labor migration, with remittances becoming an important source of income for Tajiks during the last decade. A large share of the workforce—as many as one million working age adults1 or approximately 30 percent of the labor force—has opted to leave the country for jobs and/or better pay. About 90 percent of migrants work in the Russian Federation. Growing remittances have led to a sharp drop in poverty, which fell from about 65 percent in 2003 to 23.5 percent in 2009.2 Today, remittances account for about 40 percent of GDP and make Tajikistan the most remittance-dependent country in the world. This, in addition to a narrow exports base, make the economy vulnerable to external shocks, in particular developments in the Russian Federation.

Structural transformation is lagging, and labor productivity remains low, especially in agriculture and services. The share of workers in agriculture has not changed between 2000 and 2014, indicating a lack of structural transformation in the economy. Growth in real GDP per capita (5.3 percent between 2000 and 2014) was largely driven by increases in labor productivity. In addition, the movement of workers across sectors was generally not productivity enhancing and contributed negatively to labor productivity growth. This is because labor has moved out of the more productive sectors, such as industry, into low-productivity services and agriculture sectors, where domestic job creation was the highest. Despite recent increases in labor productivity, which grew by about 5.3 percent between 2000 and 2014, it remains low by international standards.

The increasingly challenging economic environment accentuates the need for domestic job creation and a comprehensive jobs strategy. The recent (since mid-2014) fall in price of the key commodities that Tajikistan exports (aluminum and cotton), and an economic slowdown among its main trading partners like the

1 While estimates vary, according to Russia’s Federal Migration Service, as of June 2015 there were 992,170 migrants from Tajikistan in the Russian Federation (Bakanova et al. 2015). However, official estimates of TajStat differ and point to decreasing number of migrants in recent years: 799,000 in 2013, 669,000 in 2014, and 529,000 in 2015.
2 Measured by the international poverty line (US $3.1 2011 PPP per day).
Russian Federation, Kazakhstan, and China, have led to lower economic growth. Moreover, a sharp depreciation of the Russian ruble and greater restrictions on migration to the Russian Federation since January 2015 have contributed to the decline in remittances. Despite continued robust economic growth due to increased investments, returning migrants are likely to add pressure to an already tight labor market. In this context, there is an increasing need to rethink the existing growth model to ensure faster job creation and improvement in the quality of existing jobs.

**THE WORKFORCE**

The potential workforce is growing, but too many working age adults are not in the labor force; as a result, Tajikistan’s most valuable resource—its human capital—is underutilized. Tajikistan has a working age population, defined as 15–64 years old, of about 4 million people. Less than half (43 percent) of them are in the labor force (Figure O1). Many working age youth and adults, especially women, are neither employed nor looking for work, and therefore, are not contributing to economic growth. In 2013, the female labor force participation rate was just 27 percent compared to 63 percent among males.

The majority of those working are in low quality jobs in the informal sector. The informal sector represents a large and growing source of jobs. Between 2007 and 2013, the proportion of all wage employees in the informal sector increased from 28 percent to 39 percent (Figure O2). The share of unpaid workers increased slightly from 16 to 18 percent. Not surprisingly, the informal sector is particularly large in rural areas and in agriculture, where unpaid family workers are very common. Moreover, too many jobs in Tajikistan are seasonal or temporary, and their share has increased over time.

At the same time, public sector employment remains large. The number of jobs in the public sector has fallen since the 1990s as a result of privatization efforts, but the share of total employment in government

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3 Please note that, unless specified otherwise, the figures presented in this section are derived from World Bank staff analysis of these household surveys: Tajikistan Living Standard Measurement Surveys (2003, 2007, and 2009), Tajikistan Household Panel Survey (2011) and World Bank / GIZ Tajikistan Jobs, Skills, and Migration Survey (2013).

4 Please note that these estimates exclude current international migrants. If migrants are included, the total working age population is 4.85 million according to the 2013 survey estimates while the official estimate of 4.9 million.

5 Informal sector workers are those wage and salaried workers who lack an employment contract and unpaid family workers excluding those who are self-employed.

6 The public sector includes public administration and state owned enterprises, as well as public employment in such sectors as education and health. According to TajStat data, employment in government institutions and SOEs was 19.4 percent in 2010 and decreased to 18.6 percent in 2015.
institutions and state-owned enterprises (SOEs) is 28 percent (Figure O3). This is high relative to other countries in the region (e.g., 15 percent in the Kyrgyz Republic in 2007).

**Youth (15–24 year olds) have weaker jobs outcomes.** Youth who are idle, i.e. youth who are neither employed nor in school (NEET), represent 40 percent of the total, which is high by international standards.\(^7\) Between 2003 and 2013, NEET rates among youth increased from 37 to 41 percent, despite relatively favorable economic conditions (Figure O4). Moreover, the NEET rate for female youth is considerably higher than for male youth. While youth are more likely to work in private sector wage jobs than adults, almost a third of employed young people are in unpaid (informal) jobs compared to 15 percent of adults. Youth are also significantly less likely to be self-employed (5 percent compared to 11 percent among adults).

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\(^7\) These rates are similar to NEET rates, which are rates of 15-24 year olds who are not in employment, education, or training. For Tajikistan, where training rates are very low, we refer to NEET for people who are not in employment or education.
Women are at a disadvantage in employment outcomes. Between 2003 and 2013, the disparity between male and female employment rates increased. In 2003, the gap between male and female employment rates was 21 percentage points, and this increased to 35 percentage points in 2013 (Figure O5). Employed women are somewhat more likely to work in the public sector, but almost a quarter of women are involved in unpaid employment in family businesses compared to 13 percent among men. Women are also less likely to be self-employed (7 percent compared to 12 percent among men).

Not surprisingly, workers from richer households have better quality jobs. While there is some variation in employment type across consumption quintiles, the biggest difference between poorer and richer workers is in terms of the quality and stability of their wage jobs. Richer workers in wage jobs are more likely to be paid in regular installments. Only 30 percent of workers in households in the poorest quintile are paid using regular installments, compared to 45 percent of workers in households in the richest quintile. Similarly, piecewise work, which is more common in the informal sector and among seasonal or temporary jobs, is much more prevalent among workers in poor households.

Skills and education are particularly important determinants of jobs outcomes, yet completion rates for secondary education might be falling. Employment rates are positively correlated with educational attainment (Figure O6), and analysis confirms large education premiums in terms of earnings: adults who have attained post-secondary education earn 57 percent more than otherwise identical adults with less than primary school education. While the overall proportion of adults (25 years and older) who have achieved at least secondary education is approximately 80 percent, there are concerning trends. A higher percentage of younger cohorts of women are not completing secondary school or secondary special/technical education (Figure O7).

**LABOR DEMAND IN THE FORMAL SECTOR**

The formal private sector, squeezed by the large public and informal sectors, is underdeveloped and the entry rate of new firms is low. In most countries, the creation of good jobs depends on a thriving formal private sector. In Tajikistan, formal wage employment in the private sector represents just 13 percent of total employment. The rate of entry of formal businesses remains low (Figure O8). This is not due to a lack of entrepreneurial

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potential. Survey data suggests that almost 40 percent of the labor force has a preference for self-employment,9 one of the highest rates in the region (Arias et al. 2014). However, the share of latent entrepreneurs who try to start a business is very low at 11.8 percent, pointing to significant barriers to entrepreneurship.

Private sector formal firms are small and relatively young, especially compared to SOEs, which are still present in many economic sectors. The majority (70 percent) of private sector formal firms10 have fewer than 10 employees and two thirds (66 percent) have been registered for six years or less (Figure O9). SOEs make up a small share (less than 4 percent) of total firms, but they are generally larger than formal private sector firms.11 While the share of SOEs is not high overall, they are still present in many sectors. The lack of a comprehensive government database and monitoring of SOEs makes it difficult to understand their real economic impact (Bakanova et al. 2014). However, their relative size and presence in many economic sectors suggests that SOEs could be potentially undermining competition and the entry of private companies.

As in other countries, formal sector employees tend to work in larger and older private firms, but this pattern is even more pronounced for SOEs. The few large firms with more than 100 employees (only 2 percent of the total), employ about 40 percent of all formal employees (Figure O10), which is consistent with findings in other countries.12 The high share of employment in these larger and older firms is only a concern if they are less productive, which appears to be the case in Tajikistan—at least in the manufacturing sector. This could be indicative of a misallocation of labor resources or a reflection of rigidities in the labor market. Lack of competition may also be allowing less productive firms to retain higher employment than optimal. Notably, the concentration of formal employment in larger SOEs is even starker (Figure O11).14

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9 This is measured in the survey with the following question “Suppose you were working and could choose between different kinds of jobs. Which of the following would you personally choose: self-employed or being an employee?”
10 Excluding SOEs, but including dekhan farms. Formal here is defined as being registered in the Business Register. Dekhan farms are included since by the nature of being registered as a legal entity they can undertake commercial activity, i.e. conduct business as a firm.
11 The average size of a formal private sector firm in Tajikistan is 16, and the average size of an SOE is 60.
13 There is some evidence that this may be the case—at least in the case of the manufacturing sector—but more research is needed to validate this with more and better data.
14 This could be partially a result of the way the government conducted privatization by selling off smaller SOEs first or “labor hoarding” by SOEs, which might be hampering reallocation of labor to more productive sectors.
Older private sector firms are larger, but to a lesser extent than firms in other countries. Firms in the private sector that survive beyond five years in Tajikistan tend to be larger, on average, than younger firms. But the difference in size between older and younger firms is smaller in Tajikistan compared to other countries, which may indicate some barriers to growth. While the size of private sector firms aged 5–9 years is roughly comparable to the U.S. and Moldova, the trend starts to diverge for older age brackets (Figure O12). Older private sector firms (10–14 years old) are only about 1.5 times larger than young firms. In comparison, U.S. firms in that age bracket are 2.2 times larger. The difference is even more pronounced for firms aged 15–19 years in Tajikistan. This suggests that private sector firms in Tajikistan may face constraints and they do not grow to their full potential.

There are wide dispersions in labor productivity (output per worker) in the manufacturing sector, suggesting problems of allocative efficiency. There are no significant differences in average labor productivity in the manufacturing sector by size of firm, but there is a large variation in productivity for all firm types (Figure O13). Large differences in productivity across businesses, even within narrowly defined sectors, is a persistent feature in both developed and developing countries (Haltiwanger 2011), which may suggest allocative inefficiency, i.e. the inability of the economy to shift resources from low- to high-productivity activities. Analysis

Note: SOE estimates for Tajikistan exclude an outlier.
Source: Hsieh and Klenow (2014) and authors’ calculations using Business Register, 2014, TajStat, and Financial Statements from NBS.
using panel data for the manufacturing sector shows that larger firms are not more productive in Tajikistan. Moreover, firms increase productivity by laying off workers, suggesting that productive firms do not grow their employment levels, either because of barriers or disincentives.

Importantly, SOEs appear less efficient than the private sector manufacturing firms. The analysis suggests that SOEs are less productive than private sector manufacturing firms, regardless of size, age, sector and location. While this result should be taken with caution, it is nevertheless consistent with findings in the region that labor productivity among private firms tends to be higher than in SOEs operating in the same sector (Arias et al. 2014).

The jobs strategy can contribute to achieving the objectives outlined in the National Development Strategy 2030. The Government of Tajikistan set a number of ambitious goals for improving the living conditions of the population in its National Development Strategy (NDS) 2030. The NDS 2030 outlines four key objectives: i) ensure energy security; ii) develop the country’s communication opportunities; iii) ensure food security and nutrition; and iv) increase productive employment. The latter aims to both increase the quantity of

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**Figure O15**

Objectives of a Jobs Strategy in Tajikistan

**Source:** Authors.

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15 The pooled OLS regression of log (output per worker) as the dependent variable was run using size, age, region, and location controls.

16 Because the measure of productivity used (output per worker) is a less-preferred measure than those that can take into account the value of inputs (labor and capital used in production), such as value added per worker or total factor productivity. These measures were not possible to construct due to the data limitations.
jobs created and improve the quality of these jobs through increasing labor productivity and expanding access to social protection. Hence, the proposed objectives of the Jobs Strategy and NDS 2030 are well aligned.

Policy recommendations for each area are presented in Table O1 and elaborated in more detail in the report. These recommendations are based on the analysis in the jobs diagnostic and draw on a large volume of sectoral and complementary work, as well as consultations with the Government, private sector, civil society, and other stakeholders.

**STRATEGIC FRAMEWORK FOR JOBS IN TAJIKISTAN**

To improve labor market outcomes, the Government of Tajikistan needs to rethink the role of jobs in achieving its development objectives. Beyond a growth strategy, the government needs to consider a jobs strategy that aims to achieve the following key objectives: i) facilitate the creation of more jobs, particularly in the private formal sector; ii) improve the quality of existing jobs, especially in the informal sector; and iii) facilitate better access to jobs including transitions from inactivity to employment and from low to higher quality jobs, with a focus on vulnerable workers (Figure O15). The latter include youth, women, residents of lagging regions, and the bottom 40 percent of the population.

To address these objectives, the proposed jobs strategy is organized around three pillars (Figure O16).

1. **Promoting private sector growth**: Sustainable job creation relies upon the growth of a competitive private sector. Accordingly, this pillar focuses on the reforms needed to ensure an effective enabling environment at the macro- and micro-levels that will enable entrepreneurs to create new businesses, and current firms to invest, expand, and hire workers. Part of the agenda requires trade facilitation, infrastructure and logistics, given the country’s small size and landlocked position.

2. **Improving productivity and earnings, and access to formal jobs**: This pillar focuses on strengthening local value chains and connecting small producers and rural SMEs in order to improve their productivity and earnings. It also involves policies to improve incentives for formal jobs.

3. **Connecting people to jobs**: This pillar focuses on connecting potential workers to jobs through a set of supply side policies and programs aimed at increasing labor force participation through enabling policies, improving access to jobs through labor market programs, and better leveraging the benefits of migration.
<table>
<thead>
<tr>
<th>Ensure macro fundamentals are conducive to private sector growth</th>
<th>Address external vulnerabilities</th>
<th>• Pursue a higher degree of exchange rate flexibility and build international reserves by minimizing unnecessary market interventions and eliminating restrictions in the foreign exchange market</th>
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<td>Reform the budget formulation process and reduce tax discretion</td>
<td>• Reform the budget process by moving to a compliance based tax policy instead of revenue targets</td>
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<td></td>
<td>• Reduce ambiguity in the tax code interpretation, minimize unnecessary tax audits, and strengthen risk-based controls</td>
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<td>• Rationalize tax exemptions and systematize eligibility criteria</td>
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<td>Create fiscal space</td>
<td>• Better assess and manage fiscal risks stemming from quasi-fiscal activities of SOEs and the financial sector</td>
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<td>• Seek more transparency and efficiency in the management of the state budget</td>
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<td>• Increase efficiency of public spending to create fiscal space for adequate public services</td>
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<td>Improve the business environment and governance to promote firms’ entry and growth</td>
<td>Improve business regulations and overall regulatory quality</td>
<td>• Lower further the costs of business registration procedures and simplify procedures for the closing of businesses</td>
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<td>• Create an effective mechanism to ensure full and proper implementation of business inspection reforms and other reforms</td>
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<td>Improve SOE oversight and competition policies</td>
<td>• Facilitate the exit of inefficient SOEs to make room for new firms, and introduce governance structures to promote greater efficiency in SOEs</td>
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<td>• Improve the implementation of the competition law by conducting a systematic review of all exceptions to the antimonopoly rules and focus the mandate of the antimonopoly agency on sanctioning anticompetitive practices</td>
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<td>Reduce transport and logistics costs and improve facilitation to expand trade</td>
<td>Reduce logistics costs</td>
<td>• Address the issue of overloading of trucks with the weight-in-motion technology</td>
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<td>• Invest additional resources to develop procedures as well equipment to evaluate the road network data</td>
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<td>Further improve the trade facilitation regime</td>
<td>• Continue to develop the national Single Window approach for export, import and transit to allow improved levels of trade facilitation</td>
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<td></td>
<td>• Further improve customs processes and procedures such as valuation and pre-arrival information to increase efficiency and transparency</td>
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**BETTER JOBS: Improving Productivity/Earnings and Access to Formal Jobs**

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<tr>
<th>Strengthen local value chains and support to rural SMEs</th>
<th>Promote value chain development</th>
</tr>
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| • Support the links between small producer and lead firms in the value chains  
  • Facilitate opportunities for value addition (processing)  
  • Pilot comprehensive value chain development strategies in specific sub-sectors and regions |

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<tr>
<th>Increase support to rural SMEs for access to new technologies, information, networks, and finance</th>
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| • Consider piloting subsidized access to new technologies, ICT, innovative platforms for information delivery, opening up new channels for SME finance  
  • Ensure the availability of products that are relevant to rural business needs (e.g. agriculture), business incubation, and promoting business networks |

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<tr>
<th>Improve incentives for formal jobs</th>
<th>Strengthen incentives to formalize jobs and expand social security coverage</th>
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| • Assess whether the current system of labor taxation may be discouraging formalization  
  • Research options of effective engagement with informal workers, including in rural areas |

**Stabilize and develop the banking sector**

- In the short run, prevent further deterioration of the banking sector  
  - To improve the banking sector in the medium to long run: enhance enforcement of regulatory norms, strengthen credit practices and culture

**Expand access to credit, particularly for small and medium enterprises and small-scale entrepreneurs**

- Diversify collateral requirements and proceed with secured transaction reform to reduce lending risks  
  - Further develop financial institutions footprint across the whole country  
  - Develop payment systems and alternative delivery channels to rural areas of Tajikistan  
  - Support financing of SMEs’ growth through financing new equipment and technologies

**Attract foreign direct investments to enable more jobs**

- Authorize a relevant state body (e.g. SCISPM) to coordinate all state bodies responsible for granting or monitoring investment incentives  
  - Streamline the control and monitoring of procedures related to the awarding and subsequent application of investment benefits, and reassess the incentive policy in terms of costs and benefits  
  - Publish cohesive, consistent and consolidated information about investment incentives available in Tajikistan on official web sites of state bodies.  
  - Move forward with reforms to create a single window for foreign investors
## ACCESS TO JOBS: Connecting People to Jobs

<table>
<thead>
<tr>
<th>Use labor market policies to improve access to jobs</th>
<th>Promote enabling policies to increase labor force participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot targeted active labor market programs to activate the inactive population and connect jobseekers to better jobs</td>
<td>Increase childcare and early childhood education access</td>
</tr>
<tr>
<td>• Consider the “public works plus” model, which in addition to providing income support, links beneficiaries to employment and community services</td>
<td>• Expand good-quality and affordable childcare and expand access to early childhood education, thereby helping to bring women into the labor market</td>
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<td>Remove legislative restrictions to sectors and occupations</td>
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<td>• Remove gender based restrictions to increase the employment opportunities for women and reduce occupational segregation</td>
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<td>Consider interventions to overcome and influence social norms</td>
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<td>• Shift aspirations and expectations through role models and mentoring, and media interventions (e.g. tv, campaigns, radio)</td>
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<td>Improve information on education and training and labor markets available to labor market participants</td>
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<td>• Scale up labor market information systems and labor market intermediation services to help improve the job search</td>
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<td>• Enhance the Employment Agency’s capacity to provide information to clients (graduating students, first time jobseekers, women, etc.) and better match them with services and vacancies</td>
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<td></td>
<td>• Provide professional orientation in the school system and early in the school-to-work transition to provide youth with information that can inform their educational and labor market choices</td>
</tr>
</tbody>
</table>
| Use labor market policies to improve access to jobs | Implement integrated training programs and promote on the job training to upskill potential and current workers | • Consider integrated programs that combine training (i.e., job and/or life-skills training), job search assistance, entrepreneurial services, and a range of other social and employment-related support services  
• Consider short-term subsidies or matching grants to firms to invest in on-the-job training  
Consider programs targeted at youth, taking into account best practices | • Integrate interventions/services: offer an integrated package of services to enable youth to deal with the multiple constraints that they are likely to face in getting a job or starting a business  
• Profile beneficiaries: profile potential beneficiaries to identify individual factors that represent a risk in the labor market and assign appropriate services  
• Provide incentives for private sector providers: outsource services to competitively selected private sector providers paid by performance  
• Establish strong monitoring systems: a monitoring system that continuously tracks beneficiaries’ performance during the program increases the likelihood that they will complete the program and/or achieve better results |
| Scale up policies and programs to better leverage migration | **Diversify migration destinations** | • Tajikistan could consider South Korea and Eastern Europe among other potential destinations for its migrants |
| | **Upgrade migrant skills and improve pre-departure services** | • Implement skills upgrading or offer complementary courses to improve skills needed in receiving countries  
• Pre-departure services could be improved to provide information as well as ‘life skills’ training |
| | **Certify skills of returning migrants** | • Support skills assessment for returning workers so they can reintegrate and make maximum use of their new skills  
• Provide institutional support to migration centers and Adult Education Centers so they can play a bigger role in this effort |
| | **Strengthen advisory services for returning migrants** | • Expand and strengthen advisory services (business advice and financial services) to assist returnee migrants to invest their capital wisely |
| | **Improve social security options for labor migrants** | • Provide options of social security participation for workers overseas, especially where Tajikistan has not signed social security agreements |
INTRODUCTION

The objective of the report is to develop a comprehensive Jobs Strategy for Tajikistan to promote inclusive economic growth and poverty reduction. The main proposition is that jobs need to be at the center of a development strategy in Tajikistan. Indeed, economic growth will accelerate if more people work and if the productivity of jobs increases; and standards of living will improve if workers have access to good jobs. Thus, the main purpose of the report is to outline a set of policies and programs that can enable structural changes/transformations in terms of job creation, improvements in the quality of jobs, and access to jobs needed to achieve the country’s development objectives.

The Tajik economy today is not able to create sufficient jobs, existing jobs are mainly in the informal sector and have low quality, and there are major inequalities in terms of labor market outcomes. Job creation, despite high economic growth, has not kept up with the rapid increase in the workforce, and too many potential workers are inactive and not contributing to the economy. The small formal private sector is squeezed between a large public sector and the informal sector. It mainly consists of small and young firms which face difficulties in expanding employment. In addition, many of the available jobs are poor quality jobs: seasonal, occasional and temporary with irregular pay, largely in the informal sector, and without access to benefits or social protection. Finally, access to jobs is inequitable and therefore, some important groups—in particular youth and women—find it more difficult to access gainful employment. There are also some regional inequalities in terms of the distribution of jobs.

The lack of good jobs in Tajikistan has led to increased labor migration, and remittances have become an important source of income and growth in the last decade. A large share of the workforce—as many as one million working age adults—has opted to leave the country for better pay. About 90 percent of migrants, who are mostly men, work in the Russian Federation, where workers can earn significantly higher wages than in Tajikistan. Increasing remittances have led to a sharp drop in poverty, which fell from about 65 percent in 2003 to 23.5 percent in 2009. The importance of labor migration has grown over the last decade, and today,

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Figure 1
Objectives of a Jobs Strategy in Tajikistan

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Source: Authors.

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17While estimates vary, according to Russia’s Federal Migration Service, as of June 2015 there were 992,170 migrants from Tajikistan in the Russian Federation (Bakanova et al. 2015). However, official estimates of TajStat are 529,000 labor migrants in 2015.

18Measured by the international poverty line (US 3.1 2011 PPP per day).
Tajikistan is the most remittance-dependent country in the world, with remittances accounting for about 40 percent of GDP. This, in addition to a narrow export base, makes the economy vulnerable to external shocks, in particular, developments in the Russian Federation.

Recent macroeconomic developments have exposed vulnerabilities in the existing growth model. The recent (since mid-2014) fall in the prices of key commodities that Tajikistan exports (aluminum and cotton), together with the economic slowdown in its main trading partners like the Russian Federation, Kazakhstan, and China, has led to lower economic growth in Tajikistan. Moreover, the U.S. dollar value of remittances fell by 33 percent in 2015 compared to 2014, largely due to the sharp depreciation of the Russian ruble. Greater restrictions on migration to the Russian Federation since January 2015 have also contributed to the decline in remittances. This slowdown has affected domestic demand, which in turn has depressed growth in services, a major contributor to economic growth and job creation. Further declines in remittance incomes could jeopardize economic and social gains experienced over the last decade. Despite continued robust economic growth due to increased investments, returning migrants are also likely to add pressure to an already tight labor market.

Going forward, Tajikistan needs to rethink the role of jobs in the context of the country’s development goals. There are three key objectives: i) facilitating the creation of more jobs particularly in the private formal sector; ii) improving the quality of existing jobs, especially in the informal sector; and iii) facilitating better access to jobs including transitions from inactivity/unemployment into employment and from low to higher quality jobs, with a focus on vulnerable workers (Figure 1). The latter include youth, women, residents of lagging regions, and the bottom 40 percent of the population. Clearly, these objectives are not mutually exclusive, but there may be temporary trade-offs: for instance, increasing productivity in one sector, as a result of upgrades in technology, could lead to better, but fewer jobs.

To address these objectives, the proposed jobs strategy is organized around three pillars (Figure 2).

- **Promoting private sector growth:** Sustainable job creation relies upon the growth of a competitive private sector. Accordingly, this pillar focuses on the reforms needed to ensure an effective enabling environment at the macro and micro level that will enable entrepreneurs to create new businesses, and current firms to invest, expand, and hire workers. Part of the agenda requires trade facilitation, infrastructure and logistics, given the country’s small size and landlocked position.

- **Improving productivity and earnings, and access to formal jobs:** This pillar focuses on strengthening local value chains and connecting small producers and rural SMEs in order to improve their productivity and earnings. It also involves policies to reduce incentives for informality and enable access to social insurance programs.

- **Connecting people to jobs:** This pillar focuses on connecting potential workers to jobs through a set of supply side policies and programs. It involves increasing labor force participation through enabling policies, improving access to jobs through labor market programs and policies, and better leveraging the benefits of migration.
The jobs strategy will contribute to achieving the objectives outlined in the National Development Strategy 2030. The Government of Tajikistan set a number of ambitious goals for improving the living conditions of the population in its National Development Strategy (NDS) 2030. The Strategy outlines four key objectives: i) ensure energy security; ii) develop the country’s communication opportunities; iii) ensure food security and nutrition; and iv) increase productive employment. The latter, in particular, aims to both increase the quantity of jobs created and improve the quality of these jobs through increasing labor productivity and expanding access to social protection. In this regard, the proposed objectives of the Jobs Strategy and NDS are well aligned. Moreover, there are many other synergies with different pillars of the NDS (Figure D1 in Annex D).

