



Jobs in the Kyrgyz Republic

MOHAMED IHSAN AJWAD
SARAH BERGER GONZALEZ

© 2018 International Bank for Reconstruction and Development / The World Bank.
1818 H Street NW, Washington, DC 20433, USA.
Telephone: 202-473-1000; Internet: www.worldbank.org.

Some rights reserved

This work is a product of the staff of The World Bank with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of The World Bank, its Board of Executive Directors, or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries. Nothing herein shall constitute or be considered to be a limitation upon or waiver of the privileges and immunities of The World Bank, all of which are specifically reserved.

Rights and Permissions

This work is available under the Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO) <http://creativecommons.org/licenses/by/3.0/igo>. Under the Creative Commons Attribution license, you are free to copy, distribute, transmit, and adapt this work, including for commercial purposes, under the following conditions:

Attribution—Please cite the report as follows: Ajwad, M.I., and S.B. Gonzales (2018) “Jobs in the Kyrgyz Republic” World Bank, Washington, DC.

Translations—If you create a translation of this work, please add the following disclaimer along with the attribution: *This translation was not created by The World Bank and should not be considered an official World Bank translation. The World Bank shall not be liable for any content or error in this translation.*

Adaptations—If you create an adaptation of this work, please add the following disclaimer along with the attribution: *This is an adaptation of an original work by The World Bank. Views and opinions expressed in the adaptation are the sole responsibility of the author or authors of the adaptation and are not endorsed by The World Bank.*

Third-party content—The World Bank does not necessarily own each component of the content contained within the work. The World Bank therefore does not warrant that the use of any third-party-owned individual component or part contained in the work will not infringe on the rights of those third parties. The risk of claims resulting from such infringement rests solely with you. If you wish to re-use a component of the work, it is your responsibility to determine whether permission is needed for that re-use and to obtain permission from the copyright owner. Examples of components can include, but are not limited to, tables, figures, or images.

All queries on rights and licenses should be addressed to World Bank Publications, The World Bank Group, 1818 H Street NW, Washington, DC 20433, USA; fax: 202-522-2625; e-mail: pubrights@worldbank.org.

Images: ©WorldBank. Further permission required for reuse.

ABBREVIATION AND ACRONYMS

BEEPS	Business Environment and Enterprise Performance Survey
CBT	Cross-Border Trading
CIS	Commonwealth of Independent States
ECA	Europe and Central Asia
EEU	Eurasian Economic Union
FDI	Foreign Direct Investment
GCI	Global Competitiveness Index
GCR	Global Competitiveness Report
GDP	Gross Domestic Product
GERD	Gross Expenditure and Research Development
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Development Cooperation)
ICT	Information and Communications Technology
IMF	International Monetary Fund
KER	Kyrgyz Establishment Reports
MFI	Microfinance Institutions
NEET	Not in Education, Employment or Training
NSDS	National Sustainable Development Strategy
OECD	Organization for Economic Co-operation and Development
PRC	Peoples Republic of China
R&D	Research and Development
SME	Small and Medium Enterprises
TVET	Technical and Vocational Education and Training
US	United States
UNESCO	United Nations Educational, Scientific and Cultural Organization
WDI	World Development Indicators
WGI	Worldwide Governance Indicators

ACKNOWLEDGEMENTS

This report has been prepared by a core team led by Mohamed Ihsan Ajwad (Task Team Leader) and Sarah Berger Gonzalez (Senior Social Protection Consultant) and comprised of Ilhom Abdulloev (Consultant), and Alena Sakhonchik (Analyst).

The team is grateful to the following colleagues for their excellent contributions: Arvo Kuddo (Senior Labor Economist); Oleksiy A. Sluchynskyy (Senior Economist), Bakyt Dubashov (Senior Economist), Aurelien Kruse (Senior Economist), Christopher David Miller (Senior Private Sector Specialist), Saida Ismailakhunova (Economist), Sherzod Akbarov (former Social Protection Specialist), Giorgia Demarchi (Social Scientist), Violane Konar-Leacy (Senior Private Sector Specialist), Zhanybek Ybraiyim Uulu (Public Sector Specialist), Nataliya Biletska (Senior Public Sector Specialist), Rajul Awasthi (Senior Public Sector Specialist), and Susanna Hayrapetyan (Program Leader).

The report was written under the overall guidance of Cem Mete (Practice Manager) and Andrew D. Mason (former Practice Manager, Social Protection and Labor).

This note would not have been possible without the timely support and inputs from the Ministry of Economy and Ministry of Labour and Social Development of the Government of the Kyrgyz Republic. The report also benefited from discussions with Government officials and private sector representatives, including those in the Bishkek Free Economic Zone.

The report benefited from peer reviewers' comments from: Thomas Farole (Lead Economist), Johannes Koettl-Brodmann (Senior Economist), Josefina Posadas (Senior Economist).

Isadora Nouel (Team Assistant, Washington, DC) and Meerim Sagynbaeva (Program Assistant, Bishkek) provided excellent logistical assistance during the preparation of this report.

TABLE OF CONTENTS

Overview	1
Workers and potential workers in Kyrgyz Republic face challenging jobs outcomes	2
Job creation is limited to a few sectors, and is often not in the highest productivity sectors.....	4
Labor demand, supply and matching constraints limit job creation, productivity, job quality and inclusiveness	5
Unleashing the Jobs Potential in Kyrgyz Republic	7
Increase labor demand through job growth	8
Prepare and develop a skilled and capable workforce	8
Implement labor equilibrating policies	8
Introduction.....	9
Chapter I. Workers and Potential Workers	14
Labor force growth is outpacing job growth	14
Labor productivity is low	16
Job quality is a concern.....	18
Jobs are not inclusive – especially for youth, women, and residents of the South.....	23
Women and young men have weaker job outcomes	23
Women are engaged in the workforce, but have limited opportunities in the private sector	26
The most desirable jobs are in Bishkek, Jalal-Abad and Naryn	28
There is a notable correlation between household wealth and employment outcomes.....	28
Micro-determinants for Job Outcomes	29
Summary	31
Chapter II. The Job Creators	33
Despite its small size, the formal sector is important to certain regions and sectors.....	34
Economic growth and formal sector employment don’t always go together	34
Some firm types perform better than others	36
Implications for Job Outcomes	39
Productivity growth has been dragged down by the informal sector.....	39
Some sectors are more likely to hire than others.....	40
Summary	44
Chapter III. Constraints to Improving Jobs Outcomes	45
Constraints to labor demand: holding back the potential for job creation.....	48
Macroeconomic Stability: indicators are improving, but there are risks	48
Institutions: the record is mixed and the perception of corruption is a problem	51

Connectivity: barriers to geographic access, electricity, and information and communications technology need more progress	55
Access to finance: positive developments in recent years, but obstacles remain for SMEs	58
Innovation: behind the curve.....	59
Constraints to Labor Supply: there is scope for increasing labor force participation	61
Workforce size: Large and growing population, but labor force participation can be higher	61
Workforce quality: Despite progress there remains a mismatch between jobseeker skills and employer needs	65
Constraints to Labor Matching: Current labor supply and demand mismatch.....	70
Information to facilitate job matching: too many workers have difficulty with job search and skill signaling.....	70
Spatial disparities: workers are internally and externally mobile	71
Summary	74
Chapter IV. Unleashing the Jobs Potential.....	76
Increase labor demand through job growth.....	76
Improve macroeconomic stability.....	76
Strengthen institutions and governance	77
Increase firm connectivity	78
Reduce the cost and obstacles to finance.	80
Encourage innovation.....	80
Prepare and develop a skilled and capable workforce	81
Reform social policies to encourage labor force participation	81
Cultivate relevant job skills.....	82
Labor equilibrating policies.....	82
Reducing information asymmetries	82
Diminish spatial disparities.....	83
Chapter V. Conclusions.....	84
References	85
Annex I: Unleashing the Jobs Potential in the Kyrgyz Republic	90

Overview

1. Since its independence in 1991, the Kyrgyz Republic has taken steps to liberalize its economy and adopt political reforms with the aim of promoting sustained economic growth. The Kyrgyz Republic was one of the first former Soviet republics to implement economic reforms and to move toward a market-based economy. This was marked in 1998 with its accession to the World Trade Organization, allowing for greater trade with China and other bordering countries and more recently, with the accession to the Eurasian Economic Union (EEU) in 2015. In addition, in 1993, the country adopted a new constitution and transitioned toward a parliamentary democracy.¹

2. The multiple economic and political reforms implemented, together with regional and global trends, have sharply changed the structure of the economy in the Kyrgyz Republic. After the fall of the Soviet Union, a lack of jobs caused workers to shift from urban and industrial jobs to the agricultural sector, more as a coping strategy than because of attractive wages or benefits.² However, by the early 2000s, the agricultural sector had begun to deteriorate because of overgrazing, low levels of investment, and a lack of imported feed. The inevitable result is the drop in agricultural employment from 54 to 37 percent of total employment between 2003 and 2012.³ Migration, overwhelmingly to the Russian Federation, became a jobs strategy for households in the mid-2000s, and today the country is one of the most remittance dependent in the world. Finally, as in many other countries around the world, the structural transformations in the Kyrgyz Republic have led to the services sector becoming one of the most important employers in the country.

3. Jobs outcomes have fallen short of expectations on at least four dimensions. First, job creation is not keeping pace with the rapidly growing population. Second, job productivity, or output per worker, is the lowest in Europe and Central Asia, and increasing wage rates are fueling concerns about eroding competitiveness. Third, job quality is a concern, with high rates of informality, temporary work, occasional work, and seasonal work. Finally, job inclusiveness is a concern because jobs outcomes are weak for youth and women, and there is a lot of geographic variation in jobs outcomes.

4. Policymakers are confronting the question of how to improve jobs outcomes because jobs are a sustainable path out of poverty and provide workers with more than a paycheck. Despite variations in the jobs challenge, jobs are the key to people working their way out of poverty and hardship (World Bank, 2013). Furthermore, jobs are key because they enable poor people to use their most abundant asset, namely their labor, to generate income. This income sometimes come from wage employment in the formal sector, but it may also come from wage or self-employment in the informal sector. These earnings streams are often sustainable avenues out of poverty. In addition, jobs provide more than a paycheck to workers, and in fact lead workers: skills acquisition and thus enhanced productivity; female empowerment; enhanced security through productive engagement of youth; and supporting social stability in conflict and post-conflict societies (World Bank, 2012).

5. Policymakers in the Kyrgyz Republic have ambitious development goals to be achieved by 2040. The current Development Program of the Kyrgyz Republic (2018-2023) aims to be the first stage toward developing the country into: “a free country with a strong economy, high quality of life, competitive human capital and recognized new contribution to world’s culture.” To do this, the development program recognizes that “private sector leadership and technological breakthroughs” will be necessary. Private sector led growth, and technological progress can directly or indirectly impact jobs outcomes in the country.⁴ However, what has been

¹ Asian Development Bank. 2014.

² Ibid.

³ Ibid.

⁴ The NSDS' development priorities also include: (i) maintenance of macroeconomic stability; (ii) an improved business environment and investment climate; (iii) a strengthened financial sector; and, (iv) the promotion of strategic industries such as agro-processing, energy, mining, transport and telecommunications, and tourism.

lacking in the country is a comprehensive diagnostic of the jobs problem and a necessarily cross-sectoral, coordinated, and evidence-based strategy to confront the weaknesses.

6. Within this context, this report provides practical recommendations for a comprehensive approach to improving jobs outcomes in Kyrgyz Republic. This report offers a snapshot of jobs in the Kyrgyz Republic, with a focus on the number of jobs available, labor market productivity and inclusiveness; it takes a closer look at where jobs are concentrated; and, identifies labor market demand, supply and matching constraints. Acknowledging the challenging economic and political environment in the Kyrgyz Republic, the report offers realistic policy recommendations for addressing some of the most critical issues to improving jobs outcomes in the short run while noting that some policies will take time to develop and implement. The key messages of the report are elaborated on below.

Workers and potential workers in Kyrgyz Republic face challenging jobs outcomes

7. Job creation is not keeping pace with the rapidly growing population. Kyrgyz Republic's potential workforce is growing at about 2 percent per annum – faster than some of its neighbors in Europe and Central Asia.⁵ Fertility rates in Kyrgyz Republic have increased since 2000, from 2.4 to 3.2 in 2014. An estimated 50,000 new entrants join the labor market each year.⁶ By 2030, the working-age population is expected to reach around 4.6 million persons.⁷ Job creation, though, has not kept pace with the increasing population. Between 2009 and 2013, job growth averaged only 0.9 percent per annum.⁸ This has contributed to nearly one-third of the Kyrgyz working population to be inactive or not part of the labor force: 38 percent of these persons are in school, while the other 62 percent are neither in school nor working, which leaves 640,000 working age adults who are not engaged in productive activity and are not investing in their own human capital.⁹

8. Job productivity, or output per worker, in the Kyrgyz Republic is the lowest in Europe and Central Asia. Labor productivity, measured as GDP per worker, was about US\$7,600 in the Kyrgyz Republic in 2014, while in the Russian Federation it was US\$45,000, in Kazakhstan it was US\$39,000 and US\$11,000 in Moldova (Figure A). Furthermore, labor productivity growth in the Kyrgyz Republic has been averaging 4.3 percent per annum since 2005, which is low relative to other countries in the region. Increases in informality in the low-productivity sectors of services and industry have contributed to the deterioration of national productive growth.¹⁰ Despite slow productivity growth, real wages have risen robustly. The increase in wages has been largely fueled by strong wage growth in the construction and service sector. In the Kyrgyz Republic, the ratio of wages to productivity is extremely high (Figure B) relative to other CIS countries, and this could weaken external competitiveness.

⁵ The working age population grew at 2 percent per annum between 2003 and 2013.

⁶ Estimate is based on data from United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision, custom data acquired via website.

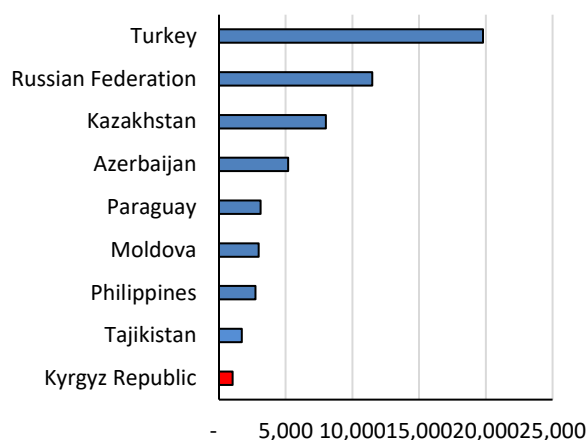
⁷ World Bank. 2015(c).

⁸ World Bank. 2015(c).

⁹ World Bank/GIZ. 2013.

¹⁰ World Bank. 2015(c). Aggregate productivity growth in the formal sector has been strong, averaged 6.7 percent a years since 2009; however, overall productivity growth average less than 1 percent.

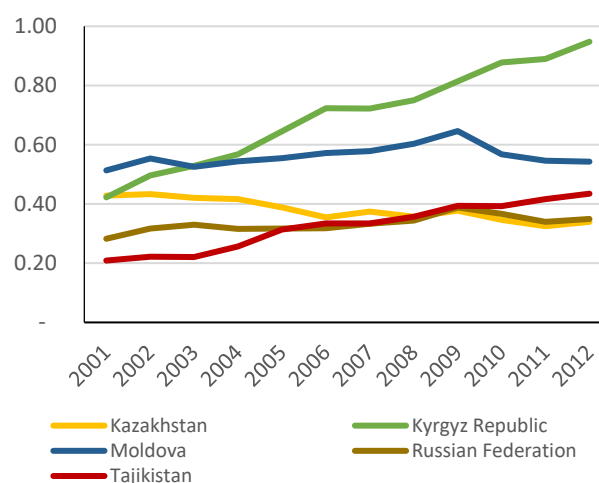
Figure A. Total labor productivity, 2014
Average output per employed worker (constant 2005
US\$/employment)



Source: World Development Indicators.

Note: Total labor productivity for Tajikistan is from 2013

Figure B. Ratio of wages to productivity, 2000-2014



Source: Employment/earnings from ILOSTAT & national stat sources; GDP calculated productivity from WDI.

9. Job quality is a concern, with high rates of informality, as well as temporary, occasional and seasonal work. Permanent, or long-term contracts in the formal sector that provide regular pay are the most attractive to workers, but too many jobs are in the informal sector in the Kyrgyz Republic (48 percent of all jobs)¹¹ and make up nearly an estimated 19.9 percent of GDP, more than two times the 1995 estimate (8.4 percent).¹² Contracts are often seasonal or short-term and proper receipt of payment is sporadic (Figure C). Informal sector workers do not have a labor contract with their employers. Exacerbating the problem with job quality is that 30 percent of all workers are seasonal; 6 percent are occasional workers; and 10 percent work on a temporary basis. Therefore, 46 percent of all workers have a job that is not permanent, most of which are in the informal sector. 43 percent of all jobs in the informal sector are seasonal, 9 percent are occasional, and 14 percent are temporary, i.e., two thirds of informal sector jobs are not permanent. Working under these conditions means that workers' security and welfare are unpredictable; their pay often does not constitute a living wage, and these factors leave them more vulnerable to poverty and shocks.

10. Formal employment is largely concentrated in the public sector, with limited development of formal private sector jobs. In general, the formal sector in the Kyrgyz Republic is small and usually urban, the public sector makes up most of the employment (public administration, education, and health/social services). The recent Kyrgyz Labor Force Survey suggests that public sector employment accounts for only 20 percent of overall employment,¹³ which is in line with OECD levels; however, this accounts for 60 percent of formal employment. The flipside is that 40 percent of employment is in the private sector, which represents about 11 percent of overall employment.

11. Jobs are not inclusive: jobs outcomes for youth and women are weak and regionally concentrated, making employment challenging for certain groups. Labor force participation rates for women has slowly

¹¹ Note that this definition of informality excludes self-employed people. In Ajwad et al. (2014) self-employed people are also included in the definition of informality and therefore, the informality rate was 62 percent.

¹² Asian Development Bank. 2014.

¹³ Kyrgyz National Statistics Committee. 2016.

declined over the last couple of years and now hovers around 58 percent. The same can be said for youth, where participation decreased between 2009 and 2013 by about 6 percentage points from 51 percent to 45 percent (Figure D). This drop was not a result of leaving work to continue education as the number of working age youth not in education, employment or training (NEET) increased after 2005. Instead, the main hypothesis for this decline is that youth withdrew from the domestic labor market in search of jobs overseas. It is worth noting, though, that when holding all other factors constant, females account for 78.5 percent of 15-24-year-old NEETs, while males only make up 21.5 percent of 15-24-year-old NEETs. Jobs outcomes are also positively associated with certain regions in Kyrgyz Republic. Workers in Bishkek and Jalal-Abad have the most desirable jobs, with 66 percent and 53 percent of employees, respectively, that are paid in regular installments, while fewer than 35 percent of employees in other regions are paid regularly.

Figure C. Indicators of Type of Employment, 2013

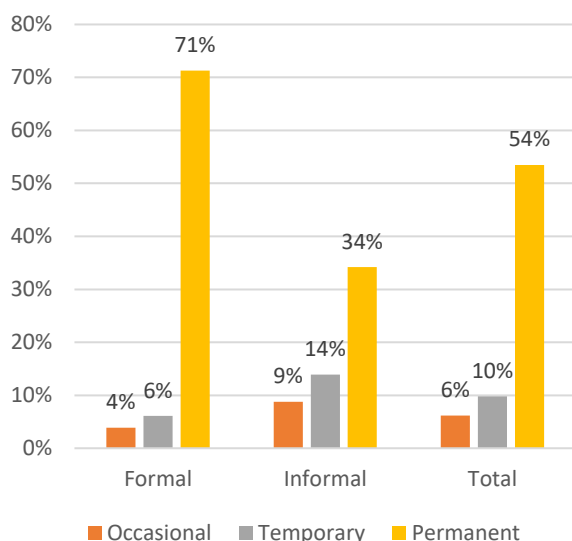
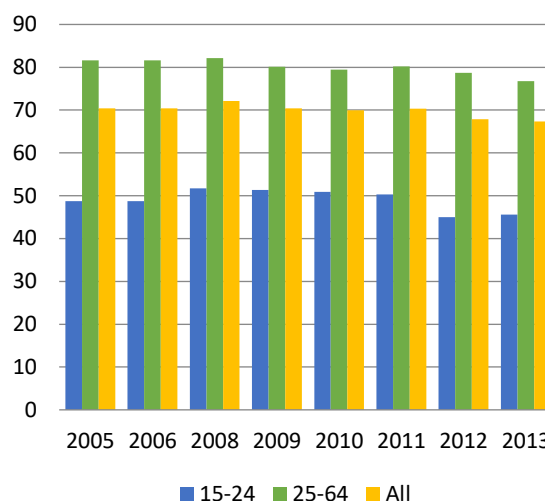


Figure D. Labor Force Participation Rate by Age, 2005-2013



Source: Authors' estimates using World Bank/GIZ Kyrgyz Republic Jobs, Skills and Migration Survey, 2013

Job creation is limited to a few sectors, and is often not in the highest productivity sectors

12. Formal, private sector employment is small, highly concentrated in urban areas, and is in a few sectors. Less than one-third of all workers are employed in the formal sector in the Kyrgyz Republic and most are in large enterprises. More than 60 percent of employment is in firms with 50 or more workers, and more than a third of employment is in firms with at least 200 workers (Figure E). Moreover, formal sector employment in the Kyrgyz Republic in 2009 and 2012 was largely concentrated in the urban center of Bishkek and in only a few sectors including manufacturing, electricity/gas/water and transport and communications.¹⁴

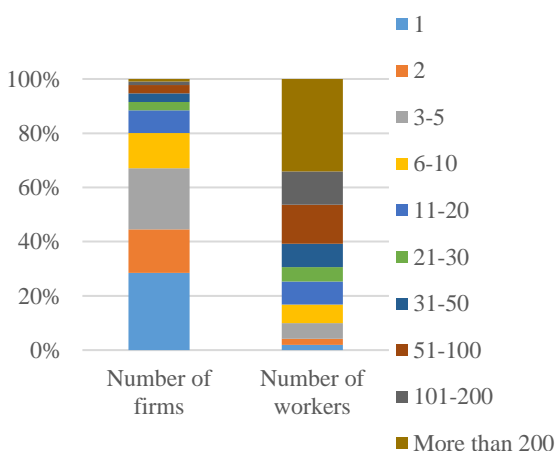
13. Firm size matters, with larger private, formal firms employing the most people; however, small- and medium-sized enterprises create employment, but rarely survive. Larger firms account for a higher percentage of employment in the formal sector than smaller firms (Figure F); these larger firms are also more likely to survive. Despite this, they create little employment relative to output growth. Small and medium-size firms, on the other hand, provide many jobs in the private formal sector, and as such their role in the sector and their development is important. However, many small and medium size firms have been unable to grow or even

¹⁴ World Bank. 2015 (c).

survive, restricting employment expansion. Therefore, entry rates are strong for smaller establishments, but job creation is mostly in larger firms.

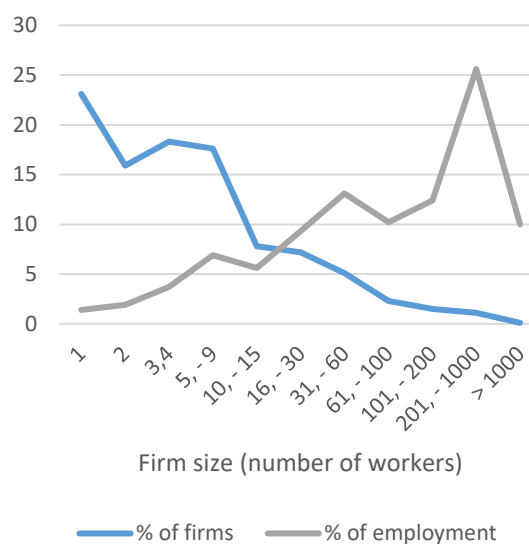
14. In the Kyrgyz Republic, the agriculture, education, and mining sectors are most likely to hire new workers. Between 2009 and 2012, firms in the agriculture sector were the most likely to hire workers, with the education and mining sectors also revealing a high probability of hiring.¹⁵ In the agriculture sector, hiring accompanied the increase in a number of new large farming activities between 2009 and 2012, and experienced growth.¹⁶ More recent growth of 5.3 percent in the agriculture sector between the fall of 2014 and the fall of 2015 (growth rate of 5.3 percent) is also likely to have contributed to an increase in hiring.¹⁷ Although the agriculture sector is usually associated with low levels of productivity, it supports community development and small rural livelihoods. Mining firms were 5 percent more likely to expand employment than other sectors, given the presence of growth; mining is capital intensive, but nearly half the mining establishments in the Kyrgyz Republic increased employment by about 41 percent between 2009 and 2012. Overall, additional information is needed to understand the future potential growth/hiring relationship in the mining and agricultural sectors.

Figure E. Distribution of firms and employment in the formal sector, 2012



Source: World Bank 2015(c).

Figure F. Firm density and employment by firm size



Source: Authors' calculation using data reported in World Bank. 2015(c).

Labor demand, supply and matching constraints limit job creation, productivity, job quality and inclusiveness

15. Labor demand is constrained by the macroeconomic outlook, ease of doing business and political stability. Since the late 1990s, macroeconomic indicators have improved; though, growth has fluctuated considerably over the last two decades largely due to political changes and instability, high dependence on commodity exports, and the country's overwhelming reliance on remittances. The inflow of remittances has created a foreign exchange surplus, triggering exchange rate appreciation and possible "Dutch Disease", possibly hindering the expansion of exports and reducing the country's competitiveness. Kyrgyz Republic is also perceived as having a governance issue, deterring business, limiting government effectiveness, and making

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ World Bank. 2105(b).

it difficult to resolve legal issues. Additionally, institutions face many limitations to doing business including laborious efforts to paying taxes, long waiting times to get an electricity connection, and limited access to affordable finance (especially for small and medium enterprises).

16. Connectivity barriers, including geographic access and information and communications technology (ICT) have also curbed potential enhancements in jobs outcomes. The country has taken advantage of its geography through cross-border trading (CBT). Small enterprises/individuals import goods from China, Tajikistan, Kazakhstan, Turkey and other countries in Central Asia. In many ways, it has emerged as a major re-exporter or supplier of bazaar goods to bazaars in other Central Asian countries. The positive employment effects include people directly employed at bazaars as well as service providers and local suppliers for whom the bazaar is often the only venue for their products.¹⁸ That said, Kyrgyz Republic remains one of the most logistics-disadvantaged countries, even among landlocked economies. High transport costs increase the cost and impact of competitiveness and potential for economic diversification. ICT in Kyrgyz Republic is also costly and lacks the necessary infrastructure to thrive. Currently, more than 80 percent of the population would have to spend at least 10 percent of their household expenditure to obtain a basic mobile plan.¹⁹

17. Notable obstacles are also limiting workers from labor force participation or improving their current employment situation. While there has been an increase in the labor supply, with youth and women making up the largest percentage of potential workers, social norms and other constraints prevent many from entering the labor force or improving their jobs outcomes. Among these constraints are: childcare duties; lack of education and skills; legislative barriers; and, discrimination. Persons with disabilities also have limited access to jobs. In 2016, the Kyrgyz Republic estimated that there are more than 172,000 persons with disabilities (about 3 percent of the population) and this number is growing.²⁰ Critical to the inclusion agenda is creating and enforcing legislation that does not allow discrimination against people with disabilities in the workplace.

18. Economic dynamism has led to a mismatch between jobseeker skills and employer needs. Kyrgyz firms are increasingly demanding higher-level skills. Figure G illustrates the change in an index of the skills intensity of jobs relative to 2006, measured in “centiles” (or less precisely, the percentile change in skills requirements in jobs). The graph shows that new economy skills have risen since 2009, with the largest increase between 2011 and 2012. In addition, the demand for routine cognitive skills has shown a subtle increase as well.²¹ New economy and routine cognitive skills are often associated with services and manufacturing jobs, while manual skills are often associated with agriculture and retail occupations. The increase in demand for higher level skills is paralleled by a high percentage of firms claiming that lack of relevant job skills and education in the labor force was a great impediment to doing business. (Figure H).²²

19. Attempts have been made to improve job-relevant skills through vocational and on-the-job training; however, many of the TVET schools remain out of touch with employer skills demands. As participation in tertiary education increases, secondary vocational training is declining. This is consistent with the structural shift in the labor market toward the services sector and like the experience of post-Soviet countries after the closure of some production facilities that were tied to vocational training. Many employers continue to recognize the professions that are offered in vocational training, as evidenced above by the better labor market outcomes for those with secondary technical/special education; however, standards and equipment have deteriorated contributing to outdated and low-quality content.²³ The agency responsible for vocational

¹⁸ Kaminski, Bartłomiej and Saumya Mitra. 2012.

¹⁹ Kelly, et al. 2017.

²⁰ UNDP. 2016.

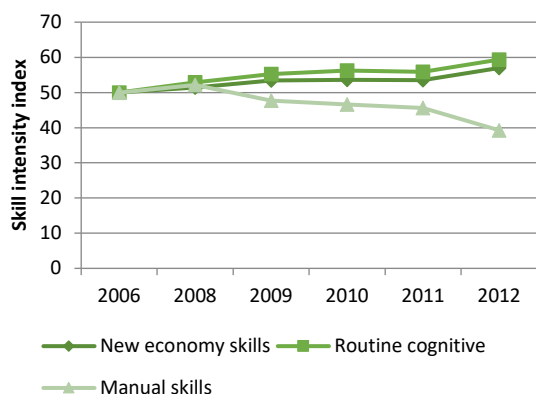
²¹ Ibid.

²² The World Bank. 2014(a).

²³ Baumann, et al. 2013.

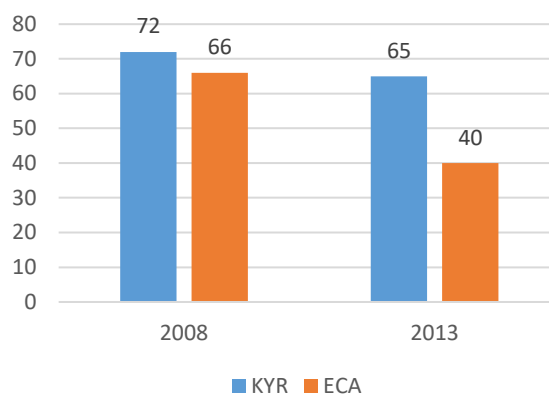
education and training has worked to improve connections with employers, but efforts are not considered widely successful.²⁴ Opportunities remain for increasing on the job training among existing firms as well as increasing skill knowledge in information and communications technology.

Figure G. The evolution of skill intensity reveals an increase in “new economy” skills, 2006–2012



Source: Ajwad et al. 2014.

Figure H. Percentage of firms indicating skills and education of available workers are a problem, 2008 and 2013



Source: World Bank. 2014(a).

20. Finally, information asymmetries in trying to match labor supply with labor demand as well as high levels of mobility have made it difficult to facilitate job matching. In the Kyrgyz Republic, there are deficiencies in job search methods and skill signaling among workers. Data indicate that almost half of the persons in the World Bank/GIZ survey experienced significant barriers to learning about vacancies, preparing a resume, performing an interview and getting good recommendations. Additionally, while internal and external migration has become an important jobs strategy for many in the Kyrgyz Republic, it has had an impact on jobs outcomes in Kyrgyz Republic. Internal migration from rural to urban areas is much more common among women who are most likely to engage in small-scale and low-paid jobs in the services sector. Young persons, usually male, tend to move out of the country. Kyrgyz workers prefer to go to the Russian Federation, Kazakhstan, and to a lesser extent, Turkey, and the United Arab of Emirates. While there are relatively high levels of mobility both internally and externally, Kyrgyz Republic does not support the programs or policies to support improvements in jobs outcomes and transition individuals after relocation.

Unleashing the Jobs Potential in Kyrgyz Republic

21. This report provides a set of policy recommendations by taking a comprehensive approach to creating and sustaining improved jobs outcomes. Policy recommendations are divided into three key areas: (i) increasing labor demand; (ii) increasing labor supply; and (iii) improving labor market matching. The policy recommendations target formal sector firm productivity, and may be equally useful when trying to increase informal sector firm productivity. It is worth noting that some recommendations may take several years to yield fruit, and so it would be helpful to consider a mix of policies that affect shorter-, medium-, and longer-term needs. The following are the key recommendations:

²⁴ Word Bank. 2015(c).

Increase labor demand through job growth

- *Improve Macroeconomic Stability:* Reduce changes in technical government staff during political transitions to promote greater economic stability, better manage aggregate fluctuations, and strengthen financial intermediation of remittances
- *Strengthen Institutions and Governance:* Simplify and streamline business regulations and improve tax administration, promote broader anti-corruption measures at the national level, and support community-level corruption monitoring initiatives.
- *Increase Firm Connectivity:* Reduce transport logistics costs, further improve the current trade facilitation regime, and reform the energy sector and lower barriers to digital adoption.
- *Reduce the cost and obstacles to Finance:* Increase access to firm and consumer-centered financial products and revise and expand the micro-finance institutional regulatory framework.
- *Encourage Innovation:* Provide tax incentives and subsidies to stimulate investment in research and development in the private sector, with particular attention to the regions, and increase Government R&D investments in risky and uncertain areas.

Prepare and develop a skilled and capable workforce

- *Reform Social Policies to Encourage Labor Force Participation:* Increase childcare and early childhood education access, remove gender-related legislative restrictions to sectors and occupations, consider interventions to overcome and influence social norms, and increase access to jobs for persons with disabilities.
- *Cultivate Job Relevant Skills:* Enhance foundational skills, equip secondary school aged children with customized vocational education and training, profile the unemployed and job seekers to link with activation services, and upgrade skills for the existing workforce.

Implement labor equilibrating policies

- *Reducing Information Asymmetries:* Develop a labor market observatory and implement labor market intermediation services.
- *Diminish Spatial Disparities:* Provide internal migrants with incentives (housing and living) and links with services, encourage the diversification of migrant destination countries, upgrade potential migrants' skills, and certify skills of returning migrants.

Introduction

1. Since its independence in 1991, the Kyrgyz Republic has taken steps to liberalize its economy and adopt political reforms with the aim of promoting sustained economic growth. The Kyrgyz Republic was one of the first former Soviet republics to implement economic reforms and to move toward a market-based economy. This was marked in 1998 with its accession to the World Trade Organization, allowing for greater trade with China and other border countries; and more recently, with accession to the Eurasian Economic Union (EEU) in 2015. The EEU agreement formally joins Armenia, Belarus, Kazakhstan, Kyrgyz Republic, and the Russian Federation for improved trade and customs controls.²⁵ In addition, the country has adopted a new constitution and has transitioned toward a parliamentary democracy.²⁶ The reforms contributed to an average growth rate of 4.8 percent between 2003 and 2013,²⁷ poverty declined from 68 percent to 37 percent in the same period.²⁸

2. The multiple economic and political reforms that have been implemented, together with regional and global trends, have dramatically changed the structure of the economy in the Kyrgyz Republic. Immediately after the fall of the Soviet Union, the lack of jobs caused workers to shift toward employment in the agricultural sector. This shift was further compounded by the privatization of state-owned industries resulting in widespread job loss in urban areas.²⁹ By the early 2000s, the agricultural sector had begun to deteriorate because of overgrazing, low levels of investment, and a lack of imported feed. The inevitable result was the drop in agricultural employment from 54 to 37 percent between 2003 and 2012.³⁰ Migration, overwhelmingly to the Russian Federation, became a jobs strategy for households in the mid-2000s, and today the country is one of the most remittance-dependent in the world. The services sector has become one of the most important sources of employment in the country because of the structural transformations.

3. Jobs outcomes have fallen short of expectations in the Kyrgyz Republic on at least four dimensions. First, job creation is not keeping pace with the rapidly growing population. Second, job productivity, or output per worker, is the lowest in Europe and Central Asia, and increasing wage rates are generating concerns about competitiveness. Third, job quality is a concern, with high rates of informality; temporary, occasional, and seasonal work. Finally, job inclusiveness is an issue because jobs outcomes for youth and for women are weak; there is also a lot of geographic variation in jobs outcomes.

4. Recent macroeconomic developments have exposed vulnerabilities in the existing growth model. GDP growth has been volatile in the recent past. Political changes; unpredictable gold exports; instability in demand for non-gold exports, and unreliable remittances caused GDP volatility. Gold exports constitute more than 40 percent of total exports, but political disagreement over ownership of the largest mine and rights to it have contributed to fluctuations in the yearly output, influencing exports and growth. In addition, the recent economic slowdown in the Russian Federation and in Kazakhstan have significantly decreased export demand, leading to lower economic growth. The U.S. dollar value of remittances fell by 25 percent during the first half of 2015 compared to first half of 2014, an estimated decline of \$225 million, largely due to the sharp depreciation of the Russian ruble and slowing growth in Kazakhstan, where many people have moved for work.³¹ Greater restrictions on migration to the Russian Federation since January 2015 have also contributed

²⁵ World Bank. 2015 (b).

²⁶ Asian Development Bank. 2014..

²⁷ World Bank, World Development Indicators.

²⁸ World Bank. 2015(c).

²⁹ Ibid.

³⁰ Ibid.

³¹ World Bank. 2015 (b).

to the decline in remittances.³² This slowdown has affected domestic demand, which in turn has depressed growth in services, a major contributor to economic growth and improving job outcomes.

5. Policy makers in the Kyrgyz Republic agree that jobs are essential for sustainable poverty reduction and shared prosperity. Structural and cyclical factors have also led policymakers in the Kyrgyz Republic to address improvements in jobs outcomes. The challenge varies depending on region and sub-population, and is mainly focused on job creation, however, it is also about increasing productivity; raising the quality of jobs; and increasing participation in the labor market of underrepresented groups. The World Development Report 2013 argues that jobs are the key to people working their way out of poverty and hardship (World Bank, 2013). The report further argues that jobs are key because they enable poor people to use their labor to generate income. This income sometimes comes from wage employment in the formal sector, but it may also come from wage or self-employment in the informal sector, and provide a means to lift poor people out of poverty. This report argues that jobs provide more than a paycheck, they also provide: skills acquisition and enhanced productivity; female empowerment; productive engagement of youth and enhanced security; and a support to social stability in conflict and post-conflict societies (World Bank, 2012).

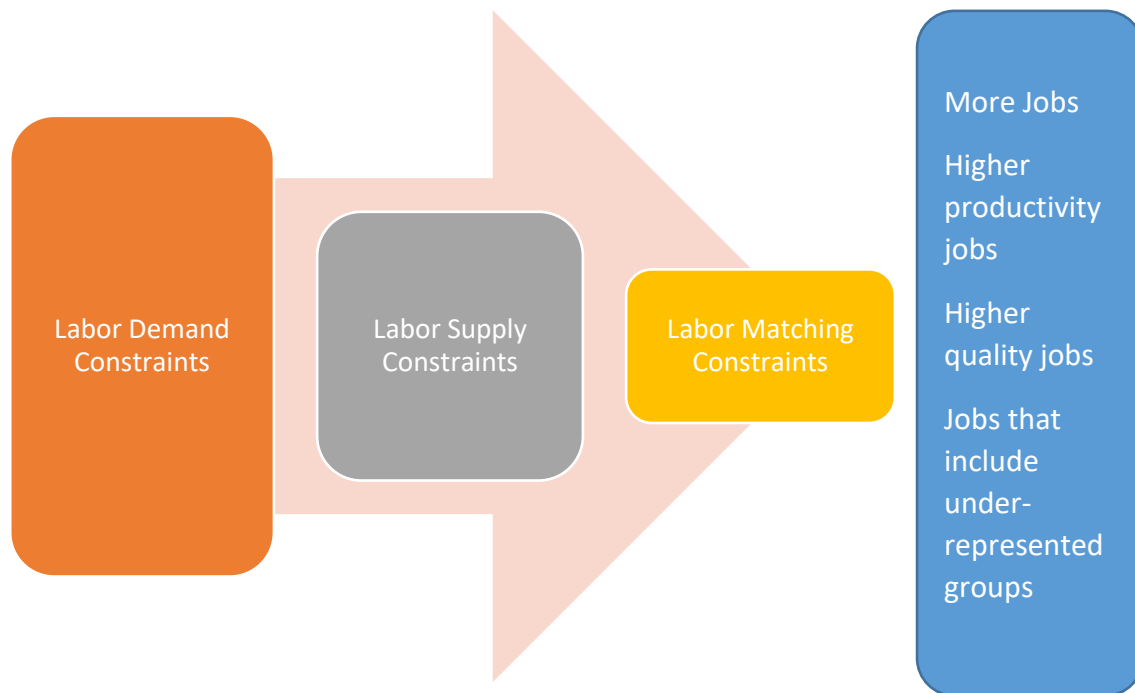
6. The authorities in the Kyrgyz Republic are motivated to improve jobs outcomes. This is most evident by the 2018-2023 National Sustainable Development Strategy (NSDS), *Forty Steps to a New Era*, which boasts three main strategic goals to becoming “a free country with a strong economy, high quality of life, competitive human capital and recognized new contribution to world’s culture” by 2040: (i) economic well-being for the people; (ii) social welfare for all citizens; (iii) security and favorable environment for the lives of citizens. The Kyrgyz Government recognizes that to improve jobs outcomes, there must be a balanced approach, establishing a safe and secure environment for domestic and international investments, improving education and health outcomes for the Kyrgyz population, and strengthening work conditions and the provision of decent labor. This most recent NSDS is the first stage of four stages and focuses on agriculture and agribusiness and the consumer goods industry and sustainable tourism to improve the economic well-being of the Kyrgyz people.

7. This report employs a simple framework to analyze the main constraints to jobs outcomes in the Kyrgyz Republic. There are three main categories of constraints, in order of their impact are: (i) labor demand constraints, (ii) labor supply constraints, and (iii) labor matching constraints³³ (Figure 0.1). These constraints limit job creation, job productivity, job quality, and job inclusiveness. The Kyrgyz Republic has a large informal sector which means that policymakers need to understand the constraints to productivity growth in the informal as well as the formal sector. The framework adopted here does not distinguish between formal and informal sectors. The framework is fleshed out in more detail in Chapter III, but this introduction provides a brief outline to help structure the report.

³² The Kyrgyz Republic’s membership in the Eurasian Economic Union is broadly thought of as the reason why the Russian Federation remains open to migrants from the Kyrgyz Republic.

³³ We use a framework outlined in Ajwad, et al. (forthcoming).

Figure 0.1 Categories of constraints to improving jobs outcomes



Source: Ajwad, et al (forthcoming).

8. Constraints to labor demand can limit sustainable job creation, which is often the result of private sector firm growth.³⁴ In many developing countries, the private sector is a main driver of job creation, accounting for 90 percent of all jobs.³⁵ But there is still uncertainty around factors that lead to job creation. Building on past work from the Global Competitiveness Index (GCI) categories³⁶ (re-defined GCI as of 2016), the Jobs Diagnostic Guidance Note, and the World Bank (2012), this paper proposes that two factors affect job growth in a country: (i) the overall enabling environment; and (ii) the firm-specific environment. There is overlap between these factors, but there are benefits to parceling out the determinants of job creation in this manner.

³⁴ Globally, the private sector is the engine of job creation in developing countries, accounting for 90 percent of all jobs in the developing world (World Bank, 2013).

³⁵ World Bank (2013). The report points to China as a remarkable example of private sector job growth, where private sector employment increased from 2.3 million in 1981 to 74.7 million workers twenty years later.

³⁶ The sub-indices underlying the GCI were revised in 2016, moving away from the “basic requirements”, “efficiency enhancers”, and “innovation and sophistication factors” sub-indices and toward the four presented in this paper. The shift resulted from the role of technology and technological transfer in disrupting the standard transformation from factor-driven to efficiency-driven to innovation-driven economies. With technology, countries may not complete, or skip over, the transformation path. Instead, four sub-indices are defined that need to be developed at any stage of the transformation process.

9. Constraints to labor supply can inhibit improvements to jobs outcomes. Two factors affect labor supply: (i) workforce size; and (ii) workforce quality. Labor supply increases are the result of greater numbers of people in the workforce or of improved quality of the workforce, these factors attract entrepreneurs.

10. And constraints to labor market matching can limit jobs outcomes. Labor market mismatches can result in high unemployment and skills mismatches if the education and training system is out of step with the needs of the labor market, or if there are market distortions which send the wrong signals to the education system.³⁷ When people move to jobs that better suit their skills and experience, or to regions where their skills are more in demand unemployment can decrease, and productivity can increase. We propose two key factors that affect labor matching: (i) information about jobs; and (ii) spatial disparities in jobs and other amenities.

11. The main audience for this paper includes policymakers in the Kyrgyz Republic across several line ministers, development partners engaged in the jobs agenda, and a number of Global Practices within the World Bank. This paper is also a key input into the Country Partnership Framework, which is currently underway. The remainder of the document is divided into five chapters: the first chapter provides a snapshot of jobs in the Kyrgyz Republic, with a focus on the number of jobs available, labor productivity, quality and inclusiveness of jobs. The second chapter takes a closer look at where jobs are concentrated. The third chapter elaborates on the constraints to improving job outcomes, focusing on constraints to labor demand, supply and matching. The fourth chapter provides a set of policy recommendations to unlock the Kyrgyz Republic's jobs potential. A summary (matrix) of policy recommendations is presented in Annex I. Chapter five concludes the document.

12. This report draws primarily on the findings from two recent World Bank reports and several publications that examine factors of economic growth and determinants of jobs outcomes in the Kyrgyz Republic. The two World Bank documents include the analytical reports, "The Skills Road: Skills for Employability in the Kyrgyz Republic"³⁸ and World Bank Report (99777-KG), "Transitioning to Better Jobs in the Kyrgyz Republic: A Jobs Diagnostic."³⁹ "The Skills Road" report⁴⁰ provides an analysis of the links between education, skills and jobs outcomes in the Kyrgyz Republic. The "Jobs Diagnostic" report describes the development of jobs in the Kyrgyz Republic in the past decade to try and understand why the country has not yielded better job outcomes. The data presented in this report are drawn largely from the Kyrgyz Establishment Reports (KER) dataset, which is submitted on an annual or quarterly basis and captures information on key financial indicators, costs, and structures (see Box 0.1 for more information on the data used for this document). Other information is drawn from the Asian Development Bank, the GIZ, the International Labour Organization, the International Finance Corporation, and select journals, papers, and reports.

³⁷ World Bank (2013).

³⁸ Ajwad, et al. 2014.

³⁹ World Bank. 2015(c).

⁴⁰ The analysis is based on the household survey on Jobs, Skills and Migration, conducted by the World Bank and the German Society for International Cooperation (GIZ) in 2013

Box 0.1 Data Used in this Document

While this document draws on several resources, most data originate from two datasets.

The first dataset is derived from the World Bank/GIZ *Kyrgyz Republic Jobs, Skills and Migration Survey* of 2013. This is one of three identical household surveys conducted in Central Asia in 2013. The other countries covered were Uzbekistan and Tajikistan. It is representative at the national, regional (oblast) and urban/rural level. The survey collected comprehensive information not typically captured by traditional household surveys. It included two distinct instruments: (i) a core questionnaire containing modules on education, employment, migration, health expenditure, remittances, government transfers, financial services, subjective poverty, and housing conditions; and (ii) a skills questionnaire on labor and work experiences, migration and preparation for migration, language skills, and technical skill training. The sample size of the core questionnaire is 1,500 households with a total of 7,706 individuals. For the skills questionnaires, one individual per household was randomly selected to participate; thus, the sample consists of 1,500 individuals. The survey was conducted from July to September 2013.

The second dataset is derived from the Kyrgyz Establishment Reports (KER), as used in the 2015 World Bank Jobs Diagnostic, *Transitioning to Better Jobs in the Kyrgyz Republic* (Report No. 99777-KG). These reports are mandatory statements required by all registered establishments in the Kyrgyz Republic. The data used for this report come from the Report on Key Financial Indicators of the Enterprise (annual and quarterly); the Statement of Sources and Use of Funds (non-profit establishments); the Statement of the Costs of Production and Distribution of Products, Works and Services of the Enterprise; the Consolidated Report on Decentralization and Privatization of State Property; the Report on Results of Issues and Subscription of Securities; and, the Report on Key Performance Indicators of Small Businesses.

While the official reports submitted by establishments include all organizations and establishments irrespective of size, ownership structure, sector or profit-making status, only a smaller subset of this data for the period of 2009-2012 were provided for analysis in the Jobs Diagnostic Report. All establishments are included except for: (i) financial institutions; (ii) public administration establishments; and (iii) several large establishments whose identity could be compromised (gold mining, railroads, public administration, and accounts for nearly half of the establishment employment from 2009-2012). The dataset includes information on firm performance and employment, *inter alia*: sales and expenses, profit, investment employment, man-hours and labor compensation. Information is also collected to determine each establishment's ownership structure, geographic location, main economic activity and, to some degree, age.

Sources: Ajwad, et al. 2014 and World Bank. 2015(c).

Chapter I. Workers and Potential Workers

1. This chapter presents the current jobs outcomes in the Kyrgyz Republic. It is divided into four subsections that focus on job outcomes: job creation, job productivity, job quality, and job inclusiveness. The chapter ends with a discussion of the micro-determinants of jobs outcomes. Analysis for this chapter is primarily derived from the 2013 World Bank/GIZ Kyrgyz Republic Jobs, Skills, and Migration Survey as well as the recently published Kyrgyz Quarterly Labor Market Brief 2014. For the purpose of this report, jobs outcomes are defined along four dimensions:

- Job Creation. The overall number of jobs in the economy. In practice, this statistic is usually the overall number of job positions that are filled.
- Job Productivity. Output per worker per unit of time. Productivity is important because wages are related to marginal productivity (according to microeconomic theory). Strengthening productivity is important because not all transitions out of poverty require a change in the type of work, but can be achieved by higher incomes in the same sector. For the sake of this report, productivity and job quality are treated differently because productivity can change without necessarily changing job quality.
- Job Quality. Job quality refers to a range of possibilities including better working conditions, non-monetary benefits (social security, unemployment insurance, etc.), and protection from mistreatment by employers.
- Job Inclusiveness. The ability of the job to draw (or at least not discriminate against) sub-groups that might be underrepresented in the labor force. These sub-groups vary depending on country and tend to be poor and vulnerable; youth, women, indigenous populations, disabled persons and minority non-nationals are some examples of underrepresented groups.

2. In the Kyrgyz Republic, improving jobs outcomes is one of the biggest development challenges. The working age population continues to grow by 1.3 to 1.4 percent each year, but job growth is less than half of one percent. Additionally, more than 20 percent of the working age population are neither in school nor working. Worker productivity is low and declining job quality (increases in informal labor and fewer investment in worker benefits and protection) are also significant concerns. Finally, jobs outcomes vary considerably by age, gender, and geography, and many sub-populations are currently underrepresented in the labor force.

Labor force growth is outpacing job growth

3. Ensuring strong job growth, especially if it is faster than labor force growth, is an important policy goal for any government. The goal becomes more challenging where the labor force is growing rapidly. Between 2009 and 2013, job growth averaged only 0.9 percent per annum.⁴¹

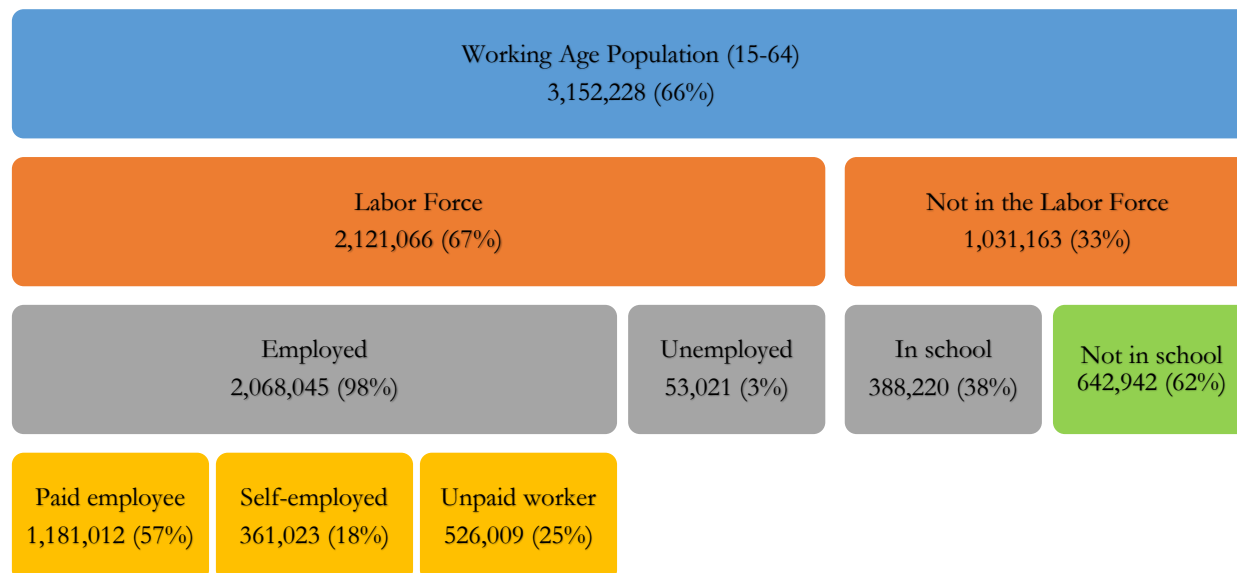
4. The Kyrgyz Republic's potential workforce is growing fast – faster than some of its neighbors in Europe and Central Asia. Fertility rates in Kyrgyz Republic have increased since 2000, from 2.4 to 3.2 in 2014, suggesting that the Kyrgyz Republic's working age population will continue to grow for several decades. 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 population is very young – 28 percent are 15-29 years old and 31 percent are under 15 years old. The working-age population (15-64-year olds) was about 2.99 million

⁴¹ World Bank (2015).

individuals in 2000 and is expected to increase to around 4.6 million by 2030, it grew by 2 percent annually between 2003 and 2013,⁴² meaning that around 50,000 new entrants per year have reached working age.⁴³

5. In 2013, the Kyrgyz Republic had a working age population of about 3.15 million people who can contribute productively to the economy. Of this working age population, about 2.1 million (67 percent) are in the labor force, either employed or looking for work (Figure 1.1), unemployment rates are relatively low, currently 3 percent, and have held over the years despite some fluctuations in GDP growth. As a result, 2.06 million people, or 98 percent of the labor force, are employed.