The rest of the report is organized as follows. Chapter 1 presents an overview of Tajikistan’s economic development and broad structural changes in terms of job creation and labor productivity growth. Chapter 2 presents the results of the analysis of the labor supply based on household surveys for the years 2003, 2007, 2009, 2011, and 2013. It looks at: 1) demographics and labor force participation; 2) employment and types of jobs; 3) inequalities in labor market outcomes; 4) the micro-determinants of these outcomes; and 5) the role of skills. Chapter 3 focuses on labor demand and labor productivity using firm-level data from the Business Register (2014-2015) and firm survey on Industrial Production (2012-2014). The chapter discusses: 1) the profile of labor demand; 2) the profile of formal sector firms and jobs (private and SOEs); 3) firm growth and job creation; and 4) productivity and jobs. Finally, Chapter 4 outlines a set of policies and programs to address the country’s main challenges in terms of job creation, labor productivity and earnings growth, and access to jobs.
1. ECONOMIC GROWTH AND JOBS

Economic growth since the early 2000s has improved welfare, but Tajikistan remains poor

On September 9, 1991 Tajikistan declared independence from the Soviet Union, and civil war erupted soon afterwards in 1992. This delayed post-transition recovery until 1997 when the civil war ended. It led to significant loss of life, emigration by minorities, and physical damage. GDP is estimated to have bottomed out in 1996 at nearly 70 percent below its 1991 level (Amir and Berry 2003). Although there has been peace since 1997, isolated security incidents flare periodically, especially close to the border with Afghanistan.

Tajikistan possesses tremendous human and natural resources. The country’s population of 8.2 million is growing fast. The demographic contrast between Tajikistan and many countries in Europe and Central Asia (ECA), and East Asia is stark because many of these countries have aging and contracting populations. Tajikistan has a wealth of largely untapped natural resources: the country’s hydropower potential is substantial; it has coal, silver and gold, as well as significant hydrocarbon potential.

The macroeconomic situation has improved in Tajikistan since 2000 and its GDP per capita has increased sharply, driven by external demand for commodities and an increasing inflow of remittances (Figure 3). Macroeconomic performance improved in the 2000s, inflation declined from around 30–40 percent in the late 1990s to around 6–7 percent in the mid-2000s; fiscal deficits fell; and the current account deficit and external debt reached manageable levels (World Bank 2011a). Much of the growth since 2000 has been driven by strong external demand for Tajikistan’s exports of aluminum and cotton. Furthermore, remittances from the steady stream of migrants who left the country have fueled consumption. Overall, Tajikistan has enjoyed high GDP growth rates in the last decade19 (about 7 to 8 percent) (Figure 4).

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19Although the country experienced a slowdown in 2009 during the Great Recession when remittance incomes into the country fell, the economy bounced back quickly.

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Source: World Development Indicators.
Strong growth has reduced poverty. Poverty, as defined by the national poverty line, fell from 81 percent in 1999 to 47 percent in 2009, and to about 32 percent in 2014.\textsuperscript{20} Extreme poverty fell more precipitously, from 73 percent to 14 percent during the same period (World Bank 2014b). When measured by the international poverty line (US$ 3.1 2011 PPP per day), the poverty rate fell from about 65 percent in 2003 to 23.5 percent in 2009 (Figure 5). This places Tajikistan among the top 10 percent in the world in terms of the rate of poverty reduction (Azevedo, Atamanov and Rajabov 2014a). Strong economic growth also boosted shared prosperity; the welfare of households in the bottom 40 percent grew by 6 percent from 2004 to 2009, mostly driven by labor income and remittances, indicating that the less affluent were able to benefit from growth (Ibid).

Nonetheless, Tajikistan remains the poorest country in Europe and Central Asia. About one third (32 percent) of the population is poor, based on the national poverty line. Although Tajikistan reached the status of lower-middle-income economy in 2015, with a Gross National Income (GNI) per capita of US$1,080,\textsuperscript{21} it remains the poorest country in the ECA region. Furthermore, while monetary poverty has fallen in the last 15 years, the country been less successful in reducing non-monetary poverty, especially in the areas of: access to education; sanitation; and heating facilities (Azevedo, Atamanov and Rajabov 2014b).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{poverty_rate_tajikistan_2003-2009.png}
\caption{Poverty rate in Tajikistan, 2003–2009}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{export_fdi_remittances_2002-2014.png}
\caption{Export, FDI, and Remittances, 2002–2014}
\end{figure}

\textit{Source:} ECATSD calculations using ECAPOV data.

\textsuperscript{20} Based on more recent, but not strictly comparable survey data.

\textsuperscript{21} Atlas method (current US$). Source: WDI.
Tajikistan’s economic model has become increasingly reliant on remittances as a source of growth

Tajikistan has become increasingly dependent on migrant labor,\footnote{Tajiks working abroad.} and therefore on remittances, as a source of jobs and growth. Remittance inflows rose by a factor of five between 2004 and 2008, overtaking exports and foreign direct investment: in 2009 the value of remittances was 17 times that of foreign direct investment, and 200 percent more than that of exports (World Bank 2011). Driven largely by rapid growth in the Russian Federation, where 90 percent of Tajik migrants work, remittances peaked at $4.2 billion, or close to 50 percent of the country’s GDP, in 2013, making Tajikistan the most remittance-dependent country in the world. Remittance-fueled consumption has led to rising imports, which reached US$5.4 billion by 2013: close to 70 percent of GDP. They have also contributed to revenue, as a result of value-added taxes on imports. Even though they fell in 2009, remittances were critical in mitigating the impact of the Great Recession on Tajikistan, providing much-needed foreign exchange and slowing the depreciation of the national currency. With the fall in aluminum and cotton prices in the post-crisis period, economic growth became increasingly dependent on the export of labor and inflow of remittances.

Tajikistan continues to rely heavily on commodities for exports, while imports have increased sharply. Between 2005 and 2013, imports increased from $1.2 billion to $1.9 billion in real terms: total growth of 58 percent (Figure 7). Tajikistan relies on commodities for its exports: between 2003 and 2013 aluminum and cotton represented about 72 percent of exported products. In 2013, aluminum represented 53 percent and raw
cotton—12 percent—of the export basket (Figure 8). Exports destinations also remain largely undiversified: in 2013, exports were mainly sent to Kazakhstan (25 percent of total exports), Turkey (23 percent), Switzerland (17 percent), China (7 percent) and Russia (5 percent).

Job creation during the past decade has been weak

Years of strong economic growth in the last decade have not translated into sufficient job creation. Between 2003 and 2013 the economy added fewer than 500,000 jobs. During this period, real GDP grew by an average of 7.2 percent per year, as employment expanded by about 2.1 percent per year. This implies an average employment to growth elasticity of around 0.3, which is lower than in most comparator countries but equal to the averages of the ECA region and lower-middle-income countries (Figure 9 and Figure 10). Even more worrisome is that in Tajikistan this elasticity decreased significantly following the Great Recession, from 0.33 in 2000–2009 to just 0.13 in 2010–2014, further exacerbating the lack of domestic job creation in recent years.

Those jobs that were created domestically were mainly in agriculture and services, sectors with low productivity. Between 2000 and 2014, employment expanded by an annual average of 2 percent, driven by the services and agricultural sectors. A total of approximately 580,000 net jobs were created during this period, of which 62 percent were created in the agricultural sector (389,000) and 20 percent in services (113,000). The industry sector shed as many jobs as the construction sector created. In fact, employment decreased by around 25,000 in industry, while employment increased by around 26,000 in construction (Figure 11 and Figure 12).

Structural transformation is lagging

There has been very little structural transformation, as the majority of workers have remained in agriculture. According to the official statistical data, there was no change in the share of employment in agriculture between 2000 and 2014, indicating a lack of structural transformation in the economy (Figure 13). Two thirds of all those who are employed (66 percent) continue to work in agriculture, the sector with lowest labor productivity. During the same period, the share of those employed in industry actually decreased from

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23 Exports fell somewhat in 2014 and changed composition: due to a lack of demand and low prices, unwrought aluminum represented 26 percent of exports in 2014 and cotton 7 percent. Their share was largely taken by other commodities exports: zinc ores (9 percent); lead ores (9 percent) and other ores (5 percent). Gold and gold content contributed 15 percent. Source: Atlas of Economic Complexity.


25 Source: TajStat. Data on agriculture employment varies for different sources, placing the number between 48 and 66 percent.
7 percent to 4 percent. Employment and labor productivity increased in the trade, construction and transport sectors, but from very low levels.

The shift toward services came largely at the expense of industry, while agriculture’s contribution to economic output has remained virtually unchanged in the last 15 years. Remittances contributed to the expansion of services, while industry contracted. Agriculture’s share of GDP has remained at an average of 22 percent since 2000, while industry’s share fell from 33 percent in 2000 to 12 percent in 2014. Services’ contribution increased to more than half of GDP (51 percent) in 2014 from 33 percent in 2010 (Figure 14), but as Figure 12 shows, employment is concentrated and growing in lower productivity services; high productivity services such as transport and communications employ very few workers.

Note: The size of the bubble represents sectoral employment shares in 2000.
Source: Author’s calculations using data from TajStat.
Despite economic growth, labor productivity remains low

Growth in GDP per capita was largely driven by increases in labor productivity, mostly in services, but more recently, in agriculture and industry. In Tajikistan, annual per capita value added grew by 5.3 percent between 2000 and 2014, almost entirely driven by increases in labor productivity. The positive contribution of demographic change, i.e. increasing share of the working age population, was counteracted by the decrease in labor force participation (Figure 15). A decomposition of labor productivity (value added per worker) growth (5.3 percent) during the same period shows that more than half of aggregate growth came from the services sector (Figure 16). Labor productivity growth slowed down significantly (3.5 percent) during the crisis period (2008–2010) and after the crisis (2010–2014)—4.0 percent. Since 2010, industry and agriculture increased their contribution to growth to 44 percent and 53 percent, respectively. Services, hit by the remittance declines during the crisis and more recent slowdown, contributed less than 10 percent of total labor productivity growth since the crisis.

The movement of workers across sectors was generally not productivity enhancing. Consistent with the trends described above, inter-sectoral shift (i.e. changes in productivity due to reallocation of workers from less to more productive sectors) made a small, but negative contribution (-0.4 percentage points) to productivity growth in 2000-2014. This is because labor has moved out of more productive sectors, such as industry, and moved to low-productivity services or remained in agriculture. Contribution of inter-sectoral shift was positive only during the crisis period, and has been negative, albeit small, since 2010.
Despite recent increases, labor productivity levels remain low. Labor productivity levels have been growing steadily in all sectors, especially in the industry sector (Figure 17). From 2000 to 2013, labor productivity in agriculture and industry grew at an annual average of 5 percent each; and grew by 8 percent in the services sector. However, between 2010 and 2013, following the crisis, labor productivity in the industry sector grew by 24 percent on average per year, entirely driven by construction, whereas productivity growth in the services sector stalled. Despite growth, total labor productivity remains very low by international standards (Figure 18).

Recent macroeconomic developments have exposed vulnerabilities in the existing growth model

Demand for Tajikistan’s exports has recently decreased as a result of the global commodities price crisis. The recent (since mid-2014) commodities price crisis, which has affected trading partners, such as the Russian Federation, Kazakhstan, and China (Figure 19), has affected demand for Tajikistan’s exports, and has led to lower economic growth in Tajikistan. Tajik exports, especially aluminum and cotton, and remittances, have driven economic growth for the last 15 years, and a reduction in demand for these exports and lower commodity prices (Figure 20) could have a significant impact on Tajikistan’s economy. Moreover, the U.S. dollar value of remittances fell by 33 percent in 2015 compared to 2014, largely due to the sharp depreciation of the Russian ruble. Greater restrictions on migration to the Russian Federation since January 2015 have also contributed to the decline in remittances. This slowdown has affected domestic demand, which in turn has depressed growth in services, a major contributor to economic growth in the past.

The recent currency depreciation may not have been sufficient to make exports competitive. The somoni lost 39 percent of its value against the US dollar during the period January 2014-June 2016. However, the mitigating impact of the depreciation on the economy and the external account has been limited, as the adjustment came with significant delays and the depreciation was relatively limited compared to other major regional currencies: Russian ruble (at 49 percent) and Kazakh tenge (at 55 percent). The relatively strong somoni continues to hamper the competitiveness of exports, and also discourages import-substitution in sectors that could potentially offer employment opportunities.

Shrinking fiscal space has led to adverse incentives to meet revenue targets. As a result of plunging revenue collections on external Value Added Tax (VAT) and customs duties, fiscal space has become strained, leading to adverse incentives to meet revenue targets. In order to offset the revenue shortfall, the authorities intensified tax audits, charging heavy fines and penalties along with mounting pressure for advance payments. This strategy by authorities has the potential to encourage entrepreneurs to shift to the shadow economy and further erode the already limited tax base.
**Banks are also showing signs of stress as a result of lower remittance flows and the economic downturn.** The banking sector has suffered markedly from the slump in migrant transfers and the sluggish economic environment in trade and services. High exposure to unhedged foreign exchange borrowers led to the widening of open foreign exchange positions and capital erosion in light of growing non-performing loans as business activity subsided and earnings became squeezed.

**Yet several structural features continue to shape jobs outcomes**

In addition to the recent macroeconomic developments, there are important structural factors which shape job challenges in Tajikistan. A country’s level of development, institutional strength, endowments, and demography define where the development payoff from jobs is greatest. The jobs agenda in one country will thus be different from that in another country, depending on their dominant features (World Bank 2012). In addition to a more difficult macro-economic environment, Tajikistan continues to face challenges which are associated with structural features of the country (geography), its structural transformation path (agrarian country), demographics (youth bulge), and institutional development (legacy of transition). All of these (Box 1) are important constraints (as well as opportunities) to Tajikistan achieving the more, better and more inclusive job outcomes.
BOX 1: SEVERAL FEATURES THAT SHAPE JOB CHALLENGES IN TAJIKISTAN

There are several features which shape Tajikistan’s development and job challenges:

- Geography: mountainous and landlocked.
  Domestic and international trade is challenging because the country is landlocked and mountains cover about 90 percent of the country. This geographic location and topography, in addition to difficult relations with some of its neighboring countries, have led the country to become one of the least accessible, and most isolated countries in Europe and Central Asia, with only limited regional and international connectivity.

- Agrarian country: almost 3 out of 4 still live in rural areas.
  Tajikistan’s urbanization level was only 26.7 percent in 2014, while ECA’s average was 70.5 percent. Despite increasing labor migration abroad, especially from rural areas, the urban population in the country only increased by 0.2 percentage points. As many as two thirds of the population are still engaged in agriculture.

- Youth bulge: fast growing and young population.
  Tajikistan is also faced with a young and rapidly growing population. Recent estimates show that 55 percent of the population in Tajikistan is under the age of 25.

- Legacy of transition: slow pace of structural reforms.
  Tajikistan lags many of its peers in the region in terms of institutional reforms, partially a result of the civil and political conflict in the early years of independence, but also because of the slow pace of reform implementation. In EBRD Transition indicators, Tajikistan falls behind in almost every area, especially with respect to large scale privatization; governance and enterprise restructuring; and competition policy. In general, Tajikistan could be categorized as a “late modernizer” (Arias et al. 2014).

SUMMARY

This chapter has presented an overview of Tajikistan’s economic development and broad structural changes in terms of job creation and labor productivity growth. The key messages are as follows:

- Tajikistan reached the status of a lower-middle-income economy in 2015, with a Gross National Income (GNI) per capita of $1,080. However, it remains the poorest country in the ECA region. Poverty remains high, even though remittance driven growth led to a steep decline over the last decade.

- Importantly, strong economic growth in the last decade has not led to sufficient jobs creation. Between 2003 and 2013, the economy added fewer than 500,000 jobs. During this period, real GDP grew by an average of 7.2 percent per year, with employment expanding by only 2.1 percent per year.

- Structural transformation is lagging: the majority of workers remain in agriculture and domestic job creation was mainly in the agriculture and services sectors with low productivity.

- Growth in GDP per capita was largely driven by increases in labor productivity, but the movement of workers across sectors was generally not productivity enhancing. This is because labor has moved out of more productive sectors, such as industry, and either moved to low-productivity services or remained in agriculture.

- More recently, the Tajik economy has been impacted by the commodity price crisis and reduced remittances due to devaluation of currencies in the Russian Federation and Kazakhstan. These forces have led to reduced external demand for Tajik exports and also internal demand, which in turn have depressed growth in services, a major contributor to economic growth in the past.

- The increasingly challenging economic environment accentuates the need for domestic job creation and a comprehensive jobs strategy.
2. THE WORKFORCE

This chapter presents a picture of the workforce in Tajikistan. The workforce is Tajikistan’s most valuable resource and has enabled the country to emerge from a painful transition following the collapse of the Soviet Union and a brutal civil war which ended in 1997. At present though, the country is facing one of its biggest challenges stemming from low prices for its key export commodities and the economic slowdown in its main trading partners, namely the Russian Federation, China, and Kazakhstan. Furthermore, the economic recession in the Russian Federation, together with political tensions, has led to decreased remittances and lower outflow of migrant workers from Tajikistan. Emerging evidence indicates that household welfare is starting to be impacted due to lower remittances and the economic slowdown.26

It first presents trends in demographics and labor force participation rates, which ultimately determine the supply of potential workers. It then proceeds to present employment and the types of jobs people have in Tajikistan, before discussing the inequalities in labor market outcomes for different population groups as well as micro-determinants of jobs outcomes. The chapter concludes with a discussion of the role of education and skills in labor market outcomes. While the chapter focuses on structural issues that are affecting the creation of jobs, the availability of good jobs, and the inclusiveness of available jobs for various sub-groups in the population, the ensuing policy recommendations (see Chapter 4) are applicable as response measures during this labor market slowdown. The chapter primarily relies on the analysis of household surveys for the years 2003, 2007, 2009, 2011, and 2013 (Box 2).

DEMOGRAPHICS AND LABOR FORCE PARTICIPATION

The potential workforce is growing at a steady clip

Tajikistan’s potential workforce is growing fast—faster than many of its neighbors in Europe and Central Asia. Fertility rates in Tajikistan fell from a relatively high rate of 4.6 in 1995 to 3.8 in 2013, but they remain above the 2.1 approximate replacement rate required to maintain populations at current levels without immigration. For comparison: in Europe and Central Asia, the fertility rate is an average of 2 children per woman, and in lower-middle-income countries women give birth to 3 children on average. The high fertility rate means that Tajikistan’s population of young people is large and is expected to continue growing for several decades. The working-age population (15-64 year olds) rose from 3.31 million in 2000 to 5.23 million in 2015, which adds an average of 40,000 people to the labor force each year; and this working-age population is expected to increase to 7.04 million by 2030 (Figure 21) while the working age populations in many other European and Central Asian countries are expected to contract. For instance, the working age population in the Russian Federation is expected to shrink by 11 percent from 99.7 million in 2015 to 88.8 million in 2030.

In addition to a relatively large working age population, Tajikistan also has the benefit of a youthful population and a relatively low elderly population. The country has a low elderly dependency ratio; the share of people over 65 years is 3.3 percent. The share of Tajikistan’s elderly population is expected to increase to 5.3 percent by 2030. At the same time, 36 percent of the Tajik population is aged 15 or under.27 The youthful population will ensure strong growth in the working age population for several decades.

26 Average per capita real income fell across many population subgroups between November 2015 and April 2016, including people in urban and rural areas, and in both the bottom 40 percent and top 60 percent of the population in terms of consumption. Source: Listening2Tajikistan [May 30, 2016].
27 Calculation based on UN population data, 2015 estimates.
The analysis in this chapter primarily relies on World Bank / GIZ Tajikistan Jobs, Skills, and Migration Survey (2013), three rounds of the Tajikistan Living Standard Measurement Surveys (2003, 2007, and 2009), and the Tajikistan Household Panel Survey (2011). All surveys are nationally representative, allow for individual analysis of labor market outcomes, and household welfare analysis. The World Bank / GIZ Tajikistan Jobs, Skills, and Migration Survey (2013) contains a labor market module, detailed questions pertaining to cognitive and non-cognitive skills of a working age adult in the family, and questions about intentions to migrate and behavior after migration.

Tajikistan does not have a regular Labor Force Survey (LFS). The latest LFS was conducted in 2009, and the new LFS is expected to be fielded in 2016. The Household Budget Survey (HBS), which is conducted quarterly, does not currently allow for an individual level analysis of labor market outcomes. With the support of the World Bank, TajStat is considering an integrated regularly conducted survey on the basis of the HBS. In the meantime, the lack of regular up-to-date information on the labor market situation significantly limits the policy making in this area. Official statistics on employment in the formal sector draws from mandatory enterprise reporting, but information on informal employment is not up to date.

Going forward, implementation of regular labor market monitoring based on regular surveys, including the situation with migration and informal employment, is critical to support implementation of jobs-focused policies in the country.

**Too many working age adults are not in the labor force**

Tajikistan has a working age population, defined as 15-64 year olds, of about 4.06 million people who can contribute productively to the economy. Of this working age population, about 1.7 million (43 percent of the working age population) are in the labor force and therefore, they are either employed or looking for work (Figure 22). Most people in the labor force in Tajikistan are employed, and therefore, unemployment rates are relatively low at 5 percent. These low unemployment rates have held over the years despite some fluctuations in GDP growth. As a result, 1.6 million people, or 95 percent of the labor force, are employed in either formal or informal jobs.

Overall labor force participation in Tajikistan is low relative to its comparators, especially for women (Figure 23). In 2013, the female labor force participation rate was 27 percent, 41 percentage points below the male labor force participation rate of 68 percent. In comparison, female labor force participation in Kazakhstan...
is 75 percent. The Kyrgyz Republic and Uzbekistan have female labor force participation rates of 60 percent and 51 percent, respectively, while in European and Central Asian countries this Figure is 52 percent. Male labor force participation, at 68 percent, is also lower than the average male labor force participation rates in Kazakhstan, the Kyrgyz Republic, and Uzbekistan of around 80 percent. Europe and Central Asia countries have an average male labor force participation rate of 75 percent.

**Labor force participation rates have declined sharply since the collapse of the Soviet Union.** During the Soviet Union era, labor force participation rates were held artificially high. ILO estimates show that about 70 percent of all 15-64 year olds participated in the labor force before independence in 1990.\(^{29}\) In 1990, male

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\(^{29}\) International Labour Organization, Key Indicators of the Labour Market database.
labor force participation was 79 percent, and female labor force participation was close to 63 percent, high by international standards. Following the collapse of the Soviet Union, and the ensuing civil war in Tajikistan (1992–1997), industrial output declined and labor was reallocated across sectors. Industries that had employed a high proportion of women (textiles, manufacturing, and agriculture) were severely affected (Asian Development Bank 2000). In addition, men migrated, mostly to the Russian Federation, but also to Kazakhstan, in large numbers starting in the 2000s for employment. Women, on the other hand, were increasingly called upon to become full-time homemakers. In general, focus group interviews reveal that when young women have children to take care of, or in some cases their families ban women from working outside the home, then women do not look for a job, despite having completed their education (Davalos, et al., 2016). By 2003, labor force participation rates had fallen to 47 percent for women, and 66 percent for men (Figure 23). By 2013, the female labor force participation rate had decreased to 27 percent, and the male participation rate had inched up to 68 percent; but the disparity between male and female labor force participation rates is significant.

**Between 2003 and 2013, adult labor force participation rates fell, but the reason may be an increase in inactivity and possibly migration opportunities.** Between 2003 and 2013, labor force participation rates fell from 56 to 50 percent (Figure 24). There are two possible explanations for the reduction in labor force participation: first, inactivity rates increased, mostly driven by women exiting the labor force. This trend began following independence and during the civil war. Second, as adults increasingly began to seek out opportunities in the Russian Federation in the 2000s, this led to increases in the reservation wage (the minimum acceptable wage for a worker to choose to enter the labor force) and family income also increased. Other studies have found that the inflow of remittances in Tajikistan has led to reduced labor force participation among remaining family members (Justino and Shemyakina 2012; Abdulloev 2013). Workers exited the labor force either because domestic wages were too low or because household income was sufficiently buoyed by remittances.

**Today, around 1.8 million people are not in employment nor in education, and therefore, Tajikistan’s most valuable resource—its human capital—is underutilized.** Of Tajikistan’s approximately 4.06 million working age population, about 2.3 million are not in the labor force. Approximately 500,500 of those who are not in the labor force are enrolled in school. However, the remaining 1.8 million are not investing in human capital and are not contributing to economic activity. We refer to the working age population that is both not in the labor force and not in education as inactive.

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**Figure 24**
For some groups, labor force participation rates have declined sharply in the last decade

![Graph showing labor force participation rates](image)

**Note:** Excluding current migrants.

**Source:** World Bank staff estimates using labor force surveys and World Bank / GIZ Tajikistan Jobs, Skills, and Migration Survey (2013).
Outmigration has become a crucial source of jobs for Tajik workers

Although there is no consensus on the number of migrants, it appears that almost one million of Tajik citizens\(^{30}\) work outside the country and Tajikistan is the most remittance-dependent country in the world (Bakanova et al. 2015). A large share of the workforce, including one third of men aged 20–39, has opted to leave the country for better pay. Most of these migrant workers (90 percent) end up in the Russian Federation, mainly working in construction, trade, housing and cleaning services, agriculture, and maintenance (Ajwad et al. 2014; World Bank 2016c; World Bank 2015b). With almost all migrants working in the Russian Federation, the recent devaluation of the ruble has had a significant impact on remittance-receiving households, who collectively received just under $4 billion in 2014 (World Bank 2016c). Russia’s Central Bank reported that the amount of money transferred to Tajikistan from Russia fell by 66.6 percent, from US$ 3.831 billion in 2014 to US$ 1.278 billion in 2015. The ruble was devalued by more than 50 percent between July 2014 and March 2016, although this devaluation is not the only reason for remittance reduction. In particular, the Russian Federation implemented legislative changes that have made it difficult and expensive for Tajik migrants to work in the Russian Federation. In 2014, the Russian legislation placed 270,000 Tajik workers on the re-entry ban list. The recession in the Russian Federation, following the oil price collapse, combined with the impact of economic sanctions,\(^{31}\) is therefore, contributing to lower demand for Tajik migrants in the Russian Federation.

The typical migrant worker is a relatively young married man who has secondary education and lives in rural Tajikistan. According to the 2013 household survey data, more than 90 percent of migrants are men and about 67 percent of these men are married. They are relatively young (under 30 years old) and they have completed secondary education. These migrants support households that are on average 7.5 persons in size, and in most cases, the migrants have children. About 77 percent of migrants live in households located in rural areas of Tajikistan.

The typical migrant is either an unskilled worker or is not employed prior to migrating, and therefore, the migrant taps a number of sources to pull together the funds needed to migrate. In fact, 46 percent of migrants are unemployed prior to migrating. This might reflect the difficult job prospects in Tajikistan, but it might also reflect the higher reservation wages held by potential migrants who have foreign wage rates on their minds and hence, turn down job opportunities that do not pay sufficiently high wages. Despite the lure of migration opportunities, and therefore, higher wages, migrants often have to use savings (36 percent), borrow from relatives (22 percent), friends (13 percent) and others (8 percent) to make the journey.

\(^{30}\) While estimates vary, according to Russia’s Federal Migration Service, as of June 2015 there were 992,170 migrants from Tajikistan in the Russian Federation (Bakanova et al. 2015). However, official estimates of TajStat are 529,000 labor migrants in 2015.

\(^{31}\) In 2015, the consequences of these twin shocks caused real GDP to contract by 3.7 percent (World Bank 2016d).
EMployment and job types

Among labor force participants, employment rates are relatively high.