Figure 1.1. Profile of Working Age Population in Kyrgyz Republic



Source: World Bank/GIZ *Kyrgyz Republic Jobs, Skills, and Migration Survey* (2013) (Note: data excludes migrants).

6. One-third of the Kyrgyz working-age population is not part of the labor force. Just over one million people of working age are not actively looking for or engaged in work.⁴⁴ 38 percent of these inactive workers are currently attending school, but the other 62 percent are neither in school nor working,⁴⁵ which leaves 640,000 working age adults who are not engaged in productive activity and are not investing in their own human capital.

7. Migration has become an important jobs strategy for households in the Kyrgyz Republic. Many youth, especially men, have sought labor opportunities abroad. The number of migrants abroad is unclear, but estimates range from 250,000 to 740,000, this is between 9 and 17 percent of the population, more than triple the world average⁴⁶ but similar to Uzbekistan and Tajikistan, where outward migration is also high.⁴⁷ This outward migration appears to have kept unemployment rates low and labor force participation high. However,

⁴² World Bank (2015).

⁴³ Estimate is based on data from United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision, custom data acquired via website.

⁴⁴ Herein referred to as inactive workers.

⁴⁵ In this paper, it is assumed that those who are not working nor in education are also not in training. Subsequently, this population is referred to as NEETs (Not in employment, education or training). Herein, the paper will reference this population as NEETs.

⁴⁶ World Bank. 2015(c). Asian Development Bank. 2014.

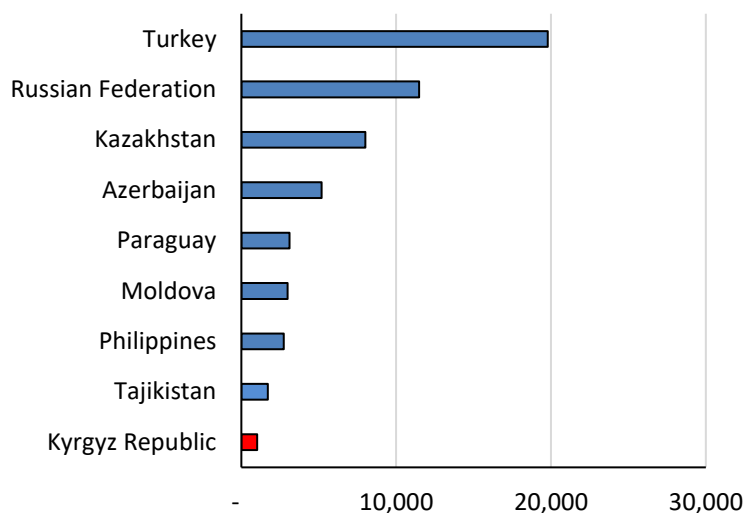
⁴⁷ World Bank, World Development Indicators. 2012.

the recent oil price drop in 2014 affected outward migration, as migrant host countries such as the Russian Federation and Kazakhstan experienced an economic slowdown. Internal migration, also continues to be a critical source for jobs, where people have moved from the poorer south to the northern, more affluent, oblasts (Bishkek, Osh and Jalal-Abad), for informal work in the service and industry sectors.⁴⁸

Labor productivity is low

8. Labor productivity is low and is growing slowly. Labor productivity, measured as GDP per worker, was about US\$7,600 in the Kyrgyz Republic in 2014, while in the Russian Federation it was US\$45,000, in Kazakhstan it was US\$39,000 and US\$11,000 in Moldova (Figure 1.2). Furthermore, labor productivity growth in the Kyrgyz Republic has been averaging 4.3 percent per annum since 2005, which is low relative to other countries in the region. Productivity growth has steadily declined from an average of 7.0 percent a year from 2005 to 2009 to 0.7 percent a year during 2009 to 2012, well below the productivity level of neighboring countries.

Figure 1.2. Total labor productivity, 2014
Average output per employed worker (constant US\$/employment)



Source: World Development Indicators.
Note: Total labor productivity for Tajikistan is from 2013

9. In recent years, productivity grew in the services sector, but declined in the industrial sector. From 2005 to 2012, strong output growth in the services sector, especially in transport and communications, supported increases in productivity at an average of 9 percent a year, as well as increases in employment. Transport and communications account for only 15 percent of service sector employment but they averaged nearly 25 percent in annual real output growth. An explosion of new communications technologies (mobile telecommunications and internet) supported by private sector demand, has reinforced this growth. The rest of the services sector had relatively low productivity over the same period, averaging less than 1 percent a year.⁴⁹ Productivity in the industrial sector has dramatically declined. This is a result of a combination of factors, but

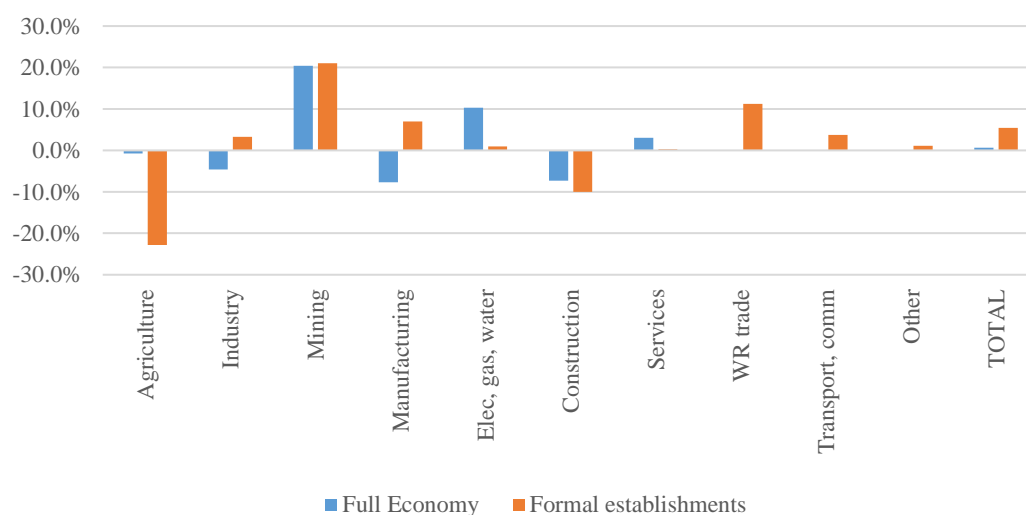
⁴⁸ Fryer et al. 2014. Over the past two decades, an estimated 1.9 million individuals in Kyrgyz Republic have changed their domestic residence at least once

⁴⁹ World Bank. 2015(c).

mainly because productivity in manufacturing, mining and utilities has been on the decline since the later 2000s to 2012.⁵⁰

10. Overall productivity growth is likely to have declined because of a drop in informal sector productivity. Data suggest that increases in informality in the low-productivity sectors of services and industry have contributed to the deterioration in national productive growth. Aggregate productivity growth in the formal sector has been strong, averaging 6.7 percent a year since 2009.⁵¹ However, overall productivity growth has averaged less than 1 percent a year, hinting at a decline in the level of output per worker in the informal sector. The formal/full economy productivity differential is particularly large in the industrial sector where informality has risen strongly (Figure 1.3). These outcomes may also be driven by compositional effects, i.e., the number of informal businesses in the economy versus formal, and the size of these firms.

Figure 1.3. Productivity Growth by Sector: Full economy v Formal establishments 2009-2012



Source: World Bank. 2015 (c).

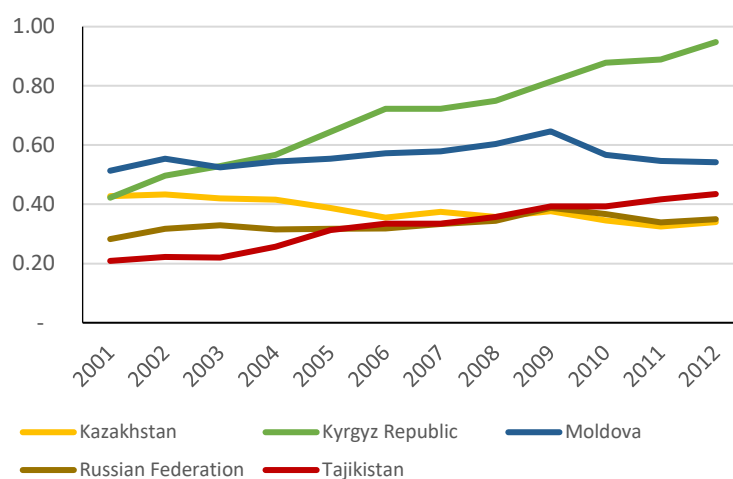
11. A potential concern is that real wage growth exceeds labor productivity growth. Since 2005, real wages have grown by an average of 10 percent a year, driven largely by the strong wage growth in the construction and services sectors. Productivity growth averaged 2.1 percent a year from 2003 to 2012. In manufacturing, wages increased at an average of 6 percent per year from 2009 to 2012 compared with an average productivity decline of 4 percent per year in the same period. Similarly, in the agricultural sector, real wage increases averaged around 17 percent a year from 2009 to 2012 compared to 4 percent productivity growth.⁵² In the Kyrgyz Republic, the ratio of wages to productivity is extremely high (Figure 1.4) relative to other CIS countries, and this could weaken external competitiveness.

⁵⁰ Ibid.

⁵¹ Ibid.

⁵² Ibid.

Figure 1.4. Ratio of wages to productivity, 2000-2014



Source: Employment/earnings from ILOSTAT & national statistical sources; GDP to calculate productivity from WDI.

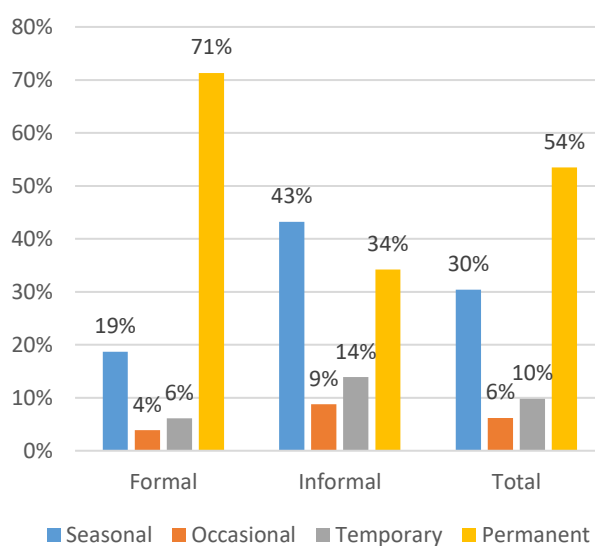
Job quality is a concern

12. Most workers are engaged in jobs that raise job quality concerns. Job quality affects workers' welfare and perceptions of their welfare. In the Kyrgyz Republic, most workers are engaged in the informal sector and are therefore not covered by social security or unemployment insurance; they are also not protected by the labor code. Many also work in jobs that provide temporary or seasonal contracts. Job quality is difficult to measure but contract predictability, protection from employer abuse and other non-monetary benefits like social security or unemployment insurance are issues for concern in the labor market.

13. Many workers are engaged in the informal sector, or have seasonal work; furthermore, many are not paid on a regular basis and have only temporary contracts. Permanent, or long-term contracts in the formal sector that provide regular pay are the most attractive to workers, but too many jobs are in the informal sector in the Kyrgyz Republic (48 percent of all jobs)⁵³. Contracts are often seasonal or short-term and proper receipt of payment is sporadic (Figure 1.5). Informal sector workers do not have a labor contract with their employers. Exacerbating the problem with job quality is that 30 percent of all workers are seasonal; 6 percent are occasional workers; and 10 percent work on a temporary basis. This means that 46 percent of all workers have a job that is not permanent, most of which are in the informal sector. 43 percent of all jobs in the informal sector are seasonal, 9 percent are occasional, and 14 percent are temporary, i.e., two thirds of informal sector jobs are not permanent. Working under these conditions means that workers' security and welfare are unpredictable; their pay often does not constitute a living wage, and these factors leave them more vulnerable to poverty and shocks.

⁵³ Note that this definition of informality excludes self-employed people. In Ajwad et al. (2014) self-employed people are also included in the definition of informality and therefore, the informality rate was 62 percent.

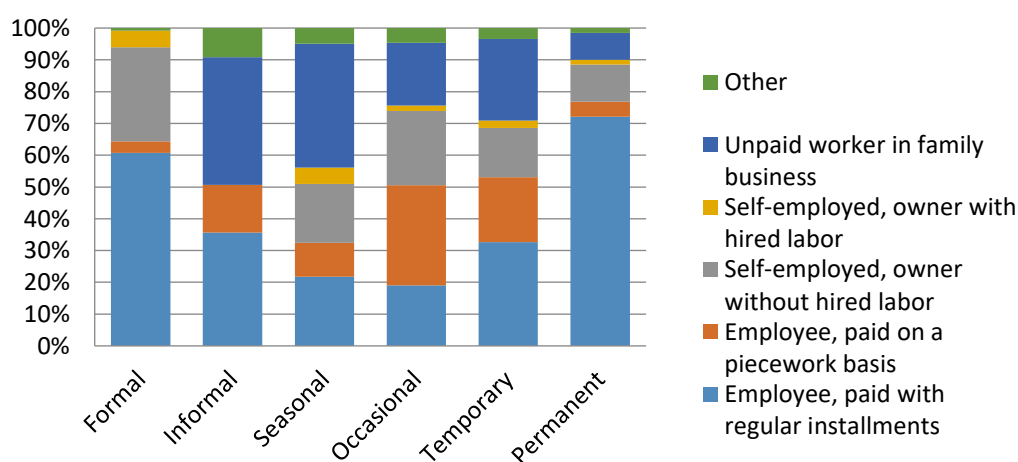
Figure 1.5. Indicators of Type of Employment, 2013



Source: Authors' estimates using World Bank/GIZ Kyrgyz Republic Jobs, Skills and Migration Survey, 2013

14. The way workers are paid also varies depending on the type of work. Sixty percent of formal sector workers are paid in regular installments, but in the informal sector this is the case for only 36 percent (Figure 1.6). In the formal sector only 3 percent of workers are paid under a piecewise pay scheme, while in the informal sector it is 15 percent, and among occasional workers 32 percent earn piecewise pay. There are almost no unpaid family workers in the formal sector, unlike the informal sector where almost 40 percent are unpaid family workers.

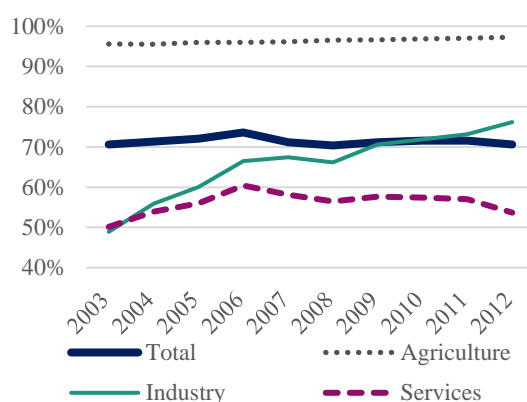
Figure 1.6: Distribution of employment type in Kyrgyzstan, 2013



Source: Authors' estimates using World Bank/GIZ Kyrgyz Republic Jobs, Skills and Migration Survey, 2013

15. Enterprise data show that the composition of informality has changed over the last decade. The agricultural sector has historically accounted for the high rates of informality, but informality has been increasing in the industry and services sectors since the early 2000s, as poor, rural workers began to migrate to the bigger cities. As they started to send home remittances construction increased (see Figure 1.7) and the manufacturing and construction sectors also experienced large increases in informality.

Figure 1.7. Informal Employment as a Share of Total Employment, by Sector 2003-2012



Source: World Bank. 2015(c).

16. There are many reasons why the informal sector is so large. In 2012, the government estimated that the informal economy made up about 19.9 percent of GDP, without the agricultural sector; this is more than two times the 1995 estimate (8.4 percent). Others argue that this grossly underestimates the extent and importance of the informal economy and that it generates between 25 and 80 percent of GDP.⁵⁴ The main reasons for high levels of informality include: high levels of tax and social security contributions; an ineffective tax administration; excessive business regulation; lack of transparency; corruption; and bribery.⁵⁵ The informal sector needs to be acknowledged and measured as workers often have little or no social protection, or employment benefits, this limits their inclusiveness in the labor market and diminishes job quality.

17. Informal (including unpaid) workers in the Kyrgyz Republic tend to be younger men with less educational attainment, from poorer households⁵⁶, live in rural areas, and live in oblasts of Osh and Batken. These informal workers tend to work in construction, trade, and agriculture (Figure 1.8):

- Informal workers have lower educational attainment and have fewer skills than formal workers. While only 17 percent of informal workers have completed higher (tertiary) education, 43 percent of formal workers have a tertiary degree. Around one in twenty-five informal workers did not complete secondary education, compared to one in fifty among formal sector workers. This is like the situation in other middle- and lower-income countries.⁵⁷
- Informal workers are more likely to be male than female. Men make up 53 percent of the informal labor force compared to 47 percent of women. Women are also marginally more likely to work in the informal (47 percent) than the formal sector (46 percent). Women working in the informal sector are often treated badly by government offices; tend to suffer from a large wage gap compared to men and may be deprived of the right to own or control property; this has a serious effect on their welfare, security and livelihood.⁵⁸

⁵⁴ Asian Development Bank. 2014.

⁵⁵ UNDP. 2006.

⁵⁶ In the lower three consumption quintiles.

⁵⁷ Koettl, Packard and Montenegro (2012) find that people who have only completed basic education in Europe are more likely to be informally employed. Perry, et al. (2007) find that workers who have not completed 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.

⁵⁸ UNDP 2006.

- Informal workers tend to be a little younger than formal sector workers. More than 38 percent of informal sector workers, and 30 percent of formal sector workers, are under the age of 30. This demographic pattern has been observed in other countries, where the informal sector appears to function as an important step in the school to work transition, especially for poorly educated youth.⁵⁹ 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 the Kyrgyz Republic the difference between the mean ages of formal and informal sector workers is just a few years, but this figure could be affected by the fact that many younger workers prefer to migrate for better paid opportunities than join the informal sector.⁶⁰
- Informal workers tend to be poorer than formal sector workers. 20 percent of informal workers are in the poorest quintile of household consumption, compared to 16 percent of formal workers. Almost 19 percent of informal workers, but more than 25 percent of formal workers, are in the richest quintile. Additionally, around half of formal sector workers make up the top two quintiles, compared to just over a third of informal sector workers.
- Informal workers are more likely to live in rural areas, and in the oblasts of Osh and Batken. More than 67 percent of informal workers, and 58 percent of formal workers live in rural areas. When differentiating by oblast, regions with large urban centers have more formal than informal workers (Bishkek and Jalal-Abad); while the oblasts of Osh and Batken in the south, have considerably more informal than formal workers.
- Informal workers are more likely to work in construction and agriculture. More than 30 percent of informal workers are engaged in the agriculture sector, while 14 percent of formal employees are in agriculture. Similarly, 10 percent of informal workers are engaged in the construction sector compared to 7 percent of formal workers. There is a marginal difference in informal and formal workers in the trade sector, with slightly more informal workers than formal.

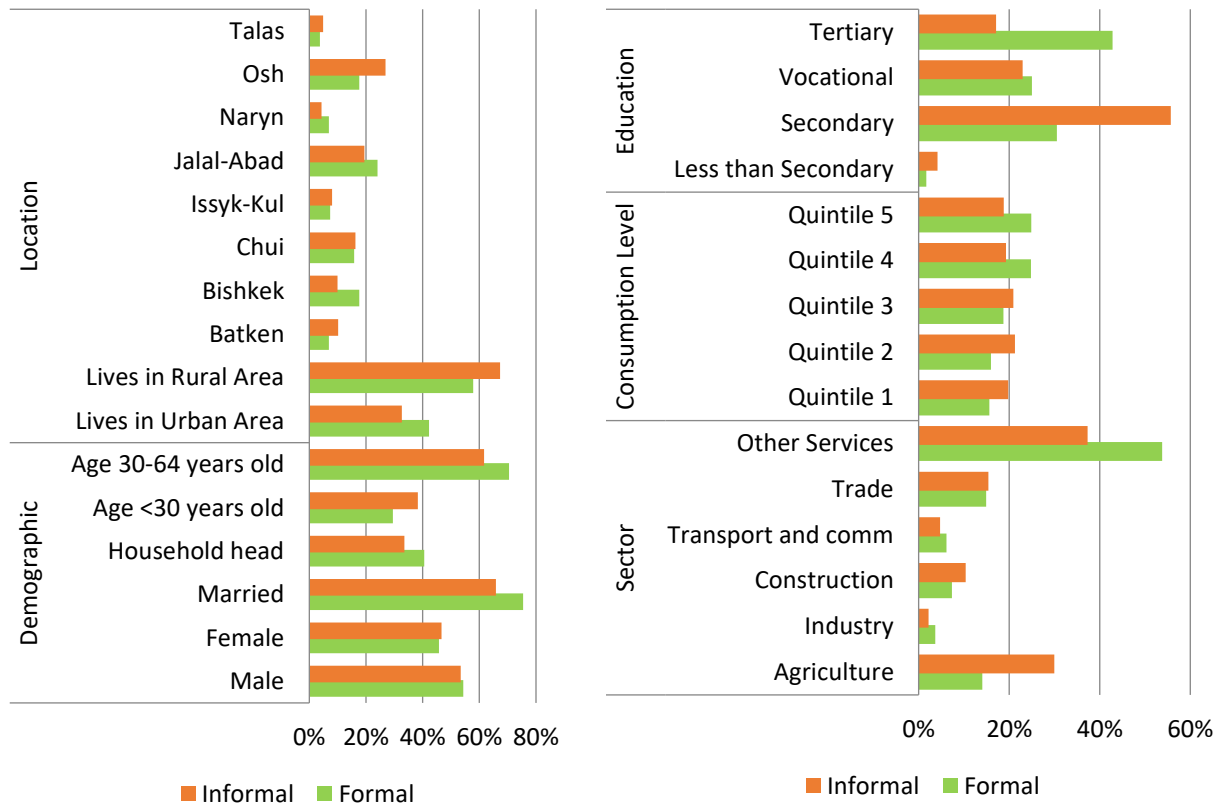
18. Formal employment is largely concentrated in the public sector, with limited development of formal private sector jobs. In general, the formal sector in the Kyrgyz Republic is small and largely urban, the public sector makes up most of the employment (public administration, education, and health/social services). The recent Kyrgyz Labor Force Survey suggests that public sector employment accounts for only 20 percent of overall employment,⁶¹ which is in line with OECD levels; however, this accounts for 60 percent of formal employment. The flipside is that 40 percent of employment is in the private sector, which is about 11 percent of overall employment. The share of formal, private sector jobs relative to overall employment is low compared to other countries in the region and elsewhere (Figure 1.9).

⁵⁹ Maloney, (2004), Koettl, 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).

⁶⁰ Abdulloev, Gang, and Landon-Lane (2012) find empirical evidence which suggests that migration and informality substitute for one another in Kyrgyz Republic.

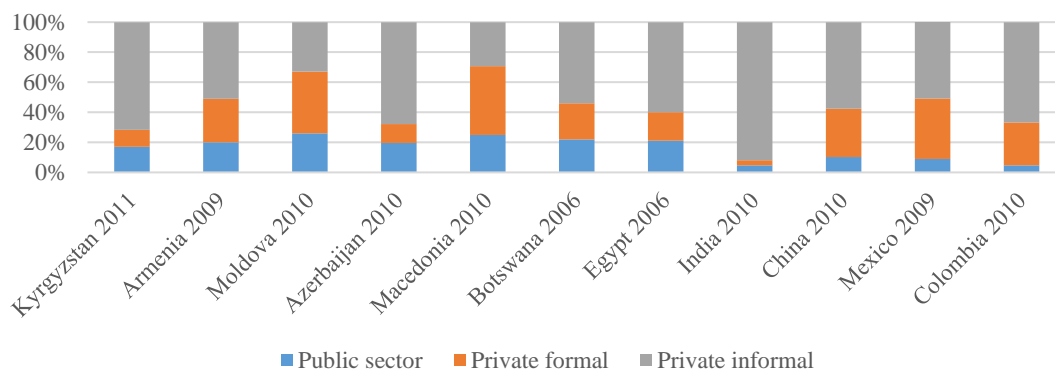
⁶¹ Kyrgyz National Statistics Committee. 2016.

Figure 1.8. Differences between Formal and Informal Sector Workers



Source: World Bank staff estimates using World Bank/GIZ *Kyrgyz Republic Jobs, Skills, and Migration Survey* (2013). Note: Excluding current migrants; age of 15-64. Education variables: age of 25-64

Figure 1.9. Share of employment in private formal, public formal and informal sector



Source: Graph from World Bank, 2015(c).

Jobs are not inclusive – especially for youth, women, and residents of the South

19. There is often some variation in jobs outcomes across sub-groups of the economy. There are some common patterns in jobs outcomes by sub-groups across countries, especially in Central Asia. Based on the evidence presented here, the underrepresented groups are often correlated with groups that are poor and vulnerable.

Women and young men have weaker job outcomes

20. Labor force participation rates for youth and for women have declined. The employment rate⁶² for men in 2013 was 79 percent and 58 percent for women, compared to 73 and 58 percent, in OECD countries (Figure 1.10). While these figures are relatively high compared to other countries in the region, female participation rates have decreased slightly over the past couple of years, mainly because of increases in outward migration. More men than women have emigrated, and this reflects the steep rise in the percentage of working-age women engaged in household work or childcare: between 2003 and 2013 this figure rose from 16 to 26 percent. This trend has been common in many migrant-dependent economies including Armenia, Tajikistan, and Moldova. Additional research is needed to determine the type of policy required to encourage an increase in female labor force participation.⁶³

21. Labor force participation rates for youth (age 15-24) have always been lower than that of older people (25-64 year olds). Labor force participation rates among youth have declined since 2005, most notably between 2009 and 2013, when they dropped by about 6 percentage points from 51 percent to 45 percent (Figure 1.10). This drop was not a result of leaving work to continue education as the number of working age youth not in education, employment or training (NEET) increased after 2005. The main hypothesis for this decline is that youth withdrew from the domestic labor market in search of jobs overseas.

Figure 1.10. Labor Force Participation Rate by Gender, 2005-2013

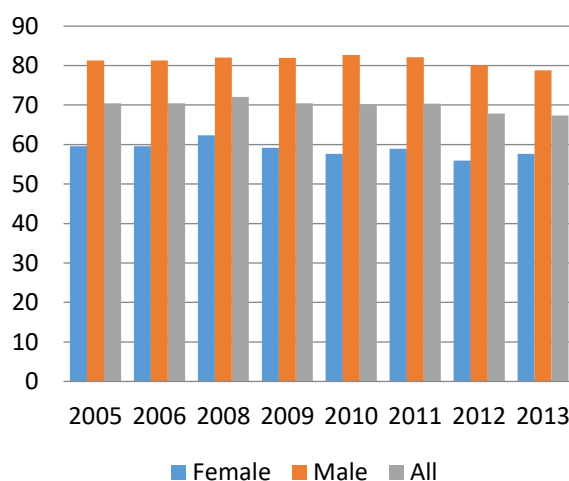


Figure 1.11. Labor Force Participation Rate by Age, 2005-2013



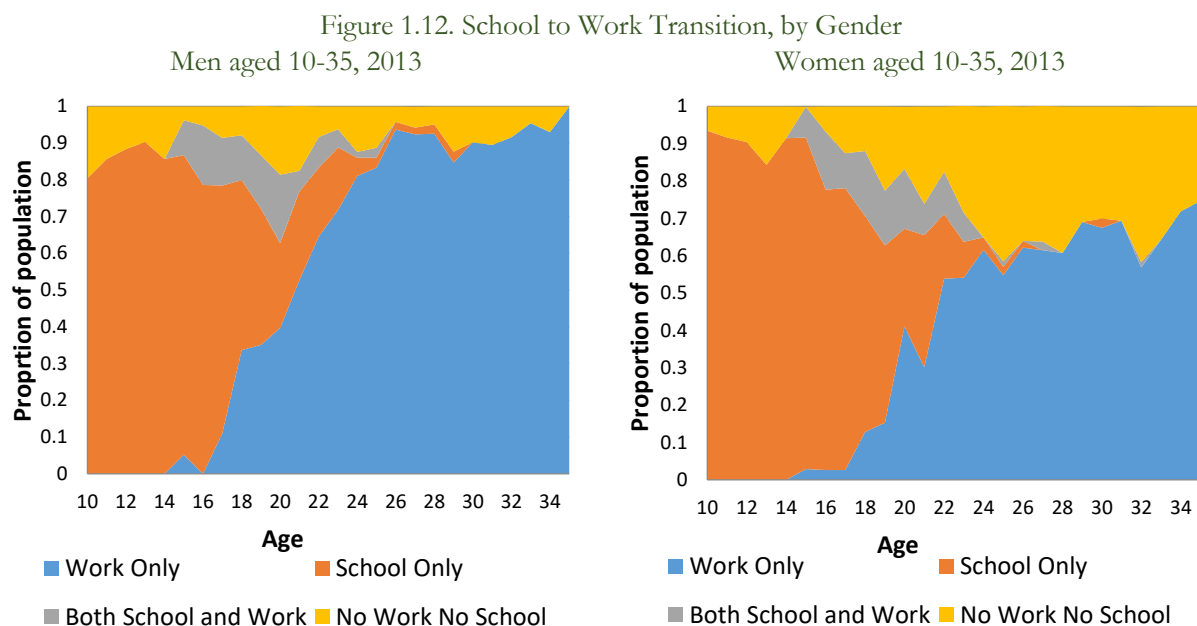
Source: World Bank/GIZ Kyrgyz Republic Jobs, Skills, and Migration Survey, 2013.

22. Most young men transition from school to work while most young women transition from school to inactivity. Until about age 16 there is little difference between the activity choices of women and men (Figure 1.12). Men and women are overwhelmingly similar at school, mostly due to the national compulsory education

⁶² The share of the labor force aged 15-64 who have a job

⁶³ World Bank. 2015(c).

requirements. However, after age 16, the differences become notable, with a few important patterns emerging. First, as men move into the labor market, more than a third of women remain in school. By the age of 21, more than half of men are actively engaged in the labor force; 35 percent of women are still in school at that age⁶⁴ compared to 24 percent of men. Second, at around 21 years of age, there is an increase in the number of women who become inactive – where one in four women is neither working nor going to school, compared to 1 in 6 men. This figure nearly doubles by the time women reach the age of 25, which is not surprising given that the average age for having a first child is 23.6 years old.⁶⁵ Finally, unlike neighboring Tajikistan, female labor force participation rates continue increasing over time, nearly three-quarters of women are working at the age of 35 in contrast to neighboring Tajikistan where the female labor force participation rate at age 35 is 30 percent.



Source: Authors' estimates using World Bank/GIZ Kyrgyz Republic *Jobs, Skills, and Migration Survey* (2013)

23. With the growing youth population, there is a greater need to re-engage young people in the labor force, particularly those who are inactive. The working age population grew by 2 percent between 2003 and 2013, the rural south experienced higher population growth than the urban north). Employment and economic opportunities, however, have not been able to keep up with the population boom. The Kyrgyz Republic is therefore in a unique situation to exploit the demographic change as a means of transforming its economy in the long run.

24. When holding all other factors constant, females account for 78.5 percent of 15-24-year-old NEETs, while males only make up 21.5 percent of 15-24-year-old NEETs. The gender disparities are not unique to the Kyrgyz Republic. Many young women and girls become inactive because of cultural factors like getting married or having children; family responsibilities; and the lack of agency to play a different role in labor markets. If data is disaggregated by age, education and consumption quintile, young individuals aged 15-24 make up more than a fifth of NEETs, most of whom are male (Figure 1.13). NEETs in Kyrgyz Republic tend to have lower levels of educational attainment and come from the lowest three consumption quintiles. Overall, those

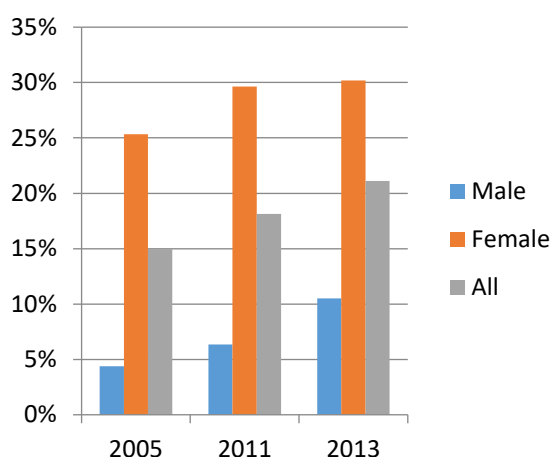
⁶⁴ 30 percent of women are working by the age of 21 and nearly 9 percent are engaged in work and school

⁶⁵ NationMaster. 2013.

individuals who are inactive and not in school are highly underutilized, are not developing their human capital, and are a strain on the economy.

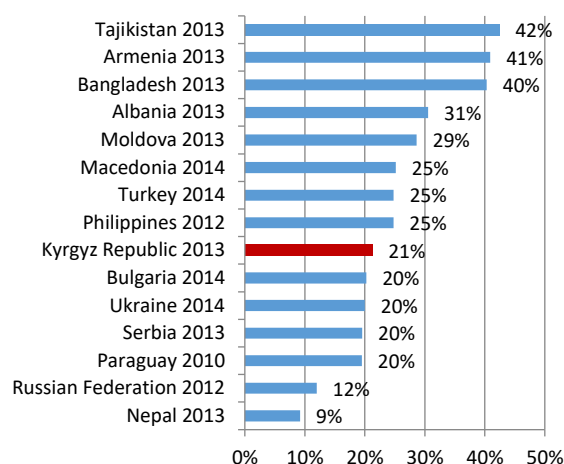
25. The percent of working age youth NEETs has increased consistently over the past decade. Between 2005 and 2013, the number of these NEETs increased from 15 to 21 percent, with the rate of young women increasing from 25 to 30 percent and the rate for young men increasing from 4 to 11 percent (Figure 1.13). Compared to other countries in the region, the percentage of youth NEETs in the Kyrgyz Republic in the middle of the list (Figure 1.14). The Russian Federation has a NEET rate of just 12 percent, while Tajikistan has a rate of 42 percent.

Figure 1.13. Percentage of 15-24-Year-olds who are Not Employed and Not in school, by Gender



Source: World Bank staff estimates using World Bank/GIZ *Kyrgyz Republic Jobs, Skills, and Migration Survey*

Figure 1.14. Percentage of 15-24-Year-olds who are Not Employed and Not in school, by Country

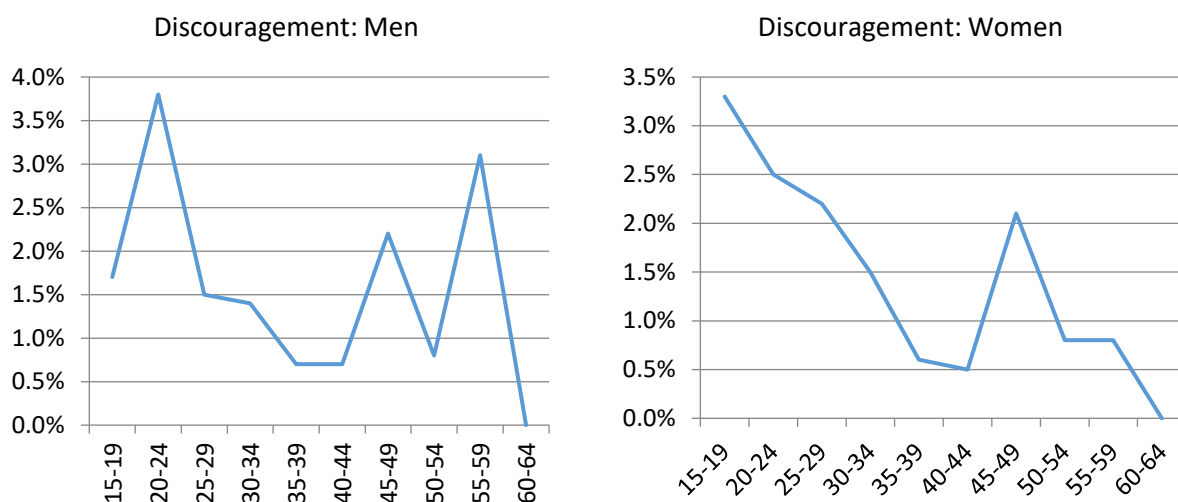


Source: World Bank, *Tajikistan Jobs Strategy*. Forthcoming. 2016.

26. The share of the population that could work but feels discouraged from seeking work is relatively low compared to other countries in the region. There are signs of job market pessimism for youth and for the 45-49 age range. 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 greatest among young people, at around 4 percent for men and 3 percent for women; this is also the case for men and women around the age of 45-49 (Figure 1.15). The average share of discouraged workers among the young labor force (aged 15–24) was just 0.5 percent in OECD countries in 2012, whereas in the Kyrgyz Republic - approximately one in six young men and one in ten young women aged 20–24 are too discouraged to look for work.⁶⁶

⁶⁶ Strokova, Victoria; Ajwad, Mohamed Ihsan. 2017.

Figure 1.15. Share of Population Discouraged from Looking for Work, 2013



Source: Ajwad et al. (2014) using World Bank/GIZ Kyrgyz Republic *Jobs, Skills, and Migration Survey* (2013).

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

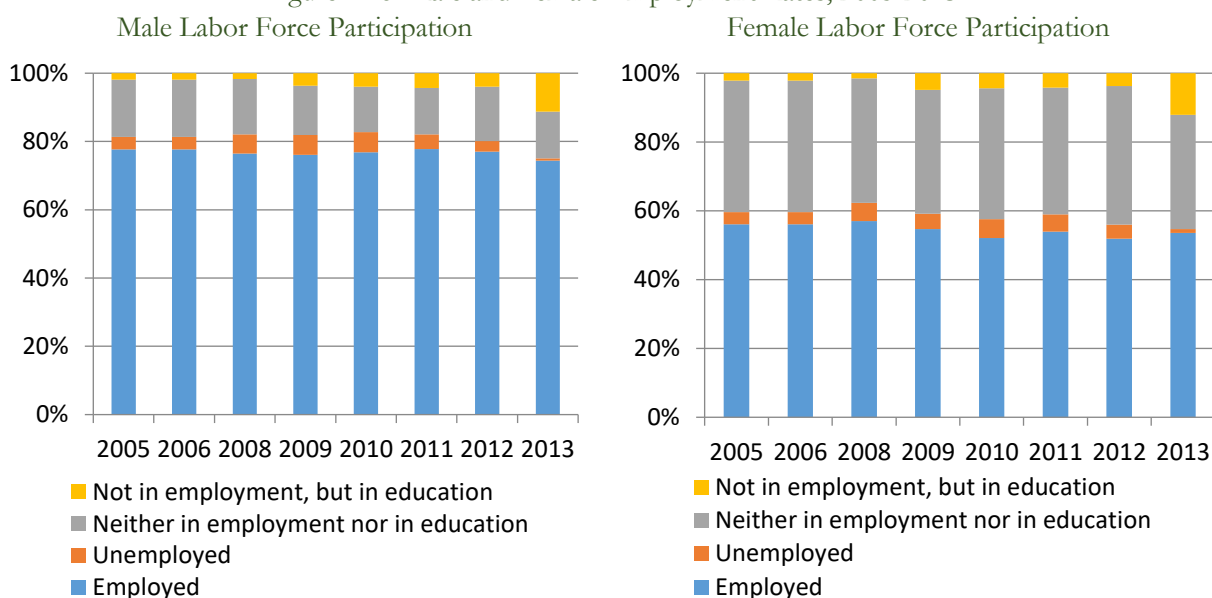
Women are engaged in the workforce, but have limited opportunities in the private sector

27. Between 2005 and 2013, the disparity between employment rates for men and women changed very little. Employment rates were 78 percent for men and 56 percent for women in 2005; male employment rates had declined by 4 percentage points to 74 percent by 2013, and the rates for women declined by only 2 percentage points to 54 percent (Figure 1.16). The Kyrgyz Republic has high female employment rates relative to its neighbors, despite the low figure compared to men. In Tajikistan the female employment rate was 26 percent in 2013 and in Uzbekistan it was 40 percent.⁶⁷ There are several reasons why women have lower employment rates and include: skills mismatch; cultural factors; family responsibilities; or discrimination by employers. Additional research is needed to understand these gender differences in employment to ensure that the Kyrgyz labor market is maximizing its potential.

28. The public sector remains an important source of employment for women more to men, with fewer opportunities in the private sector. The share of women employed in the public sector is 33 percent, higher than that of men employed at 25 percent (Figure 1.17). On the other hand, the share of men who are wage employees in the private sector is almost 33 percent, compared to only 24 percent of women.

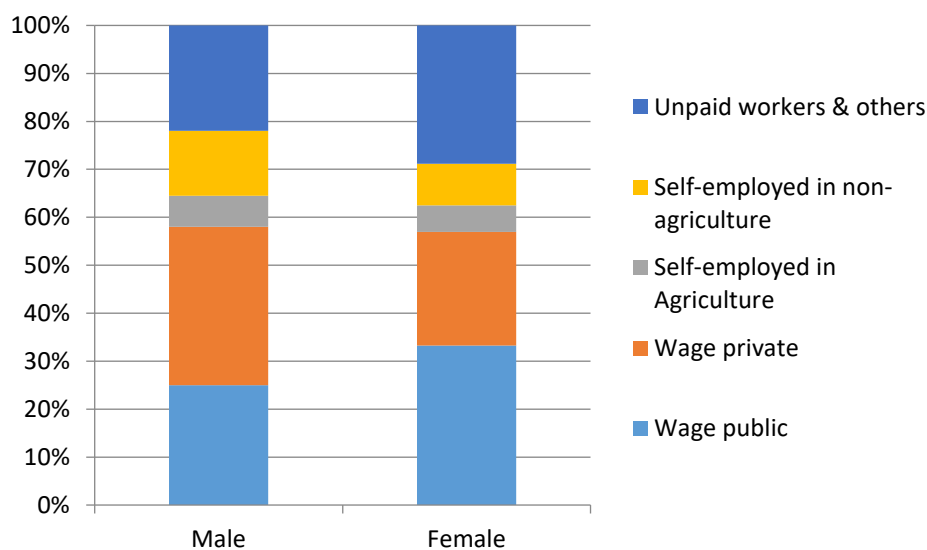
⁶⁷ Ajwad et. al. 2014.

Figure 1.16. Male and Female Employment Rates, 2005-2013



Source: World Bank staff estimates using World Bank/GIZ Kyrgyz Republic Jobs, Skills, and Migration Survey (2013). Note: Excluding international migrants

Figure 1.17 Employment Type by Gender, 2013



Source: World Bank staff estimates using World Bank/GIZ Kyrgyz Republic Jobs, Skills, and Migration Survey (2013). Note: Excluding international migrants.

29. International evidence shows that women-owned firms are less productive than male-owned firms; this productivity differential may be a result of differences in access to productive inputs.⁶⁸ Reducing this

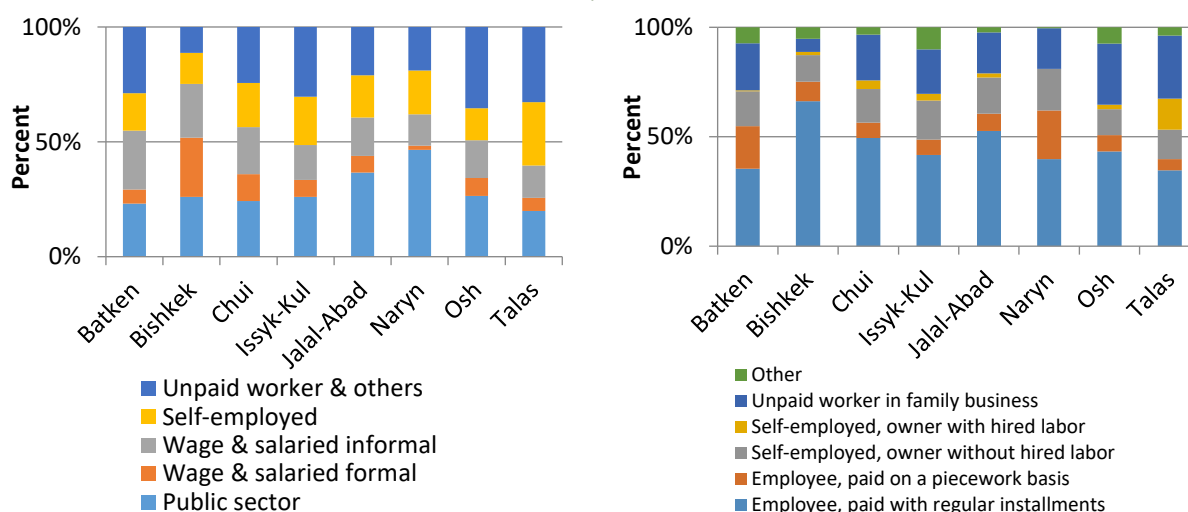
⁶⁸ Blackden and Hallward-Driemeier, 2013

productivity gap by creating equal access to productive resources could yield output gains and reduce inequity (World Bank, 2011).

The most desirable jobs are in Bishkek, Jalal-Abad and Naryn

30. There are geographic disparities in types of employment; workers in Bishkek and Jalal-Abad have the most desirable jobs. In Bishkek and Jalal-Abad, 66 percent and 53 percent of employees, respectively, are paid in regular installments, while fewer than 35 percent of employees in other regions are paid regularly. Surprisingly, public sector employment is greatest in the oblast of Naryn; however, not as many employees are paid in regular installments. (Figures 1.18).

Figure 1.18. Employment Type, by Oblast



Source: World Bank/GIZ Kyrgyz Republic Jobs, Skills and Migration Survey, 2013.

There is a notable correlation between household wealth and employment outcomes

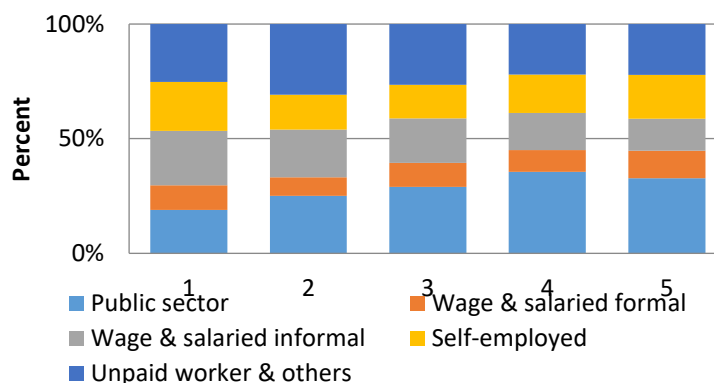
31. Adult workers from richer households are more likely to have better quality jobs. There is a clear pattern that shows that workers from richer households have more desirable jobs; this quality can be measured in many ways; one way is to see if workers are paid in regular installments. Formal sector workers with permanent or longer-term jobs, also richer working-age adults are more likely to be paid regularly; 52 percent of households in the richest quintile are paid in regular installments, but this only applies to 45 percent of households in the poorest quintile. In terms of the informal sector, which is considered less secure and therefore less attractive, 24 percent of workers from the poorest quintile, and only 14 percent of workers from the richest quintile have informal jobs (Figure 1.19). Self-employment is more common in the informal sector. Nearly 20 percent of households in the poorest quintile and 14 percent of households in the richest quintile are self-employed. The public sector, which is considered more desirable is more likely to employ wealthy adult workers: 33 percent of workers from the richest quintile have public sector jobs compared to just 19 percent from the poorest quintile (Figure 1.20). It is difficult to say whether households are rich because of their better-quality jobs, or if it is because they have access to better quality jobs in the first place. The causality may go both ways.

Figure 1.19: Employment Type by Consumption Quintile



Source: World Bank staff estimates using World Bank/GIZ Kyrgyz Republic Jobs, Skills, and Migration Survey, 2013. Notes: Excluding international migrants and does not use panel data to calculate figures.

Figure 1.20: Employment Quality, by Household Consumption



Source: World Bank staff estimates using World Bank/GIZ Kyrgyz Republic Jobs, Skills, and Migration Survey, 2013.

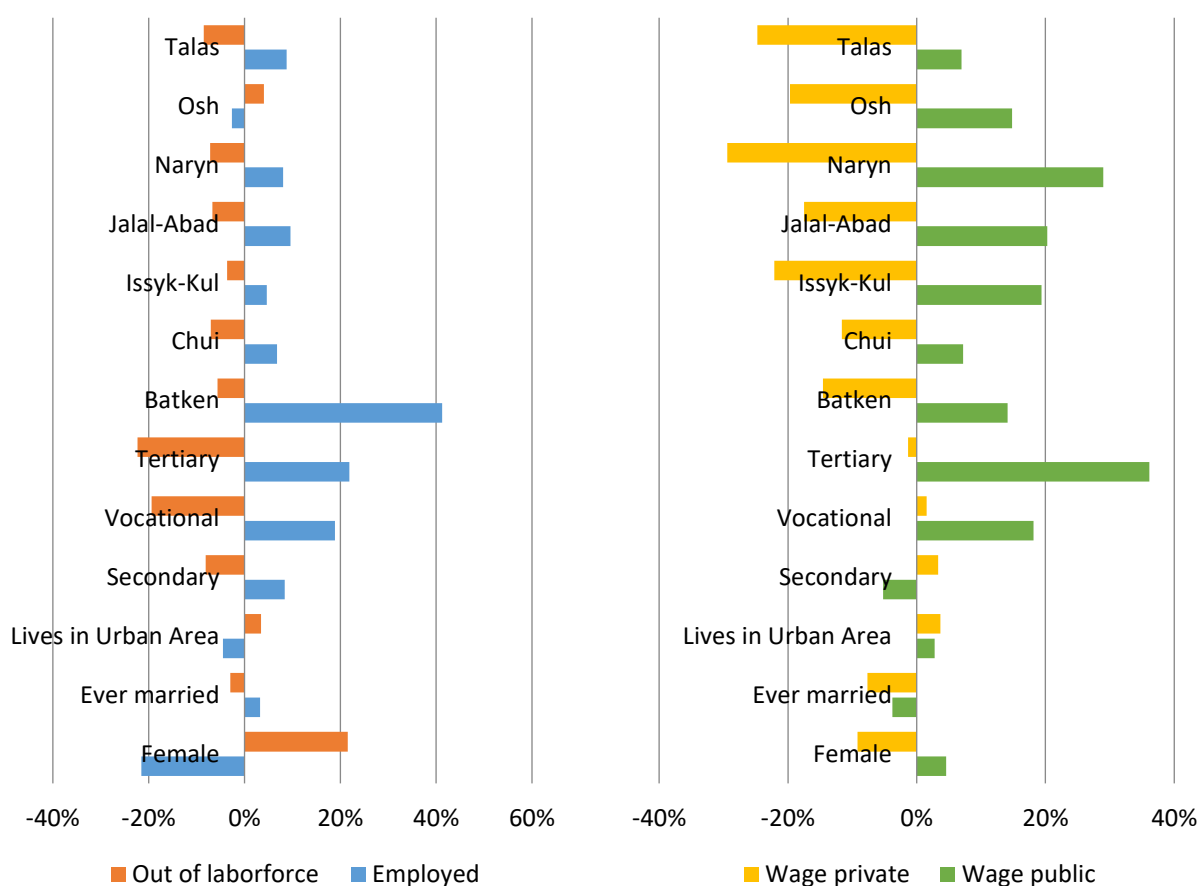
Micro-determinants for Job Outcomes

32. Gender, educational attainment, and place of residence are strong determinants of Kyrgyz employment. Multinomial logit models of employment outcomes reveal that: women are about 22 percentage points less likely to be employed than otherwise identical males; people residing in the Batken region are 4 to 10 times more likely to be employed than otherwise identical people living in Chui, Issyk-Kul, Jalal-Abad, Naryn, Osh and Talas (Figure 1.21). People who have completed tertiary education are about twenty-two percentage points more likely to be employed; and those with vocational schooling are around 19 percentage points more likely to be employed than otherwise identical people who have not completed primary and/or secondary school. Data from the 2014 Kyrgyz Labor Force Survey confirm this, noting that in the last quarter

of 2014, about 31,000 people with tertiary education gained employment, compared with about 4,000 with lower educational degrees.⁶⁹ Finally, people who live in urban areas are nearly 5 percentage points less likely to have a job than otherwise identical individuals in urban areas.