In 2013, there were more than 1.73 million people in the labor force and about 1.6 million adults working in Tajikistan (excluding current international migrants). Paid employees made up about 70 percent of the workforce; the self-employed were around 10 percent; and unpaid workers constituted 18 percent (Figure 22).32 Every country has a different labor market profile of their working age population, and a large share of the working age population in Tajikistan is engaged in unpaid work and significantly fewer are engaged in self-employment. Tajikistan has a relatively low unemployment rate on average, and therefore, employment rates mimic labor force participation rates.33

A majority of jobs are in the informal sector

The informal sector represents a large and growing source of jobs for workers. Although the definition of informality varies across countries (Perry et al. 2007), the following definition is used here: informal sector salaried workers are those who lack an employment contract or are unpaid family workers excluding those who are self-employed. Between 2007 and 2013, the proportion of all wage employees in the informal sector increased from 28 percent to 39 percent (Figure 25). The share of unpaid workers has increased slightly from 16 to 18 percent in 2013. Not surprisingly, the informal sector is particularly large in rural areas and agriculture, where the share of unpaid family workers is particularly high. It is also higher in more remote regions such as Gorno-Badakhshan Autonomous Region (GBAO).

Informal sector employment is a crucial source of jobs for the working age population who do not have a desirable formal sector job. Because of the lower barriers to entry in the informal sector, there are usually more startups among informal firms and these informal firms usually provide jobs to young, inexperienced, and unskilled workers. Studies have shown that some workers seek out informal sector work because of the flexibility associated with the work (Maloney 2004).

Figure 25
Informality is high and increasing among wage employees and unpaid workers, 2013

Note: Excluding current international migrants.

32 Two percent of the employed responded that they did not know their employment status.
33 There is variation in unemployment rates across socio-economic groups. Men are more likely to be unemployed than women; and 24-64 year olds are more likely to be unemployed than 15-24 year olds.
Informal (including unpaid) workers tend to be younger men with less educational attainment, and from rural areas, GBAO, and Khatlon. They tend to work in construction, trade, and agriculture. Additional stylized facts about informal workers are as follows (Figure 26):

- **Informal (including unpaid) workers have lower educational attainment (are lower skilled) than formal workers.** While only 11 percent of informal workers have completed higher education, 32 percent of formal workers have a tertiary degree. At the other end of the spectrum, almost one in five informal workers has not completed secondary education compared to one in ten among formal sector workers. This is consistent with the situation in other middle- and lower-income countries.34

- **Informal workers tend to be a little younger than formal sector workers.** More than 35 percent of informal sector workers are under the age of 30, while only 24 percent of formal sector workers are under age 30. This demographic pattern has been observed in other countries too, where the informal sector appears to function as an important step in the school to work transition, especially for poorly educated youth (Maloney, 2004).35 In Mexico, the mean age of informal salaried workers is five years lower than that of formal sector workers and 14 years lower than that of the informal self-employed workers. In Tajikistan the difference between formal and informal sector workers’ mean ages is only 1.55 years. It is possible that the age difference between formal and informal sector workers in Tajikistan is small because younger workers have a preference for international migration opportunities over domestic informal sector work.36

- **Informal workers tend to be poorer than formal sector workers.** While 18 percent of informal workers are in the poorest quintile of household consumption, only 11 percent of formal workers are in the bottom quintile. At the other extreme, while almost 22 percent of informal workers are in the richest quintile, more than 30 percent of formal workers are in the richest quintile.

- **Informal workers are more likely to live in rural areas, GBAO, and Khatlon.** More than 75 percent of informal workers live in rural areas, while only 61 percent of formal workers live in rural areas. Although

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34Koettl, Packard and Montenegro (2012) find that across Europe, too, people who have only completed basic education are more likely to be informally employed. Perry, et al. (2007) find that workers who have not completed their primary education are more likely to be in the informal sector (either earning a salary or in self-employment) in Argentina, Bolivia, or in the Dominican Republic.

35Koettl, Packard and Montenegro (2012) also find that 15–24 year olds in some European countries are more likely to be employed in the informal sector (defined as jobs with no labor contract).

36Abdulov, Gang, and Landon-Lane (2012) find empirical evidence which suggests that migration and informality substitute for one another in Tajikistan.
the differences in the distribution of workers across regions are marginal, informal workers are slightly more prevalent in GBAO, Regions of Republican Subordination (RRP), and Khatlon.

- **Informal workers are more likely to work in construction and agriculture.** More than 35 percent of informal workers are engaged in the agriculture sector, while 17 percent of formal employees are in agriculture. Similarly, 19 percent of informal workers are engaged in the construction sector compared to 10 percent among formal workers.

**Working conditions in the informal sector are inferior to those in the formal sector, and can impose costs to the economy at large.** Consistent with evidence from other countries in the region (Koettl, Packard and Montenegro 2012), jobs in the informal sector in Tajikistan are different from jobs in the formal sector. A bit surprisingly, there is no evidence that informal sector wages are lower than formal sector wages, controlling for individual and job characteristics. However, despite potentially higher pay, informal sector jobs offer significantly less protection and poorer working conditions. The following are some stylized facts:

- **Formal sector workers are able to manage risk better than informal sector workers.** Around 50 percent of workers in the formal sector are entitled to sick leave, but fewer than 16 percent of workers in the informal sector have this benefit. Moreover, people working informally typically do not have access to public social insurance instruments to manage shocks. In addition, workers in the formal sector have better access to pensions (M-Vector forthcoming).

- **Informal work tends to be more physical than work in the formal sector.** Two-thirds of tasks are characterized as “manual/physical” in the informal sector, while 45 percent of tasks in the formal sector are characterized as such (Ajwad et al. 2014).

**And many jobs are seasonal or temporary**

**Job quality can be measured in a number of ways, but a number of job quality indicators show that this is a concern in Tajikistan.** While workers are drawn to regular installment pay, formal sector work, and permanent or longer term jobs, too many jobs in Tajikistan are: in the informal sector; available only during certain times of year; receive payment only occasionally; and are temporary. The job quality trends show a slight deterioration over time. While the changes are small, seasonal and temporary jobs have become more common since 2007, and permanent or long-term jobs are less common (Figure 27).

**Figure 27**
Job quality has deteriorated slightly over time

<table>
<thead>
<tr>
<th>Year</th>
<th>Permanent/Long Term</th>
<th>Temporary</th>
<th>Seasonal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>40%</td>
<td>60%</td>
<td>0%</td>
</tr>
<tr>
<td>2009</td>
<td>40%</td>
<td>60%</td>
<td>0%</td>
</tr>
<tr>
<td>2011</td>
<td>40%</td>
<td>60%</td>
<td>0%</td>
</tr>
<tr>
<td>2013</td>
<td>40%</td>
<td>60%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Note:** Excluding international migrants.

**Source:** World Bank staff estimates Living Standard Measurement Surveys and World Bank / GIZ Tajikistan Jobs, Skills, and Migration Survey (2013).

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37 On the contrary, Arabishebani and Staneva (2012) find a significant informal employment wage premium across the whole earnings distribution. The wage premium in the informal sector could try to compensate for lack of benefits and security [compensating differentials theory]. Therefore there may be a tradeoff between higher pay but no benefits or protection versus a more secure job with benefits that pay less.
Public sector employment remains sizable

The Soviet legacy resulted in a bloated public sector relative to the overall share of employment in Tajikistan. Until the mid-1990s, the public sector dominated most economic activities, directly or through publicly owned enterprises (Van Eeghen et al. 2014). Public sector employment has since fallen in Tajikistan, reflecting privatization efforts, but public sector work as a share of total employment remains substantial (Figure 28). Public sector employment as a share of total employment in Tajikistan is relatively high at about 28 percent in 2013, while it was 17 percent in Armenia in 2010, 15 percent in the Kyrgyz Republic in 2007, and 13 percent in Turkey in 2010.

Public sector workers earn higher wages, largely as a result of their better socioeconomic characteristics. Males in the public sector earn, on average, 132 somoni ($6.7) per month more than males in the formal private sector; while women who work in the public sector earn 78 somoni ($9.9) per month more than women in the formal private sector. These figures do not account for such differences as education level or experience of workers, and therefore, we apply an Oaxaca-Blinder decomposition to assess whether the premium paid to public sector workers can be explained by valuable socioeconomic traits or if it is a premium associated with public sector employment. We find that workers with socioeconomic characteristics valued by the labor market self-select into the public sector. For example, 47 percent of men in the public sector have completed higher education, while only 17 percent of private sector males have the same attainment rate. Similarly, 34 percent of women in the public sector have completed higher education, as opposed to only 18 percent in the private sector. There is also a high disparity for women with regard to vocational education among public sector workers relative to private sector workers. Almost 31 percent of female workers in the public sector have received some form of vocational education, as opposed to only 13 percent of formal private sector workers.

INEQUALITY IN LABOR MARKET OUTCOMES

Youth have weaker jobs outcomes

Youth (15-24 year olds) labor force participation rates have always been lower than 25-64 year old labor force participation rates. Between 2003 and 2013, youth labor force participation rates fell from 42 percent to 34 percent (Figure 27 above). Much of this fall in labor force participation can be explained by an

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Note: Excluding international migrants.

38 The public sector includes public administration and state owned enterprises, as well as public employment in such sectors as education and health.
increase in inactivity by female youth (see below). Some of the decline in youth labor force participation rates over the last decade is explained by increasing educational enrollment. That is, youth enrollment in education increased by 87 percent for those not in work during 2003 and 2013.

**Youth idleness, i.e. youth who are neither employed nor in school, is high by international standards.** In 2013, almost 650,000 youth in Tajikistan, 41 percent of 15-24 year olds, were neither employed nor in education (NEET) (Figure 29). This is high by international standards. In the Russian Federation, about 12 percent of 15-24 year olds are neither employed nor in education; this Figure is 20 percent in Ukraine, 21 percent in the neighboring Kyrgyz Republic, and 25 percent in Turkey. Rates of youth who are neither employed nor in education in OECD and the EU-28 are about 17 and 19 percent, respectively, and in Latin America, one in every five young persons is neither employed nor in education (Hoyos et al. 2015).

**NEET rates among youth have proven to be very persistent, despite a decade of strong growth in Tajikistan.** Between 2003 and 2013, the share of NEET among youth increased from 37 to 41 percent despite relatively favorable economic conditions (Figure 29). A recent study in Latin America found that society needs to focus more on young people who are neither employed nor in school, because of the particular risks associated with youth inactivity: i) it contributes to the intergenerational persistence of inequality; ii) it is linked to crime and violence in some contexts; and iii) failing to address the NEETs problem could prevent a country from exploiting a demographic window of opportunity (Hoyos et al. 2015). Research in ECA countries has shown that youth who are neither employed nor studying are less likely to trust other members of society or to participate in civic and political activities than youth who are engaged in work or studies (Arias et al. 2014). These are compelling reasons for addressing youth employment and schooling needs, and possibly in a more urgent and focused sense than other subgroups in society.

**Female youth are more likely to be not in employed or school than male youth.** Between 2003 and 2013, female youth have always maintained higher NEET rates than male youth. In 2013, 54 percent of female youth were not in employment or school, while 27 percent of male youth of the same age group were NEET (Figure 30). NEET rates of female youth rose from 47 percent to 60 percent between 2003 and 2011 and then

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**Figure 29**
Youth labor inactivity rates are high by international standards, particularly for females.

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39 These rates are similar to not in education, employment, or training (NEET) rates, which are the rates of 15–24 year olds who are not in employment, education, or training. For Tajikistan, where training rates are very low, we refer to NEET for people who are not in employment or education.

dropped to 52 percent between 2011 and 2013. On the other hand, NEET rates for young men were relatively stable between 2003 and 2013, maintaining a rate of around 26 percent.

The majority of young men transition from school to work while most young women transition to inactivity. Until about age 16, there is little difference between the activity choices of women and men (Figure 31). Both groups are overwhelmingly similar at school, mostly due to the national compulsory education requirements. However, after age 16, the differences between women and men become stark, with two noteworthy patterns emerging. First, overall labor force participation rates increase from around zero at age 16; male participation in the labor force increases sharply to almost 80 percent by age 35, but women's participation increases to only 30 percent by age 35. Second, the proportion of both women and men who are neither employed nor in school increases from close to zero at age 16, but labor inactivity for women, as measured the indicator, increases very sharply. Female labor inactivity rates are low until age 16 and by age 25, they reach about 70 percent. In contrast, male inactivity rates increase to about 30 percent by age 20.

Too many young men and women who could work feel discouraged from seeking work. Discouraged workers are defined as people who are not in the labor force and are available to work, but are no longer looking for a job because they do not believe they will find one. The share of discouraged workers is particularly high among young people; approximately one in six young men and one in ten young women aged 20–24 are too discouraged to look for work (Figure 35). By comparison, the average share of discouraged workers among the young labor force (aged 15–24) was just 0.5 percent in OECD countries in 2012 (Figure 32). Tajikistan has not been able to absorb working-age young people into the labor market, limiting the extent to which the country can turn the youth bulge into a demographic dividend.
Recent studies find that inadequate skills and experience are at the root of labor market discouragement. A qualitative study has found that youth face particular barriers to finding jobs, as they do not have the skills and experience required by employers (Davalos et al., 2016). Lacking work experience, youth may choose to exit the labor force after a few failed attempts. It is also possible that some of the labor market discouragement in Tajikistan is a result of young people leaving the domestic labor force in favor of international migration. There is an urgent need to address these high levels of youth labor market discouragement, partly because this is a wasted resource, but partly because the longer the youth are in a state of inactivity, the harder it becomes to reactivate these workers.

Among youth who are employed, youth are more likely to work in the private sector, but almost a third of youth work in unpaid jobs (Figure 33). More than half of employed youth (15-24 year olds) are employed in the private sector, which is higher than the share of employed 25-64 year olds who work in the private sector (43 percent). Likewise, the latter are also more likely to be employed in the public sector than employed youth. However, youth are significantly more likely to work as unpaid workers in family businesses: 30 percent of youth compared to 15 percent of adults. A very small share of youth (about 5 percent) are self-employed compared to 11 percent among adults.

Figure 32
Labor market discouragement is a problem in Tajikistan, especially among the youth, 2013

Note: The figures depict the number of discouraged as a share of the population in the age cohort.

Figure 33
Youth are more likely to work in the private sector and are significantly more likely to work as unpaid workers in family businesses

Note: Excluding international migrants.

Figure 34
Female employment rates have always been lower than male employment rates

Note: Excluding international migrants.
Women are at a disadvantage in employment, and the trends are not encouraging

Between 2003 and 2013, the disparity between male and female employment rates has increased from a relatively high base (Figure 34). In 2003, male employment rates were 67 percent and for women this figure was 46 percent; by 2013, male employment rates had declined by 6 percentage points to 61 percent, while the women’s rate had decreased by 20 percentage points to 26 percent. There are several reasons why women would have lower employment rates. The reasons range from skills mismatches, to cultural factors, family responsibilities, and discrimination by employers. One factor, however, is that legislation in Tajikistan prohibits women from employment in certain sectors and occupations, and this may be impacting employment rates (see Spotlight 2).

Across the age distribution, women are less likely to engage in employment at particular times in their lives. To examine employment rates across age, we compare working age Tajik men and women with the equivalent population in Organization of Economic Cooperation and Development (OECD) countries (Figure 35). We find that, there is a big disparity between employment rates of Tajik women and OECD women (approximately 30 percentage points), especially in the 20-34 age group. A recent qualitative study finds that caring for children is a significant obstacle for women to participate in the labor market (Davalos et al. 2016). If Tajikistan’s female employment rates were on par with those of OECD countries, there would be 700,000 more women contributing to the Tajik economy today (Ajwad et al. 2014).

Figure 35
While male employment rates mirror OECD employment rates, female employment rates are considerably lower than those of their male counterparts, 2013

Note: Excluding international migrants.

Figure 36
Women are much more likely to work in the public sector or as unpaid workers in family businesses

Figure 37
Employment rates do not favor big cities as they sometimes do in other countries

Note: Excluding international migrants.
The public sector is a more important source of employment for women and so is unpaid work. The public sector is a more important source of employment for women than for men, while employed men are more likely to be in a private sector job. The share of women who are employed in the public sector is 32 percent, while 26 percent of men are employed in the public sector (Figure 36). On the other hand, the share of employed men who are wage employees in the private sector is almost 50 percent, while only 37 percent of female wage employees are in the private sector. Importantly, women are much more likely to be in unpaid employment in family businesses (25 percent of women compared to 13 percent among men).

The most desirable jobs are in Dushanbe

Employment rates do not favor big cities, as they sometimes do in many other countries. There is very little variation in employment rates, except in GBAO where employment rates are significantly higher than other regions of Tajikistan (Figure 37). The employment rate in the densely populated region of Dushanbe is almost the same as Khatlon, which is a significantly less dense region of the country where agriculture is the primary activity.

Workers in Dushanbe are more likely to be public sector workers and more likely to be paid in regular installments. Workers in Dushanbe have more desirable jobs than in any other region of Tajikistan (Figure 38) Almost 49 percent of workers are in the public sector in Dushanbe, while in all other regions of Tajikistan fewer than 30 percent of workers are engaged in the public sector. In Dushanbe, almost 59 percent of employees are paid in regular installments, while fewer than 40 percent of employees in each of the other regions of Tajikistan are paid in regular installments. Surprisingly, salaried formal sector employment is relatively equally distributed across regions.

Workers from richer households have better quality jobs

There is some variation in employment outcomes across household consumption quintiles. The share of workers who earn wages and salaries vary marginally across household consumption quintiles, a proxy for household wealth (Figure 39). Among workers from households in the poorest quintile, 72 percent earn wages and salaries, while for households in the third quintile, 66 percent earn wages and salaries; and among the richest households, 71 percent are earners. There is more variation in the incidence of unpaid workers, which follows an inverted U-shaped curve across household consumption quintiles. Among the poorest households, about 15 percent of workers are unpaid; while for households in quintile 3, about 20 percent are unpaid; and for the richest households, about 12 percent receive no pay. Self-employment among the richest households is about 5 percentage points higher than that for the poorest households.

Figure 38
Workers in Dushanbe have more desirable jobs

Note: Excluding international migrants.
Richer workers are more likely to have better quality jobs (regular installment pay, formal sector work, and public sector jobs). While job quality can be measured in a number of ways, one measure is whether workers are paid in regular installments. Richer working age adults are more likely to be paid in regular installments. While 29 percent of workers in the poorest quintile are paid using regular installments, 45 percent of workers in the richest quintile are paid in this way (Figure 39). On the other hand, piecewise work (mainly construction and agriculture) is more common among workers in poor households. 47 percent of workers in the poorest quintile and only 29 percent of workers in the richest quintile receive income from piecewise work. Piecewise work is also more common in the informal sector, for seasonal or temporary work; while regular installment pay is more common among formal sector workers with permanent or longer term jobs.

There is a clear relationship between household welfare and job quality. It is not easy to determine whether households are rich because they have better quality jobs, or whether richer households have access to better quality jobs (because of networks, location, education, etc.). However, there is a clear pattern that shows that workers from richer households have more desirable jobs. For example, of all workers who belong to the poorest quintile, 19 percent work in the public sector, while of all workers who belong to the richest quintile, 35 percent work in the public sector (Figure 40). Of all workers who belong to the poorest quintile, 45 percent work in the informal sector, while of all workers who belong to the richest quintile, only 26 percent work in the informal sector.

**MICRO-DETERMINANTS OF JOB OUTCOMES**

**The micro-determinants of employment outcomes are revealing**

**Gender, educational attainment, and location of residence determine employment outcomes.** Multinomial logit models of employment outcomes reveal that: females are about 23 percentage points less likely to be employed than otherwise identical males; people residing in RRP, Dushanbe, Sogd, and GBAO are between 14 and 19 percent less likely to be employed than otherwise identical people living in the Khatlon region (Figure 41). People who have completed secondary school are more than eight percentage points more likely to be employed; and those with post-secondary school attainment are more than 25 percentage points more likely to be employed than otherwise identical people who have not completed primary school.

**Gender, educational attainment, and location of residence also determine the type of employment.** Females are 12 percentage points less likely to be private sector wage employees than males. Residents of RRP and GBAO are 13 and 25 percentage points, respectively, less likely to be in private sector wage employment than residents of the omitted Khatlon (Figure 41). Primary and secondary school completion increases the chances of private sector wage employment by about 30 percentage points relative to people who did not...
complete primary school; and rural residents are about 16 percentage points more likely to work in private wage employment. The high incidence of private wage employment in rural areas and in some geographic regions of Tajikistan, is explained by agricultural employment, which includes informal sector employment. The multinomial logit also shows the determinants of public sector wage employment. Unsurprisingly, people who have post-secondary educational attainment are 44 percent more likely to receive public sector wages than people who have not completed primary school.

**Holding personal characteristics constant, gender, experience, educational attainment, location of residence, and sector of employment all determine wages.** We estimate a mincer regression with log monthly wages for working age adults as the dependent variable and a number of socioeconomic characteristics as the independent variables. We find that the sector of employment is the most important determinant of wages once all other factors are held constant. In Tajikistan, working age adults who are engaged in the

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**Figure 40**
Workers from richer households are more likely to have more desirable jobs

**Note:** Excluding international migrants.

**Source:** World Bank staff estimates using World Bank / GIZ Tajikistan Jobs, Skills, and Migration Survey (2013).

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**Figure 41**
Multinomial logit models show that gender, educational attainment, and location of residence determine employment outcomes

**Source:** World Bank staff estimates using Living Standard Measurement Survey (2009).

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41 Gender, age and age squared, educational attainment, region of residence; household size, number of children, number of youth and number of elderly.
industrial sector earn 175 percent more, and adults in the services sector earn 61 percent more than otherwise identical adults in the agriculture sector. Results show that educational attainment is crucial in that working age adults who have attained post-secondary education earn 57 percent more than otherwise identical adults with no primary school education (Figure 42). Women earn 36 percent less than otherwise identical men. In addition, experience, measured by age, matters, but it diminishes as more and more experience accumulates. Finally, adults in Dushanbe earn 43 percent more than otherwise identical adults in Khatlon.

EDUCATION, SKILLS, AND LABOR MARKET OUTCOMES

A number of socioeconomic factors emerge as important determinants of labor market outcomes, but education and skills deserve particular mention. There is significant demand for skills in the Tajik economy, as evidenced by substantial positive labor market returns to both cognitive and non-cognitive skills. Yet, considerable skills gaps persist. Inactive individuals in Tajikistan have significantly lower cognitive and non-cognitive skills than employed individuals. Additionally, a large share of employers reports shortages of adequately skilled individuals in the workforce (Ajwad et al. 2014).

Figure 42
Determinants of wages: Gender, age, education, location, and sector. Results from mincer regression: Dependent variable log monthly wage, 15-64 year olds, 2009


Figure 43
Employment outcomes are positively correlated with educational attainment, 2013

Employment rates are positively correlated with educational attainment. For 25-64 year old adults who have not completed secondary education, 35 percent are employed, while more than 79 percent of those who have completed higher education are employed (Figure 43). These positive correlations between educational attainment and employment outcomes are observed in other countries as well. In Europe, for example, employment rates of people who completed tertiary education was 83.7 percent across the EU-28 in 2014, while employment rates of those who had attained no more than a primary or lower secondary education was 52.6 percent. In Tajikistan, even among those who are employed, there is variation in the type of employment across educational attainment. For 25-64 year old adults who have not completed secondary education, 14 percent are public sector wage employees, and 53 percent are private sector wage employees. However, for 25-64 year olds who have completed higher education, the public sector is more appealing. Specifically, 64 percent of 25-64 year olds who have completed higher education are public sector wage employees, and only 21 percent are in the private sector. Self-employment does not show a big incidence gap between 25-64 year olds who have not completed secondary education and those who have completed secondary special or technical education. At the other extreme, almost 64 percent of 25-65 age adults who have less than secondary education are neither employed nor in school, while only 48 percent of all 25-65 year olds are neither employed nor in school.

While education completion rates have been relatively high at the secondary level, an increasing share of people, women in particular, are not completing secondary school. The education system in Europe and Central Asia was well-regarded prior to transition, as a result of the Soviet system's emphasis on equalizing the population's access to education (Davalos, et al., 2016). Tajikistan’s achievement in terms of access to general education remains strong: educational enrollment is high at the secondary level. The proportion of adults (25 years and older) who have achieved at least a secondary level education is approximately 80 percent (Figure 44). Worryingly, however, recent cohorts of women are not completing secondary school nor secondary special/technical education. Secondary completion rates are 54 percent for 25-29 year olds, while for 45-49 year olds, the completion rates are 66 percent. More recent generations are also stopping with less than secondary general completion. Among 25-29 year olds, 34 percent completed less than secondary, while among 45-49 year olds, 14 percent completed less than secondary level.

Figure 44
Education completion rates are favorable at the secondary level, but the share of younger women not completing secondary school is increasing, 2013

Female educational attainment has either stayed constant or declined over time, while male educational attainment has largely improved. A closer look at secondary school completion shows an unambiguous increase in secondary school completion rates for men in both urban and rural areas for younger cohorts relative to older cohorts, implying that secondary school completion rates are increasing. However, for females, the pattern is ambiguous. For example, urban cohorts of females aged 40-44 have a higher education attainment rate than 20-24 year olds; rural cohorts of females aged 50-54 have a considerably higher secondary educational attainment than females aged 20-29. The trends become starker when special/technical education attainment is observed. Female educational attainment of special/technical education has decreased for younger cohorts in urban areas and remained steady, though at a lower level, in rural areas. This is a concerning trend especially considering the government’s efforts to improve overall access to education in recent years at all levels.

Skills and education are particularly important; however, access to education is not equitable

Education completion is correlated with wealth, and that is a problem. The higher education completion rate is nearly three times greater among men from households in the richest per capita consumption quintile (33 percent), compared to men from the poorest quintile (12 percent). Among women, this ratio is five to one. In poorest-quintile households, approximately one-third of all men and women have not completed secondary education, compared to just 8 percent of men and 20 percent of women in households in the richest quintile (Figure 45). Education completion is higher for individuals from wealthier households, implying that richer households have better access and better ability to complete education than poorer households.

![Figure 45](image-url)

Women and men belonging to richer households typically completed a higher level of education, 2013

**Source:** Authors’ estimates using the World Bank / GIZ Tajikistan Jobs, Skills, and Migration Survey (2013).
SUMMARY

This chapter presented a picture of Tajikistan’s workforce. The key messages are as follows:

- Tajikistan’s potential workforce is growing rapidly due to the high fertility rate. As a result, the country is experiencing a demographic dividend, which is especially noticeable relative to many other countries in Eastern Europe and Eastern Asia.

- But too many working age adults are not in the labor force, and therefore, are not contributing to economic growth. For some groups, labor force participation rates have declined sharply in the last decade, and for women, the rates are now among the lowest in the world.

- Outmigration has become a crucial source of jobs for Tajik workers. As many as one million Tajiks, mostly young men, have migrated for work, with 90 percent of workers traveling to the Russian Federation. However, recent developments indicate that, going forward, fewer Tajiks will be able to find work in the Russian Federation because of a number of legislative restrictions on Tajik migrants attempting to work there.

- The quality of jobs is an issue: the majority of jobs are in the informal sector; and many jobs are seasonal, temporary or occasional. The informal sector workers are typically young, unskilled, rural residents, who work in the agriculture and construction sectors.

- Public sector employment remains sizable, but tends to benefit urban residents and the better educated, in particular.

- The labor market is characterized by demographic, geographic, and wealth disparities—youth, women, workers outside Dushanbe, and workers from poorer households have less desirable jobs outcomes.

- Skills and education are particularly important determinants of jobs outcomes; however, female educational attainment by younger cohorts has declined. Younger cohorts of females are not completing secondary school and special/technical education as much as older cohorts, implying that secondary school and special/technical education completion rates might be decreasing over time.

- Access to and completion of education is not equitable. Workers in richer households have higher educational attainment, and, since higher educational attainment leads to better employment outcomes, there is some evidence that richer households have an intergenerational advantage.
SPOTLIGHT 1: WOMEN FACE LEGISLATIVE BARRIERS TO EMPLOYMENT

Many factors contribute to the observed low female labor force participation rates in Tajikistan; one factor is its Labor Code. Tajikistan’s Labor Code (Article 160) prohibits women’s employment in: underground jobs, difficult jobs, jobs in harmful conditions, or jobs linked to manual lifting and moving of heavy loads. The list of specific sectors and professions where female employment is not allowed is established by Ordinance No. 240 of 25 July 1978 inherited from Soviet times. Tajikistan chose to preserve the restrictive list in its original form at the national level, the only post-Soviet Republic to do so despite the archaic nature of the restrictions. According to the ordinance, women are excluded from numerous professions and tasks that are perceived to be harmful or difficult in around 36 sectors of the economy. Crucially, women are not allowed to engage in “dangerous” professions or tasks within economic sectors important to Tajikistan such as construction, mining, geological exploration and topography, railway transport and subways, even agriculture. Not all restrictions are enforced, but their existence may mean that some women avoid these sectors for employment and training; male employers may also avoid hiring women for these jobs.

According to the World Bank’s Women, Business and the Law project, which monitors legal and regulatory barriers to women’s employment in 173 economies, Tajikistan stands out as a particularly restrictive country for women (World Bank 2016e).

The existing legal framework (Ordinance No. 240 of 25 July 1978) prevents gender parity in the labor market, particularly in export sectors:
- restrictions are in place in the production of minerals like aluminum, zinc and lead ores, gold, which are key exports
- women are prohibited from 32 professions and tasks within the non-ferrous metallurgy sector; this includes the production of aluminum, zinc dust, silicon, also processing cinders for the production of mercury (Part VIII)
- women are restricted from nearly 28 professions and tasks in the metal industry, including forging and thermal work, gas welding, or melting metals and alloys (Part I)
- in the textile and light industry, women are prohibited from about 19 professions and tasks. Women cannot work as press operators in primary cotton processing, scourers engaged in the fleshing and breakdown of major raw hides, or leather cleaners (Part XVI)
- women are also barred from about 25 professions and tasks within the food industry including: processing fish, or working on a kneading machine with a movable capacity of more than 330 liters, where manual transfers are needed (Part XVII)
- in the agricultural sector, women cannot drive tractors equipped with dusters and sprayers when working with pesticides, or work in the pits, and septic tanks (Part XXXVI).

This information is obtained from the legal contributor to World Bank’s Women, Business and the Law project and confirmed by the Ministry of Labor of the Republic of Tajikistan.
Regulatory restrictions also keep women from some occupations which span many sectors of the economy in Tajikistan. The legislation does not allow women to become rescuers, crane operators, or firefighters. In addition, Tajik women may not work during night hours, except in certain sectors of the economy where it is particularly needed.44

Unsurprisingly, restrictions on sectors and occupations have led to gender-segregated areas of study. Most girls in Tajikistan remain in fields commonly associated with women’s traditional roles in society, such as education, health, and social services, with only a few entering scientific or technical study.

The original intention of the restrictions was to protect women and women’s reproductive health, and more recently countries have been reforming their regulations to include gender neutral protection; countries are leaving employment decisions to the worker. In the case of “dangerous” jobs, governments, employers, and trade unions work together to establish safe working conditions that protect women and men. Removing restrictions on women’s employment is not expected to create substantive costs for Tajikistan. On the contrary, restrictive labor laws tend to result in: considerable variation in employment opportunities for women compared to men; uneven distribution of jobs; and inflexibility in the labor market in terms of women’s employability. Another negative implication of labor regulatory barriers is occupational segregation that may reduce women’s earnings potential, since many restricted jobs are often in higher-paying sectors. A study shows that the Russian Federation had a high gender earnings differential during its transition to a market economy largely because of occupational segregation by gender [Ogloblin 1999]. That segregation was more related to gender-based job restrictions in Soviet-era labor regulations than to gender differences in education or the higher incidence of part-time work among women. In addition, World Bank’s Women, Business and the Law 2016 found that in those countries where there was at least one restriction on women’s employment, their estimated earned income was 12 percent less than men’s income relative to countries where such restrictions do not exist [World Bank 2016e].


Spotlight contributed by Alena Sakhonchik.

3. LABOR DEMAND IN THE FORMAL SECTOR

In many countries, including Tajikistan, the availability of more and better jobs depends on a thriving formal private sector. It is therefore important to better understand the profile of firms and employment in the private sector and the relationship between productivity and employment. This chapter presents an overview of the demand side of jobs, focusing on the formal private sector in Tajikistan. It looks at the distribution of formal sector firms to understand their characteristics. It then looks at where the jobs are and what type of firms create jobs. Finally, it reviews the relationship between employment and productivity (in the manufacturing sector). The chapter pays particular attention to differences by firm ownership (private vs public), age, size, sector and region. The analysis draws parallels and comparisons with other countries.

PROFILE OF FORMAL SECTOR LABOR DEMAND IN TAJIKISTAN

The formal private sector is squeezed between large public and informal private sectors

On the one hand, the demand for labor in Tajikistan is largely dominated by the public sector. The share of public sector employment, including state owned enterprises (SOEs), is relatively high at 28 percent compared to many other countries in the region (Chapter 2). Employment in SOEs is about half of total public employment. Public sector jobs, coveted by many for their security and other benefits, are not a sustainable source of jobs, especially given the current high levels of public sector employment. The public sector also tends to favor those with higher education and is much less accessible to those in the bottom 40 percent.

On the other hand, the demand for labor in the private sector is largely informal. Informal wage employment is about 31 percent of total employment or almost half of all private sector employment.45 The informal sector may be able to provide a large number of jobs, especially to the poor, but they are not necessarily good jobs. The pay may be comparable or higher than in the formal sector for a comparable worker (Arabsheibani and Staneva 2012), but informal sector jobs are largely temporary or seasonal, and lack security and benefits.

The formal private sector, which is small and squeezed between the large public and informal private sectors, has the potential to create more and better jobs. Formal wage employment in the private sector represents just 13 percent of total employment in Tajikistan. The formal sector is small, but an important part of the labor demand. This sector needs to grow in order to create more jobs for Tajiks, especially for those in the bottom 40 percent. A better understanding of the formal private sector in Tajikistan is needed to assess impediments or inefficiencies that could hold back growth in private sector employment, where there is potential to provide better (formal) jobs. The rest of this chapter focuses on the private formal sector in Tajikistan utilizing limited, but never previously analyzed, firm-level data (see Box 3).

Tajik entrepreneurial potential is not fully utilized

The formal private sector in Tajikistan is still relatively underdeveloped with low formal firm creation. The rate of entry of formal businesses remains low in Tajikistan, in comparison with other countries and over time (Figure 46). Despite an uptick in 2009 and 2010, the rates of formal firm entry remain one of the lowest in the

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45 Another 18 percent are unpaid contributing family workers, who are also considered informal.
ECA region. Recent improvements to simplify the process of business registration, including the establishment of a one-stop-shop mechanism for starting and registering a business in 2009 (Box 4), have had only a temporary effect on entry of formal businesses.

There is significant entrepreneurial potential, which is not being fully utilized. Survey data suggests that the lack of business creation is not a result of the lack of desire among Tajiks to become an entrepreneur; almost 40 percent of the labor force has a preference for self-employment, one of the highest rates in the region (Figure 47). However, the share of latent entrepreneurs who try to start a business is very low at 11.8 percent, considerably lower than the ECA average of 26.8 percent. Only about 55 percent of those who attempt to start a business succeed, compared to almost 64 percent in the ECA region as a whole, pointing to significant barriers to entrepreneurs in Tajikistan. Research shows that while latent entrepreneurship and the likelihood of success with a new business are associated with particular attitudes and demographic characteristics, the quality of the local business climate also matters. The gap between starting a business and success is highest among countries that lag on structural reforms, with success being more likely in those countries which were able to proceed with reforms more efficiently (Arias et al. 2014).

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This is measured in the survey with the following question “Suppose you were working and could choose between different kinds of jobs. Which of the following would you personally choose: self-employed or being an employee?”

The desire to be self-employed does not appear to be driven by necessity or at least not by necessity alone (survival entrepreneurship). In the ECA region overall, as many as one fifth of the wage-employed declare a preference for self-employment; a large number of these are highly educated or highly skilled professionals currently working as directors or managers (Arias et al. 2014).

Didier married men and individuals willing to take risks are more likely to self-report latent entrepreneurship. While there is no consistent relationship between educational attainment and latent entrepreneurship, educational attainment is positively correlated to the probability of starting a business and succeeding. Working in the private sector is also associated with higher latent entrepreneurship rates compared to working in the public sector. Latent entrepreneurship is also greater in areas with a higher concentration of economic activity (Arias et al. 2014).
Tajikistan’s rates of latent entrepreneurship are among the highest in ECA, but the share that takes steps to start a business is among the lowest.


Source: Arias et al. 2014.
BOX 3: KEY DEMAND SIDE DATA USED IN THE ANALYSIS

The demand side analysis for the Tajikistan job diagnostics is carried out using data made available in anonymized form by TajStat: The Business Register and the Data on Industrial Production.

BUSINESS REGISTER (2014 AND 2015)

The Business Register incorporates all registered legal entities in the country, including: private sector firms and farms (dekhan); state owned enterprises (SOEs); and government institutions (ministries and state agencies). The latter are not included in the analysis. The dataset included firms in the Business Register as of January 1 of each year; in 2014, for example, the data represents legal entities at the end of 2013. The major advantage of using the Business Register is that it incorporates all registered entities in the country. However, the available information on the firms is very scarce, limited to average annual number of employees, location, sector of economic activity, date of registration, type of ownership [private, collective, state, mixed, foreign], and legal form.

DATA ON INDUSTRIAL PRODUCTION (2012-2014)

Data on Industrial Production is a separate dataset with information collected on registered firms in the following economic sectors: mining, manufacturing and utilities. Reporting is mandatory for those enterprises which have active production in a given year. Industrial Production data includes more information such as output and fixed assets, in addition to the number of annual average production employees. The main advantage of using Industrial Production data is that it allows for linking productivity to employment and assessing these variables by location, size, age, etc.

DATA LIMITATIONS

Business Register

The Business Register does not include information on sales or fixed assets, or more detailed information on employment (such as permanent versus temporary workers, male or female employees, etc.). It also does not have information on average wages or the wage bill. As a result, it cannot be used for analysis of productivity and/or wages. TajStat plans to include additional variables in the next round of data collection. Missing data in the Business Register continues to limit most of the analysis. Information on employment information is missing for 37.8 percent of the firms in 2015 compared to 14 percent in 2014 [Table B1, Annex B]. The sharp increase in the number of firms with missing employment data suggests that the data quality issue is significant and may be systematic, especially in 2015.
PROFILE OF FORMAL SECTOR FIRMS AND EMPLOYMENT

Private sector formal firms are small and relatively young, especially compared to SOEs

Private sector formal firms in Tajikistan tend to be small and relatively young. The majority (70 percent) of private sector formal firms in Tajikistan have fewer than 10 employees (Figure 48). This is comparable to countries in similar economic conditions, like Moldova where 61 percent of firms are also small (Figure 49). However, given Tajikistan’s history since independence, which included a civil war (1992–1997), private firms have been more recently established there than in Moldova and other countries for which comparable data is available (Annex C): two thirds (66 percent) have been registered for six years or less, while in Moldova this share is 20 percent. This is also likely a result of the reforms to ease the process of business registration (Box 4), such as the establishment of a one-stop-shop mechanism for starting and registering a business, which was established in 2009. The large share of young firms does not need to be a concern if these firms can grow and expand employment. There is evidence that shows that it is young, not necessarily small, firms that create the most jobs (Haltiwanger, Jarmin, and Miranda 2013). In Tajikistan, however, it does not appear to be the case, as shown below. Consistent with the new business density estimate cited above, the number of new entrants (i.e. 1-year-old firms) is low in Tajikistan; it was 8.3 percent in 2014, only a little higher than Moldova (6.3 percent) in the same year, but comparable to the rate (9 percent) observed in the Kyrgyz Republic (2009–2012) (Sattar, Keller and Uulu 2015).

SOEs make up a small share of total firms in Tajikistan, but they are generally larger than formal private sector firms. The number of SOEs has been declining over the years (Bakanova et al. 2014), although about 800 continue to operate according to the Business Register. This is small (3.8 percent of the total) compared to the approximately 25,000 private sector registered firms. There are significant differences between private sector

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49 Excluding State Owned Enterprises, but including dekhan farms. Formal here is defined as being registered in the Business Register. Dekhan farms are included since by the nature of being registered as a legal entity they can undertake commercial activity, i.e. conduct business as a firm.

50 Moldova is chosen as a comparator due to its similar transition history (former Soviet Union Republic) and high reliance on remittances. There are, however, differences between the countries, including population size (with a population of 3.5 million, Moldova is much smaller than Tajikistan; its GDP per capita is twice as high as Tajikistan’s). Additional country comparisons are presented in Annex C.

51 The average size of private sector firms is nearly identical in Tajikistan and Moldova: approximately 16.5 employees.

52 Almost all firms represented in Tajikistan’s Business Register are less than 20 years old, which is expected given the civil and political conflict which took place between 1992 and 1997. Age is measured based on date of registration in the Business Register.

53 The actual number may be less due to the lack of a common methodology for identifying SOEs in different registries [see Bakanova et al. 2014 for more details].
firms and SOEs: private sector firms in Tajikistan tend to be smaller than SOEs, although there are some SOEs with only 1-9 employees. The average size of a formal private sector firm in Tajikistan is 16, and the average size of an SOE is 60 (Figure 50). In Moldova, comparable figures are 18 and 120, respectively (Figure 51). The lack of a comprehensive government database and a coordinated management system of SOEs makes it difficult to understand their real economic impact (Bakanova et al. 2014), but their size suggests that SOEs could be potentially influential in those sectors where they operate (the issue of the sectoral distribution of SOEs is discussed below). Entry of the private sector in such sectors is either forbidden by law or in practice not doable because of current institutional and political arrangements. Complex entry and operational requirements, as well as political preferences (both national and local) protect SOEs’ monopoly position and overemployment (Ibid).

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54 The government has also been a lot slower to privatize medium and larger SOEs. For example, of the 6,029 state properties privatized in the first decade of transition (1991–2000), 95 percent were small enterprises. Privatization of other SOEs grew in the mid-2000s with the adoption of the Strategic Plan for Privatization of Medium and Large Enterprises for 2003–09 in 2004, but it has stalled again since then (Bakanova et al. 2014).

55 This may be a result of poor quality data on SOEs and also the inclusion of some government units in a departure from standard global practice.

56 The average size is 49 if an outlier in terms of employment is excluded.
The Government of Tajikistan has been conducting reforms to the business registration system since 2008, and has worked with donors to develop an action plan for a one-stop shop mechanism for business registration. A European Union project supported the action plan and changes were introduced as early as 2009. A network of entry points was established through district Tax Committees and the action plan required the three government agencies: the Tax Committee, the Pension Fund and the Statistics Committee to exchange data, rather than to require a client to do it for themselves. Before the introduction of the one-stop shop, business registrations could take up to 49 days to complete and registrants had to apply across multiple ministries. The current process takes a maximum of 11 days.

The progress in this area has been remarkable since 2008. In the Doing Business 2016 report, Tajikistan moved to 57th place out of 189 countries in the area of Starting a Business; it ranked 161th out of 178 countries in 2008. Other factors that have led to Tajikistan’s recent improvements include:

- Reducing the number of business activities that are subject to licensing requirements [2008].
- Reducing the minimum capital requirement and speeding up issuance of tax identification numbers [2010].
- Creating a one-stop shop that consolidates registration with the state and the tax authority [2011].
- Allowing entrepreneurs to pay in their capital up to 1 year after the start of operations, thereby eliminating the requirements related to opening a bank account [2012].
- Enabling the Statistics Agency to issue the statistics code for the new business at the time of registration [2015].

However, not all recent reforms have helped ease the business registration process; in 2014 Tajikistan introduced a requirement to have preliminary approval from the tax authority before starting a business and to submit additional documents at registration.

Sources: World Bank [2011]; World Bank [2016].

**Formal employment is concentrated in larger and older firms**

As in other countries, formal sector employees tend to work in larger and older firms. Despite the low number of large firms (only 2 percent of the total), large firms with more than 100 workers employ about 40 percent of all formal employees (Figure 52); and about half of all formal employees work in firms older than 5 years and more than a third work in firms older than 10 years (Figure 53). This is also consistent with findings in many other countries (e.g., Hsieh and Klenow (2014) for emerging countries, and Haltiwanger et al. (2013) for the United States). In Moldova, employment is also concentrated in large and older firms. Concentrating employment in these larger and older firms is only a concern when they are unproductive, as seems to be the case in the manufacturing sector in Tajikistan. In this case, the tendency to distribute the formal workforce toward older, larger, but not necessarily more productive, firms could be a misallocation of labor resources or a reflection of rigidities in the labor market. Lack of competition may also be allowing less productive firms to retain higher employment than optimal.

*Figure 52*  
Tajikistan: Employment by age and firm size, private formal sector, 2014

*Figure 53*  
Moldova: Employment by age and firm size, private formal sector, 2014

Source: Financial Statements, 2014, NBS.
But concentration of employment in larger older firms is even more pronounced for SOEs.\textsuperscript{57} This is partially a result of the way the government conducted privatization. The Government divested itself of smaller SOEs in successive waves of privatization, but retained ownership of the largest Soviet-era enterprises and any sector deemed to be a natural monopoly (U.S. Department of State 2015). As a result, SOE employment is more concentrated in larger and older firms. Among SOE employees, almost two thirds (61 percent) work in firms with more than 100 employees (Figure 54). This share is higher still in Moldova (84 percent) where SOEs are an average of two times larger than in Tajikistan (Figure 55). Larger, older SOEs in the manufacturing sector do not appear to be more productive than smaller and younger SOEs; there is therefore reason to believe that this large share of employment in larger and older SOEs may not be efficient. Research shows that efforts to reform SOEs and reduce public sector employment has paid off significantly in the form of employment growth in the private sector in ECA countries\textsuperscript{58} (Arias et al. 2014). To the extent that labor hoarding by SOEs may still be happening in Tajikistan, it could hamper reallocation of labor to more productive sectors.

SOEs’ presence in most sectors of the economy can have negative implications for efficiency and competition

The distribution of formal firms by sector indicates a private sector that is still skewed toward agriculture. Formal private sector firms operate mainly in the agricultural sector\textsuperscript{59} (38.7 percent of all formal private sector firms); 25 percent are in commerce, and 17.5 percent are in other services (Figure 56). Formal employment by sector is more skewed toward agriculture (57 percent of all formal employees—Figure 57) given that registered farms tend to be larger (Figure 58) than private firms in other sectors.\textsuperscript{60}

While the share of SOEs is not high overall, they are still present in many sectors. Around 18 percent of SOEs are in utilities, where a large share of government ownership is to be expected; however, they are present...
in nearly all economic activities in Tajikistan, including manufacturing, agriculture, transport, and other services (Figure 59). Employment in SOEs is very heavily skewed to the manufacturing sector\(^{61}\) (Figure 60).

Some sectors are more dominated by SOEs than others, but all are likely to be affected by noncompetitive pressures (Box 5). The share of SOEs relative to all registered firms is not very high (Figure 61), but varies by sector. In particular, the sectors with the highest share of SOEs (Figure 61) include: utilities (32 percent of total firms), transport (8 percent), and mining (5 percent). Employment by SOEs is also very high in these sectors at: 53, 34 and 25 percent of the formal registered workforce. Given that SOEs tend to enjoy a set of implicit benefits, including preferential access to finance (Bakanova et al. 2014), their continued presence raises concerns that private sector firms may be facing unfair competition. In many cases, governance issues and biased regulations that favor SOEs can undermine competition, and inhibit incentives to reduce costs, innovate, or become more efficient, all of which could impede entry and growth of more efficient private sector firms.

\(^{61}\) But this is largely driven by an outlier SDE in the manufacturing sector. If that outlier is removed, the share of employed in SDEs in the manufacturing decreases from 27.6 percent to just 8 percent.
SOEs in Tajikistan are involved in elaborate quasi-fiscal activities (QFA) which carry significant fiscal risks for the state budget. The primary quasi-fiscal activity is the extensive use of below-market and even below-variable cost price of energy, utilities, and other services, which creates a stream of subsidies that: deprive the public sector of revenues; generate SOE losses; and give rise to large contingent fiscal liabilities. This also undermines the rational economic behavior of SOEs, private companies and households alike, and results in inefficient use of energy and public resources. It erodes accountability of SOE managers and blurs the principles of responsible behavior of the state as an owner of SOEs and an efficient provider of critical public goods and services. The total costs of these QFAs were estimated at about 3 percent of GDP in 2012 (Bakanova et al. 2014).

There are some regional differences in distribution of private sector firms and SOEs as well

Geographically, the distribution of the formal private sector is slightly skewed toward Khatlon, while SOEs are more prevalent in Dushanbe. Somewhat surprisingly, there is not a large concentration of formal...
private sector firms in the capital city. Only about one fifth of all private formal firms are in Dushanbe while the largest share (35.7 percent) is in Khatlon, where there is a large concentration of dekhan farms. Another quarter of private sector firms (24.8 percent) is in Sogd. The smallest share is in the sparsely populated Gorno-Badakhshan region (Figure 62). Employment is roughly proportional to these shares (Figure 63), although firms tend to be somewhat smaller in Dushanbe and in the Region of Republican Subordination, where there are approximately 13 employees, on average, compared to 18 in Khatlon and Sogd. The formal firms in Gorno-Badakhshan are of larger average size (28 employees), but smaller firms are likely to face more hurdles to registering in this remote region. The distribution of SOEs, on the other hand, is a little bit more skewed toward Dushanbe (Figure 64), and employment in SOEs is also more concentrated in Dushanbe and in the Region of Republican Subordination (Figure 65).

Figures 62, 63, 64, 65: Distribution and employment share by region, 2014


In Moldova, 34 percent of all firms (private and SOEs) are in the capital city of Chișinău, while in Tajikistan only 25 percent of all firms are in Dushanbe. In Kenya, half of the formal manufacturing firms are in Nairobi [Cirera, Xavier and Mathilde 2015].
The number of state-owned enterprises (SOEs) has dropped since the 1990s, but many SOEs remain active in various sectors: travel; automotive/ground transportation; energy/mining; metal manufacturing/products; food processing/packaging; agricultural, construction, building & heavy equipment; services; finance; and information & communication. The Government of Tajikistan divested itself of smaller SOEs in successive waves of privatization, but retained ownership of the largest Soviet-era enterprises and any industry deemed to be a natural monopoly.

The State Committee for Investments and State-Owned Property Management maintains a database of all SOEs in Tajikistan, but this information is not publicly available. Major SOEs include:

- Travel: Tajik Air, Tajik Air Navigation Dushanbe Airport, Kulob Airport, Qurghonteppa Airport, Khujand Airport
- Automotive & Ground Transportation: Tajik Railways
- Energy & Mining: Barqi Tojik, TajikTransGas, Oil, Gas, and Coal, and VostokRedMet
- Metal Manufacturing & Products: Tajik Aluminum Company (TALCO), and AluminSohtMon (TALCO subsidiary)
- Agricultural, Construction, Building & Heavy Equipment: Tajik Cement
- Food Processing & Packaging: Konservniy Combinat Isfara
- Services: Dushanbe Water and Sewer, Vodokanal Khujand, and ZhKX (water utility)
- Finance: AmonatBonk (savings bank), TajikSarmoyaguzor (insurance), TajikSugurta (insurance)
- Information & Communication: Tajik Telecom, Tajik Post, and TeleRadioCom

While information on SOEs and rules governing them remain quite unclear, it is generally believed that they enjoy significant privileges and remain largely protected from competition. In sectors that are open to both the private sector and foreign competition, SOEs receive a larger percentage of government contracts than their private sector competitors. According to government policy, private enterprises cannot compete with SOEs under the same terms and conditions with respect to market share, products/services, and incentives, and they do not have the same access to financing. Local domestic law makes SOEs subject to the same tax burden and tax rebate policies as their private sector competitors, but the government regularly writes off their tax debts via administrative orders or decrees. SOEs are afforded material advantages, including preferential access to land and raw materials that are not granted to private enterprises.

SOEs in Tajikistan are engaged in a variety of quasi-fiscal activities which are inefficient, undermine competition, and come at a significant fiscal cost and risk:

- Mispricing: pricing goods and services at below-market or cost recovery levels. This creates financial losses for SOEs and inefficiency in the use of scarce resources.
- Provision of noncommercial services: SOE delivery of social services free of charge or below cost recovery, with no mention in the government budget.
- Soft budget constraints: tolerance of SOE arrears (implicit subsidy) leading to distortions in the allocation of resources.
- Barter and offset arrangements: arrangements that reduce revenue and spending, making it difficult to calculate the precise size of QFAs or to manage the related fiscal risks.
- Operating inefficiency: technical losses and unmetered/unbilled consumption (including from theft).
- Subsidized lending and rescue operations and bailouts: below-market and preferential lending rates; poorly secured and sub-par loans; mispriced loan guarantees.
- Subsidies related to the exchange rate system: unjustified subsidies arising from biased application of multiple exchange rates and subsidized exchange risk insurance.