33. Gender, marital status, educational attainment and residence are also notable determinants of the type of employment. Women are 9 percentage points less likely to be private sector wage employees than men. Residents of Naryn and of Talas are 29 and 25 percentage points less likely to be in private sector wage employment than people from other oblasts (Figure 1.21); in general, rural residents are only 3 percentage points less likely to work in private wage employment than urban residents. Furthermore, workers in rural areas earn considerably less than their urban counterparts, and women earn much less than men. People who are married, or have ever been married, are 8 percent less likely to work in the private sector as a wage employee, compared to people with similar characteristics who have never been married. The multinomial logit also shows the determinants of public sector wage employment. Completion of vocational training increases the chances of public sector wage employment by about 18 percentage points compared to people who did not complete primary school. Similarly, those who have completed tertiary education are 36 percentage points more likely to have a public-sector job than people who have not completed primary school. Finally, not continuing in school after secondary education decreases the likelihood of public sector wage employment (5 percentage points).

Figure 1.21. Multinomial logit models: Determinants of Employment Outcomes

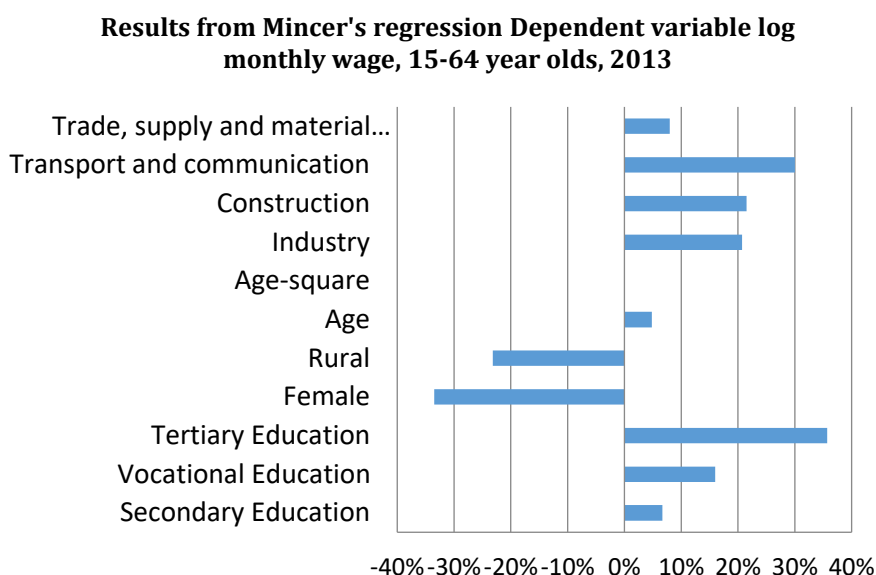


Source: World Bank estimates using Living Standards Survey (2010).

⁶⁹ Kyrgyz National Statistics Committee. 2016.

34. Holding all other factors constant, wages are positively correlated with education, and with employment sector. Data from 2013 suggest that there is a notable wage premium to tertiary education (Figure 1.22). On average, tertiary educated workers have about 30 percent higher wages than workers with similar jobs who have completed only secondary education. This high return is a signal that there is a strong demand for tertiary educated individuals in the Kyrgyz economy, however the Kyrgyz Republic places the lowest premium on tertiary education compared to the rest of the region. This could be for one of two reasons: (i) the high number of tertiary graduates; and/or, (ii) the positive correlation between the degree of modernization⁷⁰ and the returns to higher education. The value and importance of tertiary education is likely to increase as the Kyrgyz economy continues to modernize. Finally, when analyzing the wage return by sector, individuals employed in transport and communication seem to earn the most.

Figure 1.22. Wage Determinants in the Kyrgyz Republic, 2013



Source: World Bank/GIZ Kyrgyz Republic Jobs, Skills and Migration Survey, 2013.

Summary

The key messages of this jobs outcomes chapter as follows:

- A high fertility rate means that the Kyrgyz Republic's potential workforce is growing rapidly, outpacing labor force growth. As a result, the country is experiencing a demographic dividend, which contrasts with many other countries in Europe and Central Asia.
- About one-third of working age adults are not in the labor force, and therefore, are not contributing to economic growth. While 38 percent of those who are not in the labor force are attending school, the remaining 62 percent are neither in school nor working.
- Migration, both abroad and internal, has become an important jobs strategy, with roughly 9-17 percent of the population working abroad, mostly in the Russian Federation.

⁷⁰ Modernization from reforms intended to transition to a market economy

- Labor productivity is low and labor productivity growth is slow. A potential concern is that real wage growth exceeds labor productivity growth, potentially weakening external competitiveness.
- Most workers are engaged in the informal sector, work seasonally, receive irregular payments, and have temporary contracts. The typical informal sector worker is young, unskilled, lives in rural areas, and works in the construction and agriculture sectors.
- Formal employment is largely concentrated in the public sector. Formal private sector jobs are limited.
- Jobs are not inclusive. The labor market is characterized by demographic, geographic, and wealth disparities: youth, women, workers in the southern Kyrgyz Republic, and workers from poorer households have worse jobs outcomes.
- Regression analysis shows that some socioeconomic factors are more important correlates of employment outcomes than others. In fact, gender, marital status, educational attainment, and location of residence are particularly important correlates of employment and type of employment. Unsurprisingly, skills and education are also important correlates of jobs outcomes.

Chapter II. The Job Creators

1. Over the past 20 years, the structure of the Kyrgyz economy has changed significantly. Immediately after the fall of the Soviet system, the privatization of state-owned industries resulted in widespread cuts to urban jobs⁷¹. This lack of jobs caused workers to shift toward employment in the agricultural sector but by the early 2000s, the sector had begun to deteriorate through overgrazing, low levels of investment, a lack of imported feed, and the loss of non-essential farm jobs, which resulted in a drop in agricultural employment from 54 to 37 percent between 2003 and 2012.⁷² Today, employment remains largely concentrated in the services sector.

2. Jobs are largely concentrated in the informal sector (including agriculture). The informal sector makes up about 70 percent of employment; it is comprised of small activities and is largely dominated by agriculture, trade, construction, and services (hotel and restaurant sectors). Firms operating in the informal sector typically have fewer than five employees.

3. In this chapter we show that the formal sector lacks the necessary dynamism to create jobs. The formal sector, which accounts for about 30 percent of employment, is made up of public sector and private sector establishments, which accounted for about 17 and 11 percent of overall employment respectively in 2012.⁷³ While relatively small in size, the formal sector yields the majority of the output for the economy and, in general, is the source of better quality jobs for workers.⁷⁴ There have been economic growth and increases in productivity over the past couple of years, and much of this growth has been concentrated in a few large firms that tend to benefit from larger economies of scale and limited competition. These benefits, however, have contributed to growth without job creation. Small- and medium-sized firms have low rates of survival, as well as low rates of growth and little job creation.

4. This chapter will focus on jobs in formal sector establishments. It will examine employment growth, and barriers that have prevented formal sector firms from growing. Informal employment in the Kyrgyz Republic is high, and the statistical knowledge of the informal economy, including the magnitude of informal work and employment patterns, is fragmented or non-existent.⁷⁵ Additional information and data are needed to better understand informal sector employment. Findings for this section are derived from analyses and conclusions from the 2015 World Bank report, “Transitioning to Better Jobs in the Kyrgyz Republic: A Jobs Diagnostic,” which uses a subset of data from the Kyrgyz Establishment Reports (KER) that does not include firm data on financial institutions, public administration establishments, and several large establishments (namely gold mining and railroads). As such, this section will focus on employment and jobs in public and private formal sector establishments that are within that subset of KERs.⁷⁶ First, a snapshot of formal sector employment including growth and employment outcomes in formal establishments is presented; implications for job creation in the formal sector are then discussed.

⁷¹ World Bank. 2015(c).

⁷² Ibid.

⁷³ At the end of 2014, public sector employment was about 20.5 percent of overall employment. Kyrgyz National Statistics Committee. 2016.

⁷⁴ World Bank, 2015 (c).

⁷⁵ International Labor Organization. 2012.

⁷⁶ As noted in the 2015 World Bank report “Transitioning to Better Jobs in the Kyrgyz Republic: A Jobs Diagnostic,” though, the missing sectors account for approximately half of the establishment employment between 2009 and 2012, with the largest proportion being in public administration.

Despite its small size, the formal sector is important to certain regions and sectors

5. Formal sector employment is small, largely urban and concentrated in a few sectors. Less than one-third of all workers are employed in the formal sector in the Kyrgyz Republic and most are in large enterprises. More than 60 percent of employment is in firms with 50 or more workers, and more than a third of employment is in firms with at least 200 workers (Figure 2.1). Moreover, formal sector employment in the Kyrgyz Republic in 2009 and 2012 was largely concentrated in the urban center of Bishkek (Figure 2.2) and in only a few sectors including manufacturing, electricity/gas/water and transport and communications.⁷⁷

Figure 2.1. Distribution of firms and employment in the formal sector, 2012

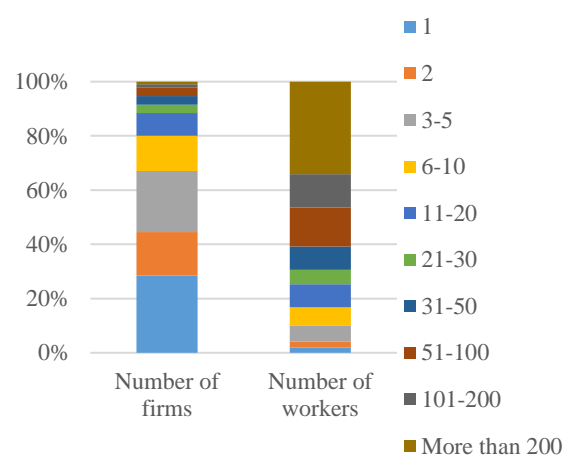
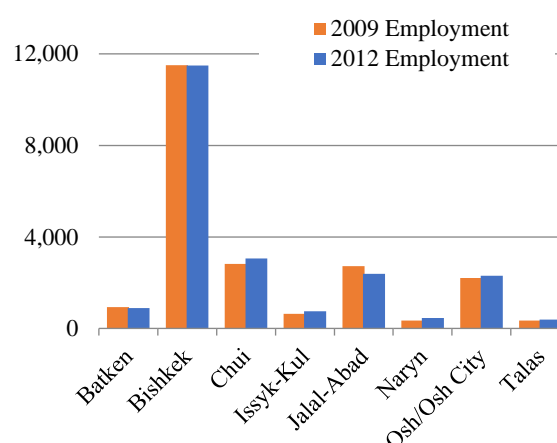


Figure 2.2. Formal Employment by Region, 2009-2012



Source: World Bank 2015 (c).

Economic growth and formal sector employment don't always go together

6. Recently, job growth in private and public firms in the formal sector has not been accompanied by economic growth in the formal sector. Between 2009 and 2012, economic growth averaged more than 6.6 percent per year in real terms in formal sector establishments⁷⁸. However, formal sector employment growth only averaged 0.4 percent a year, with the bulk of job creation coming from state-owned enterprises and non-profit entities, it did not come from “value-creating private sector firms, which account for two-thirds of employment.”⁷⁹ Table 2.1 shows that employment growth was concentrated in a few sectors. Given the current population growth among young people of working age, lack of job creation and employment growth has the potential to become problematic.

7. Employment growth has been concentrated in a few firms which create relatively few jobs. In general, expanding establishments (in terms of value added) saw employment grow at an average of about 13 percent a year for the 2009-2012 period, compared to establishments experiencing negative growth that averaged job losses of about 14 percent a year. This appears to suggest that there is a close association between economic

⁷⁷ World Bank. 2015 (c).

⁷⁸ In the subset of data of the Kyrgyz Establishment Reports (KER)

⁷⁹ Ibid.

growth and hiring, but only a small number of firms account for a large portion of overall economic output. These establishments tend to have very low employment creation rates. Output growth expanded nearly 10-fold from 2009 to 2012; 40 firms accounted for about half of this. Employment did expand by about 17 percent in aggregate, but this paled in comparison to output growth.⁸⁰

Table 2.1. Employment Growth in Registered Establishments, 2009-2012

Sector	Sector's share of employment (overall)	Employment in registered establishments as a share of total employment	Employment growth: Registered establishments	Employment growth: total economy	Employment growth: outside registered establishments
Agriculture	27.8%	2.7%	-6.1%	1.1%	0.9%
Mining	0.6%	62.1%	7.6%	-22.3%	-8.6%
Manufacturing	8.9%	27.5%	-5.3%	5.5%	2.0%
Elec/gas/water	2.2%	58.7%	1.3%	2.0%	1.6%
Construction	9.4%	9.5%	-7.6%	9.0%	6.9%
Wholesale & Retail trade	17.0%	6.8%	1.2%	6.8%	6.4%
Hotels and Restaurants	3.3%	5.3%	-7.6%	0.7%	0.2%
Transport/communications	7.4%	21.3%	-0.6%	-2.6%	-2.2%
Other services	23.3%	78.6%	-4.1%	-1.8%	-15.8%
Total	100.0%	29.4%	2.0%	1.3%	1.0%

Source: World Bank 2015 (c).

8. The regular entry and exit of firms has, unsurprisingly, contributed to both job creation and job loss. Between 2009 and 2012, the number of firms entering the market increased by 4.5 percent per year. Entering firms contributed about 60 percent of all the jobs created by firms (about 32,000 jobs); nevertheless, this was countered by job losses in established firms (more than 16 percent of jobs or about 35,000 jobs).⁸¹ While most of the job-shedding companies experienced negative growth, there were also a number of companies positive economic growth that laid off workers. Additionally, jobs were lost through firm exit. The frequent changes in employment points to the constant fluctuations within the formal sector. Employment in the formal sector is clearly more secure than in the informal sector, but this type of uncertainty does not bode well for the welfare of workers.

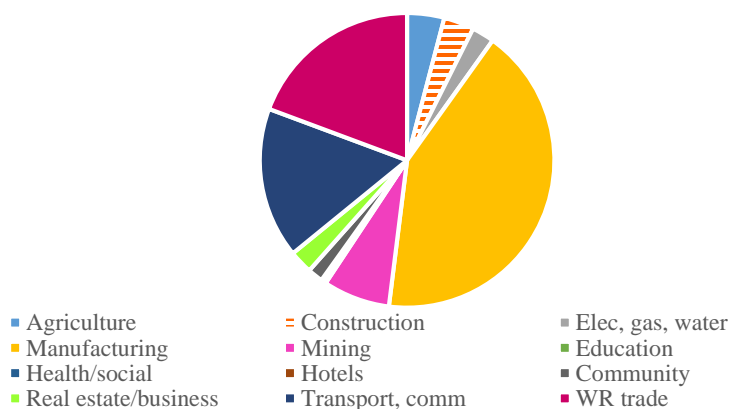
9. At the sectoral level, employment has increased in the services sector, but decreased considerably in the manufacturing sector. In general, job growth across the sectors has been limited. Between 2009 and 2012, services experienced modest output growth, mostly in wholesale and retail trade, community services, and education. At the same time, manufacturing, wholesale and retail trade, and transport and communications accounted for most output growth (Figure 2.3). Despite this, some of the greatest job losses came from

⁸⁰ Ibid.

⁸¹ Ibid.

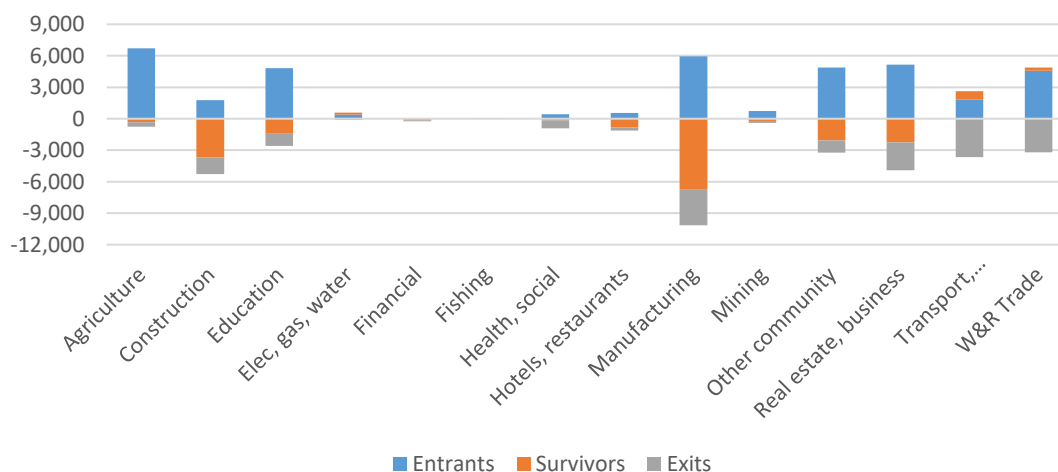
manufacturing, where more than 6,775 manufacturing jobs were lost (more than 15 percent of employment) (Figure 2.4).⁸²

Figure 2.3. Value added Growth by Sector, 2009-2012



Source: World Bank 2015(c).

Figure 2.4. Employment Growth by Sector, 2009-2012



Source: World Bank 2015(c).

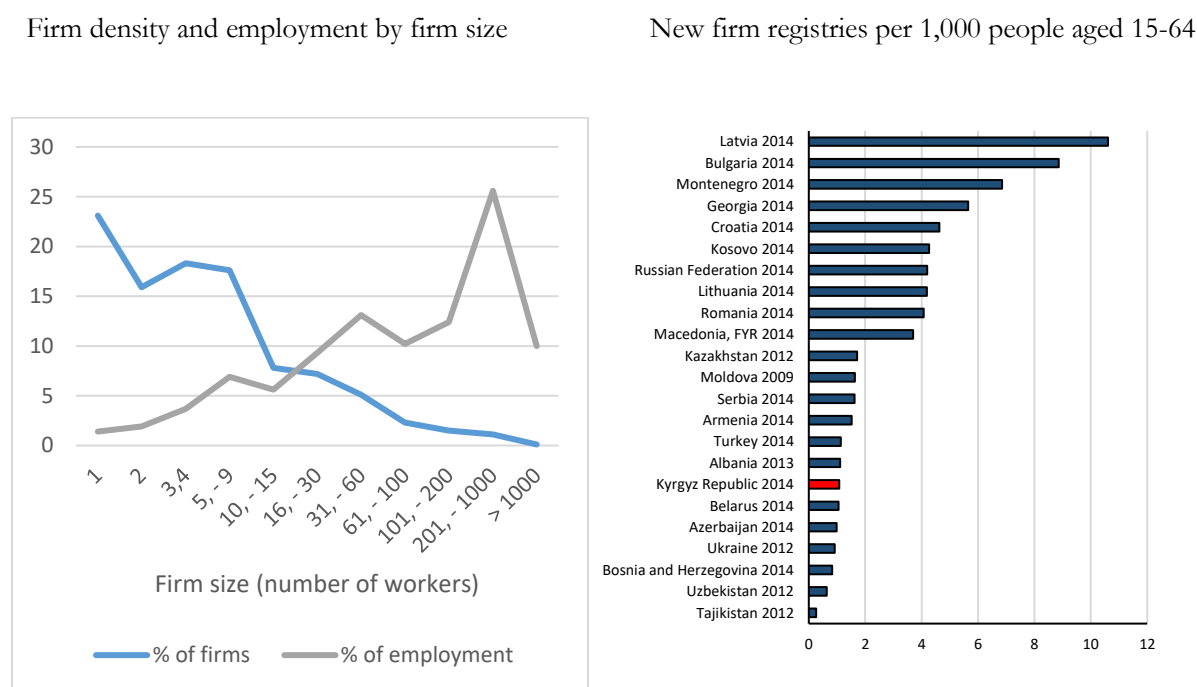
Some firm types perform better than others

10. Firm size plays an important role in job creation. Larger firms account for a higher percentage of employment in the formal sector than smaller firms (Figure 2.5); these larger firms are also more likely to survive. Despite this, they create little employment relative to output growth. Small and medium-size firms, on the other hand, provide many jobs in the private formal sector, and as such their role in the sector and their

⁸² Ibid.

development is important. Sadly, many small and medium size firms have been unable to grow or survive, restricting employment expansion, but entry rates are strong for smaller establishments and employment was created across all firm sizes between 2009 and 2012; most of that job creation was from larger firms entering the market. From a low base, more than 4,000 new businesses were registered in the Kyrgyz Republic in 2014, but new business density⁸³ is relatively low at 1.1 percent. New business density in the Republic of Georgia is 4.6 percent, in the Russian Federation it is 4.2 percent, and in Moldova it is 1.63 percent (Figure 2.5).

Figure 2.5: Larger firms hire most workers, most firms are small, and new firm registry is relatively low



Source: Authors' calculation using data reported in World Bank. 2015(c); and Strokova and Ajwad (2017).

11. Between 2009 and 2012, small firms exited at a high rate, and medium-sized firms shrank. When disaggregating the data by firm size and exit/entry, results indicate that small firms have high rates of exit, while medium size firms have a high probability of shrinking to become a smaller firm. This is due to many factors; although the burdensome regulatory environment and political instability play a prominent role. In terms of numbers, of the more than 25,000 small firm jobs that existed in 2009, an average of more than 5,000 jobs were likely lost by 2012 because of firm exit. Similarly, among medium-sized formal establishments, 4,300 out of 37,000 jobs were lost due to firm exit, and around 6,000 jobs were lost because of a reduction in the size of the firm, creating a net loss of 10,300 jobs in 2009 among medium-size formal establishments.⁸⁴

12. The outcome on net job creation is beginning to have implications on the overall size of formal sector establishments and on the make-up of the formal sector. While firm entry and job creation has continued, many jobs have been lost among larger established firms. From 2009 to 2012, average employment in formal sector companies declined from about 18 employees per establishment to about 16.⁸⁵ The net outcome of this is that

⁸³ The number of new firm registries per 1,000 people aged 15-64.

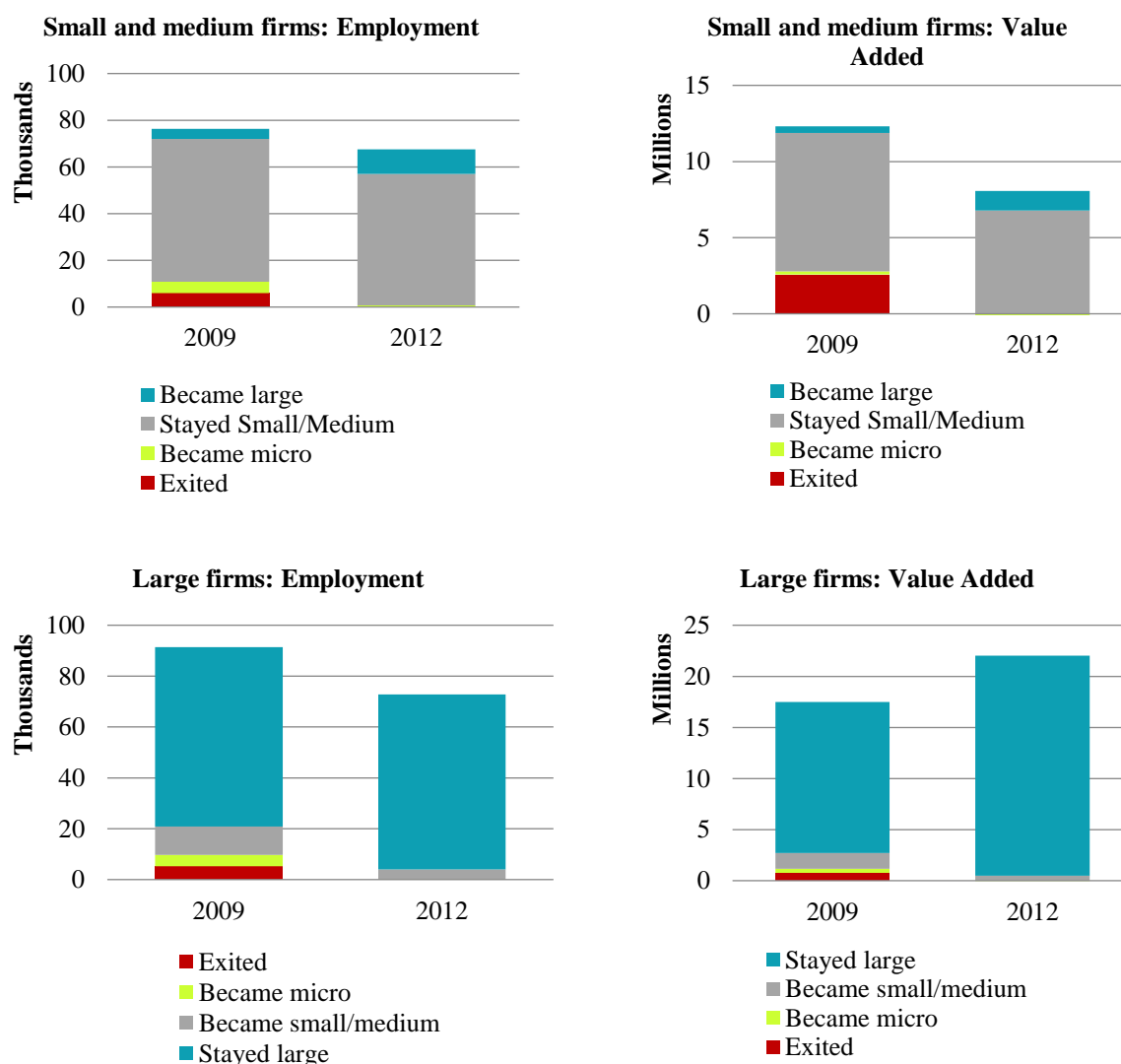
⁸⁴ Ibid.

⁸⁵ Ibid.

the formal sector is shrinking, is increasingly made up of larger surviving firms that are unable to create new employment opportunities.

13. A closer look at firm growth (output) and firm size reveals that SMEs have neither created jobs nor grown, while large firms grew but did not create jobs. Between 2009 and 2012, small and medium sized firms lost much more in output than they did in employment, as large firms demonstrated strong output growth while shedding jobs. Figure 2.6 shows this and elaborates on the dynamics of small- and medium-size and large firm growth in terms of value-added and employment. The outcome is that the number of firms continues to grow, but they are not creating the jobs that are needed in the Kyrgyz Republic.

Figure 2.6. Evolution of Employment and Value-Added Growth of formal Establishments, 2009-2012



Source: World Bank. 2015(c).

14. High regulatory requirements reduce incentives for firm growth. The Kyrgyz Republic is characterized by a burdensome regulatory environment which discourages the growth of small and medium firms.⁸⁶ The 2013 BEEPS confirms this, suggesting that medium sized firms face the largest regulatory burden among firm types.⁸⁷ Among the challenges for firm-size expansion are tax administration, corruption and political stability. The Kyrgyz Republic has a special tax regime, including the patent system, which incentivizes small-sized firms to stay small instead of scaling up and expanding beyond the tax incentive threshold.⁸⁸

15. Moreover, small and medium-sized firms face many barriers to growth and therefore, job creation. While small and medium-size firms continue to enter the labor market, there are several constraints that prevent them from thriving, preventing them from creating sustainable, better and inclusive employment. An Asian Development Bank report suggests that some of these impediments are: complex tax administration, corruption, political instability, and limited competition among firms (these constraints are discussed in the following section).⁸⁹

16. A closer look at larger, growing firms suggests that some of their success in creating jobs can be attributed to limited competitive pressure as well as to economies of scale. Of the larger firms sampled in the dataset, those that contributed most to value added seem to suggest that there are limited competitive pressures, significant market power, notable economies of scale (which allow for growth without job creation), and access to resources not shared by other large firms including twice the access to bank lending and government loans. Currently, about 3 percent of the largest growing firms have access to government budgetary credit, which is five times the rate of other large firms and 30 times the rate of non-large firms.⁹⁰

17. Overall, the central challenge in the formal sector is a growth challenge. Until some of the constraints are addressed, small- and medium-sized firms will continue to face challenges in survival and growth, thus preventing them from creating better, sustainable and more inclusive jobs.

Implications for Job Outcomes

Productivity growth has been dragged down by the informal sector

18. It *appears* that productivity in the informal sector has been negative. As noted above, productivity at the aggregate level in the formal sector has been strong, averaging 6.7 percent per year for value-creating firms between 2009 and 2012. Economy-wide, though, productivity growth has averaged less than 1 percent per year, hinting at the impact of the significant productivity declines in the informal sector, especially in manufacturing and construction.⁹¹

19. While the formal sector has experienced productivity growth, it has been concentrated in large firms for the most part. Large established enterprises and large firm entrants between 2009 and 2012 contributed almost 150 percent to the increase in productivity growth. At the other extreme, existing small- and medium-size firms dragged productivity growth down by 63 percent; and new small-and medium-size firms contributed 13 percent) to productivity growth (Figure 2.7). The breakdown of productivity growth further implies the strong role held by large firms in the Kyrgyz formal sector economy (Figure 2.8).⁹²

⁸⁶ World Bank. 2015(c).

⁸⁷ World Bank 2014(a).

⁸⁸ World Bank. 2015(c).

⁸⁹ Asian Development Bank. 2014.

⁹⁰ World Bank. 2015 (c).

⁹¹ Ibid.

⁹² Ibid.

20. Labor was reallocated to more productive sectors because of labor shedding from less productive firms. A strong indicator of better jobs is productivity growth either from within firms/industries/locations or movement of labor to more productive firms.⁹³ Between 2009 and 2012, employment shifted from less productive firms to more productive firms in the formal sector. This shift, however, does not imply that productive establishments were creating employment; rather, it simply denotes the shift in labor.

Figure 2.7. Productivity Growth of Entrants and Established Firms, Large Firms v. Others 2009 and 2012

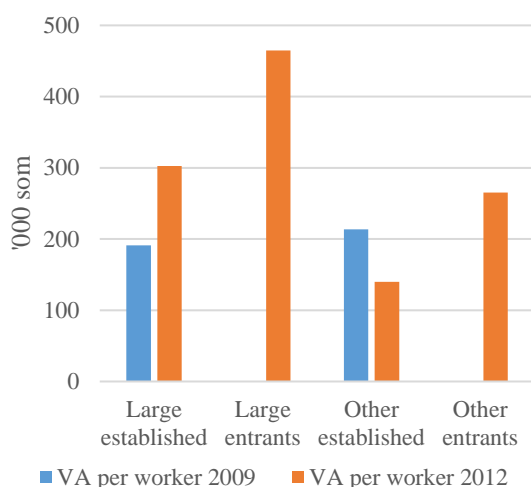
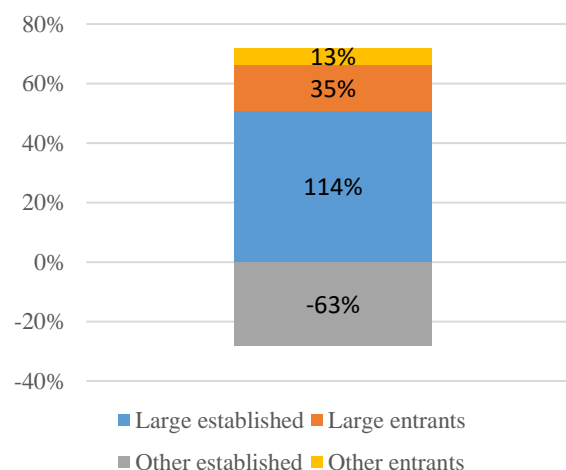


Figure 2.8. Contribution to Productivity Growth by Size and Age of Firm, 2009-2012



Source: World Bank. 2015(c).

21. The absence of robust productivity growth outside larger firms limits technological spillovers, with implications for long-term growth. There is growing evidence that sustained growth happens when less-productive firms adopt the technology and business practices of frontier firms. Subsequently, as countries develop, productivity per worker differences between firms in an industry decline. In the Kyrgyz Republic, the concentration of productivity suggests that there is a lack of technological spillovers from large established firms to entrants/small firms, affecting long-term growth. Without that spillover, growth becomes an enclave activity, with benefits for few firms and workers.⁹⁴

Some sectors are more likely to hire than others

22. Growth and hiring differences among firms are the result of many factors. These include: the age of the establishment, size, ownership, and level of investment, they are also influenced directly by the type of the activities in the sector. Some sectors are more likely to hire workers during periods of growth, beyond what can be attributed to the firm's size or age difference, and some labor activities have higher growth potential, than others. To disentangle the effects, Table 2.3 presents the differences in sectoral hiring rates in the presence of growth (relative to the sample mean), broken down between the portion attributable to higher probability of growth versus and the portion attributable to stronger hiring rates.⁹⁵

⁹³ Ibid.

⁹⁴ Ibid.

⁹⁵ Ibid.

Table 2.3. Sectoral Differences in Hiring Rates, 2009-2012: Estimated Portion Attributable to Differences in Growth versus Portion Attributable to Employment Elasticities

	Probability of hiring	Difference in probability of hiring, relative to mean	Difference in prob. of growth, relative to mean	Portion of hiring difference attributable to higher probability of growth	Portion attributable to higher probability of hiring, in the presence of growth
Agriculture	68%	27%	26%	14%	14%
Mining	49%	8%	6%	3%	5%
Manufacturing	37%	-3%	-1%	-1%	-3%
Electricity/gas/water	39%	-2%	6%	3%	-5%
Construction	41%	0%	-2%	-1%	1%
Wholesale/retail trade	41%	0%	-2%	-1%	1%
Hotels/restaurants	38%	-3%	-2%	-1%	-1%
Transport/storage/communication	40%	-1%	0%	0%	-1%
Finance	25%	-15%	-17%	-9%	-6%
Real estate/business	39%	-2%	0%	0%	-2%
Education	56%	15%	10%	5%	10%
Health/social	36%	-4%	-1%	0%	-4%
Community	36%	-4%	-6%	-3%	-1%

Source: World Bank. 2015(c).

23. In the Kyrgyz Republic, the agriculture, education, and mining sectors are most likely to hire new workers. Between 2009 and 2012, firms in the agriculture sector were the most likely to hire workers, with the education and mining sectors also revealing a high probability of hiring.⁹⁶ In the agriculture sector, hiring accompanied the increase in a number of new large farming activities between 2009 and 2012, and experienced growth.⁹⁷ More recent growth of 5.3 percent in the agriculture sector between the fall of 2014 and the fall of 2015 (growth rate of 5.3 percent) is also likely to have contributed to an increase in hiring.⁹⁸ Although the agriculture sector is usually associated with low levels of productivity, it supports community development and small rural livelihoods (Box 2.1). Mining firms were 5 percent more likely to expand employment than other sectors, given the presence of growth; mining is capital intensive, but nearly half the mining establishments in the Kyrgyz Republic increased employment by about 41 percent between 2009 and 2012. Overall, additional information is needed to understand the future potential growth/hiring relationship in the mining sector (Box 2.2).

⁹⁶ Ibid.

⁹⁷ Ibid.

⁹⁸ World Bank. 2105(b).

Box 2.1. Kyrgyz Republic and the Agricultural Sector

Agricultural production in the Kyrgyz Republic depends on scarce arable land and vast natural pastures and meadows. The country's total territory is around 20 million hectares (199,949 square kilometer) of which 1.3 million hectares or 12.3 percent is arable land, making up about 6.7 percent of total land and area. Per person arable land availability in the Kyrgyz Republic is like that of comparator countries, but it among the lowest in the world. On the other hand, Kyrgyz Republic has vast mountain pasture resources, comprising 46 percent of Kyrgyz territory. This land has historically been used for livestock production, which dominated gross agricultural output before the transition to a market economy. However, livestock production has collapsed to the levels of subsistence agriculture over the last two decades.

Agricultural sector performance in the Kyrgyz Republic points to erratic and slow growth, also considerable underutilization of its potential. Agricultural sector performance can be divided into three periods: (i) the transition period, 1991-1995, where agriculture shifted from a collective/soviet farm production system to private ownership of land. This period is characterized by sharp drop in agricultural value added, as well as an overall decline in GDP. (ii) The period of small but sustained growth, reaping the benefits of private farm ownership and structural adjustments, as well as investment inflows from international donor assistance programs. From 1996 until 2005, agricultural performance was largely positive, with an average of 7 percent growth in agriculture value-added. (iii) from 2005 to the present is the period of sporadic growth and underutilization of agricultural potential, this may be a result of uncoordinated and inefficient public policies and external shocks, including political shocks and weather-related risks⁹⁹. This period includes occasional peak years followed by troughs with average growth of 1 percent.

Agriculture's contribution to GDP has been declining, as other sectors grow faster than agriculture. The biggest decline in agricultural contribution to GDP was from 2005 to 2015, characterized by stagnation in the agricultural sector and the relatively faster development of other sectors, especially mining. Around the same time, the agricultural value added per worker¹⁰⁰ — demonstrates some increases. Nonetheless, this increase in agricultural sector labor productivity growth has mainly been a result of rural-urban migration with almost no benefit to poverty reduction. Lack of investments and underutilization of existing land and water resources continue to cause stagnation in this sector.

Where are the opportunities? Although not currently thriving now, the food processing industry provides a natural entry point to create much-needed off-farm employment in rural areas. A well-developed food processing industry can stimulate higher agricultural productivity and increased agricultural growth. Food manufacturing in the Kyrgyz Republic is characterized by a small number of medium-to-large and concentrated agri-food enterprises, and many small-to-micro and dispersed firms. Much work is needed in terms of reducing regulation and allowing for entry of other firms.

Source: World Bank. 2017(d).

⁹⁹ Broka, S. et al. 2016.

¹⁰⁰ Labor productivity in agriculture.

Box 2.2. The Kyrgyz Republic and the Mining Sector

The Kyrgyz Republic has a long history of mining. Prior to the collapse of the Soviet Union, it was the sole producer of antimony¹⁰¹ for the whole Soviet Union. It also produced nearly 64 percent of rare earth products and 15 percent of uranium. In the mid-1980s, the Soviet Government was spending up to 50 million rubles a year on exploration of new mines which employed nearly 61,000 people.¹⁰² When the markets opened up in the early 1990s, a number of foreign investors began their own exploration.

In 1997, the largest mine in the Kyrgyz Republic opened - the Kumtor mine - a gold mine. Since its opening, mining workers have pulled about 270 tons of gold from the open pit of the mine in the Tian Shan mountains near the Chinese border. In a good year, the mine can account for 12 percent of the Kyrgyz Republic GDP and nearly half of its exports, contributing almost a tenth of the national budget.¹⁰³ The Kyrgyz Republic also mines a number of other rare earth products including: silver, coal, tin, tungsten and copper, however, gold makes up nearly 90 percent of the mining industry, and ¹⁰⁴ mining is a large part of the Kyrgyz economy.

There is notable potential for job creation with mining, in extraction and all along the value chain. Evidence from developing countries suggests that a new mine creates employment for women and men. International data suggest that temporary or permanent closure of a mine leads to reduced service sector employment for women. This is expected to be because women do not shift back to agricultural production to the same extent as when they left it to take up mining work, and this often has an overall negative impact on labor force participation. The effect is less strong for men, as they tend to return to their previous employment (services or farming).¹⁰⁵ Additional research is needed in the Kyrgyz Republic to determine if these effects are similar.

Another challenge for the mining sector in the Kyrgyz Republic is that the sector is heavily politicized. One of the biggest obstacles to ensuring growth is political disagreement over the tax revenue to be collected from foreign firms. Moving beyond political disagreement will improve investment, and create economic opportunities for the Kyrgyz people.

24. Low entry rates for firms have prevented some sectors with high capacity for job creation from hiring and generating employment. Table 2.3, using data from 2009 until 2012, shows that there are several sectors with similar probabilities for hiring, given growth, and firms entering the labor market, by definition, must create employment to grow. Sectors like manufacturing, utilities and finance all have a propensity to hire, but have exhibited low entry rates and are therefore less likely to hire given low growth, or the lower probability of growth. In contrast, education and agriculture have had very high rates of entry into the sector, which has been accompanied by a greater probability to hire, given growth (Figure 2.9). Subsequently, sectoral growth is largely related to the degree to which establishments can enter the market.¹⁰⁶

¹⁰¹ Antimony is a shiny, brittle, white metallic element, mainly used in alloys, and in compounds in medicine

¹⁰² Zozulinsky, Artyom. 2007.

¹⁰³ The Economist. 2013(b).

¹⁰⁴ Zozulinsky, Artyom. 2007.

¹⁰⁵ Ibid.

¹⁰⁶ World Bank. 2015(c).

Figure 2.9. Sectoral Differences in Entry Rates and Hiring Probabilities, given Growth



Source: World Bank. 2015 (c).

Summary

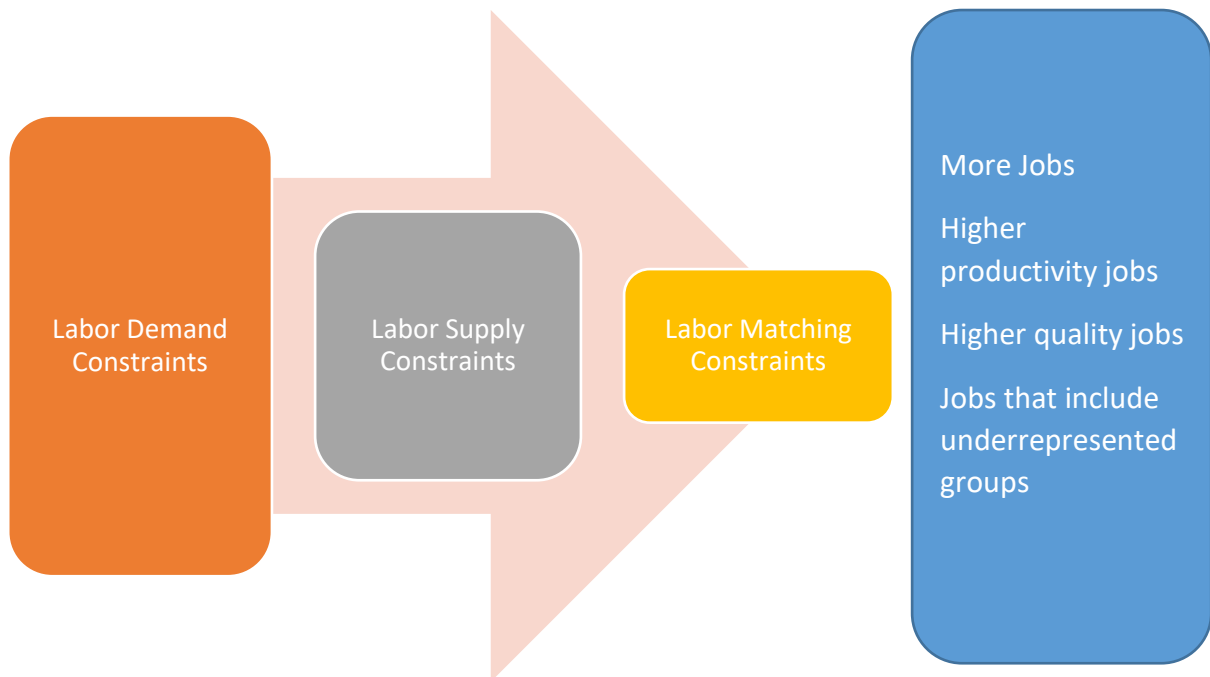
Private formal sector firm data shows that there are significant barriers to firm growth in the Kyrgyz Republic. The key messages are as follows:

- Private, formal sector employment is small. The formal sector is typically situated in urban areas and is concentrated in few sectors including manufacturing, electricity/gas/water and transport and communications.
- Private, formal sector job growth has not created private, formal sector employment growth. Job growth among private formal sector firms averaged more than 6.6 percent per year between 2009 and 2012, formal sector employment growth averaged around 0.4 percent per year.
- Employment in private, formal sector establishments is highly concentrated in large firms and the services sector; but these larger firms create relatively few new jobs.
- Small- and medium-sized enterprises create several jobs; however, they are unable to survive and grow.
- Productivity remains concentrated in a few large establishments; however, these establishments are not creating jobs.
- The agriculture, education and mining sectors are most likely to hire, given growth.

Chapter III. Constraints to Improving Jobs Outcomes

1. There are three main categories of constraints to improving jobs outcomes: (i) labor demand constraints, (ii) labor supply constraints, and (iii) labor matching constraints.¹⁰⁷ These constraints limit job creation, productivity growth, job quality, and inclusiveness. In the Kyrgyz Republic, as in most countries, labor demand is the dominant factor, followed by labor supply, and finally job matching (Figure 3.1). As in many other developing countries, the Kyrgyz Republic has a large informal sector and policymakers therefore need to understand the constraints to productivity growth in the informal sector as well as the formal sector. The framework adopted here does not make a distinction between formal and informal sectors and therefore, the constraints to improving jobs outcomes can be applied to either sector.

Figure 3.1 Categories of constraints to improving jobs outcomes



2. Constraints to labor demand can limit sustainable job growth. Job growth is often the result of private sector firm growth¹⁰⁸ and occurs via greater competitiveness and an expansion of markets for selling goods and services. However, there is still considerable debate about what factors create jobs in a country. Building on past work from the Global Competitiveness Index (GCI) categories¹⁰⁹ (re-defined GCI as of 2016), the Jobs Diagnostic Guidance Note, and the World Bank (2012), this section proposes that two factors affect job growth in a country (Figure 3.2): (i) the overall enabling environment; and (ii) the firm-specific environment. There is

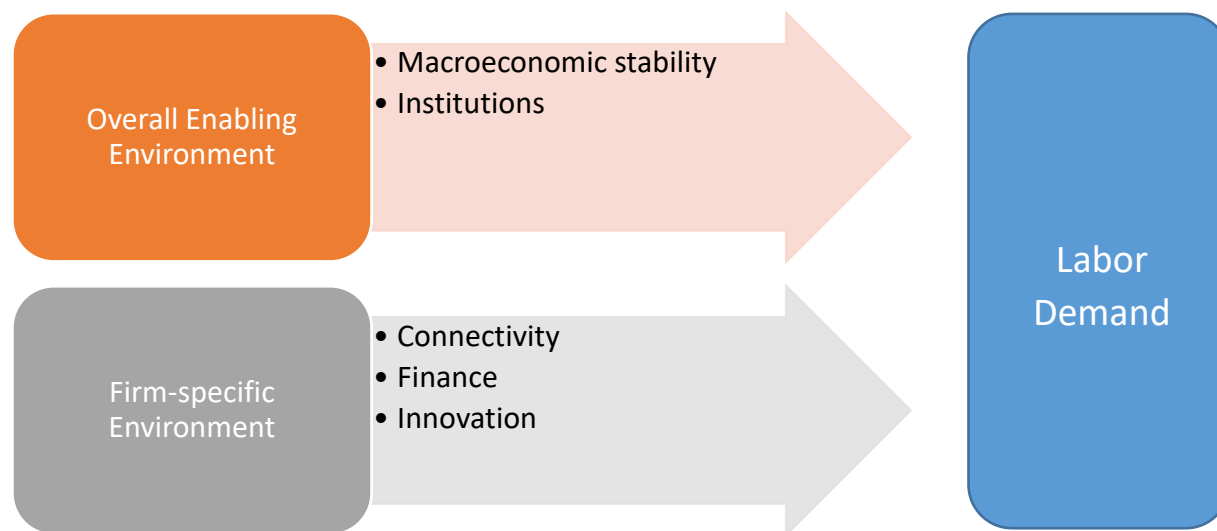
¹⁰⁷ We use a framework outlined in Ajwad, et al. (forthcoming).

¹⁰⁸ We are not ignoring the role of the public sector, but globally, the private sector is the engine of job creation in developing countries, accounting for 90 percent of all jobs in the developing world (World Bank, 2013).

¹⁰⁹ The sub-indices underlying the GCI were revised in 2016, moving away from the “basic requirements”, “efficiency enhancers”, and “innovation and sophistication factors” sub-indices and toward the four presented in this paper. The shift resulted from the role of technology and technological transfer in disrupting the standard transformation from factor-driven to efficiency-driven to innovation-driven economies. With technology, countries may not complete, or skip over, the transformation path. Instead, four sub-indices are defined that need to be developed at any stage of the transformation process.

overlap between the two factors, but there are benefits to parceling out the determinants of job creation in this manner.

Figure 3.2 Main Factors Affecting Job Growth in the Country



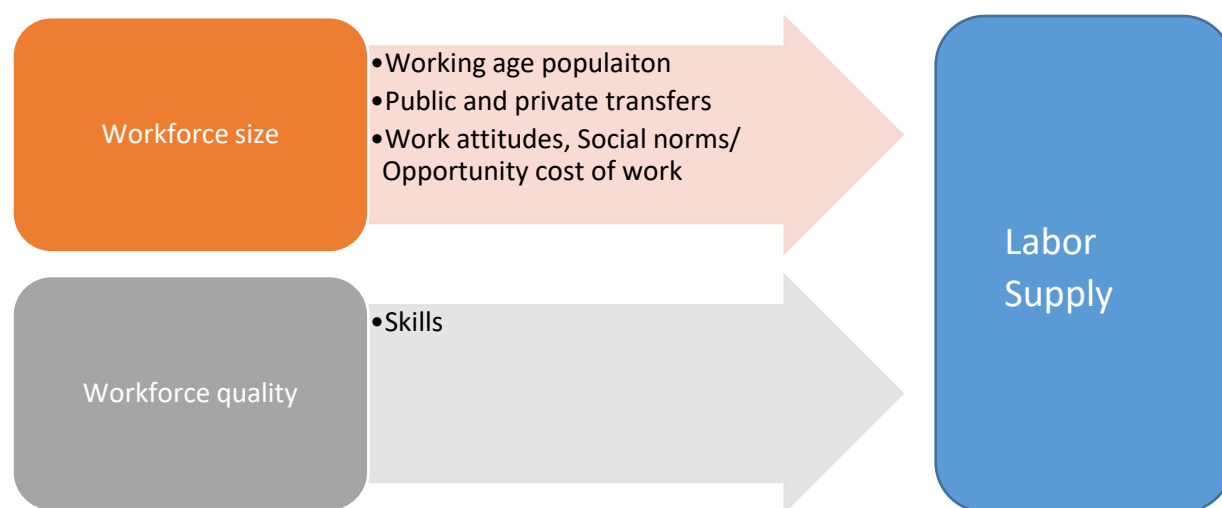
3. The Overall Enabling Environment allows firms to grow and thrive. It includes macroeconomic stability and strong institutions. A stable macroeconomic environment can incentivize investment in the country resulting in new and growing businesses, which may create and maintain jobs. Macroeconomic stability helps contain volatility and avoid significant misalignments of relative prices (World Bank, 2012). Factors that promote macroeconomic stability include solid and transparent fiscal management, and inflation and exchange rate management. Strong institutions create predictability, which firms value because it helps them initiate contracts with partners; acquire factors of production; and generally, operate without having to factor in significant fluctuations. While institutions are hard to define, Nobel Laureate Douglas North states that the role of institutions in society is to “reduce uncertainty by establishing a stable (but not necessarily efficient) structure to human interaction.” Therefore, in the context of job growth, the following are included here: property rights; judicial systems and the rule of law; public-sector performance; and accountability among institutional factors that are needed for firms to thrive. Included here are rules and regulations that facilitate fair production and trade processes, such as trade policy, antitrust legislation, taxation, business processes (for starting and running a business), and FDI rules and regulations. In addition, the enabling environment also includes rules governing the labor market, including those that govern the fair treatment of workers: labor-employer relations, labor legislation, labor taxes, and wage policies.

4. The Firm-specific Environment includes factors that help firms access inputs for production and sell their outputs, helping the firm to operate and grow. These factors include: (i) connectivity; (ii) finance; and (iii) innovation. Better connectivity can help firms access inputs and sell outputs to bigger markets. More specifically, better transport infrastructure; access to reliable electricity and water; communications technology; and information communication technology are key to firms’ being more connected. Included here are factors such as trade, information and advertising, and even political relationships which can affect connectivity. Better access to finance can lead to job growth, firm growth and/or product innovation; this can include access to loans, leasing products, venture capital, etc. Access to finance is especially important for micro, small, and

medium firms.¹¹⁰ Countries can facilitate access to financial services by strengthening institutional infrastructure; liberalizing markets and facilitating greater competition; and encouraging innovative use of know-how and technology (Claessens, 2006). Innovation can result in the creation of new products and processes or lead firms to adopting technology, which can affect job creation.¹¹¹ Innovation can be spurred by fostering research and development; ensuring that financial instruments are available to promote risk-taking; facilitate trade, FDI, and entrepreneurial start-ups and spinoffs; and increase access to quality education (Goldberg, et al., 2011).

5. Improvements in jobs outcomes are also hindered by labor supply constraints. Labor supply increases because the number of people in the workforce increases, or because the quality of the workforce increases. The two factors that affect labor supply are therefore: (i) Workforce size; and (ii) Workforce quality.

Figure 3.3 Main Factors Affecting Labor Supply



6. The workforce size is affected by the labor supplied. Three key factors affect workforce size: (i) the working age population; (ii) public and private transfers; and (iii) work attitudes, social norms/opportunity cost of work. First, the size of the working age population can impact the labor supply; factors that affect the size of the working age population include fertility rates, mortality rates, child labor laws, retirement age and generosity of old age benefits. Second, public or private transfers can also affect labor supply. Some social benefits create an incentive to work (such as earned income tax credit), a disincentive to work (such as Europe's disability benefits), or a safety net to allow for risk-taking during a job search or firm start-up (unemployment insurance). Similarly, private transfers, such as when remittances are received or sent, may distort work incentives. Finally, gender norms or attitudes toward certain types of work affect people's willingness to search for or accept jobs. For example, gender roles constrain work options, both in terms of the opportunity cost of time due to women's household responsibilities as well as the types of jobs that society deems appropriate for women (or men). A high opportunity cost for working, such as the low cost of leisure among youth, may also limit labor supply.