Sources: U.S. Department of State 2015; Bakanova et al. 2014.
FIRM GROWTH AND EMPLOYMENT

Private sector firms grow as they age, but to a lesser extent than private firms in other countries or SOEs

Young firms that survive longer than five years in Tajikistan tend to grow as they age, but to a lesser extent than in other countries. While the available data does not allow for long-term tracking of firms, it is possible to gauge whether firms tend to be larger as they get older in Tajikistan. Hsieh and Klenow (2014) find that older firms in the manufacturing sector in the United States tend to be significantly larger than young startups. 63 For instance, U.S. firms aged 25-29 years old are 3.4 times larger than firms that are younger than 5 years (Figure 66). Using a slightly different methodology, 64 we find evidence of somewhat stunted growth among surviving (beyond 5 years) formal private sector firms in Tajikistan. While the differences in size of private sector firms aged 5-9 years compared to firms younger than five years are roughly comparable to the U.S. and Moldova, the trend starts to diverge for older age brackets. Older (by Moldova and Tajikistan standards) private sector firms (10-14 years old) are only about 1.5 times larger than young firms. In comparison, U.S. firms in that age bracket (10-14 years old) are 2.2 times larger than young firms. 65 The difference is even more pronounced for firms aged 15-19 in Tajikistan, which are not only far behind the U.S., but also the Moldova private sector benchmark, and are just slightly larger, on average, than firms in the 10-14 age bracket. This suggests that market distortions and other obstacles keep private sector firms small as they age and they don’t grow to their full potential. SOEs, however, are doing much better in terms of average employment, suggesting that these constraints are less binding for them.

An important lesson from other countries is that reforms and a better business climate can help firms grow. While it is difficult to identify obstacles to firms’ growth with the available data, literature suggests that business reforms that improve market functioning can positively affect firm growth and job creation. Hsieh and Klenow (2014) describe clear differences in the life cycle of firms in India subsequent to reforms in 1994 (Figure 67). 66 Econometric analysis using a variety of firm data for the ECA region also suggests that firms that face a less burdensome regulatory environment and less corruption experience improved growth in employment (Arias et al. 2014). Increased access to improved infrastructure and greater bureaucratic and judicial efficiency were also associated with better performance. In particular, a one-standard deviation improvement in each dimension of the business environment is associated with substantial growth in employment as well as profitability (ibid).

Figure 66
Employment over life cycle of firms

Note: SOE estimates for Tajikistan exclude an outlier. The graph is truncated for comparison with Moldova and Tajikistan, but Hsieh and Kleow (2014) show that older U.S. firms (i.e., those 40 years or older) are about 8 times larger than start-ups.

Source: Hsieh and Klenow (2014) and authors’ calculations using Business Register, 2014, TajStat, and Financial Statements from NBS.

63 Hsieh and Kleow (2014) construct a synthetic panel using two years of surviving manufacturing firms five years apart and grouped in five-year age bins. They assume that every cohort experiences similar rates of exit and growth over the life cycle. They compare these results to the average size of the firm by age in a cross section. Results using both methodologies are similar for emerging economies while growth of the typical firm in the U.S. is lower in the cross section approach. We use the cross section results here.

64 We regress size of firms (log of employment) on dummies for age categories.

65 Manufacturing sector firms in Moldova come close to U.S. firms in this regard.

66 Although post-1994 behavior suggests relatively modest growth over the life cycle in comparison to other countries, the pre-1994 pattern suggests that by the time the firm is 35 years old, average plant size was just one fourth of the plant size at birth.
Job creation appears concentrated in larger firms, while small firms saw job losses

The limited data suggests that smaller firms tend to see job losses, while jobs are being created in larger firms. While the data is limited, it is important to assess which firms have experienced net employment gains versus net employment losses. The data for 2014-2015 suggests that smaller firms with fewer than 10 employees and, to some extent, those with 10-19 employees, regardless of how long they have been in business, have laid off some employees while larger, older firms saw job gains (Figure 68). If this is part of a consistent trend and is not due to biases in the data, it could point to barriers to jobs growth in small and young firms. Across a large number of OECD and emerging countries, young and small firms, rather than small firms as a whole, are net job creators (Criscuolo et al. 2014). Controlling for firm age, Haltiwanger, et al., (2013) find that there is no systematic relationship between firm size and growth in the United States manufacturing sector;

Figure 67
Employment over the life-cycle of firms in India: reforms can positively impact a firm’s capacity to grow

[Graph showing employment over the life-cycle of firms in India]


Job creation appears concentrated in larger firms, while small firms saw job losses

While the data is limited, it is important to assess which firms have experienced net employment gains versus net employment losses. The data for 2014-2015 suggests that smaller firms with fewer than 10 employees and, to some extent, those with 10-19 employees, regardless of how long they have been in business, have laid off some employees while larger, older firms saw job gains (Figure 68). If this is part of a consistent trend and is not due to biases in the data, it could point to barriers to jobs growth in small and young firms. Across a large number of OECD and emerging countries, young and small firms, rather than small firms as a whole, are net job creators (Criscuolo et al. 2014). Controlling for firm age, Haltiwanger, et al., (2013) find that there is no systematic relationship between firm size and growth in the United States manufacturing sector;

Figure 68

[Bar chart showing net job creation by size and age in Tajikistan]


67 Smaller and younger firms may also have less capacity or fewer incentives to accurately report their employment information. More consistent efforts to check the data reported, including automatic cross-check with other government databases such as the Tax Committee, is needed to provide more reliable information for policymaking.
they highlight the importance of business start-ups in U.S. job creation. Firm startups account for only 3 percent of employment but for almost 20 percent of gross job creation in the U.S. In contrast, startups account for 3 percent of private sector formal employment in Tajikistan, but account for only 13 percent of gross jobs created.

As regards job creation by sector, only the agricultural sector saw job losses, while other sectors saw positive net job creation. Only the agricultural sector saw net job losses from 2014 to 2015 (Figure 69) among small and very small firms, but older small firms appear to have been particularly affected. Net employment gains among the large registered firms (or farms) were not enough to compensate for job losses among smaller firms or farms.68 Other sectors saw positive net job creation even though some of small firms in those sectors had to lay off some employees. It is important to note again that the data only covers employment in registered legal entities, and hence is not the same as aggregate employment trends.

**PRODUCTIVITY AND EMPLOYMENT**

*There is a wide dispersion in labor productivity by type of firm, suggesting possible allocative inefficiency*  

It is important to examine the relationship between employment and productivity in Tajikistan in order to find out if larger firms are more productive and if more productive firms hire more labor. This information could help assess whether markets in Tajikistan operate in a way that helps creation of good jobs. This analysis is for the manufacturing sector, where information on output per worker is available for 2012-2014.

SOEs appear less efficient than the private sector manufacturing firms. Overall, based on firm level data, labor productivity (average output per worker) in the manufacturing sector adjusted for inflation, experienced very little growth between 2012 and 201470 (Figure 70). Compared to firms in the private sector, SOE productivity appears to be somewhat lower and more dispersed around the mean than private firms’ productivity (Figure 71). In particular, there is higher density toward the left of the productivity distribution among SOEs. A basic regression analysis confirms that SOEs are less productive than private sector manufacturing firms, controlling for size, age,

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68 The reasons for this are not clear especially considering potential measurement issues. In general, this could be related to migration, which peaked around 2013. There could also be some restructuring in the sector in terms of ownership, perhaps in part due to the new Tax Code. Official statistics on individual entrepreneurs show that between 2013 and 2014 there was a large increase in individual dekhan farmers, not included in the data on legal entities: there are between 69,000 and 97,000 active registered individual farmers. Some small farms registered in the Business Register may have reorganized into individual entrepreneurs/dekhan farmers. The data does not allow for further testing of this hypothesis.

69 Productivity analysis is limited to the manufacturing sector since information on output is only available in the industrial data. Labor productivity is measured as output per worker since information on labor costs is not available to estimate value added per worker.

70 In logs, average output per worker increased from about 9.4 in 2012 to 10.4 in 10.4 in 2014 in the private sector and from 8.8 to 9.8 among SOEs.

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While this result should be taken with caution, it is nevertheless consistent with findings in the region that labor productivity among private firms tends to be higher than among SOEs operating in the same sector (Arias et al. 2014).

There are no significant differences in labor productivity by size of firm, but there is a wide dispersion in output per worker (Figure 72 and Figure 73). Dispersion of labor productivity is higher among small and medium SOEs. All types of firms exhibit a long low productivity tail in the distribution, but also higher density along the high productivity tail, especially for smaller firms. This suggests large variation in productivity, especially in small private firms. Large differences in productivity across businesses, even within narrowly defined sectors, are a persistent feature in both developed and developing countries (Haltiwanger 2011), which may suggest allocative inefficiency, i.e., the inability of the economy to shift resources from low- to high-productivity activities.

The pooled OLS regression of log (output per worker) as the dependent variable was run using size, age, region, and location controls. Because the measure of productivity used (output per worker) is less preferred than measures that can take into account the value of inputs (labor and capital used in production), such as value added per worker or total factor productivity. These measures were not possible to construct due to the data limitations.

Larger firms are not more productive in Tajikistan and they increase productivity by laying off workers.\(^{73}\) Using regression analysis to control for firm characteristics like industry and location (Table 1), private firms in the same sector have similar productivity regardless of size (except for very large firms that are more productive). Larger SOEs tend to be less productive, suggesting that SOEs may not be utilizing labor efficiently. Table 2 shows the average effects on employment of “within firm” changes in productivity. The overall impact of changes in productivity is negative for both private sector firms and SOEs. If a quadratic term\(^ {74}\) for productivity is introduced, the relationship between increasing productivity and employment is positive, but only for small firms. Above this threshold, improving productivity is associated with lay-offs. Small firms are limited in how many jobs they can create, and it is those larger firms that are able to increase productivity and hire additional labor who are contributing to sustained creation of good jobs in Tajikistan. Similar to the results above, it appears that there are significant barriers to employment and productivity growth in Tajikistan, suggesting that productive firms do not grow their employment levels, either because of barriers or disincentives to do so.

Table 1
Determinants of productivity (with respect to micro)

<table>
<thead>
<tr>
<th></th>
<th>Private</th>
<th>SOEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>sz_10tol9</td>
<td>0.477</td>
<td>-0.517</td>
</tr>
<tr>
<td>sz_20to49</td>
<td>-0.131</td>
<td>-1.172*</td>
</tr>
<tr>
<td>sz_50to249</td>
<td>0.265</td>
<td>-1.871***</td>
</tr>
<tr>
<td>sz_250to499</td>
<td>0.572</td>
<td>-1.705**</td>
</tr>
<tr>
<td>sz_500plus</td>
<td>0.532*</td>
<td>-1.469*</td>
</tr>
<tr>
<td>Constant</td>
<td>9.849***</td>
<td>10.40***</td>
</tr>
<tr>
<td>Observations</td>
<td>1,267</td>
<td>169</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.129</td>
<td>0.313</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1


Table 2
Determinants of changes in employment (firm fixed effects)

<table>
<thead>
<tr>
<th></th>
<th>Private</th>
<th>SOEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in productivity</td>
<td>-0.512***</td>
<td>0.406**</td>
</tr>
<tr>
<td>Changes in productivity_sq</td>
<td>-0.0420***</td>
<td>-0.0969**</td>
</tr>
<tr>
<td>Constant</td>
<td>8.045***</td>
<td>3.165***</td>
</tr>
</tbody>
</table>

Observations | 1,267  | 1,267 | 169 | 169 |
R-squared | 0.482 | 0.510 | 0.579 | 0.747 |
Number of id | 779 | 779 | 96 | 96 |
R2 | 0.482 | 0.510 | 0.579 | 0.747 |
R2-adjusted | 0.481 | 0.509 | 0.577 | 0.744 |
Between R2 | 0.00748 | 0.0275 | 0.00759 | 0.0254 |
Overall R2 | 0.0141 | 0.0380 | 0.0207 | 0.0584 |
Within R2 | 0.482 | 0.510 | 0.579 | 0.747 |

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1


\(^{73}\)This analysis is based on limited panel data and, hence, should be repeated if more rounds of data become available to ensure that the results are not sensitive to the time period used for the analysis.

\(^{74}\)Relaxing the assumption that the relationship is linear.
SUMMARY

The analysis of available firm data provides a snapshot of the formal private sector in Tajikistan in comparison with SOEs and with other countries. The main findings of the analysis suggest that:

- The formal private sector, squeezed by large public and informal sectors, is still very underdeveloped and entry of new firms is relatively low.
- Private sector firms in the formal sector tend to be small and relatively young, and most formal private sector employees are employed in larger and older firms.
- SOEs are significantly larger than private sector firms and are still present in many economic sectors, potentially undermining competition and entry of private companies.
- Older private sector firms are smaller in Tajikistan than in comparator countries, which may indicate barriers to growth. SOEs may not experience similar barriers as they are significantly larger across the firm life-cycle.
- Short-term trends indicate that job creation is concentrated in older, larger firms, while smaller, younger firms have a higher rate of job losses. Smaller and younger firms form the basis of job growth in countries such as the United States, but contribute significantly less to job creation in Tajikistan.
- There is a wide dispersion in labor productivity by type of firm, suggesting possible allocative inefficiency.
- Larger firms are not more productive in Tajikistan, but they increase productivity by laying off workers, suggesting that productive firms do not grow their employment levels, either because of barriers or disincentives to do so.
4. STRATEGIC FRAMEWORK FOR JOBS IN TAJIKISTAN

This section presents an organizing framework to address Tajikistan’s jobs challenges in the short and medium term, based on the analysis of outcomes presented in Chapters 2 and 3 of this report.

The broad objectives of the Jobs Strategy in Tajikistan are to: i) facilitate the creation of more jobs; ii) improve the quality of existing jobs; and iii) ensure access to jobs among vulnerable population groups (Figure 74). These three objectives are important for Tajikistan:

- **Facilitating the creation of new jobs:** economic growth in the last decade has not translated into a sufficient number of jobs for a growing workforce in Tajikistan. Between 2003 and 2013 the economy has added less than 500,000 net jobs, while the working age population increased by 1.3 million. While migration will remain an important jobs strategy for many households, the government should prioritize improving policies to facilitate job creation in the domestic private sector for the growing young population. Hence, a Jobs Strategy should include measures and interventions to remove constraints to the creation and expansion of formal businesses—in general, policies that promote investments and innovation.

- **Improving the quality of jobs:** The quality of jobs in Tajikistan is a concern, as many people have jobs, but of temporary, seasonal, or occasional nature without a regular source of income. These are jobs with low labor productivity and earnings and often poor working conditions. A large share of the employed have informal (39 percent) or unpaid (18 percent) jobs, and do not have access to basic social protection. There is an important agenda therefore to improve the quality of jobs, with a focus on poor and vulnerable workers, especially in rural areas.

- **Connecting individuals to jobs:** There are many working age people in Tajikistan who are not employed: employment rates vary by gender, age, and, to some extent, region of residence. Almost 650,000 youth (15-24 year olds) are inactive and the female labor force participation rate is 36 percentage points below the male labor force participation rate of 63 percent. Also, the types of job that different people have vary dramatically: the poor, in particular, are much more likely to have worse quality jobs. A Jobs Strategy, hence, should include measures to facilitate labor market transitions: from inactivity or unemployment into jobs; from low to high productivity jobs; or from regions or areas with fewer job opportunities to areas with more potential—whether

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**Figure 74**

Objectives of a Jobs Strategy in Tajikistan

- **MORE JOBS**
  - Creation of New Businesses
  - Expansion of Current Businesses

- **BETTER JOBS**
  - Productivity and Higher Wages
  - Better Working Conditions and Social Insurance

- **ACCESS TO JOBS**
  - Efficient Matching
  - Removing Barriers to Participation and Mobility

**Source:** Authors.
domestically or abroad. Finally, diversifying migration destinations and improving skills and preparation of migrants is an important avenue to improve living standards in Tajikistan.

To address these objectives, the jobs strategy is organized around three pillars (Figure 75).

- **Promoting private sector growth**: Sustainable job creation relies upon growth of a competitive private sector. Accordingly, this pillar focuses on the reforms needed to ensure an effective enabling environment at the macro and micro level that will enable entrepreneurs to create new businesses, and current firms to invest, expand, and hire workers. Part of the agenda requires trade facilitation, infrastructure and logistics given the country's small size and landlocked position.

- **Improving productivity and earnings, and access to formal jobs**: This pillar focuses on measures that could help improve productivity, such as strengthening local value chains and connecting small producers and rural SMEs. It also involves policies and interventions to either improve incentives for formal jobs or reduce incentives for informal jobs, including enabling access to core social insurance programs.

- **Connecting people to jobs**: This pillar focuses on connecting potential workers to jobs through a set of supply side policies and programs aimed at increasing labor force participation through enabling policies, improving access to jobs through labor market programs, and better leveraging the benefits of migration.

The jobs strategy will contribute to objectives set out in the Government of Tajikistan’s National Development Strategy 2030. The National Development Strategy 2030 (NDS) sets ambitious goals to improve the living conditions of the population. Within the NDS there are four key objectives: i) ensure energy security; ii) develop the country's communication opportunities; iii) ensure food security and nutrition; and iv) enhance productive employment. The latter, in particular, aims to both increase the quantity of jobs created and improve the productivity and quality of these jobs through expanding access to social protection. In this regard, the proposed objectives of the Jobs Strategy and NDS are well aligned. Moreover, there are many other synergies with different pillars of the NDS (Annex D). The key difference is that in the strategic framework for jobs, jobs could be an outcome of many policies—not just those directly aimed at job creation or employment.
PILLAR 1: PROMOTING PRIVATE SECTOR GROWTH

A pre-requisite for Tajikistan to increase job creation is to create conditions for private sector growth, which implies much higher private sector investments. This requires increasing expected rates of return on investments, ensuring that entrepreneurs and firms can finance these investments, and eliminating barriers to entry and distortions that might preclude private investments in particular sectors. Some of the most urgent reforms to achieve these objectives involve improving macroeconomic management and governance to reduce risks and uncertainty; upgrading business regulations and facilitating trade and logistics, in order to reduce transaction costs; reforming institutions that govern capital markets to improve access to finance; and rethinking investment incentives. It is important to note, however, that the link between these reforms and jobs is quite complex: higher investments and a more efficient allocation of resources across sectors can create but also destroy jobs. In addition, the private sector alone might not be able to internalize social externalities related to jobs, or create sufficient jobs for vulnerable population groups, particularly in lagging regions. Thus, the discussion in this section identifies key interventions to promote private sector investments but also raises issues that would need to receive attention in the context of the jobs agenda.

The discussion is organized around the following set of policies: i) Macro fundamentals; ii) Business environment and economic governance; iii) Trade facilitation, transport and logistics; iv) Access to finance; and v) Investment Policy and Promotion.

Ensure macro fundamentals are conducive to private sector growth

From a jobs perspective, Tajikistan faces three challenges when it comes to macro-economic policies: being able to address external vulnerabilities, which can adversely affect employment and earnings; reducing discretion in the implementation of the tax code, which can reduce job creation and/or encourage entry into the informal sector; and creating fiscal space to be able to protect workers and stimulate the economy during a downturn.

Addressing external vulnerabilities. As a country still dependent on commodity exports (cotton and aluminum), Tajikistan has to contend with the effects of commodity price volatility. Hence, strong macroeconomic management is needed to smooth fluctuations in prices and dampen the impact on other sectors of the economy. There are also some concerns that significant inflows of remittances may have led to a real exchange rate appreciation (the Dutch disease) which could penalize the export sector, a likely important source of jobs in the future. In general, volatility in foreign transfers, if not managed effectively, can result in the volatility of real exchange rates. These can have spillover effects on the tradables sector, reducing the predictability and stability of profits, and therefore lowering incentives for firms to invest and growth.

Reforming the budget formulation process and reducing tax discretion. Fiscal policy and, in particular, revenue collection and related tax administration can have important implications for private sector investment and job creation. Research shows that higher tax rates on businesses are associated with fewer formal businesses and lower private investment (Djankov et al. 2010.). In Tajikistan, despite significant improvements in tax policy and administration in recent years (Box 6), substantial shortcomings are still present in the administration of revenue collection and, in particular, ambiguity in the interpretation of the tax code and VAT refund procedures. Overall, the most serious issues with taxation stem from the budget formulation process, which benchmarks expenditures as a starting point. This, in turn, results in undue revenue collection targeting, largely ignoring tax base, rate and business cycle changes. Especially, during economic downturns taxpayers are required to make hefty pre-payments and face excessive cameral audits. At the same time, the system retains some discretions which need to be addressed more effectively. Inconsistent approaches to tax exemptions erode budget revenues and undermine the level playing field, which is essential for a conducive business environment and for new firms to enter the market on competitive terms. Reform of the budget formulation process can address these problems.

Creating fiscal space. Given debilitated infrastructure and social and demographic developments, the pressure on total public spending is intensifying even as the fiscal space narrows in the wake of slowing global and

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75The process of obtaining VAT refunds is very slow, a situation that the authorities attribute to insufficient coordination between the Tax Committee and the Ministry of Finance and to a lack of available liquidities at the Tax Committee (UNCTAD).
regional growth and fragility of the domestic economy. Despite low reported fiscal deficit and a moderate debt level, fiscal and debt positions are fragile given upcoming debt amortization payments, heightening quasi-fiscal risks, and thin international and fiscal buffers. Soft budget constraints primarily in the energy sector, frequent financial bailouts, insufficient strategic orientation and inefficiencies of public expenditures (especially capital expenditures) are compressing fiscal space and the buildup of fiscal buffers. These result from soft budget constraints on SOEs (largely in the energy sector), continued directed lending by banks, and other quasi-fiscal risks. SOEs’ debts continue rising along with operating losses and emergency interventions to keep critical operations afloat. The absence of a solid sovereign debt market and low confidence in the banking sector impede the healthy development of the financial sector. Liquidity in the system is distributed unevenly, while systemically-important banks are now facing solvency issues. Thus, the state budget is heavily burdened by loss-making enterprises and frequent financial bailouts, which limits the ability of the government to conduct countercyclical fiscal policies.

POLICY OPTIONS

Address external vulnerabilities:

• Pursue a higher degree of exchange rate flexibility and build international reserves by minimizing unnecessary market interventions and eliminating restrictions in the foreign exchange market.

Reform the budget formulation process and reduce tax discretion:

• Reform the budget process by moving to compliance-based tax policy instead of revenue targets;
• Reduce ambiguity in the tax code interpretation and minimize unnecessary tax audits and strengthen risk-based controls; and
• Rationalize tax exemptions and systematize eligibility criteria.

Create fiscal space:

• Better assess and manage fiscal risks stemming from quasi-fiscal activities of SOEs and the financial sector by adopting a financial risk mitigation strategy;
• Seek more transparency and efficiency in the management of the state budget and build fiscal buffers for countercyclical fiscal policies; and
• Increase efficiency of public spending to create fiscal space for adequate public services, invest in human and physical capital, and support the most needy.
BOX 6: PROGRESS MADE IN TAX POLICY AND TAX ADMINISTRATION

TAX POLICY

The new Tax Code [in effect from January 1st 2013] simplified the tax system to enhance incentives for private sector growth while reducing incentives for tax avoidance. The number of taxes was reduced from 21 to 10 by merging some taxes. For instance, land tax and property tax were merged into a single property tax, sales tax on primary aluminum and cotton fiber and tax on aluminum processing were merged into a single sales tax, royalty from water and tax on subsurface users were merged into a single tax on natural resources.

To make the business environment friendlier, (i) the VAT threshold was raised from 200,000 to 500,000 somoni, (ii) corporate income taxes will be cut from the current statutory rates of 25 and 15 percent to 23 and 13 percent in 2017, and (iii) road user tax will be phased out by 2017. The revisions also streamlined tax concessions, by exempting all imported technologies and equipment from VAT and customs duties. While the simplified tax rate for small businesses was increased from 4 percent to 5 percent, small businesses were exempted from paying the VAT. In order to limit tax pressure on taxpayers, the personal income tax brackets were revised. Additionally, the social tax levying methodology was simplified to promote formality.

TAX ADMINISTRATION

Government has taken significant steps to improve tax administration. The Government’s Tax Reform Program issued in December 2010 is being supported by a new World Bank grant that plans for a comprehensive set of improvements in business processes, organizational structure and functions. According to DB 2014, Tajikistan made paying taxes easier and less costly for companies by reducing the corporate income tax rate, merging the minimal income tax with the corporate income tax and abolishing the retail sales tax. At the same time, Tajikistan increased the land and vehicle tax rates. In Doing Business 2015, Tajikistan was cited among top 10 reformers, mainly because of improvements in the tax administration. In paying taxes, Tajikistan improved its ranking by 15 places from Doing Business 2014 due to the reduced number of payments. Its position is, however, still low: 172th out of 189 countries (Doing Business 2016).

Over the past year, the Tax Committee has undertaken several activities to improve tax administration: (i) taxes can be paid through banks; (ii) a self-reporting system is in place; (iii) the Large Taxpayers Inspectorate (LTI) is in operation and is organized along functional lines; (iv) business registration has been greatly simplified; (v) internal control has been improved and a performance evaluation system of local inspectorates has been developed; (vi) development of communication networks is in progress; (vii) electronic kiosks to simplify tax payments have been introduced; (viii) the functional reorganization has been piloted; (ix) the department of medium size enterprises has been initiated; and (x) the system for the taxation of small enterprises has been simplified by increasing the VAT threshold and exempting them from road tax. The Tax Committee is developing a basic model of Risk Based Audits, replacing manual selection of audit planning with computer-driven selection based on taxpayer data and a set of 20 risk indicators.

Source: Based on contributions from Hassan Aliiev.
Improve the business environment and governance to promote firms’ entry and growth

A competitive business environment that promotes the creation and growth of businesses is critical for the creation of private sector jobs. It is also important to encourage the formalization and growth of current informal micro and small enterprises. Where the regulatory environment is onerous, firms will have a disincentive to register (e.g., where there are high costs or bureaucracy to register a business, or where registration puts the firm in a position where they will face burdensome taxes and regulation, inspections, and corruption) and to expand (e.g., where accessing finance and land or obtaining construction permits is costly and burdensome). Overall, evidence shows that higher employment growth is correlated with better corruption control, better regulation, more government effectiveness, and greater voice and accountability (Van Eeghen et al. 2014).

During the last decade, the Government of Tajikistan has introduced several reforms to enable development of the private sector. Since 2008, the Government has eased barriers to new businesses by eliminating unnecessary procedures, lowering minimum capital requirements, and centralizing government functions related to registration of new businesses (creating a one-stop-shop). The government has also changed the insolvency law to streamline bankruptcy proceedings, lowered corporate income tax rates, passed new laws calling for the creation of a credit bureau, and is developing an e-permit system, which should make it easier for businesses to obtain permits.

Recent reform efforts highlight the importance of addressing the quality of reform implementation alongside adoption of new reforms. While in recent years much attention has been given to developing high quality framework legislation, the private sector has not responded to these reforms with greater levels of investment. The private sector representatives often cite the limited or inconsistent level of implementation of previous reforms. The lack of a consistent approach to ensuring proper implementation of normative legal acts (NLAs) and the absence of an effective mechanism to monitor implementation were identified as main obstacles for proper law implementation. This is not to say that the issue of implementation is entirely neglected; a number of concrete actions to train government officials, raise legal awareness of businesses, and monitor compliance are being taken, but on an ad-hoc basis with great variability among regions and agencies (IFC 2013).