7. Labor supply, at least in this context, is not simply about the number of workers, but also depends on the productivity of those workers. A key factor affecting labor supply is worker skills. A worker with relevant skills is more likely to be employed and productive than a similar worker without those skills. Skills may be

¹¹¹ Frey, C.B. and M.A. Osborne (2013).

gained through education systems or via other institutions/actors, such as within families, training institutions, or on-the-job training. Skills requirements may change over time and with the economic structure of the country.

8. Even with high labor supply and demand, workers and jobs may not find each other or if there is a job-worker match, it may not be the most efficient (allocative inefficiencies). Impediments to strong matches are (i) the flow of information; and (ii) spatial disparities. First, the flow of information between jobs seekers and firms is crucial. Firms may not know where workers are and workers may not know where suitable job openings are. Globally, most job matches are done via informal matching mechanisms (friends and family) which likely lead to somewhat inefficient allocations. Even if workers and firms find each other, it may be difficult to know if the match is a good one, most worker skills are only revealed after starting to work, and jobs may require tasks that are not easily defined. Second, mobility in the labor market and mobility by employers may be difficult as job vacancies and workers may not be in the same place. This can result in information asymmetries (as mentioned above) or market failure if workers or jobs cannot relocate. Mobility and relocation allowances, Economic Zones, and other mechanisms have been used to alleviate the spatial disparities by moving jobseekers or employers.

9. In the remainder of this chapter, we elaborate on the constraints to improving jobs outcomes: (i) constraints to labor demand; (ii) constraints to labor supply; and (iii) constraints to labor matching. Each subsection notes those areas where the Kyrgyz Republic has made progress, but where it continues to face challenges.

Constraints to labor demand: holding back the potential for job creation

Macroeconomic Stability: indicators are improving, but there are risks

10. Continued and sustained macroeconomic stability is not only a precondition for job growth, it also provides the fiscal space to address other critical issues.¹¹² Accordingly, the primary goal of macroeconomic stabilization policies should be to achieve stable economic growth. This key policy objective is complemented by the need to stabilize intermediate variables that can have a strong impact on jobs outcomes.¹¹³ Unstable growth over the last decade combined with the unpredictability of commodity prices and remittances places the Kyrgyz Republic in a critical place when addressing key macroeconomic factors that inhibit improvements in jobs outcomes.

11. Since the late 1990s, macroeconomic indicators in the Kyrgyz Republic have improved, driven largely by external demand for commodities and an increasing inflow of remittances. Immediately after the fall of the Soviet Union, the Kyrgyz economy collapsed with a complete breakdown of supply chains and an absence of demand for industrial goods and agricultural products. Much of the growth since 1997 has been driven by strong external demand for Kyrgyz exports of gold and fruit. Furthermore, remittances from the steady stream of migrants who left the country have fueled consumption, and thus, growth. Macroeconomic performance improved in the late 1990s and early 2000s, inflation declined from around 30–40 percent in the late 1990s to around 6–7 percent more recently¹¹⁴; fiscal deficits fell; and the current account deficit and external debt reached manageable levels.

12. Over the past decade and a half, GDP growth has fluctuated considerably (Figure 1.1). There are three main reasons for the growth fluctuations: (i) political changes and instability have exacerbated fluctuations in growth; (ii) the country has a high dependence on commodity exports, which tend to be volatile; (iii) the Kyrgyz

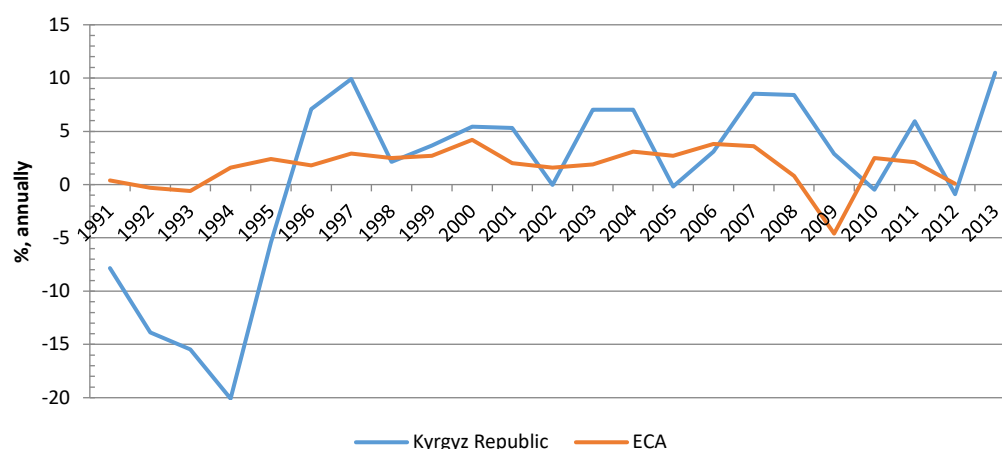
¹¹² International Labour Organization et al. 2012.

¹¹³ Ibid.

¹¹⁴ World Bank Development Indicators. Inflation, GDP deflator (percent annual). Inflation in 1999 was 37.6 percent and more recently in 2015, it was 7.9 percent. Like GDP, though, inflation rates have been highly volatile.

Republic is dependent on remittances, with an overwhelming majority of migrant workers traveling to the Russian Federation for work.

Figure 3.1. Economic Growth in Kyrgyz Republic and ECA, 1991-2013



Source: Ajwad et al. 2014.

13. Unforeseen political changes and instability have exacerbated fluctuations in growth. These include: in 2005, opposition protests (Tulip Revolution) in cities led President Oskar Akayev to resign; in 2010, the Government fell in response to political instability and protests on the ground; in 2011, a coalition government was elected; in 2014, the coalition broke down; and in 2015, a new government was elected; and in April 2016 the prime minister resigned.¹¹⁵

14. The Kyrgyz Republic dependencies heavily dependent on commodities for exports, especially gold from one mine, this has contributed to macroeconomic volatility. Commercial gold mining, which started in 1997, is concentrated in one large mine, Kumtor, in Issyk-Kul Oblast. It contributed an average of 7 percent (at factor cost) of GDP between 2001 and 2012 (Figure 3.2). While exporting gold is more important for external trade than for domestic growth, accounting for an average of 34.6 percent of exports from 2001 to 2012 and as much as 43 percent in 2011 because of high gold prices, it has largely contributed to the sharp peaks and troughs of the country's growth since 2001.¹¹⁶ In 2014, gold accounted for 41 percent of exports; radioactive chemicals made up 5.3 percent; scrap copper 4.8 percent; and dried legumes 4.6 percent (Figure 3.3). The lack of export diversity makes the country particularly vulnerable to internal shocks (e.g. geological¹¹⁷, technical and political factors) as well as external shocks (e.g. drop of global price of gold). Additionally, export destinations also remain largely undiversified: in 2014, most exports were sent to Switzerland (39 percent of total exports), Kazakhstan (31 percent), Russia (6.4 percent), Turkey (5.8 percent) and China (4.3 percent).¹¹⁸ Contrasted with the revenue generated exporting these goods (US\$1.09 billion), between 2009 and 2014, imports increased at an annualized rate of 20 percent, from US\$3.74 billion to US\$9.3 billion in real terms. The greatest import is refined petroleum which makes up nearly 11 percent of imports.¹¹⁹

¹¹⁵ European Forum for Democracy and Solidarity.

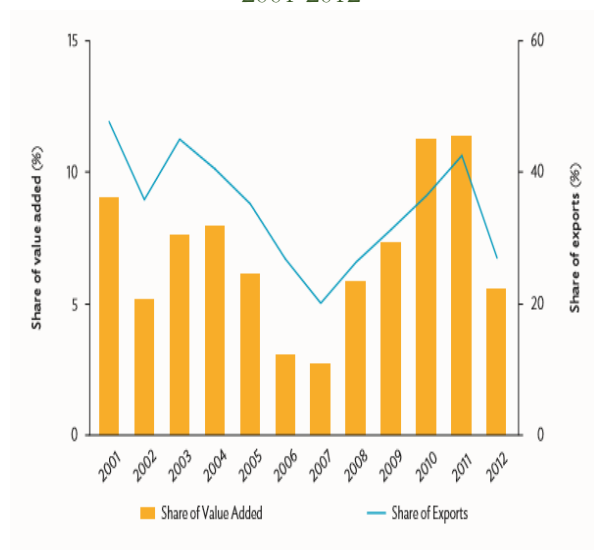
¹¹⁶ Asian Development Bank. 2014.

¹¹⁷ In 2012, geologic factors caused a significant decline in gold production, which resulted in a 0.1% decline of GDP. Source: Asian Development Bank. 2014.

¹¹⁸ Economic Complexity Observatory. 2014.

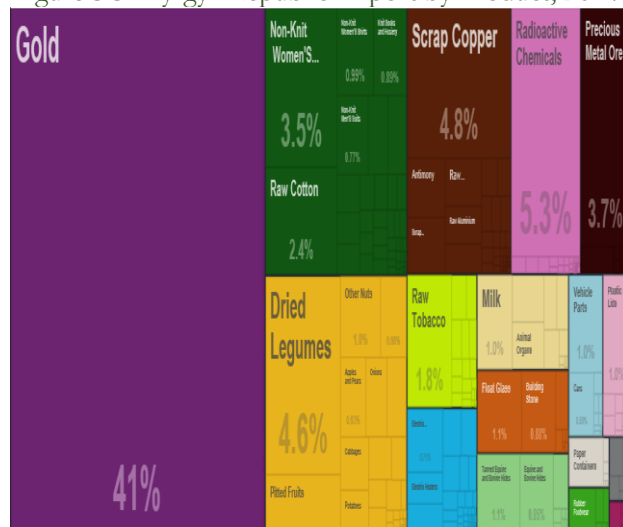
¹¹⁹ Ibid.

Figure 3.2. Role of Gold in the Economy, 2001-2012



Source: Asian Development Bank. 2014.

Figure 3.3. Kyrgyz Republic Export by Product, 2014



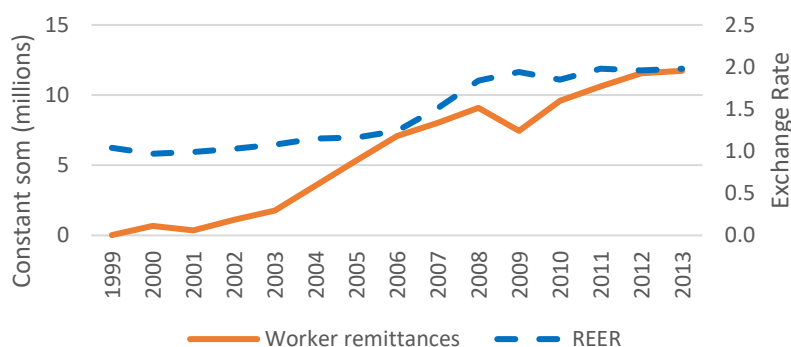
Source: Economic Complexity Observatory. 2014.

15. The inflow of remittances has created a foreign exchange surplus, triggering an exchange appreciation and possible “Dutch Disease” conditions posing a threat to overall stability. As Kyrgyz nationals continue to migrate abroad to find work, and remittances will continue to expand consumption and investment (especially in children’s education, health care and residential housing construction). Between 2005 and 2013, total consumption rose by an average of 19 percent; by 2013, it averaged about 135 percent of GDP, up from around 90 percent in 2001.¹²⁰ While remittances have been an important source of income over the past decade, they have been accompanied by a considerable slowdown in manufacturing growth and a rapid acceleration in the services sector. The real exchange rate has also increased, from 1.04 percent in 2000 to 1.98 percent in 2013 (Figure 3.4) – all symptoms of Dutch Disease.¹²¹ This has the potential to hinder the expansion of exports and reduce the country’s competitiveness, thus impacting improvements in job outcomes.

¹²⁰ World Bank. 2015 (c).

¹²¹ Ibid.

Figure 3.4. Growth of Remittances and Real Effective Exchange Rate Movements, 1999-2013



Source: World Bank 2015(c).

16. The Russian Federation is the main destination for migrant workers, and the lack of diversification in migrant destinations is also a cause of instability. It is believed that about half a million Kyrgyz workers remit an estimated US\$1.6 billion from the Russian Federation to their families.¹²² The second most important migrant destination for Kyrgyz residents, though it is a distant second, is Kazakhstan. In 2012, about 6,000 Kyrgyz workers remitted an estimated US\$15 million from Kazakhstan back to their families.¹²³ Given the Kyrgyz Republic's dependence on remittances, the lack of diversification in migration choice has caused households, and the Kyrgyz economy, to be highly vulnerable to fluctuations in the Russian Federation. Furthermore, the Russian Federation and Kazakhstan are resource-rich economies, one of the main natural resources is oil, as such their economies are subject to similar commodity price fluctuations. This was particularly evident with the collapse of the ruble in the Russian Federation at the end of 2014 when migrants started to return to their home countries and the flow of remittances dropped; GDP in Kazakhstan slowed during the same time. In the Kyrgyz Republic, private transfers, largely originating from the Russian Federation, fell by 5.2 percent between 2013 and 2014 (in US\$ terms) and was projected to contract by 20 percent in 2015, representing an income loss of over US\$400 million. This has slowed domestic consumption and saving, and has been accompanied by a precipitous drop in income growth and a decline in GDP growth.¹²⁴

17. In April 2017, the IMF completed consultations under Article IV and concluded that the prospects of a recovery following the recent crisis are improving. Regional factors are expected to continue to exert influence and pose a negative risk for the Kyrgyz economy. The IMF also warned that efforts are needed to shore up economic stability and that structural reforms growth could fall short of aspirations. The IMF further noted that: (i) growth for 2017 is expected to reach 3.5 percent and to continue to expand into the medium term; (ii) that inflation may rise to 5-7 percent; and (iii) the external balance is expected to widen to about 13 percent in 2017 before gradually narrowing over the medium term.

Institutions: the record is mixed and the perception of corruption is a problem

18. Good governance and high-quality institutions are critical for improvements to jobs outcomes. Rules that set out and clarify property rights; facilitate the resolution of disputes; enhance the predictability of economic interactions; and protect against arbitrary transactions and abuse are critical. They will help promote promoting enabling growth, vibrant business development, increased economic participation and strong

¹²² Kuchins et al. 2015.

¹²³ Ibid. Migrants also travel to the United Arab Emirates and Turkey.

¹²⁴ World Bank. 2015(b).

investment.¹²⁵ Institutions and government policies are central to defining, implementing and enforcing these rules, and their roles are critical to advancing jobs outcomes.

19. There are many institutional measures that are relevant to jobs outcomes, this report focuses on business and investment climate indicators in the 2017 Kyrgyz Republic Doing Business Report. These indicators include: starting a business; dealing with construction permits; getting electricity; registering property; getting credit; protecting minority investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. Policy makers in the Kyrgyz Republic need to understand where their economy stands relative to the other economies in the world in terms of these indicators.

20. Institutions that impact the business and investment climate, and hence, jobs outcomes have a mixed record in the Kyrgyz Republic. On the positive side, the Kyrgyz Republic ranks at 30 out of 190 countries at starting a business; it ranks 8th at registering a property; 32nd at dealing with construction permits; 32nd at getting credit; and 42nd at protecting minority investors. However, there are several indicators that show that institutions are weak, such as getting electricity where it ranks 163 out of 190 countries; it comes in at 148 at paying taxes; 141 at enforcing contracts; and 130 at resolving insolvency. These limitations inhibit capacity to deliver governance and strong institutions; this discourages participation in, and expansion of, the formal economy and encourages engagement in the informal sector.¹²⁶

21. Focusing on institutional limitations can be instructive for the Kyrgyz Republic to focus on its institutions and improve jobs outcomes. As pointed out in the World Bank's *Doing Business* reports, good rules create an environment where new entrants with drive and good ideas can get started in business and where good firms can invest, expand and create new jobs. The role of government policy in the daily operations of domestic small and medium-size firms is a central. Through understanding the degree to which current business regulation is designed, accessible to all and simple to implement, Kyrgyz Republic will be able to better facilitate improvements in business expansion and innovation, and allow for aspiring entrepreneurs to compete on equal footing.¹²⁷

- In the Kyrgyz Republic it takes many months to get an electricity connection, it is costly, and service is often unreliable. It takes an average of 125 days to complete the procedures and obtain an electricity connection.¹²⁸ In comparison, it only takes 18 days in the Republic of Korea; Kazakhstan only takes 77 days and in Moldova it takes 87 days. In addition, the cost of completing the procedures and obtaining electricity is also significant in the Kyrgyz Republic at 858 percent of income per capita. In Kazakhstan, it is only 50 percent of income per capita but Moldova is also high at 738 percent of income per capita.
- In the Kyrgyz Republic paying taxes is a significant burden on businesses because of the number of times that businesses must pay taxes, and because of the time that businesses have to spend collecting information, filing and paying taxes. Kyrgyz businesses must pay taxes about 51 times a year; in Kazakhstan businesses only pay taxes 7 times and in Moldova they pay 10 times a year. It is also time-consuming to collect information, file and pay taxes. Businesses spend 225 hours per year on taxes in the Kyrgyz Republic; in Kazakhstan this figure is 178 hours and 181 hours in Moldova. As a comparison, businesses spend about 55 hours on taxes in Luxemburg.
- In the Kyrgyz Republic, the cost of contract enforcement is high and the quality of the judiciary is weak. The quality of the judicial processes (measured by considering the court structure and proceedings, case

¹²⁵ World Bank. 2017(b)

¹²⁶ Singh et al. 2012. Empirical analysis suggests that the size of a country's informal economy is largely influenced by the quality of institutions.

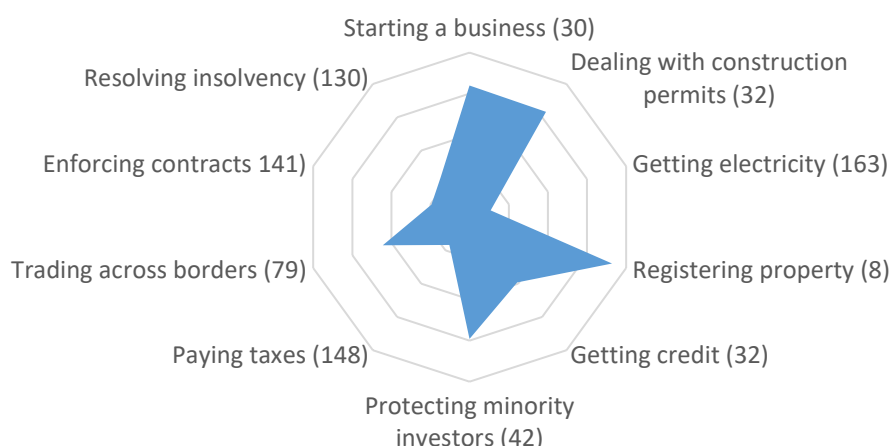
¹²⁷ World Bank. 2018.

¹²⁸ Authorities in the Kyrgyz Republic are in discussions with the IMF and World Bank on removing some of the electricity subsidies, and raising energy tariffs. If this is accompanied by an improvement in the quality of electricity provided, it could have a beneficial impact on jobs outcomes.

management; court automation, and alternative dispute resolution) is low. It takes about 410 days to file and serve the case, go through the trial and enforce the judgement, which is about average for the region. However, it is extremely costly to go through this process. In the Kyrgyz Republic, businesses spend about 47 percent of their yearly income to enforce the contract through the courts (attorney fees, court fees, and enforcement fees), while in Kazakhstan and Moldova, businesses spend 22 percent 29 percent of their yearly income, respectively.

- In the Kyrgyz Republic, settling insolvency issues is time-consuming, costly, and recovery rates are low. However, it should be noted that dealing with insolvency is a problem in a number of CIS countries. It takes about one and a half years to resolve insolvency in the Kyrgyz Republic, but it takes less than half a year to do so in 22 other economies around the world; the cost of settling insolvency issues in the Kyrgyz Republic is about 15 percent of the estate, and about 22 economies are able to deal with this at a cost of 1 percent of the estate. 34 cents on the dollar are recovered in insolvency proceedings in the Kyrgyz Republic, and in Norway, almost 93 cents on the dollar are recovered in insolvency proceedings.

Figure 3.5: Rankings on various *Doing Business* Indicators - Kyrgyz Republic
(Scale: Rank 190 center, Rank 1 outer edge)



Source: World Bank. 2017(a).

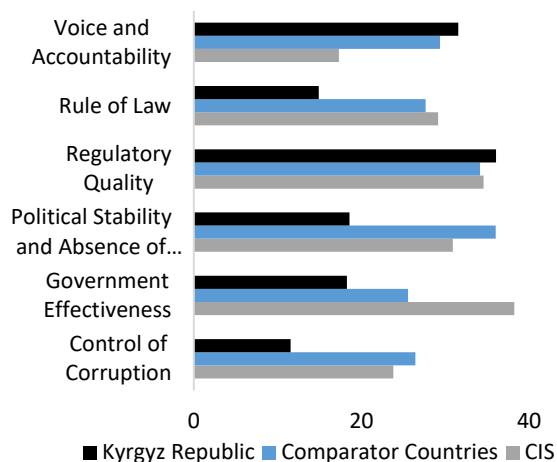
22. Property rights protection remains weak. The 2015-2016 World Economic Forum's Global Competitiveness Report (GCR) ranked the Kyrgyz Republic at 124 on property rights out of 140 countries. Property and contract rights are generally protected in the legal framework of the Kyrgyz Republic, but implementation does not always follow the law. A number of arbitration cases were initiated in international venues against the Kyrgyz Republic for failure to protect investors' property rights and it has lost most of these cases, reflecting a very real risk for firms.

23. The Kyrgyz Republic is perceived to have a corruption problem with widespread consequences on the effectiveness of public institutions and political stability. According to Transparency International, the Kyrgyz Republic faces significant challenges with corruption across all parts of the economy and all levels of the state apparatus.¹²⁹ Transparency International's 2016 Corruption Perceptions Index ranks the Kyrgyz Republic at 136 out of 176 countries and territories, and at 48 out of 51 European and Central Asian countries – ahead of Tajikistan, Turkmenistan and Uzbekistan. In addition, the Kyrgyz Republic has consistently scored poorly on the World Bank's Worldwide Governance Indicators (WGI). A comparison shows that the Kyrgyz Republic

¹²⁹ Transparency International.2016.

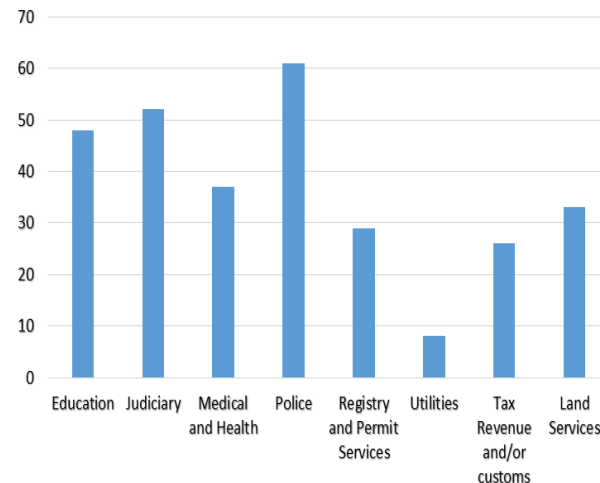
falls well below the CIS and comparator country¹³⁰ averages on each of the 2015 indicators (Figure 3.6). The key governance constraints include administrative and institutional capacity leading to: reduced government effectiveness, political instability, absence of rule of law, and an inability to control corruption. These constraints impact economic growth, private sector development, and jobs outcomes. However, despite this, voice and accountability as well regulatory quality remain greater than the CIS and comparator countries.

Figure 3.6. A Comparison of Governance Indicators, 2015
(Scale of 0 exhibiting no governance and 100 being the max governance)



Source: Worldwide Governance Indicators. 2016.

Figure 3.7. Global Corruption Barometer 2013: Percentage of individuals who have paid a bribe to any one of 8 services over last 12 months



Source: Transparency International. 2013.

24. According to the Gallup World Poll (2013), only 56 percent of Kyrgyz citizens are satisfied with government services. The Global Corruption Barometer survey (2013) indicates that 45 percent of Kyrgyz respondents said they paid a bribe while accessing public services. Corruption prevails in such services as police, judiciary, education, health, land management, registration and permits, and tax and customs (Figure 3.7). Accessibility, quality and duration of service delivery need improvement at national and municipal levels. The latter requires improving legislation; compiling a complete directory of free and paid services available to the public; and standardizing services.

¹³⁰ The comparators were chosen based on a few factors: similar level of income based on a set of aggregate level indicators (GNI per capita in PPP terms), population size and percent of population in rural areas. Additionally, having comparator countries helps represent the different regions (excluding MENA). The resulting list of comparator countries for the Kyrgyz Republic are: Tajikistan, Moldova (ECA); Honduras, Nicaragua (LCR); Cambodia, Lao PDR (EAP); Senegal, Zambia (AFR); and Nepal (SAR). Though the history of many of these comparator countries differs from the Kyrgyz Republic, they provide some valuable information on where it may be significantly different. As an alternative, CIS countries (Armenia, Azerbaijan, Belarus, Kazakhstan, Moldova, Russian Federation, Tajikistan and Uzbekistan) also provide a useful comparison given the similarity of their legacies, despite being more affluent.

Connectivity: barriers to geographic access, electricity, and information and communications technology need more progress

25. Policies that promote connectivity can help firms access inputs and sell outputs to bigger markets. Developing and expanding the tradable sectors and promoting exports in the Kyrgyz Republic are key for sustainable growth and improving job outcomes. The Kyrgyz Republic already takes advantage of its geography through cross-border trading, but many challenges remain in connecting firms with the reliable transport infrastructure; dependable electricity and water; and communications technology. In many ways, this inhibits further firm development and improvements to job outcomes.