However, Tajikistan still struggles to improve various aspects of the business environment (Table E1, Annex E). While there have been improvements, Tajikistan ranks 132nd in Doing Business—significantly below its Central Asia neighbors. The private sector continues to struggle with getting reliable access to electricity (ranked 177th), paying taxes (172nd), dealing with construction permits (152nd), resolving insolvency (147th), trading across borders (132nd), getting credit (109th), and registering property (102nd) (Figure E3, Annex E). Enterprise surveys (World Bank Enterprise Survey 2013) also reveal that approximately 20 percent of firms in Tajikistan identified access to finance as a major constraint, followed by tax rate (17.9 percent), tax administration (11.2 percent), electricity (10.4 percent), and practices of the informal sector (10.1 percent) (Figures E1, E2, Annex E). A variety of indicators point to remaining weaknesses in overall regulatory quality in Tajikistan, and business regulations in particular, including WB Governance Indicators (Figure E3, Annex E). Cumbersome regulatory requirements increase chances of corruption: a third of firms say they are expected to give gifts in meetings with officials and 37 percent expect to have to give gifts to public officials “to get things done”, including government contracts, licenses, permits, etc. (World Bank Enterprise Survey 2013).

While business registration requires few procedures, the cost of the process remains high. Tajikistan has recently reduced the number of procedures necessary to start a business from 14 to 4. However, the cost of registration (1,150 somoni or about 21.5 percent of income per capita) is very high (compared to about 4 percent of income in Moldova and Kyrgyz Republic) and remains the highest among comparator countries (Table E2, Annex E). This high cost may discourage firm creation and formalization of informal enterprises. Furthermore, closing a business has also been reported as challenging and cumbersome (UNCTAD 2016).

Further simplification of permit procedures is ongoing. Beyond registration, businesses need to obtain a number of authorizations before they may start operations, including licensing and permitting requirements.76

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76Only certain activities are subject to licensing requirements, but all businesses need some type of permit or authorization (UNCTAD 2016).
Some progress has been made with the adoption of the Law on Permits in 2011 with the goal to simplify the business permitting process, standardize procedures and reduce the total number of permits (UNCTAD 2016, (World Bank 2013b). To simplify permit issuing procedures and reduce the cost for businesses, an E-permit system has been introduced in two pilot ministries (the Ministry of Health and Social Protection and the Ministry of Transport, which issue 31 types of permits or 35.6 percent of the total number of permitting documents).

**Tajikistan has also modernized the regime for business inspections, but has yet to improve the coordination between inspectorates.** While there has been significant progress, the area of business inspections, which includes safety, environmental, labor, and other checks, remains a major obstacle to firms in Tajikistan, as they often present an excessive burden to firms and opportunities for unofficial payments. To further improve inspection practices, the new Law on Inspections of Business Entities was adopted in December 2015. The new Law, which entered into force on July 1, 2016, envisages that inspection bodies provide consultations to economic entities on compliance of their activities and reduction of risks, instead of detection of violations. In addition, the Law sets up new criteria for inspection bodies on reporting and performance appraisal and provides for greater transparency in carrying out inspections and training inspectors. The crucial strength of the new Law is the establishment of the Coordination Council under the Government to: i) coordinate the activities and plans of inspection bodies, ii) ensure uniform implementation of the Law by entire inspection bodies, iii) approve criteria for risk level assessment and operational performance appraisal, iv) review annual reports of inspection bodies, and v) make recommendations to the Government on inspection system reforms. As noted above, the key challenge going forward would be to ensure proper implementation of the new law and continuing involvement of the private sector in monitoring and improving the implementation of new legislation.

In addition, competition remains very weak in Tajikistan. According to the 2014 EBRD index of competition Tajikistan has one of the lowest scores (1.67) among comparison countries in ECA (Figure E7, Annex E). Research shows that better competition policy and improved governance lead to higher employment creation among late modernizers (Richter and Witkowski 2013). While basic competition legislation is in place, Tajikistan now needs to improve the implementation of the competition law. There are important exceptions to antimonopoly rules, since a large number of activities in different sectors are listed as natural monopolies. As discussed in Chapter 3, despite privatization, SOEs, which are active in various sectors in Tajikistan, continue to play an important role in the economy. Private firms cannot compete with SOEs under the same conditions, which undermines competition to a large extent.

All these constraints result in a low level of business density and high rates of informality, and the overall small size of the private sector (as shown in Chapter 3). The private sector is dominated by small firms that are often informal, and this makes it harder for formal businesses to compete because they face higher relative tax burdens and fewer counterparts with whom they can document fair transactions for purposes of VAT.

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77 Tajikistan’s 2006 inspections law requiring inspectors to present an inspection order and ID contributed to a sharp decrease in the number of inspections: the average Tajik private firm was inspected just twice in 2007, compared to 10 times in 2002, while small and medium companies went through an average of five inspections in 2007, less than half the number they endured in 2005 (IFC 2009).

78 The Law on Competition and Restriction of Monopolistic Activities on Markets of 2006 sets the basic principles and procedures of the Tajik competition regime and applies both to the regulation of private markets and to natural monopolies, including public utilities Amendments to the antimonopoly law were adopted in 2012. Among other changes, they lowered the threshold used for the definition of a dominant market position for a single company (UNCTAD 2016). The State Agency for Anti-Monopoly Policy and Enterprise Support is responsible for providing support for entrepreneurship; preventing and eliminating monopolistic activity, abuse of dominant market position, and unfair competition; and regulating prices for products of monopolistic enterprises.

79 These are listed in article 5 of the Law of 2008 on Natural Monopolies [amended in 2013] and include: transportation of oil via pipelines; procurement and transmission of natural gas through main and/or distribution pipelines, exploitation of gas distribution systems and related gas distribution pipelines; production, transmission, and/or distribution of electricity (or) heat; rail transport services; services of transport terminals, airports and air navigations; postal services, telecommunications using the network of local lines; services of water supply and/or sanitation systems; and local lines of air transportation services (UNCTAD 2016).
POLICY OPTIONS

Improve business regulations and overall regulatory quality:
• Lower further the costs of business registration procedures and adopt measures to simplify procedures for the closing of businesses; and
• Create an effective mechanism to ensure full and proper implementation of business inspection reforms and other reforms.

Improve SOE oversight and competition policies:
• Facilitate the exit of inefficient SOEs to make room for the entry of new, dynamic firms, and introduce governance structures that serve to promote greater efficiency in SOEs. This would also require assessing the job impacts of privatizations and preparing programs to compensate workers and facilitate transitions to new jobs or early retirement; and
• Improve the implementation of the competition law. This includes conducting a systematic review of all exceptions to the antimonopoly rules and focusing the mandate of the antimonopoly agency on sanctioning anticompetitive practices.80

Reduce transport and logistics costs and improve facilitation to expand trade

Developing tradable sectors and promoting exports in Tajikistan is key for sustainable growth and job creation. Indeed, Tajikistan has a relatively small domestic market, and so, for firms to expand to a competitive scale and create jobs, they will need to serve wider markets. Further, trade offers firms access to technology and knowledge that drive labor productivity growth. Recognizing potential significant gains from trade, Tajikistan was the second Central Asian country to be admitted to the World Trade Organization, in 2013. But the challenges the country faces are considerable.

First, Tajikistan is Central Asia’s least accessible, most isolated country, with only limited regional and international connectivity. This is partly a function of the country’s geography and topography: internal and regional communications and transportation are problematic, especially in winter. As a result, logistics costs are very high, accounting for about 23 percent of exported value and 18 percent of imported value (World Bank 2013). These costs greatly impact trade, the competitiveness of domestic products, and the potential for economic diversification, because they increase the costs of both inputs and exports. While railways could be more cost-effective, given the mountainous topography and small rail network, the share of road transport in overall traffic flows has been continually increasing. Roads are the country’s dominant mode of transport, carrying 90 percent of all passengers and almost 70 percent of cargo traffic.81 Overloading of trucks is a major problem in Tajikistan, increasing road deterioration and overall transportation costs.82

Second, regulations for international trade are extensive and border compliance is time consuming. Compared to neighboring countries, Tajikistan requires more associated time and cost for both exporting and importing goods (Table E3, Annex E). In line with WTO commitments, the Government has introduced parliamentary amendments to the Customs Code aimed at reducing the number of documents required for trade activities. Recently, Tajikistan made customs procedures more efficient by making it possible to submit customs declarations electronically. Existing clearance processes are generally consistent with regional practice and minimum international convention obligations, albeit with a high degree of physical interventions in cross-border movements.

80 For more detailed recommendations please see UNCTAD 2016.
82 Ministry of Transport (MoT) is currently in the process of reviewing the rules, regulations and standards of axle load control, which are currently enforced by the State Service on Control and Regulation. The State Service uses mobile scales located at border posts and at its regional offices to enforce current regulations, and a ban on travelling during the day has been issued for overloaded trucks with some limited results. The scales available in the country are old and require the vehicles to stop for the control of weight and inspection.
Tajikistan has been working on the development of the national Single Window for several years. However, the necessary technical capacity is lacking, and ITC infrastructure is inadequate among the agencies that should be connected to the private sector.

Third, Tajikistan, along with its neighbors, faces the challenge of connecting peripheral areas with regional and global economic centers of activity. At the core of this challenge is the need to rebuild a regional framework of connectivity that links population centers and economic hubs across borders in the Central Asia region, in particular in the highly populated Fergana Valley. Relatively small investments in cross-border transport links could potentially have a higher impact than the simple economic value added from reduced transportation costs. However, this is a longer term agenda and can only be achieved if reforms in other areas are addressed, including in trade facilitation.

**POLICY OPTIONS**

Reduce logistics costs:
- Address the issue of overloading of trucks with the weight-in-motion technology. While the upgrade of the existing axle-load-control system is planned, the introduction of weight-in-motion technology is needed to help address the issue of truck overloading; and
- Invest additional resources to develop procedures as well equipment to evaluate the road network data. This would be beneficial at both the project and network levels.

Further improve the trade facilitation regime:
- Continue to develop the national Single Window approach for exports, imports and goods in transit. This would address systemic issues, such as lack of technical capacity and insufficient ITC infrastructure, and thus improve the level of trade facilitation; and
- Further improve customs processes and procedures such as valuation and pre-arrival information to increase efficiency and transparency. For instance, it would be desirable to ensure that customs valuation is based on the value of the goods that are being imported (not a predetermined amount of duties) and introduce pre-arrival information to enable the customs administration to assess the risk of an incoming consignment before it even arrives at the border.

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83 The Single Window is a facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export, and transit-related regulatory requirements. It facilitates the exchange of trade relevant information between traders and government agencies, and amongst government agencies, for obtaining permits and licenses, certificates and necessary approvals, http://tfi.unece.org/contents/single-window-for-trade.htm

84 Supported by the on-going ADB-financed RIBs project as well as technical assistance provided by GIZ. For more information about the project and the approach, see: http://www.intrasoft-intl.com/e-customs/tjsw/about/approach/

85 Fergana Valley is home to more than 10 million people, or 31 percent of Tajikistan’s population, 51 percent of the Kyrgyz Republic’s and 27 percent of Uzbekistan’s.
Expand access to finance, especially for SMEs, to enable firms to grow

There is a growing body of evidence that shows that access to finance is important for job creation, especially among small and medium enterprises. For instance, a recent cross-country study of 50,000 firms across 70 developing countries found that increased access to finance results in higher employment growth, especially among micro, small, and medium enterprises (Ayyagari et al. 2016). While it is difficult to attribute job creation effects entirely to access to finance, there are two important channels through which access to finance positively affects jobs: i) external finance can increase the number of start-ups and facilitate entrepreneurship; and ii) access to formal financial sources allows higher investments in capital, new technologies, research and innovation. Thus, improving access to finance could have positive effects on employment via the creation of new firms and sustained growth of the existing ones (World Bank 2013).

Tajikistan’s financial inclusion indicators are weak by regional standards (Table E4, Annex E). Financial intermediation is low for several reasons, including low confidence in the banking sector, which decreased further in 2015-2016 following signs of a developing financial crisis, the weaknesses in the outreach of the banking sector to the regions,86 risk aversion of financial service providers due to non-transparent financial operations of SMEs and/or lack of transparent financial statements, and a lack of bankable projects. Banking penetration is low (deposits as a share of GDP were 14.2 percent in 2014), with less than 650,000 banking accounts and the availability of ATM and point of sale (POS) infrastructure very limited.87

Access to finance was reported as the biggest obstacle to operations by 22.6 percent of firms in Tajikistan in 2013.88 Moreover, access to finance remains unequal: only 15 percent of small firms and 11 percent of medium-size firms have a bank loan/line of credit, compared to 28.5 percent of large firms. Access to credit is more limited in rural areas (Tilekeyev 2014). Credit to the private sector increased from 20.2 percent of GDP in 2014 to 23.2 percent in June 2015, though this likely reflects a potentially problematic trend of aggressive credit growth in a financial sector marked by weak governance and a high non-performing loans (NPL) ratio. The reported NPL ratios (more than 60 days overdue) increased to around 30 percent of total loans by the end of 2015 from 9.5 percent at the end of 2012. Government interference and state-directed lending had also contributed to the deterioration of loan portfolio quality for many years (World Bank 2015c). The low level of access to credit and financial sector vulnerabilities may be partly responsible for the slow growth of small firms in Tajikistan, as observed in Chapter 3.

Maturity mismatches between SME financing needs and the ability of financial institutions to provide long-term financing, as well as high interest rates, prevent SMEs from accessing credit. Most loans are issued for a period of 6 to 18 months, 80 percent of loans are for less than one year, and the maximum maturity is three years.89 Interest rates and average interest rate spreads in Tajikistan remain the highest in the region (Table E5, Annex E).90 The high spread is often interpreted as a signal of inefficiency, low competition in the banking sector, and/or funding constraints and high operational costs. Both banks and microfinance institutions (MFIs) rely heavily on collateral rather than cash flow and business sustainability projections for lending decisions. That is why the average Loan-To-Value (LTV) ratio (or in other words, requirements for collateral) is above 120 percent, which limits access to finance for SMEs due to insufficient collateral. Most MFI lending is focused on urban centers, especially Dushanbe, Khujand and Kurgan Tube, but MFIs are expanding into rural areas more actively than the banks. Regulations on agent banking place limits on branchless banking services that MFIs can offer in rural areas. Finally, prolonged directed lending practices, as well as discriminatory bank forbearance, have undermined the level playing field in the financial sector.

86 There are 6.5 retail branches per 100,000 people compared to 7.8 in Kyrgyz Republic or 22.3 ECA average. Furthermore, the bank branches are concentrated in the western part of the country, predominantly in the main cities (WDI).
87 There are 10.4 ATMs per 100,000 people compared to 24.7 in Kyrgyz Republic or 49.2 ECA average (WDI).
88 Enterprise Survey 2013. Small firms are defined as 5-19 employees; medium as 20-99 employees; and large as those with more than 100 employees.
89 As of October 2014, the average maturity of corporate loans was 12.7 months, lower than that of retail loans (14.1 months).
90 The spread between the average lending rate and average deposit interest rate stood at about 12.4 percent in September 2015, but was as high as 17.8 percent in 2013.
POLICY OPTIONS

Stabilize and develop the banking sector:

- In the short run, prevent further deterioration of the banking sector. In addition to having an effective financial crisis preparedness and management mechanism in place,91 the National Bank of Tajikistan (NBT) should take urgent steps to resolve NPLs, put a new bank resolution framework in place and improve the financial stability of the system, and improve risk management and governance practices in the financial sector; and
- To improve the banking sector in the medium to long run, enhance enforcement of regulatory norms, strengthen credit practices and culture, and develop new lending mechanisms focused on SMEs’ financing needs.

Expand access to credit, particularly for small and medium enterprises and small-scale entrepreneurs:

- Diversify collateral requirements and proceed with secured transaction reform to reduce lending risks, so as to expand access to finance for the SME sector;
- Further develop financial institutions’ footprint across the whole country and
- Develop payment systems and alternative delivery channels to deliver financial services to rural areas of Tajikistan; and
- Support SMEs’ growth through financing new equipment and technologies. This can be done through the effective development of leasing as a financing mechanism and of lending products for equity and equipment financing. In addition, support can be given to financial institutions in developing new products specifically focused on SME financing.

Attract foreign direct investments to enable more jobs

Attracting higher levels of foreign direct investment (FDI) is an important part of the proposed jobs strategy. FDI can help create better (higher-skilled) and better-paid jobs, promote the transfer of knowledge, raise labor productivity, and diversify and upgrade the value-added component of exports—all of which affect a country’s ability to integrate with global value chains and grow. Research shows that, to mobilize FDI and maximize potential benefits, appropriate investment policies are required (Echandi, Krajcovicova and Qiang 2015).

Foreign and domestic investments in Tajikistan remain low (Figure E8, Annex E) and are concentrated in a few large projects, with the extractive sector attracting more than half of the inflows since 2009 (UNCTAD 2016). One of the key obstacles to attracting greater foreign investment is the relatively low level of protection afforded to investors in Tajikistan (Table E6, Annex E). The weak business environment and poor protection for investors leads to exceptionally low levels of overall investment in Tajikistan and undermines the government’s ability to invest in infrastructure because of difficulty in mobilizing public-private partnerships (PPPs).

Tajikistan’s legislation on investments has not been sufficiently detailed, which affected its clarity and predictability (UNCTAD 2016). The Law on Investment (2007) created a uniform regime for both local and foreign companies grounded on the principle of non-discrimination.93 A new Law on Investment was passed in March 2016 and defines FDI through a minimum threshold of 10 percent foreign ownership of firms. It also provides for setting up a one-stop shop for investors. Despite some improvements, the definition of investment remains very broad as it extends to portfolio investments, which are typically regulated by separate legislations due to the specific regulatory challenges that they pose. The Law on Investment Agreements (2013) does not identify priority sectors or provide established eligibility criteria for special treatment (e.g. size of investments, impact on employment creation) (Ibid). Until recently, foreign investors faced additional costs to register

91 Specifically, Financial Stability reports should be published on regular basis and be available for the market.
92 This protection includes equal treatment under domestic law, appeals and procedures to deal with expropriation, remittance of profits, contract enforcement, currency convertibility, rights for foreign citizens to own land and other assets, and other sector-specific issues.
companies, linked to translation and notarization requirements. To address this issue, in February 2015 Tajikistan acceded to the Apostille Convention.94

Tajikistan also has a number of tax incentives to attract investment and established four Free Economic Zones (FEZ), located in Sogd, Dangara, Panj and Ishkoshim, which provide reduced taxes and customs fees.95 The overall effect of these measures remains limited and results vary by FEZ.96 Currently, investment promotion policy rests with the State Committee on Investment and State Property Management (SCISPM) and implementation with an investment promotion agency “TajInvest.” In addition, the Ministry of Economic Development and Trade designs policies related to investment in the free economic zones. Tajikistan has also put in place a public-private dialogue (PPD) mechanism at the level of the President (the Consultative Council on Improvement of Investment Climate), which is tasked to discuss and prepare recommendations for submission to the President and the Government on issues related to private sector development and investment promotion. However, TajInvest’s capacity to carry out pro-active and targeted investment promotion campaigns is low. Moreover, coordination mechanisms between the agency and other stakeholders should be further developed in order to enhance the effectiveness of FDI promotion efforts (UNCTAD 2016).

POLICY OPTIONS

Improve investment policy coordination and implementation:

- Authorize a relevant state body (e.g. SCISPM) to coordinate all state bodies responsible for granting or monitoring investment incentives;
- Streamline the control and monitoring of procedures related to the awarding and subsequent application of investment benefits, which will make it possible to assess the effectiveness of those incentives;
- Reassess the incentive policy in terms of costs and benefits, which will enable state authorities to study how provision of the incentives contributes to achievement of their priority objectives and evaluate various costs related to those incentives.
- Publish cohesive, consistent and consolidated information about investment incentives available in Tajikistan on the official websites of state bodies; and
- Move forward with reforms to create a single window for foreign investors (UNCTAD 2016).

Getting the future workforce off to a good start now is key to success in the future. While this pillar primarily focuses on getting the fundamentals right in terms of enabling more private sector investment, a key ingredient of success in the future would be to have a workforce that is equipped for the new type of jobs that such investments might bring. Therefore, a long-term strategy should also involve long-term investments in human capital. While human development policies such as early childhood and basic education are outside the scope of a Jobs Strategy, it is, nevertheless, an important fundamental to ensure that the jobs created in the future have the workers with the necessary skills. The successful policies to help ensure this are highlighted in Spotlight 2.

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95 Free economic zones provide an exemption from payment of corporate taxes, except for income tax and social tax in respect of employees. In addition, they are exempt of all customs duties, VAT and excise taxation for both foreign and domestic goods imported to the zones. Source: UNCTAD 2016.
96 Sogd FEZ has 25 investors, Dangara FEZ has attracted 23 investors, Panj FEZ hosts 8 investors, while Ishkoshim FEZ has attracted no investors so far. The uneven development of the zones reflects the uneven development of the regions of the country where they are located. Source: UNCTAD 2016.
The creation of quality jobs depends critically on the levels and relevance of skills in the workforce. To meet the expected growing demand for better higher-order skills in the workplace, policy makers need to address skill formation across all stages of life (Figure 1): from conception to preschool (or early childhood development [ECD]); general education; higher education; and in-work training for members of the workforce. At all levels of education and training, a broad focus on cognitive and non-cognitive skill formation is crucial to ensure that skills are valued in the current and future labor market. The market needs a comprehensive skills development strategy that improves the quality and relevance of education and training in a way that everyone is able to build market-valued skills.

The importance of skills for employment outcomes is clear, yet Tajikistan’s skill-formation track record for education and training is mixed. Workers with higher educational attainment generally have higher cognitive and non-cognitive skills, while there is considerable variation in these skills across workers within educational attainment categories, which means that there are too many low performers in each educational attainment level.

Although the education system in Tajikistan provides universal access to education and enrollment at primary and secondary education is comparable to regional averages, skills gaps emerge at early ages given the low coverage of early childhood education (ECE) programs. In Tajikistan, only 12 percent of preschool age children attended ECE programs in 2014 (compared to 34 percent in Uzbekistan). In addition, the effectiveness of the existing public pre-school education is a concern in light of the 2011 USAID the Early Grades Reading Assessment (EGRA) finding that primary school children who had attended pre-school did not have better reading skills than children who had not attended pre-school.

Given that the foundations of cognitive and behavioral skills are formed early in life, the early childhood period is critical in the development of these skills, and this includes having adequate nutrition and stimulation. With respect to the former, approximately 15 percent of all children under the age of five suffer from malnutrition and moderate and severe stunting is prevalent, affecting 39 percent of all children under the age of five (UNICEF 2013, WHO 2013). Malnutrition and stunting severely, and often irreversibly, affect children’s physical and cognitive development, which in turn limits their capacity to learn. In general, rural children and children born to mothers with less education are more likely to be stunted.

While coverage for general education is relatively high (more than 90 percent enrolled in grade 9), performance of the general education system in terms of learning achievements could be improved. 30 percent of girls and 31 percent of boys in Grade 2 did not meet national standards for reading fluency, rising to 45 percent and 56 percent, respectively, in Grade 4 (EGRA). Students also struggled with inferential questions, indicating low levels of cognitive development in terms of critical thinking and reading comprehension.

Figure 1
Skills are developed in all stages of life—very stylized

![Diagram showing the development of skills from 0 to 3, 3 to 5, primary school, secondary school, post-secondary, and life-long learning.](Source: World Bank (2013a).)
POLICY OPTIONS

The following suggestions must be prioritized if the skills attainment among the future Tajik workforce is to be improved. These measures are unlikely to impact new labor market entrants in the short- to medium-term, but are important for preparing future cohorts for the labor market.

Getting children off to the right start by expanding access to quality ECD programs which are critical to ensuring that all children acquire the cognitive and non-cognitive skills that are conducive to high productivity and flexibility in the labor market. This entails:

- Supporting access to quality pre-school services through expansion of half-day pre-school programs; and
- Developing a multi-sectoral policy to ensure a holistic approach to ECD. This needs to include measures to provide multi-sectoral services to children 0 to 3 years old and to reach their parents with educational support on feeding, child development, curriculum and other issues of concern.

Ensuring that all students learn effectively by modernizing the curriculum and improving teaching quality, in order to strengthen the link between educational attainment and cognitive and non-cognitive skills. This entails:

- Continuing the reforms to move from knowledge- to competency-based learning in general education and incorporating life skills in the basic education curriculum
- Updating teacher preparation and/or professional development to ensure the pipeline and current supply of teachers is well prepared to implement the revised ECD programs, and other changes to the curriculum. These changes are necessary but will have no impact if teachers are not prepared.
- Ensuring that updating of the curriculum is a continuous process based on substantive and sustainable feedback between the labor market and professional education.
- Establishing or enhancing a Quality Assurance System for all levels of education.

Source: This spotlight draws extensively on Ajwad et al. 2014.

PILLAR 2: IMPROVING PRODUCTIVITY AND EARNINGS, AND ACCESS TO FORMAL JOBS

The quality of jobs in Tajikistan is a concern, as many people have jobs, but of a temporary, seasonal, or occasional nature without a regular source of income. These are jobs with low labor productivity and earnings, and often poor working conditions. The majority of these jobs are informal, not offering basic social protections in case of job loss, injury or sickness. There is an important agenda therefore to improve the quality of jobs with a focus on poor and vulnerable workers. The quality of jobs is a particular issue outside of Dushanbe, especially in rural areas, where a large part of the population still relies on agriculture as the main source of employment. With poor access to national and international markets, farmers are forced to operate on a subsistence level or trade in thin local markets where returns could be suppressed by low demand.

This second pillar of the strategy focuses on strengthening selected value chains, connecting small producers and firms, and improving incentives for formal jobs. Developing and integrating value chains97 offers the potential to create and improve the quality of jobs in rural regions and in urban areas alike, both to wage earners and the self-employed (small producers and microenterprises). This requires provision of tools and mechanisms for managing market failures (such as access to markets or finance, in particular for small producers) and risks and vulnerabilities (through social insurance for vulnerable workers, e.g. informal wage employees working without a contract, self-employed not contributing to social insurance, unpaid family workers). It is important to improve the incentives for both firms and workers to formalize.

The following discussion is organized around the following set of policies: i) Strengthening local value chains and support to rural SMEs; and ii) Improving incentives for formal jobs.

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97 A value chain consists of the activities needed to bring a product from the initial idea and conception to its final market. These activities include design, production, marketing, distribution and support services, up to the final consumer.
Strengthening local value chains and support to rural SMEs

The market organization (value chains) in the agriculture sector remains fragmented, which limits the country’s ability to respond effectively to market opportunities. On the demand side, issues range from poor access to credit for working capital and investments to weak market links. Along with barriers to entry and expansion, all of these constrain the demand of agro-processors and traders for agricultural commodities. As a result, processing companies and traders struggle to secure a reliable supply of raw material, lack investment finance to modernize their equipment, and have limited knowledge of improved technologies, modern product standards and food safety. On the supply side, low farm productivity—resulting primarily from poor access to investment and working capital finance and technological knowledge—limits value added. Farmer capacity to market their products is also constrained by inexperience with market activity and low economies of scale. Only one-third of crop producers currently sell their output and, of those, more than half (52 percent) sell at the farm gate (World Bank 2013a). An estimated 32 percent sell in local markets and 15 percent in national or export markets. Farm input markets are also weak. Strengthening the competitiveness of agricultural value chains is critical to providing sustainable, productive earnings opportunities for households outside of the metropolitan areas.

Rural SMEs tend to face a double challenge of distance from markets and small size. This is compounded by lack of access to critical services that support market access and the exploitation of scale economies. While rural SMEs in Tajikistan are not restricted from access to finance, their options are often limited only to what is available from microfinance institutions with rural outreach. On the other hand, SMEs in urban areas enjoy access to a much wider variety of financial products. Similarly, while urban SMEs can take advantage of multiple information networks that flow from urban agglomerations, rural SMEs could be dislocated from such information and business networks, and often lack the ICT infrastructure to access information through alternative sources. Thus, supporting rural SMEs will require targeted support for market information and access to finance that may be qualitatively different, both in the nature of the service and its delivery.

The policy options below have broad applicability. While the focus is on rural areas, given that this is where the majority of people still reside, and the agricultural sector, where a large share of people work, these policies could be equally applicable to other sectors of the economy and areas of the country. Spotlight 3 provides further discussion of the agricultural sector and measures that can support the creation of better jobs in the sector.

POLICY OPTIONS

Promote value chain development:
- Support the links between small producer and lead firms in the value chains;
- Facilitate opportunities for value addition (processing); and
- Pilot comprehensive value chain development strategies in specific sub-sectors and regions, including, for example, interventions to raise skills and productivity at the farm/firm level, investment in logistics infrastructure and services, access to finance, and market access support.

Increase support to rural SMEs for access to new technologies, information, networks, and finance:
- Consider piloting subsidized access to new technologies, ICT, and innovative platforms for information delivery, and opening up new channels for SME finance; and
- Ensure the availability of products that are relevant to rural business needs (e.g. agriculture), business incubation, and promoting business networks.

Data of TajStat. Data on agriculture employment varies for different sources, placing the number between 48 and 66 percent.
Improve incentives for formal jobs

Informality is pervasive in Tajikistan. The decision to operate formally vs. informally involves costs and benefits for both employers and workers. The formal sector brings the potential for higher productivity and earnings and greater worker security. But the costs are not negligible, such as taxes on profits and earnings; social security contributions; and the costs of registration and compliance with government regulations.

The social security system is not well designed to promote formalization. Tajikistan has a formal social security system composed of old-age, disability, and survivorship pensions as well as unemployment, sickness, and maternity insurances, and other benefits. The system is funded by a contribution of 25 percent levied on the wage bill of the formal sector and 20 percent applied to net revenues of the self-employed. The current social insurance system does not provide incentives for the informal sector to join and does not explicitly cater to them, apart from the reduced contribution rate; no other special schemes are offered for informal sector or agriculture workers. Furthermore, high labor taxes may be pushing employment to the shadow economy/informal sector. The current total rate of social security contributions is 26 percent99 (compared to 10 percent in Kazakhstan) and may be prohibitively high, especially for small and medium-sized firms, operating in low productivity sectors.

Coverage of the informal sector by social security schemes remains low. The Tax Administration is in charge of collecting all social security contributions; however, underpayments and underreporting are prevalent. This results both in underfunding of the pension scheme and in the inability of some workers to accrue pension rights. More efforts need to be put in place to expand the coverage of the informal sector, through enhanced design and implementation which takes into account current constraints such as the low productivity of informal businesses/the self-employed.

POLICY OPTIONS

Consider strengthening incentives to formalize jobs and expand social security coverage:

- Assess whether the current system of labor taxation may be discouraging formalization; for example: Is the rate of social security contributions too high especially for SMEs in low productivity sectors? Is the current regime for the self-employed providing sufficient incentives for them all to contribute?
- Research options for effective engagement with rural workers, utilizing various forms of presumed taxation for assessment of contribution liabilities.

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99 Employer pays 25 percent of gross salaries to finance old age, disability, and survivor pensions. Employee pays 1 percent, which is meant to finance a notional defined contribution account introduced in 2013. The employer’s contributions also finance sickness and maternity, unemployment benefits and family allowance. Self-employed persons pay 20 percent of declared income; certain categories of self-employed pay a flat-rate contribution of 15 somoni.
SPOTLIGHT 3: AGRICULTURE EMPLOYMENT AND PRODUCTIVITY IN TAJIKISTAN

Sector Overview

93 percent of Tajikistan is covered in mountains; arable land accounts for only 6 percent of the total land area. Despite this, the agricultural sector accounts for more than 24 percent of GDP and up to 66 percent of total employment. The sector has a strong impact on the country’s overall economic performance, and it plays a major role in poverty reduction, as more than 75 percent of the poor live in rural areas [World Bank 2014a].

The Agricultural Sector in Tajikistan is important for:

- **Employment, mainly in rural areas.** Agricultural employment accounts for nearly 40 percent of total rural employment, around 38 percent of which comes from salaried jobs in non-farm activities [World Bank 2013a].
- **Poverty reduction.** Crop, and livestock production, along with remittances, are the top three most common sources of income for poor households [World Bank 2013a].
- **Food security.** Growth in the agricultural sector also contributes to improved food security. As much as 75 percent of agricultural output could be consumed on-farm [World Bank 2014a]. At the same time, almost a third of the population suffers from malnutrition. Tajikistan’s households spend a large share of their income on food: more than around 50 percent on average, and the poorest households spend even more than 60 percent of their income on food.

The sector has been undergoing continuous structural reforms, especially since the 2007 Freedom to Farm Reform. The improved performance of the agricultural sector in the country has been stimulated by the land privatization and agriculture reforms of the last 20 years, in particular the Freedom to Farm Reform (Figure 1).

The reforms have promoted a dramatic increase in the share of private and individual farming. Small-scale, private dekhan farms with an average of 2.8 hectares (Ha) of arable land and 4.9 Ha of agricultural land, have increased in number to more than 125,000 [2014]. Dekhans now control agricultural production with 80 percent of arable land and 70 percent of agricultural land, and they continue to grow in number as the land reform continues to progress. Today, private farms contribute 91 percent of the Gross Agricultural Output (GAD), up from 36 percent in 1991.

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**Figure 1**
Agriculture value added per worker (2000–2013, in constant 2005 US$)

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100 Data of TajStat. Data on agriculture employment varies for different sources, placing the number between 48 and 66 percent.
101 Which tend to be owned by multiple shareholders, such as extended families. In most cases, the land plot owned by one such farm shareholder is 0.2 Ha.
Although farm productivity and labor productivity have increased significantly in response to this reform, they still lag other countries in the region and elsewhere. Even though such reforms have increased farm output, the scale of farm operations has fallen as a result of the breakup of the collective farms, thus hindering economies of scale in production and sale of agricultural products. Labor productivity, although improving, lags behind some of the comparator countries (Figure 2).

Weak agricultural commercialization has limited the sector’s ability to benefit from the growth in demand for agricultural products in domestic and export markets. Only one-third of crop producers currently sell their output, and more than half of these [52 percent] sell at the farm gate (World Bank 2013a). In domestic markets, the volume of food retail trade grew by 39 percent in real terms from 2007–2012, in response to increased personal disposable income and continued population growth. Yet, most of this increased demand has been met by imports, which grew by 11.6 percent annually during 2006–2011. Exports of Tajik food products grew at a much slower rate, by an average of only 4.7 percent during the same period. Market organization (value chains) in the agriculture sector remains fragmented and disjointed, and this limits the country’s ability to respond effectively to market opportunities.

The investment climate does not fully support competitive agribusiness development. The Enabling Business of Agriculture Survey evaluates three cross-cutting categories: (i) Operation indicators: these identify and measure the requirements for local companies on how to enter the market and start business activities; (ii) Quality control indicators: these measure the regulations governing plant protection, the safety standards for users of agricultural machinery and quality control associated with seeds and fertilizer products; and (iii) Trade indicators: these measure trade restrictions on exporting agricultural products; importing fertilizer and tractors; and transporting goods across borders. While Tajikistan is doing quite well in the areas of markets and transport, access to fertilizer is difficult, and access to finance seems to be particularly constrained. It should be noted, however, that assessments of market access and transport are regulatory-based and may not capture the difficulties on the ground.

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Figure 2
Agriculture value added per worker (constant 2005 US$), 2013

Source: World Development Indicators
POLICY RECOMMENDATIONS

- **Promote agricultural sector linkages and organization by removing demand and supply side constraints along the value chains.** On the demand side, issues to be addressed range from poor access to credit for working capital and investments to weak market links. Barriers to entry and expansion constrain the demand of agro-processors and traders for agricultural commodities. On the supply side, lack of skills needs to be addressed through assessments, followed by provision of training and advisory services necessary to support increased commercialization of farm and agribusiness products for producer associations, farmers, agro-processors, agribusiness enterprises, and agro-input dealers.

- **Improve the capacity to identify and respond to market opportunities.** This is particularly important now, given that regional export markets are expected to grow strongly in response to improved rail links through southern Tajikistan into Turkmenistan; this is a route that also affords access to markets in the Caucasus, the Middle East, and Europe. Market intelligence should be developed as part of training, as well as the establishment of a virtual stock market for agro-based products.

- **Refocus the education system (in particular in agriculture and food technology) to respond to the future market demand of a highly skilled labor force in agriculture and agribusiness.** This would need to include curriculum modernization and re-orientation to the issues faced by the new generation of mixed, small-scale farms, and commercial agribusiness enterprises. Moreover, the expansion of farmer training programs should be supported by financing measures to update their curricula, teaching materials, equipment, and facilities.

- **Further promote agro-processing in both rural and urban areas.** The expansion of the agro-processing sector and the promotion of high value agriculture could support the creation of on-farm and off-farm agricultural employment in both rural and urban areas [as large-scale agro-processors tend to locate their plants in or near urban areas]. This could involve niche products such as flowers, which is usually more labor-intensive and requires a highly qualified labor force.

- **Improve productivity.** Productivity gains can be realized through improved access to agricultural inputs and better on-farm management techniques, such as better soil preparation, optimum fertilizer and chemical use; wider use of improved varieties and certified seeds; increased fodder production; and better livestock husbandry.

- **Support rural non-farm SMEs.** Although the developed supply chains will create new opportunities, it will not fully compensate for the jobs lost in primary agriculture. New jobs and opportunities need to be generated in rural non-farm sectors [services and manufacturing].

Spotlight contributed by Izabela Leao and Sandra Broka.

PILLAR 3: CONNECTING PEOPLE TO JOBS

Chapter 2 outlined a number of problems with the labor market, namely: i) there are too many potential workers outside the labor force, especially women and youth; ii) there are significant differences in labor market outcomes of individuals depending on their educational attainment, region of residence and gender; and iii) migration is an important jobs strategy for many Tajik households.

This third pillar of the strategy therefore focuses on a set of supply side policies and programs aimed at: i) increasing labor force participation through a set of enabling policies; ii) improving access to jobs through labor market policies; and iii) increasing and leveraging the benefits of migration.

**Promote enabling policies to increase labor force participation**

As Chapter 2 shows, women and youth are highly represented among potential workers who are outside the labor force and thus, are not contributing to the economy. Female labor force participation (and employment) rates are lower than male labor force participation (and employment) rates at all age groups, indicating that there may be significant barriers for women to enter the labor market (including, childcare duties, lack of education and skills, legislative barriers, social norms and discrimination). However, those women who would like to enter the labor force and have gainful employment are likely to face more barriers than men.
A lack of affordable, high-quality childcare and day-care facilities and family support are important barriers to labor market participation, especially among young women (Davalos et al. 2016). In Tajikistan, there was a steady deterioration in access to pre-schools following independence and the civil war. Several studies have established the positive effect that affordable childcare options can have on boosting female labor supply. Early childhood education programs can also be part of Tajikistan’s long-term jobs strategy because they ensure that all children acquire the cognitive and non-cognitive skills that are conducive to high productivity when those children grow up and join the labor market (Spotlight 2).

Finally, some of the barriers to female labor force participation are legislative. Tajikistan’s labor legislation has a number restrictions that bar women from participating in some occupations or sectors (Spotlight 1). These could dissuade women from undertaking studies in certain fields and entering the labor market. Conversely, law abiding entrepreneurs will be reluctant to hire women to carry out tasks if they are legally prohibited from doing so. The two reinforcing actions lead to segregation, and in many cases, wages get inflated in gender segregated industries (World Bank 2016e). Removing these legislative barriers to female employment is not expensive and other countries have done so successfully.

There are a number of factors that keep youth out of the labor force. Although more work is needed in this area, the key determinants of inactivity appear to be high reservation wages in anticipation of migration opportunities, low educational attainment, and location of residence.

POLICY OPTIONS

Increase childcare and early childhood education access:
- Expand good-quality and affordable childcare and expand access to early childhood education, thereby helping to bring women into the labor market.

Remove legislative restrictions to sectors and occupations:
- Remove unnecessary gender based restrictions to increase the employment opportunities for women and reduce occupational segregation. These legislative changes have the potential to improve women’s earnings potential, since many restricted jobs are often in higher-paying sectors.

Consider interventions to overcome and influence social norms:
- Shift aspirations and expectations through role models and mentoring, or media interventions (e.g. TV, campaigns, radio), to expose people to information and role models;
- Disseminate information on increased job opportunities for young women.

Use labor market policies to improve access to jobs

There are information asymmetries in the Tajik labor market. For example, more than two-thirds of all working age adults (68 percent) indicated that they face significant constraints in learning about job vacancies in Tajikistan (Arias at al. 2014). Similarly, there is no information system, such as a labor market observatory, that offers students information about labor market outcomes to help them make informed choices about what topics to specialize in. Labor market intermediation and labor market observatories can facilitate movement across geographic areas and can provide the information needed to help students make more informed choices, because they provide information about job vacancies and wages for workers. A number of countries have

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102 With the collapse of the Soviet system and the destruction during the civil war, the network of pre-schools in Tajikistan deteriorated. From 1991 to 2009 the total number of pre-schools fell from 944 in 1991 to 467 in 2009. There was also a misallocation of pre-schools geographically; by 2009, there were 350 pre-schools in urban areas compared to 137 in rural areas. For a country that is about 27 percent urbanized, the disproportionate distribution of pre-schools in urban areas shows that the existing pre-schools are not strategically positioned (ILO, 2014).

103 See, for example, Attanasio, Low, and Sanchez-Marcos (2008); Nollenberger and Rodríguez-Planas (2011); Sánchez-Mangas and Sánchez-Marcos (2008).

104 Hungary and Belarus are two examples of countries in the Europe and Central Asia region where reforms were introduced to remove or reduce the number of gender based employment restrictions.
successfully implemented labor market information systems to reduce information asymmetries. In Poland, for example, an employment observatory was introduced to provide information on job availability, wages, career prospects, and hiring expectations (Arias et al. 2014). Employment observatories have also been established in Chile and Colombia. The rationale behind employment observatories is that information about major industries, recent growth areas, occupations experiencing shortages, qualifications needed for jobs, and other relevant information, can help people make better-informed choices about their education and careers. Access to this type of information is widely available in the United States, the EU countries, and Australia.

**Active labor market programs can be used to help people transition from inactivity to work or to access better jobs, but the current range and scale of programs is very limited.** Active labor market programs (ALMPs), which are usually a combination of policy tools that support and incentivize job-searching and job-finding, have been used effectively in many countries. ALMPs can strengthen the motivation, the capabilities, and the opportunities of a targeted population. ALMPs cover a wide range of interventions that can target labor supply with, for example, training programs, and labor demand through, for example, public works projects or employment subsidies. They can also foster the matching of workers and jobs through intermediation services. The current range and scope of programs offered in Tajikistan remains limited, however.

**Educational attainment is a key determinant of employment outcomes but skills mismatches persist in Tajikistan** (Ajwad et al. 2014). Problems include: the relevance of results from a predominantly supply-driven orientation to skills development, weak linkages between education institutions and the labor market, obsolete education standards, and curricula that are not based on occupational and functional analysis. The lack of a functioning and independent qualifications system exacerbates the challenge of reducing inefficiencies due to unnecessary or irrelevant education and training provision. The issues of the quality and relevance of TVET and higher education are high on the Government’s agenda, and there are two simultaneous donor-supported efforts aimed at modernizing both sectors in improving the skills and labor market outcomes of youth in Tajikistan.105 In recent years, Tajikistan’s TVET system has been benefiting from support from international development partners.106 These partners are now seeking to address past constraints, including: i) insufficient involvement of local authorities; ii) weak capacity and experience of TVET staff; iii) limited resources to modernize facilities and teaching materials; and iv) weak mechanisms for monitoring and evaluating implementation of the TVET strategy (ETF, 2015).

**In addition, there are limited opportunities for relevant training and retraining opportunities, even on the job.** While there is a perception that the skills being taught at TVET institutions and universities are poorly aligned with the needs of employers, very few employers offer on the job training (OJT) to employees. In Tajikistan, only one third of firms offer their employees formal training, while small firms are least likely to offer training (21.7 percent) compared to medium (43 percent) and large firms (52.6 percent) (World Bank Group Enterprise Survey 2013).

**POLICY OPTIONS**

**Improve information on education and training and labor markets available to labor market participants:**
- Scale up labor market information systems and labor market intermediation services to help improve the job search;
- Enhance the Employment Agency’s capacity to provide information to clients (graduating students, first time jobseekers, women, etc.) and better match them with services and vacancies; and
- Provide professional orientation in the school system and early in the school-to-work transition to provide youth with information that can inform their educational and labor market choices.

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105 The Asian Development Bank (ADB) supports a $32 million project, approved in November 2015, to promote a demand-driven, quality-assured, and flexible technical and vocational education and training (TVET) delivery system in Tajikistan. The project aims to modernize the TVET system by developing industry-endorsed standards, and competency-based training and assessment tools for 17 priority occupations. Additionally, in June 2015 The World Bank Board approved a US$15 million Tajikistan Higher Education Project with a goal to develop mechanisms that improve and monitor the quality and labor-market relevance of higher education.

106 Partners include the European Training Foundation (ETF) and the Asian Development Bank.
Pilot targeted active labor market programs to activate the inactive population and connect job seekers to better jobs:

- Consider the “public works plus” model,\(^\text{107}\) which in addition to providing income support, links beneficiaries to employment and community services; and
- Profile beneficiaries before offering these programs. Tailoring programs to target groups, carrying out monitoring and evaluation, and in general providing integrated services can be more effective than individual services.

Implement integrated training programs and promote on the job training to upskill potential and current workers:

- Consider integrated programs that combine training (i.e., job and/or life-skills training), job search assistance, entrepreneurial services, and a range of other social and employment-related support services (Sanchez Puerta et al. 2015); and
- Leverage international experience, which suggests that the key to making training programs successful is to put in place incentives for training, such as placing beneficiaries in jobs through performance-based contracts (Ibid).
- Consider short-term subsidies or matching grants to firms to invest in on-the-job training: To address under-provision of OJT, consider providing short-term subsidies or matching grants to firms to incentivize them to invest in training of their employees. Such grants could be targeted to firms with growth potential, such as young innovative start-ups, rather than focusing only on firm size. Other firm characteristics that could be used as proxies for targeting include the firm’s sector of activity, the frequency of technology adoption, or the gaps between wages and productivity (Sanchez Puerta et al. 2015).

Consider programs targeted at youth taking into account lessons learned:\(^\text{108}\)

- Integrate interventions/services: youth are likely to face multiple constraints affecting their likelihood of getting a job and the associated earnings. Thus, offering an integrated package of services increases the likelihood of success of a given program, especially in low- and middle-income countries. However, there do not seem to be any strong patterns of specific interventions that perform better than others. It depends on the characteristics and challenges faced by the targeted population, as well as the country context;
- Profile beneficiaries: profiling is the identification of individual factors that represent a risk in the labor market and assigning appropriate services based on this, which allows a better understanding and response to the constraints faced by individuals, and thus they can be directed to the services that best fit the challenges they face and their needs;
- Provide incentives for private sector providers: Programs implemented solely by the private sector seem to perform better than joint public-private implementation or sole implementation by the government. The rationale may be that such providers are better positioned to respond to the needs of both employers and job seekers. Therefore, outsourcing services to competitively selected private sector providers paid by performance and results may contribute to improved outcomes; and
- Establish strong monitoring systems: a monitoring system that continuously tracks beneficiaries’ performance during the program increases the likelihood that they complete and/or reach better results; such a system aims to ensure that the intervention is delivering the expected results, and to obtain feedback on whether adjustments are needed both in the composition and intensity of services.

Scale up policies and programs to better leverage migration

Migration has become and will continue to be an important component of Tajikistan’s jobs strategy. Migration has alleviated the pressure on the Tajik labor market by giving workers opportunities to earn higher incomes, sometimes many multiples of the wages that they would receive in Tajikistan. In addition, many of the

\(^{107}\) Subbarao et al. 2013.

\(^{108}\) Kluev at al. (2016).
returning migrant workers believe that the international work experience they received has a positive impact on current work opportunities in Tajikistan. Tajik preference for work in the Russian Federation is not surprising given the historical ties and the significant wage differential between the two countries (in 2014, formal sector construction wages were US$800 per month in the Russian Federation and US$400 in Tajikistan). However, in the absence of established alternative destinations, Tajikistan’s sole reliance on the Russian Federation for migration exposes it to economic shocks.

**Reintegration of return migrants presents a challenge.** In addition, returning migrants face challenges as they reintegrate into the domestic economy. There are only two functioning migration integration centers in Tajikistan and they have limited capacity. As a result, few return migrants pass through these centers and certification and recertification of skills occurs infrequently. Finally, it is also important to ensure that migrants have access to social security and are able to access their benefits in old age.

**POLICY OPTIONS**

**Diversify migration destinations:**
- Tajikistan could consider South Korea as an alternative potential destination for its migrants. For example, South Korea has established the General Employment Permit Program, in which Uzbekistan and the Kyrgyz Republic already participate, and Tajikistan could consider applying to the program; and
- Tajikistan’s young and growing population can be a source of labor for a number of Eastern European countries, most of which have aging populations and have low population growth rates in need of low and unskilled labor.

**Upgrade migrant skills and improve pre-departure services:**
- Implement skills upgrading or offer complimentary courses to improve skills needed in receiving countries. Thereby, the demand for Tajik labor can be increased abroad; and
- Improve pre-departure services to provide information as well as “life skills” training to potential migrants. Programs around the world vary in length and scope, but should be shaped by the needs of the migrants and their awareness of the laws in the countries to which they are going.

**Certify skills of returning migrants:**
- Support skills assessment for returning workers so they can reintegrate and make maximum use of their new skills; and
- Provide institutional support to migration centers and Adult Education Centers so they can play a bigger role in this effort.

**Strengthen advisory services for returning migrants:**
- Expand and strengthen advisory services (business advice and financial services) to assist returnee migrants so they can invest their capital wisely.

**Improve social security options for labor migrants:**
- Provide options of social security participation for workers overseas, especially where Tajikistan has not signed social security agreements.

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109 Authors’ calculations based on data from TajStat and Federal State Statistics Service of Russia.
## ANNEX A. LABOR SUPPLY ANALYSIS SUMMARY TABLES

### Table A1
Labor Force Participation Rate by Age Cohort

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<td>42.8</td>
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### Table A2
Labor Force Participation Rate by Consumption Quintile

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<td><strong>Total</strong></td>
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### Table A3
Labor Force Participation Rate by Rural/Urban Location

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*Note:* Excluding current migrants. Working-age population 15–64 y.o.
### Table A4
**Labor Force Participation Rate by Education Level**

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<td>Secondary general</td>
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### Table A5
**Employment Rate by Age Cohort**

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### Table A6
**Employment Rate by Consumption Quintile**

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<th>Consumption quintile</th>
<th>All</th>
<th>Male</th>
<th>Female</th>
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</thead>
<tbody>
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<td>1</td>
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<td>2</td>
<td>39.8</td>
<td>59.3</td>
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<td>39.7</td>
<td>61</td>
<td>23.8</td>
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<td>4</td>
<td>42.7</td>
<td>61.9</td>
<td>28.8</td>
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<td>44.6</td>
<td>63.9</td>
<td>29.7</td>
</tr>
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<td><strong>Total</strong></td>
<td><strong>40.4</strong></td>
<td><strong>60.7</strong></td>
<td><strong>25.8</strong></td>
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### Table A7
Employment Rate by Rural/Urban Location

<table>
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<tr>
<th></th>
<th>All</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
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<td>26</td>
</tr>
<tr>
<td>Rural</td>
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<td>25.7</td>
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<tr>
<td>Total</td>
<td>40.4</td>
<td>60.7</td>
<td>25.8</td>
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</table>

*Note:* Excluding current migrants. Working-age population 15–64 y.o.

### Table A8
Employment Rate by Education Level

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<thead>
<tr>
<th>Education Level</th>
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<th>Female</th>
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<tr>
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<tr>
<td>Secondary general</td>
<td>42.9</td>
<td>73.5</td>
<td>26</td>
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<tr>
<td>Secondary technical/special</td>
<td>70.4</td>
<td>80.5</td>
<td>55</td>
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<tr>
<td>Tertiary</td>
<td>78.9</td>
<td>84.4</td>
<td>67.9</td>
</tr>
<tr>
<td>Total</td>
<td>49.6</td>
<td>76.5</td>
<td>30.6</td>
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</table>


### Table A9
Employment Status by Age Cohort: All

<table>
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<tr>
<th>Age Cohort</th>
<th>Employed (%)</th>
<th>Unemployed (%)</th>
<th>Discouraged (%)</th>
<th>Inactive (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
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<td>11.6</td>
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<td>10</td>
<td>38.7</td>
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<td>35-39</td>
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<td>5.7</td>
<td>37.2</td>
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<td>3.3</td>
<td>35.4</td>
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<td>4.2</td>
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<tr>
<td>55-59</td>
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<td>3</td>
<td>44.9</td>
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<tr>
<td>60-64</td>
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<td>4.2</td>
<td>58.4</td>
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<td>2.3</td>
<td>8.4</td>
<td>49</td>
</tr>
</tbody>
</table>

### Table A10
Employment Status by Age Cohort: Male

<table>
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<tr>
<th>Age Cohort</th>
<th>Employed (%)</th>
<th>Unemployed (%)</th>
<th>Discouraged (%)</th>
<th>Inactive (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
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<td>9.6</td>
<td>72.9</td>
</tr>
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<td>3.7</td>
<td>17.2</td>
<td>28.6</td>
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<td>15.3</td>
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<td>7.1</td>
<td>8</td>
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<tr>
<td>40-44</td>
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<td>5.3</td>
<td>8.3</td>
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<td>5.5</td>
<td>10.6</td>
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<td>1.7</td>
<td>8.8</td>
<td>10.9</td>
</tr>
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<td>1.5</td>
<td>4.4</td>
<td>17.1</td>
</tr>
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<td>0.9</td>
<td>7.1</td>
<td>33.4</td>
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<td><strong>10.2</strong></td>
<td><strong>26.8</strong></td>
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### Table A11
Employment Status by Age Cohort: Female

<table>
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<tr>
<th>Age Cohort</th>
<th>Employed (%)</th>
<th>Unemployed (%)</th>
<th>Discouraged (%)</th>
<th>Inactive (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
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<td>1.5</td>
<td>13.2</td>
<td>72.1</td>
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<tr>
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<td>12</td>
<td>66.4</td>
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<tr>
<td>25-29</td>
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<td>30-34</td>
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<td>3.6</td>
<td>8.7</td>
<td>61.4</td>
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<tr>
<td>35-39</td>
<td>37</td>
<td>1.9</td>
<td>4.7</td>
<td>56.4</td>
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</tr>
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<td>55-59</td>
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<td>68</td>
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<td>1.5</td>
<td>81.4</td>
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<td><strong>7.1</strong></td>
<td><strong>64.8</strong></td>
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### Table A12
Employment Status by Consumption Quintile: All

<table>
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<th>Consumption quintile</th>
<th>Employed (%)</th>
<th>Unemployed (%)</th>
<th>Discouraged (%)</th>
<th>Inactive (%)</th>
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</thead>
<tbody>
<tr>
<td>1</td>
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<td>11.1</td>
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<td>39.8</td>
<td>1.7</td>
<td>9.8</td>
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<td>39.7</td>
<td>2.3</td>
<td>8.6</td>
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<td>4</td>
<td>42.7</td>
<td>3</td>
<td>7.4</td>
<td>46.8</td>
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<td>44.6</td>
<td>2.2</td>
<td>5.8</td>
<td>47.4</td>
</tr>
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<td><strong>2.3</strong></td>
<td><strong>8.4</strong></td>
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### Table A13
Employment Status by Consumption Quintile: Male

<table>
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<th>Employed (%)</th>
<th>Unemployed (%)</th>
<th>Discouraged (%)</th>
<th>Inactive (%)</th>
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<tbody>
<tr>
<td>1</td>
<td>56.1</td>
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<td>13.1</td>
<td>28.9</td>
</tr>
<tr>
<td>2</td>
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<td>24.9</td>
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<td>61</td>
<td>2.8</td>
<td>9.3</td>
<td>27</td>
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<td>4</td>
<td>61.9</td>
<td>2</td>
<td>10.5</td>
<td>25.6</td>
</tr>
<tr>
<td>5</td>
<td>63.9</td>
<td>2.5</td>
<td>5.8</td>
<td>27.7</td>
</tr>
<tr>
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<td><strong>2.3</strong></td>
<td><strong>10.2</strong></td>
<td><strong>26.8</strong></td>
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### Table A14
Employment Status by Consumption Quintile: Female

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<th>Employed (%)</th>
<th>Unemployed (%)</th>
<th>Discouraged (%)</th>
<th>Inactive (%)</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>19.3</td>
<td>2.1</td>
<td>9.8</td>
<td>68.8</td>
</tr>
<tr>
<td>2</td>
<td>26.4</td>
<td>1.6</td>
<td>7</td>
<td>65</td>
</tr>
<tr>
<td>3</td>
<td>23.8</td>
<td>2</td>
<td>8.1</td>
<td>66</td>
</tr>
<tr>
<td>4</td>
<td>28.8</td>
<td>3.8</td>
<td>5.1</td>
<td>62.3</td>
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<td>29.7</td>
<td>2</td>
<td>5.7</td>
<td>62.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25.8</strong></td>
<td><strong>2.3</strong></td>
<td><strong>7.1</strong></td>
<td><strong>64.8</strong></td>
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</table>

### Table A15
**Employment Status by Rural/Urban: All**

<table>
<thead>
<tr>
<th></th>
<th>Employed (%)</th>
<th>Unemployed (%)</th>
<th>Discouraged (%)</th>
<th>Inactive (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>40.3</td>
<td>2.8</td>
<td>6.6</td>
<td>50.3</td>
</tr>
<tr>
<td>Rural</td>
<td>40.4</td>
<td>2.1</td>
<td>9.1</td>
<td>48.4</td>
</tr>
<tr>
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<td><strong>2.3</strong></td>
<td><strong>8.4</strong></td>
<td><strong>49</strong></td>
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</table>

*Note:* Excluding current migrants. Working-age population 15–64 y.o.

### Table A16
**Employment Status by Rural/Urban: Male**

<table>
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<tr>
<th></th>
<th>Employed (%)</th>
<th>Unemployed (%)</th>
<th>Discouraged (%)</th>
<th>Inactive (%)</th>
</tr>
</thead>
<tbody>
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<td>2.4</td>
<td>8.2</td>
<td>29</td>
</tr>
<tr>
<td>Rural</td>
<td>60.8</td>
<td>2.2</td>
<td>11.1</td>
<td>25.9</td>
</tr>
<tr>
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<td><strong>60.7</strong></td>
<td><strong>2.3</strong></td>
<td><strong>10.2</strong></td>
<td><strong>26.8</strong></td>
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</tbody>
</table>

*Note:* Excluding current migrants. Working-age population 15–64 y.o.

### Table A17
**Employment Status by Rural/Urban: Female**

<table>
<thead>
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<th></th>
<th>Employed (%)</th>
<th>Unemployed (%)</th>
<th>Discouraged (%)</th>
<th>Inactive (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
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<td>3.1</td>
<td>5.5</td>
<td>65.4</td>
</tr>
<tr>
<td>Rural</td>
<td>25.7</td>
<td>2</td>
<td>7.7</td>
<td>64.6</td>
</tr>
<tr>
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<td><strong>25.8</strong></td>
<td><strong>2.3</strong></td>
<td><strong>7.1</strong></td>
<td><strong>64.8</strong></td>
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</tbody>
</table>

*Note:* Excluding current migrants. Working-age population 15–64 y.o.
### Table A18
Employment Status by Education Level: All

<table>
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<tr>
<th>Education level</th>
<th>Employed (%)</th>
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<th>Discouraged (%)</th>
<th>Inactive (%)</th>
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</thead>
<tbody>
<tr>
<td>Less than secondary</td>
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<td>7.7</td>
<td>55.2</td>
</tr>
<tr>
<td>Secondary general</td>
<td>42.9</td>
<td>2.5</td>
<td>6.9</td>
<td>47.8</td>
</tr>
<tr>
<td>Secondary technical/special</td>
<td>70.4</td>
<td>2.5</td>
<td>4</td>
<td>23</td>
</tr>
<tr>
<td>Tertiary</td>
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<td>2.3</td>
<td>3.5</td>
<td>15.3</td>
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### Table A19
Employment Status by Education Level: Male

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<th>Inactive (%)</th>
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</thead>
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<tr>
<td>Less than secondary</td>
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<td>10.2</td>
<td>19.6</td>
</tr>
<tr>
<td>Secondary general</td>
<td>73.5</td>
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<td>12.7</td>
<td>11.5</td>
</tr>
<tr>
<td>Secondary technical/special</td>
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<td>11.4</td>
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<td>4.1</td>
<td>9.4</td>
</tr>
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<td>12.2</td>
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### Table A20
Employment Status by Education Level: Female

<table>
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<th>Inactive (%)</th>
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<tr>
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<td>6.8</td>
<td>69.1</td>
</tr>
<tr>
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<td>26</td>
<td>2.6</td>
<td>3.7</td>
<td>67.7</td>
</tr>
<tr>
<td>Secondary technical/special</td>
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<td>1.2</td>
<td>2.8</td>
<td>40.9</td>
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<tr>
<td>Tertiary</td>
<td>67.9</td>
<td>2.9</td>
<td>2.3</td>
<td>26.9</td>
</tr>
<tr>
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<td>4.3</td>
<td>62.6</td>
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</table>

ANNEX B. FINAL SAMPLE AND DATA USED IN LABOR DEMAND ANALYSIS

Business Register

Final sample includes only private sector firms/commercial farms and SOEs. The sample excludes public institutions (which are not firms). The analysis primarily uses 2014 data when the number of private firms with employment information is 21,888 and the number of SOEs is 869 including one particularly large outlier (Table A2, Annex A). As expected, the latter are different in terms of employment levels and have many more employees (Table A2 and A3, Annex A). Most of the analysis is therefore performed separately on SOEs and private firms. Domestic and foreign firms are included within private firms, although there are only 226 observations for foreign firms.

Age Calculation in the Business Register

Data cleaning revealed the following pattern: even though the data technically covers firms registered up to 01/01/2015, around 400 firms registered between January and March of 2015. In previous years, more companies registered during this period than in other months, possibly reflecting delayed data/entry registration from the previous year. As a result, if a firm is registered between January and March, the reported registration year is changed to the previous year. For all other firms, the year of registration was kept as reported in the data.

Industrial Production—Cross Section

In 2014, there were 1,488 firms in the industrial dataset: 1,312 in manufacturing, 145 in mining and 31 in utilities. Of these, the number of firms with available information on employment is very small for mining (120) and utilities (14), so these sectors were left out of the analysis. In total, there are 919 firms with valid employment information in manufacturing. Of these 35 are classified as “manufacturing” according to ISIC version 3.1 but not according to ISIC version 4.110 The final sample used is 884 firms classified as manufacturing based on ISIC version 4.

Industrial Production—Panel Data

Panel data was used for productivity and employment growth regressions. There are 2,852 observations for the private sector, distributed unevenly across the 3 years: 2012 has 816 observations, 2013 has 929 and 2014 has 1,107. There are 539 observations for state-owned enterprises: 191 in 2012, 168 in 2013, and 180 in 2014.

After calculating the growth indicators between the years and taking into account data availability by region, size, sector and year of observation the final sample for the panel is: private firms: 1,267 observations; SOEs: 171 observations.

110 The ISIC codes are: 2211, 2212 and 3710—in ISIC 3.1 corresponding to 5811, 5813, 3830 respectively in ISIC 4. Manufacturing is classified between 1000 and 3500 in ISIC 4.
Table B1
Distribution of employment Information by year

<table>
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<td></td>
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<td>26.02%</td>
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<tr>
<td></td>
<td>86.01%</td>
<td>62.25%</td>
<td>73.98%</td>
</tr>
<tr>
<td>Total</td>
<td>26,458</td>
<td>27,153</td>
<td>53,611</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table B2
Summary Statistics of Private firms and SOEs (2014)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Firms</th>
<th>Mean</th>
<th>St. D.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOE without outlier</td>
<td>868</td>
<td>48.75</td>
<td>135.62</td>
<td>1</td>
<td>2,934</td>
</tr>
<tr>
<td>SOE with outlier</td>
<td>869</td>
<td>59.55</td>
<td>345.93</td>
<td>1</td>
<td>9,431</td>
</tr>
<tr>
<td>Private</td>
<td>21,888</td>
<td>16.38</td>
<td>68.9</td>
<td>1</td>
<td>3,869</td>
</tr>
</tbody>
</table>

Table B3
T-test results on employment by ownership (2014)

<table>
<thead>
<tr>
<th></th>
<th>SOE</th>
<th>Private</th>
<th>Difference</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Employees*</td>
<td>59.55</td>
<td>16.38</td>
<td>43.17</td>
<td>0.00***</td>
</tr>
<tr>
<td>N</td>
<td>869</td>
<td>21,888</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Employees</td>
<td>48.75</td>
<td>16.38</td>
<td>32.37</td>
<td>0.00***</td>
</tr>
<tr>
<td>N</td>
<td>868</td>
<td>21,888</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Includes an outlier SOE - the only firm in the Tajikistan with more than 9,000 employees
ANNEX C. FIRM AND EMPLOYMENT DISTRIBUTIONS BY FIRM SIZE, AGE AND SECTOR

Figure C1
Distribution of firms, 2014

Figure C2
Distribution of employment, 2014

Figure C3
Distribution of firms, 2014

Figure C4
Distribution of employment, 2014

Figure C5
Distribution of firms

Figure C6
Distribution of employment

# ANNEX D. STRATEGIC FRAMEWORK FOR JOBS AND NATIONAL DEVELOPMENT STRATEGY

<table>
<thead>
<tr>
<th>JOBS STRATEGY</th>
<th>Promoting private sector growth</th>
<th>Improving productivity / earnings and access to formal jobs</th>
<th>Connecting people to jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macroeconomics</td>
<td>Business environment and governance</td>
<td>Trade facilitation, transport and logistics</td>
<td>Access to finance</td>
</tr>
<tr>
<td>Institutional capacity and regional development</td>
<td>Effective public administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regional development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human capital development</td>
<td>Education and Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health and Longevity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social protection</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Culture</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Life environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reducing social inequalities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic growth and its quality</td>
<td>The real sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Productive employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Financial sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Investment climate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEX E. BENCHMARKING OF INSTITUTIONAL CONSTRAINTS

Figure E1
Top 5 constraints for doing business, according to WB Enterprise Survey

Source: WB Enterprise Survey.

Figure E2
The most problematic factors for doing business


Note: Regulatory quality index captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. The index value ranges from -2.5 to +2.5 (+2.5 = best).

Source: WB Governance Indicators.

Figure E3
Regulatory Quality

Source: WB Enterprise Survey.

Figure E4
Compliance with regulations (Senior management time spent dealing with regulatory requirements)

Source: WB Enterprise Survey.
Figure E5
Percent of firms expected to give gifts in meetings with tax officials


Figure E6
Percent of firms expected to give gifts to public officials “to get things done”


Figure E7
Competition Score (1-4.5 scale)

Note: The measurement scale for the indicators ranges from 1 to 4+, where 1 represents little or no change from a rigid centrally planned economy and 4+ represents the standards of an industrialized market economy. For competition policy: 1 No competition legislation and institutions; 2 Competition policy legislation and institutions set up; some reduction of entry restrictions or enforcement action on dominant firms; 3 Some enforcement actions to reduce abuse of market power and to promote a competitive environment, including break-ups of dominant conglomerates; substantial reduction of entry restrictions; 4 Significant enforcement actions to reduce abuse of market power and to promote a competitive environment.; 4+ Standards and performance typical of advanced industrial economies: effective enforcement of competition policy; unrestricted entry to most markets.
Source: EBRD Transition Indicators (2014).

Figure E8
Foreign direct investment, net inflows (% of GDP)

Source: World Bank Indicators.
### Table E1

<table>
<thead>
<tr>
<th>Economy</th>
<th>Kazakhstan</th>
<th>Kyrgyz Republic</th>
<th>Tajikistan</th>
<th>Uzbekistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting a business</td>
<td>21 [53]</td>
<td>35 [28]</td>
<td>57 [81]</td>
<td>42 [64]</td>
</tr>
<tr>
<td>Getting Credit</td>
<td>70 [71]</td>
<td>28 [36]</td>
<td>109 [118]</td>
<td>42 [105]</td>
</tr>
<tr>
<td>Protecting Minority Investors</td>
<td>25 [64]</td>
<td>36 [33]</td>
<td>29 [27]</td>
<td>88 [87]</td>
</tr>
<tr>
<td>Trading Across Borders</td>
<td>122 [121]</td>
<td>83 [82]</td>
<td>132 [159]</td>
<td>159 [158]</td>
</tr>
<tr>
<td>Resolving Insolvency</td>
<td>47 [63]</td>
<td>126 [126]</td>
<td>147 [147]</td>
<td>75 [75]</td>
</tr>
</tbody>
</table>


### Table E2
Starting a business in Tajikistan and selected countries in 2016

<table>
<thead>
<tr>
<th>Countries</th>
<th>Rank in 2016</th>
<th>Number of procedures*</th>
<th>Number of days</th>
<th>Cost (percentage of income per capita)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kyrgyzstan</td>
<td>35</td>
<td>4 (9)</td>
<td>10 (21)</td>
<td>2.1 (10.4)</td>
</tr>
<tr>
<td>Republic of Moldova</td>
<td>26</td>
<td>4 (10)</td>
<td>4 (30)</td>
<td>4.3 (14.6)</td>
</tr>
<tr>
<td>Mongolia</td>
<td>36</td>
<td>5 (7)</td>
<td>6 (13)</td>
<td>1.5 (9.6)</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>57</td>
<td>4 (14)</td>
<td>11 (79)</td>
<td>21.5 (85.1)</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>42</td>
<td>5 (11)</td>
<td>6.5 (28)</td>
<td>4 (11.5)</td>
</tr>
</tbody>
</table>

Note: * The numbers in parentheses refer to data for 2006.
Source: UNCTAD (forthcoming) based on World Bank Doing Business Database.
### Table E3
Summary of export and import time and cost for trading across borders

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>132</td>
<td>29</td>
<td>94</td>
<td>122</td>
<td>83</td>
<td>159</td>
<td></td>
</tr>
<tr>
<td>Trading Across Borders—distance to frontier (DTF)</td>
<td>57</td>
<td>93.2</td>
<td>69.6</td>
<td>60.4</td>
<td>72.3</td>
<td>44.3</td>
</tr>
<tr>
<td>Time to export: Border compliance (hours)</td>
<td>75</td>
<td>3</td>
<td>34</td>
<td>133</td>
<td>27</td>
<td>112</td>
</tr>
<tr>
<td>Cost to export: Border compliance (USD)</td>
<td>313</td>
<td>0</td>
<td>375</td>
<td>574</td>
<td>485</td>
<td>278</td>
</tr>
<tr>
<td>Time to export: Documentary compliance (hours)</td>
<td>66</td>
<td>2</td>
<td>35</td>
<td>132</td>
<td>24</td>
<td>174</td>
</tr>
<tr>
<td>Cost to export: Documentary compliance (USD)</td>
<td>330</td>
<td>150</td>
<td>300</td>
<td>430</td>
<td>190</td>
<td>292</td>
</tr>
<tr>
<td>Time to import: Border compliance (hours)</td>
<td>108</td>
<td>3</td>
<td>32</td>
<td>2</td>
<td>37</td>
<td>111</td>
</tr>
<tr>
<td>Cost to import: Border compliance (USD)</td>
<td>223</td>
<td>0</td>
<td>423</td>
<td>0</td>
<td>512</td>
<td>278</td>
</tr>
<tr>
<td>Time to import: Documentary compliance (hours)</td>
<td>126</td>
<td>2</td>
<td>41</td>
<td>6</td>
<td>36</td>
<td>174</td>
</tr>
<tr>
<td>Cost to import: Documentary compliance (USD)</td>
<td>260</td>
<td>100</td>
<td>200</td>
<td>0</td>
<td>200</td>
<td>292</td>
</tr>
</tbody>
</table>


---

### Table E4
Financial inclusion indicators

<table>
<thead>
<tr>
<th>Tajikistan</th>
<th>Armenia</th>
<th>Azerbaijan</th>
<th>Kazakhstan</th>
<th>Kyrgyz Rep.</th>
<th>Uzbekistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population, age 15+ (millions)</td>
<td>5.3</td>
<td>GNI per capita, $ 990</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Account (% age 15+)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All adults</td>
<td>11.5</td>
<td>51.4</td>
<td>27.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>9.1</td>
<td>47.4</td>
<td>23.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults belonging to the poorest 40%</td>
<td>4.3</td>
<td>44.2</td>
<td>19.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young adults (% ages 15-24)</td>
<td>4.5</td>
<td>35.6</td>
<td>20.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults living in rural areas</td>
<td>9.3</td>
<td>45.7</td>
<td>24.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Financial institution account (% age 15+)

| All adults | 11.5 | 51.4 | 22.3 |
| All adults, 2011 | 2.5 | 43.3 | 21.1 |

Mobile account (% age 15+)

| All adults | 0.0 | 0.3 | 10.0 |

(continued on next page)
**Tajikistan**

Europe & Central Asia

<table>
<thead>
<tr>
<th>Population, age 15+ (millions)</th>
<th>5.3</th>
<th>GNI per capita, $</th>
<th>990</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Tajikistan</th>
<th>Europe &amp; Central Asia</th>
<th>Low income</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access to financial institution account (% age 15+)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has debit card</td>
<td>4.2</td>
<td>36.9</td>
<td>6.6</td>
</tr>
<tr>
<td>Has debit card, 2011</td>
<td>1.8</td>
<td>36.4</td>
<td>6.3</td>
</tr>
<tr>
<td>ATM is the main mode of withdrawal (% with an account)</td>
<td></td>
<td>66.7</td>
<td>20.2</td>
</tr>
<tr>
<td>ATM is the main mode of withdrawal (% with an account), 2011</td>
<td></td>
<td>72.5</td>
<td>19.7</td>
</tr>
<tr>
<td><strong>Use of account in the past year (% age 15+)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Used an account to receive wages</td>
<td>4.1</td>
<td>22.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Used an account to receive government transfers</td>
<td>0.7</td>
<td>7.3</td>
<td>1.0</td>
</tr>
<tr>
<td>Used a financial institution account to pay utility bills</td>
<td>2.6</td>
<td>12.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Other digital payments in the past year (% age 15+)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Used a debit card to make payments</td>
<td>1.5</td>
<td>22.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Used a credit card to make payments</td>
<td>0.6</td>
<td>14.9</td>
<td>0.6</td>
</tr>
<tr>
<td>Used the Internet to pay bills or make purchases</td>
<td>0.9</td>
<td>11.9</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Domestic remittances in the past year (% age 15+)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sent remittances</td>
<td>6.0</td>
<td>12.9</td>
<td>18.3</td>
</tr>
<tr>
<td>Sent remittances via a financial institution (% of senders)</td>
<td>31.5</td>
<td>15.4</td>
<td></td>
</tr>
<tr>
<td>Sent remittances via a mobile phone (% of senders)</td>
<td>2.5</td>
<td>42.8</td>
<td></td>
</tr>
<tr>
<td>Sent remittances via a money transfer operator (% of senders)</td>
<td>11.8</td>
<td>14.1</td>
<td></td>
</tr>
<tr>
<td>Received remittances</td>
<td>14.9</td>
<td>15.5</td>
<td>25.6</td>
</tr>
<tr>
<td>Received remittances via a financial institution (% of recipients)</td>
<td>18.4</td>
<td>22.1</td>
<td>13.0</td>
</tr>
<tr>
<td>Received remittances via a mobile phone (% of recipients)</td>
<td>3.4</td>
<td>1.0</td>
<td>33.8</td>
</tr>
<tr>
<td>Received remittances via a money transfer operator (% of recipients)</td>
<td>38.0</td>
<td>15.6</td>
<td>14.8</td>
</tr>
<tr>
<td><strong>Savings in the past year (% age 15+)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saved at a financial institution</td>
<td>1.5</td>
<td>8.4</td>
<td>9.9</td>
</tr>
<tr>
<td>Saved at a financial institution, 2011</td>
<td>0.3</td>
<td>4.9</td>
<td>11.5</td>
</tr>
<tr>
<td>Saved using a savings club or person outside the family</td>
<td>3.5</td>
<td>6.6</td>
<td>16.3</td>
</tr>
<tr>
<td>Saved any money</td>
<td>31.3</td>
<td>38.5</td>
<td>46.5</td>
</tr>
<tr>
<td>Saved for old age</td>
<td>7.0</td>
<td>11.8</td>
<td>8.3</td>
</tr>
<tr>
<td>Saved for a farm of business</td>
<td>3.7</td>
<td>5.1</td>
<td>16.7</td>
</tr>
<tr>
<td>Saved for education or school fees</td>
<td>9.8</td>
<td>12.1</td>
<td>16.6</td>
</tr>
</tbody>
</table>

(continued on next page)
### Tajikistan

Europe & Central Asia

<table>
<thead>
<tr>
<th>Population, age 15+ (millions)</th>
<th>5.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNI per capita, $</td>
<td>990</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit in the past year (% age 15+)</th>
<th>Tajikistan</th>
<th>Europe &amp; Central Asia</th>
<th>Low income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrowed from a financial institution</td>
<td>3.8</td>
<td>12.4</td>
<td>8.6</td>
</tr>
<tr>
<td>Borrowed from a financial institution, 2011</td>
<td>4.8</td>
<td>7.8</td>
<td>11.7</td>
</tr>
<tr>
<td>Borrowed from family or friends</td>
<td>12.2</td>
<td>23.6</td>
<td>34.9</td>
</tr>
<tr>
<td>Borrowed from a private informal lender</td>
<td>1.9</td>
<td>2.1</td>
<td>6.5</td>
</tr>
<tr>
<td>Borrowed any money</td>
<td>24.8</td>
<td>39.5</td>
<td>52.5</td>
</tr>
<tr>
<td>Borrowed for a farm of business</td>
<td>3.0</td>
<td>2.8</td>
<td>12.2</td>
</tr>
<tr>
<td>Borrowed for education or school fees</td>
<td>6.2</td>
<td>6.2</td>
<td>10.9</td>
</tr>
<tr>
<td>Outstanding mortgage at a financial institution</td>
<td>3.7</td>
<td>10.2</td>
<td>4.1</td>
</tr>
</tbody>
</table>

**Source:** Financial Inclusion Data / Global Findex.

### Table E5

Indicators of financial sector

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Tajikistan</th>
<th>Kyrgyz Republic</th>
<th>Kazakhstan</th>
<th>Armenia</th>
<th>Georgia</th>
<th>Russia</th>
<th>Moldova</th>
<th>Azerbaijan</th>
<th>Kosovo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-performing loans (NPL)</td>
<td>29.8</td>
<td>6%</td>
<td>12.80%</td>
<td>8.50%</td>
<td>2.20%</td>
<td>5.20%</td>
<td>18.60%</td>
<td>16.60%</td>
<td>6.50%</td>
</tr>
<tr>
<td>Capital adequacy ratio (CAR)</td>
<td>8.30%</td>
<td>21.30%</td>
<td>16.10%</td>
<td>15.90%</td>
<td>21.10%</td>
<td>12.90%</td>
<td>25.36%</td>
<td>16.60%</td>
<td>18.90%</td>
</tr>
<tr>
<td>Interest rates (loan)</td>
<td>26.14%</td>
<td>22.80%</td>
<td>16.10%</td>
<td>24%</td>
<td>21.10%</td>
<td>25.30%</td>
<td>22.50%</td>
<td>14.30%</td>
<td>8.20%</td>
</tr>
<tr>
<td>Local currency</td>
<td>USD</td>
<td>USD</td>
<td>USD</td>
<td>USD</td>
<td>USD</td>
<td>USD</td>
<td>USD</td>
<td>USD</td>
<td>USD</td>
</tr>
</tbody>
</table>

**Source:** World Bank staff compilation.

### Table E5

Indicators of protection for investors in Central Asia

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Kazakhstan</th>
<th>Kyrgyz Republic</th>
<th>Tajikistan</th>
<th>Uzbekistan</th>
<th>ECA Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength of minority investor protection index (0=weak to 10=strong)</td>
<td>5.7</td>
<td>6.3</td>
<td>6.5</td>
<td>5.3</td>
<td>6.06</td>
</tr>
<tr>
<td>Investment Freedom Score (0=weak to 100=strong)</td>
<td>40</td>
<td>60</td>
<td>25</td>
<td>0</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Note:** The strength of minority investor protection index is the average of the extent of disclosure index, the extent of director liability index and the ease of shareholder suits index; Investment Freedom Score is defined as "In an economically free country, there would be no constraints on the flow of investment capital. Individuals and firms would be allowed to move their resources into and out of specific activities, both internally and across the country's borders, without restriction. Such an ideal country would receive a score of 100 on the investment freedom index."

**Source:** Doing Business, 2015; Index of Economic Freedom, 2015.


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