26. The Kyrgyz Republic is strategically located but also landlocked. To the east of the Kyrgyz Republic is the second largest economy in the world, China; to the north are Kazakhstan and the Russian Federation; to the south, are India, Nepal, Pakistan, and other South Asian countries; and to the west are Turkmenistan and Uzbekistan. Being landlocked limiting its access to ports The Tian Shan mountains cover about 80 percent of the country, however, barely 7 percent of its land area is arable, due to its elevation and topography; the remaining land comprises glaciers, mountains, and pasture-land or steppe that support livestock grazing and forests.¹³¹

27. The Kyrgyz Republic has taken advantage of its geography through cross-border trading (CBT). Small enterprises/individuals import goods from China, Tajikistan, Kazakhstan, Turkey and other countries in Central Asia. In many ways, it has emerged as a major re-exporter or supplier of bazaar goods to bazaars in other Central Asian countries. Most imported goods are used for domestic consumption, but Kyrgyz traders appear to have acquired a competitive edge over their counterparts in other Central Asian countries in their ability to procure goods from more cost-efficient sources and re-export them for profit (Box 3.1). Additionally, these bazaars have been an important source of employment. The positive employment effects include people directly employed at bazaars as well as service providers and local suppliers for whom the bazaar is often the only venue for their products.¹³²

Box 3.1. Vibrant Cross-Border Trading

Since the early 2000s, trade, particularly the re-export of goods from the PRC to other countries in the region, has created several economic opportunities. Optimizing the country's challenging geographic location, small enterprises/individuals import goods (primarily cheap manufacturing goods) from China, taking advantage of the simplified tax regime for cross-border trade, and re-export those items using the CIS preferential tariff.¹³³ Re-exports are most commonly sent to Uzbekistan, Kazakhstan, and Russia.¹³⁴

This has had an important impact on labor and the economy over the past decade as re-exports now represent nearly 40 percent of manufactured exports¹³⁵. Most of the jobs are either in Bishkek, where Dordoi Market accounted for 59.3 percent of registered imports and 79 percent of exports in 2011. Osh, the location of Kara Suu Market is another busy place.¹³⁶ In 2008, it was estimated that Dordoi Market directly employed about 55,000 workers and created an additional 100,000-150,000 jobs in auxiliary services.¹³⁷ Much of this employment has been in the informal sector, but further understanding of labor force dynamics in this trade may lead to improved jobs outcomes.

¹³¹ Over 90 percent of its 198,500 km² area is at least 1,000 meters above sea level and 30 percent higher than 3,000 meters.

¹³² Kaminski, Bartlomiej and Saumya Mitra. 2012.

¹³³ World Bank. 2015(c).

¹³⁴ Kaminski, Bartlomiej and Saumya Mitra. 2012

¹³⁵ World Bank. 2015(c).

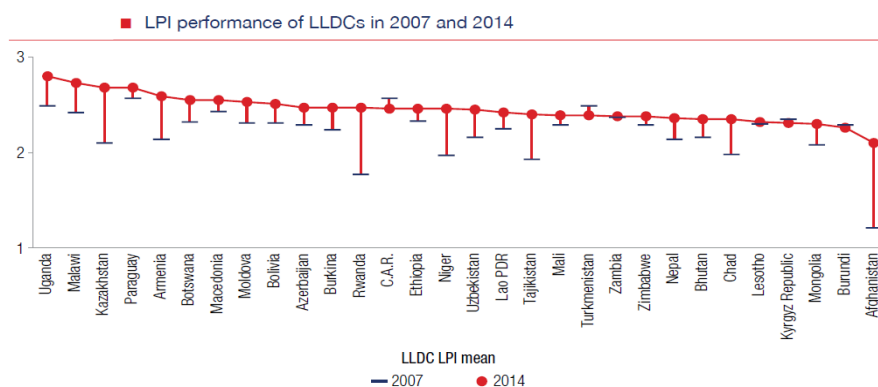
¹³⁶ Asian Development Bank. 2014.

¹³⁷ Kaminski, Bartlomiej and Saumya Mitra. 2012.

28. It is now easier to engage in cross-border trading with the Kyrgyz Republic. The 2017 Doing Business Report notes that the ease of trading across borders has increased for Kyrgyz Republic, ranking them at 79th compared to their regional competitors (Kazakhstan, 119th; Russia, 140th; Tajikistan, 144th; and Uzbekistan, 165th). This improvement is largely attributed to a reduction in the amount of time spent exporting a good across the border, and to a decrease in the amount of time spent on compliance paperwork.

29. The Kyrgyz Republic continues to be ranked poorly for trade logistics and transport. The Kyrgyz Republic remains one of the most logistics-disadvantaged countries, even among landlocked economies; it did not make much progress in terms of transportation logistics between 2007 and 2014 (Figure 3.8).¹³⁸ One of the greatest disadvantages that Kyrgyz Republic faces with regard to trade is the distance from production centers to seaports, which is between 4,500 and 5,200km compared to an average of 1,500 to 2,000km of other landlocked countries. This increases transportation costs and impacts the competitiveness of domestic products; it also impacts the potential for economic diversification. At the core of this challenge is the need to rebuild a regional connectivity framework to link population centers and economic hubs across borders in the Central Asia region, especially in the highly populated Fergana Valley.¹³⁹ Relatively small investments in cross-border transport links have proven to have a higher impact than the simple economic value added from reduced transportation costs. However, continued benefits will only be achieved if reforms in other areas are addressed, including in trade facilitation.

Figure 3.8. Logistics performance index of landlocked countries, 2007 and 2014



Source: World Bank. 2014. "Improving Trade and Transport for Landlocked Developing Countries: A Ten-Year Review."

30. The Kyrgyz Republic also continues to face poor connectivity in terms of electricity. Most Kyrgyz electricity is generated using hydropower: 90 percent of domestic electricity is produced by hydropower, but the country is using less than 10 percent of its hydropower potential. This is partly due to the unpredictability of seasonal weather,¹⁴⁰ but the frequent outages, interruptions, and fluctuations in voltage are mainly a result of deteriorating infrastructure. There remains a strong political reluctance to increase tariffs (which have been kept

¹³⁸ World Bank. 2014(b).

¹³⁹ Fergana Valley is a home to more than 10 million people, or 51 percent of the Kyrgyz population; 31 percent of Tajikistan's population; and 27 percent of Uzbekistan's population

¹⁴⁰ During the winter when demand is high and water releases are limited, the Kyrgyz Republic imports coal, oil, and gas to fuel thermal electricity plants. These imports sustain the power supply, but changes in prices or disputes with trading partners can affect imports. Source: Asian Development Bank. 2014.

far below the cost of rehabilitation) and the system is poorly managed mainly due to the lack of a regulatory framework; underinvestment; and poor service quality.¹⁴¹

31. Kyrgyz tariffs are among the cheapest in the world, but the fickleness of the power supply is one of the top concerns of firms and is a binding constraint to improving job outcomes. In the 2017 Doing Business Report, the Kyrgyz Republic ranked 163 out of 189 countries in terms of reliable electricity, one of the lowest in the region (Figure 3.9). The reliability of electricity is further exacerbated by the amount of time it takes to obtain electricity: currently it takes 7 procedures and 125 days to supply electricity to a business compared to the 7 procedures and 89 days in Uzbekistan and 7 procedures and 77 days in Kazakhstan (Figure 3.10).¹⁴² Poor electrical infrastructure outside the capital remains particularly severe, discouraging some private entrepreneurs in labor-intensive sectors (manufacturing and food processing) from further investing and developing greater markets. Additionally, electricity ranks as the fifth greatest obstacle to doing business, with an increase from 47 to 73 percent in firms experiencing power outages between 2008 and 2013.¹⁴³ Since 2013, investments in the sector and efforts to improve governance suggest that outages may be on the decline; however, the system still lacks the regulatory framework and infrastructure update needed to ensure regular and reliable access to electricity.

Figure 3.9. Ease of getting Electricity in select Central Asian Countries, 2017

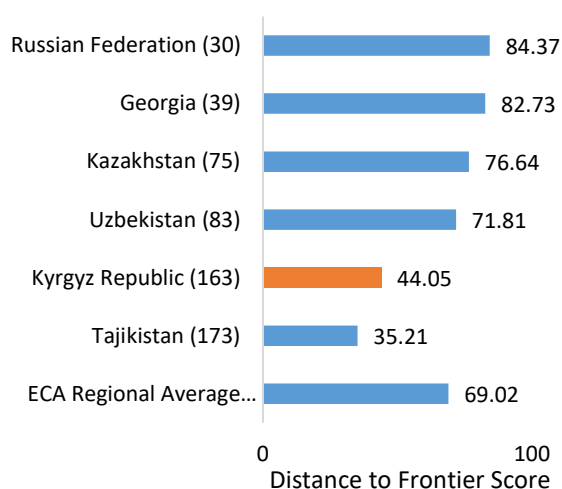
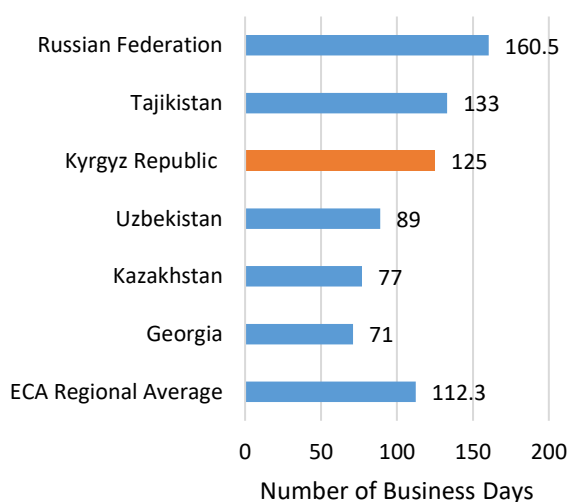


Figure 3.10. Number of Business Days needed to get Electricity, 2017



Source: World Bank. 2017. Doing Business Regional Report.

32. The information and communications technology (ICT) sector is not yet fully up and running in the Kyrgyz Republic, curbing the potential for enhancements in jobs outcomes. The benefits of ICT improvements could yield multiple dividends. First, they promote the inclusion of firms in the world economy by expanding trade, raising the productivity of capital, and intensifying competition in the marketplace; this then helps to bring about innovation. Second, it can create jobs; it leverages human capital, and produces consumer surplus. Finally, it enables citizens to access public services; strengthens government capability and transparency; and serves as a platform for citizens to tackle collective action problems.¹⁴⁴ According to the Global Innovation

¹⁴¹ Asian Development Bank. 2014.

¹⁴² Getting electricity in Russia only requires 3 procedures, but it takes nearly 161 days to obtain electricity, nearly the highest in the region.

¹⁴³ World Bank. 2014(a).

¹⁴⁴ World Bank. 2016(b).

Index, the Kyrgyz Republic ranks 95th out of 205 countries in terms of ICT access¹⁴⁵, behind the Russian Federation (41st), Kazakhstan (48th), and Moldova (51st) but ahead of Nicaragua (99th), India (107th) and Tanzania (118th).¹⁴⁶ Central Asia and the South Caucasus have the lowest rates of fixed broadband in the Europe and Central Asia region, while Western Europe and the Baltic States have the highest.¹⁴⁷ This low access suggests that the proportion of individuals using the Internet (on any device) is relatively low in the Kyrgyz Republic; the proportion of individuals using the Internet (on any device) is 28 percent, compared to 55 percent in Kazakhstan and 44 percent in Uzbekistan. The Kyrgyz Republic is not the worst performer in the Central Asia region: only 17 percent in Tajikistan, and 12 percent in Turkmenistan use the internet on any device.

33. ICT in Kyrgyz Republic is costly and lacks the necessary infrastructure to thrive. Currently, more than 80 percent of the population in Kyrgyz Republic would have to spend at least 10 percent of their household expenditure to obtain a basic mobile plan.¹⁴⁸ This contributes to a vicious cycle: high prices and poor service quality for the Internet mean that demand is low, which, in turn, fails to generate incentives for infrastructure investment.¹⁴⁹ Infrastructure development is limited not only by lack of demand, but also limited competition and stringent regulations to ICT firms entering into the market. Reducing these barriers and enticing demand will be critical for the development of the ICT sector.

34. Efforts have been made to improve the ICT sector, but greater investment is needed. The Kyrgyz Republic remains an emerging economy in terms of reaping the benefits of digital dividends. As a result, investments in infrastructure must be accompanied by financing efforts to improve the quality of education; this will help individuals to gain the skill set necessary to use and manipulate the technology to yield positive jobs outcomes. The World Bank's 2016 World Development Report, Digital Dividends points out that the benefits of ICT to jobs outcomes are neither automatic nor assured, but in many instances, enhancements in digital technologies can yield important progress.

Access to finance: positive developments in recent years, but obstacles remain for SMEs

35. There is a growing body of evidence that shows that access to finance is important for improving job outcomes, 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.¹⁵⁰ While it is difficult to attribute job outcomes 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 for higher investments in capital, new technologies, research and innovation. Improving access to finance could have positive effects on employment by creating new firms and enabling sustained growth of the existing ones.¹⁵¹

36. Over the past few years, the Kyrgyz Republic has made important improvements in increasing access to finance. Commercial banks have reduced the complexity of the loan application process and credit is much more available now than nearly ten years ago. In 2013 only 4 percent of firms reported the complexity of the

¹⁴⁵ The ICT access index is a composite index that weights 5 ICT indicators (20 percent each): (i) fixed telephone lines per 100 inhabitants; (ii) mobile cellular telephone subscriptions per 100 inhabitants; (iii) international internet bandwidth (bit/s) per internet user; (iv) percentage of households with a computer; and (v) percentage of households with internet access. Source: Knoema. 2016.

¹⁴⁶ Knoema. 2016.

¹⁴⁷ Kelly, et al. (2017).

¹⁴⁸ Ibid.

¹⁴⁹ Ibid.

¹⁵⁰ Ayyagari, et. al. 2016.

¹⁵¹ World Bank. 2013(d).

application process as the main reason for not applying for a loan, compared to 12 percent in 2008.¹⁵² The Government has also made important steps to achieve better access to credit information for banks and other finance institutions, which should improve the public's access to credit. Other legislative actions include: a law on payment systems; a law on consumer protection; and amendments to the banking law on collateral.¹⁵³ In fact, a new law on the exchange of credit information has been approved. There have been other legislative actions, including a law on payment systems expected to be approved after revisions; a law on consumer protection; the expected approval of amendments to the Civil Procedures Code that will enable accelerated court enforcement of arbitral awards; and the expected adoption by the Kyrgyz National Bank of an integrated risk-based off-site/on-site system for supervising microfinance institutions (MFIs). There are also amendments to the banking law on collateral that have yet to be approved by the Parliament.

37. Nonetheless, access to finance continues to be expensive and a constraint for firm development and for doing business in the Kyrgyz Republic. In 2013, access to finance in the World Bank Enterprise Survey was listed as the 7th greatest barrier to business, up from 9th in 2008. Many of the small and medium enterprises (SMEs) have had difficulties with affordability and availability of financial services. Interest rates have not changed much between 2008 and 2013, but at least 50 percent of medium-sized firms noted the high interest rate as a reason they did not apply for a loan from a Bank in 2013, compared to 16 and 31 percent for small and large companies, respectively.¹⁵⁴

38. Even though microfinance institutions have stepped in, especially in rural areas, financing remains limited in scope and impact. More than one-third of credit comes from microfinance institutions (MFIs). Between 2000 and 2010, the number of MFIs more than quadrupled and by mid-2014, there were about 230 MFIs and 142 credit unions. The sector, though, is highly concentrated, with the largest 11 institutions accounting for 80 percent of the microfinance loan portfolio. Almost half of the lending goes to agriculture, and more than one-quarter to trade and commerce. In late 2013, over 67.2 percent of MFIs' clientele were women.¹⁵⁵ Access has increased, but most of the loans are small in nature (not nearly enough to facilitate private investment or entrepreneurship), and have extremely high interest rates (ranging between 20 and 60 percent); short maturities (average maturity of 10 months); and they lack the financial and risk-management products appropriate for the population.¹⁵⁶

39. The Kyrgyz Republic also has a low level of aggregate domestic savings. This is estimated at about one-third of GDP, despite the notable inflow of remittances. Overall, there is an absence of financial products that are aimed at promoting savings and back remittances.

Innovation: behind the curve

40. Policies that promote innovation, which may result in the creation of new products and processes or lead firms to adopt technology, can affect jobs in a country.¹⁵⁷ Innovation can be spurred by fostering research and development (R&D); ensuring that financial instruments are available to promote risk-taking; facilitate trade, FDI, and entrepreneurial start-ups and spinoffs; and increase access to quality education.¹⁵⁸

¹⁵² World Bank. 2014(a).

¹⁵³ Asian Development Bank. 2014.

¹⁵⁴ World Bank. 2014(a).

¹⁵⁵ Asian Development Bank 2014.

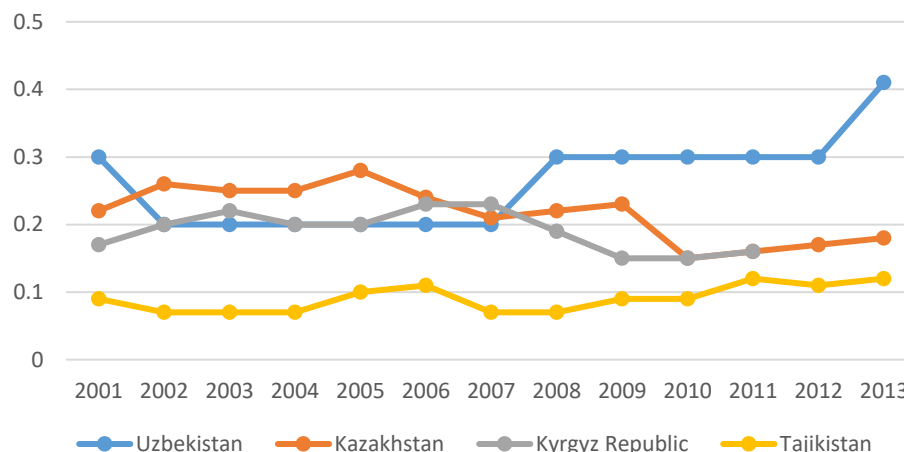
¹⁵⁶ Ibid.

¹⁵⁷ Frey, C.B. and M.A. Osborne (2013).

¹⁵⁸ Goldberg, et al., 2011.

41. In the Kyrgyz Republic, research and development investments are very low. R&D investment in Central Asian Republics has been historically low; in the 2016-2017 Global Competitiveness Report, the Kyrgyz Republic ranked 123rd out of 138 countries in the area of innovation, slightly better than the previous year (125th); better than Moldova (133rd) and Nicaragua (136th), but worse than Kazakhstan (59th) and the Russian Federation (56th).¹⁵⁹ Additionally, over the past decade, Kazakhstan and Kyrgyzstan have struggled to maintain gross domestic expenditure on R&D (Gross Expenditure on Research and Development: GERD) at 0.2 percent of GDP (Figure 3.11). Uzbekistan's R&D effort intensified in 2013 to 0.4 percent of GDP.¹⁶⁰

Figure 3.11 Gross Expenditure on Research and Development (GERD)/GDP Ratio, 2001-2013



Source: UNESCO. 2015.

42. The Kyrgyz Republic invests very little in R&D relative to comparator countries. This low investment includes finance and human resources. The Kyrgyz economy is oriented primarily towards agricultural production, mineral extraction, textiles and the services industry and, as a result, there is little incentive to create knowledge- and technology-based industries.¹⁶¹ The number of researchers has changed very little over the last decade, hovering at just over 2,000 individuals, a small fraction of the population and much smaller than Uzbekistan and Kazakhstan (Table 3.1). As a result, research makes little impact and tends to have little practical application in the economy or generating economic development. Finally, R&D is concentrated in the Academy of Sciences, suggesting that the universities urgently need to refocus their efforts to becoming research bodies.¹⁶²

¹⁵⁹ Schwab, Klaus and Xavier Sala-i-Martin. 2017.

¹⁶⁰ UNESCO. 2015.

¹⁶¹ Ibid.

¹⁶² Ibid.

Table 3.1. Central Asian Researchers, by field and gender

		Researchers by Field of Science														
		Total Researchers			Natural Sciences		Engineering and Technology		Medical and Health Sciences		Agricultural Sciences		Social Sciences		Humanities	
		Per million pop.	No. of women	Women (%)	Total	Women (%)	Total	Women (%)	Total	Women (%)	Total	Women (%)	Total	Women (%)	Total	Women (%)
Uzbekistan (2011)	30,890	1,097	12,639	40.9	6910	35.3	4982	30.1	3659	53.6	1872	24.8	6817	41.2	6650	52
Kazakhstan (2013)	17,195	1,046	8,849	51.5	5091	51.9	4996	44.7	1068	69.5	2150	43.4	1776	61	2114	57.5
Kyrgyz Republic (2011)	2,224	412	961	43.2	593	46.5	567	30	393	44	221	50	154	42.9	259	52.1
Tajikistan (2011)	2,152	262	728	33.8	509	30.3	206	18	374	67.6	472	23.5	335	25.7	256	34

Source: UNESCO. 2015.

Constraints to Labor Supply: there is scope for increasing labor force participation

43. Increasing labor supply can improve jobs outcomes. Labor supply increases because the number of people in the workforce increases, or because the quality of the workforce improves. This sub-section analyzes two key factors that affect labor supply: (i) workforce size; and (ii) workforce quality. The size of the workforce is affected by: (i) the working age population; (ii) public and private transfers; and (iii) work attitudes, social norms, opportunity cost of work. Workforce quality is affected by skills of the workers.

Workforce size: Large and growing population, but labor force participation can be higher

44. There are several factors that can affect a person's desire to seek work or to accept a job. These include: public and private transfers; work attitudes; social norms; and the opportunity cost of work. This section largely focuses on the growing population of the Kyrgyz Republic and some of the social norms and opportunity costs among other barriers deterring key population groups from participating in the labor force.

45. The Kyrgyz Republic's potential workforce is growing fast – faster than some of its neighbors in Europe and Central Asia. Fertility rates in the Kyrgyz Republic have increased from 2.4 in 2000 to 3.2 in 2014, it has a substantial working age population that will continue to grow for several decades. 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 working-age population (15-64-year olds) was about 2.99 million individuals in 2000 and is expected to increase to around 4.6 million by 2030, while the working age populations in many other European and Central Asian countries are expected to contract.¹⁶³ 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.

46. As noted earlier, women and youth are highly represented among potential workers who are outside the labor force and not contributing to the economy. Female employment rates are slightly lower than male employment rates in all age groups indicating that there may be barriers to women entering the labor market including: childcare duties; lack of education and skills; legislative barriers; social norms; and discrimination. Similarly, those women who would like to enter the labor force are likely to have more barriers than men.

¹⁶³ United Nations. 2015.

47. A lack of affordable, high-quality childcare and day-care facilities as well as social norms are important barriers to labor market participation, especially for young women.¹⁶⁴ 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 the Kyrgyz Republic's long-term jobs strategy because it ensures that all children acquire the cognitive and behavioral (non-cognitive) skills that are conducive to high productivity when they grow up and join the labor market. Social norms also play a role in limiting female participation in the labor force: qualitative researchers reported a man in the Kyrgyz Republic responding with the following statement when discussing women in the workforce: "...some men are against their women working. Even if he only earns enough to buy bread and water, he will say, stay at home because I must earn the money."¹⁶⁵ During the same study, another man responded as follows: "If a woman goes to work people wonder. Even if she behaves well and earns money in a proper way, some people may have different views. She may lose the trust of her family."¹⁶⁶

48. Additional barriers to female labor force participation are legislative. Kyrgyz labor legislation has many restrictions that bar women from participating in some occupations or sectors (see 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.¹⁶⁷ Removing these legislative barriers to female employment is not expensive and other countries have done so successfully.

49. Finally, there are several 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.

50. Persons with disabilities do not have as much access to jobs. In 2016, the Kyrgyz Republic estimated that there are more than 172,000 persons with disabilities (about 3 percent of the population) and this number is growing.¹⁶⁸ Despite some changes to the legislation intended to improve their rights, persons with disabilities continue to face barriers to their participation in society as equal members.¹⁶⁹ Problems of physical access to infrastructure, buildings, public transport, and information accessibility (lack of materials in Braille, sign language) hinder persons with disabilities from applying for or considering employment. Additionally, while all persons with disabilities may not be of working age, many are and they are often excluded from participating in mainstream labor market programs due to many factors, including lack of access to education and vocational rehabilitation and training, lack of access to financial resources, disincentives created by disability benefits, the inaccessibility of the workplace, and employers' perceptions of disability and disabled people.

51. Evidence has shown, though, that almost all jobs can be performed productively by someone with a disability, and given the right environment, most people with disabilities can be productive.¹⁷⁰

52. Critical to the inclusion of persons with disabilities in the workplace is creating and enforcing legislation that does not allow for discrimination against people with disabilities in the workplace. Many countries also have specific measures such as quotas aiming to increase employment opportunities for people with disabilities. Most common, though, are vocational rehabilitation and employment services; that is, job training, counselling,

¹⁶⁴ Davalos et al. 2016

¹⁶⁵ Ibid.

¹⁶⁶ Ibid.

¹⁶⁷ World Bank. 2016(d).

¹⁶⁸ UNDP. 2016.

¹⁶⁹ It is worth noting that, to date, the Government has not ratified the UN Convention on Rights of Persons with Disabilities, preventing persons with disabilities from full protection and inclusion into society.

¹⁷⁰ World Health Organization. 2011.

job search assistance, and placement. These have the potential to develop or restore the capabilities of people with disabilities to compete in the labor market and to facilitate their inclusion. Finally, changing attitudes in the workplace is central to the inclusion of persons with disabilities.¹⁷¹

SPOTLIGHT 1: LEGISLATIVE BARRIERS ON WOMEN'S EMPLOYMENT IN KYRGYZ REPUBLIC

There are many factors that contribute to low female labor force participation rates in the Kyrgyz Republic.¹⁷² One such factor is the Labor Code. The Kyrgyz Labor Code¹⁷³ (Article 303) prohibits women from working in: in heavy jobs, jobs in harmful and (or) dangerous working conditions, or jobs linked to lifting or moving of heavy loads exceeding maximum permissible thresholds, generally established in a manner determined by the Government.

While the Labor Code provides a mandated overarching employment framework, a more comprehensive list of specific professions and occupational tasks where female employment is not allowed is established by Government Decree No. 158 of 24 March 2000.¹⁷⁴ According to the Decree, women are excluded from nearly 400 professions perceived to be “harmful” or “dangerous” for women across different sectors of the economy.¹⁷⁵ Pressingly, women are not allowed to engage in jobs within economic sectors that the Kyrgyz Republic relies on for its exports: mining, non-ferrous metallurgy, food and tobacco industry, light and textile industries, production of transport equipment, furniture manufacturing, and agriculture. Although there may be a considerable variation in the degree of regulatory enforcement, the existence of such restrictions limits the range of jobs from which women can choose for employment and training; employers are provided with more leverage in avoiding women-candidates.

The existing Kyrgyz legal framework (Government Decree No. 158 of 24 March 2000) prevents gender parity in essential export sectors:

- women cannot work in jobs linked to ferrous and non-ferrous metallurgical production and production of insulation materials (11309)
- women are restricted from ore mining, operational exploratory drilling for oil and gas (11297), welding work in foundries (13392), and hewing (12690)
- restrictions are in place in the processing of minerals like ore and uranium (11708)
- women cannot be involved in the extraction and processing of peat (12692)
- in the textile and light industry, women cannot be transporters (19217), press operators in primary cotton processing (17115), and dyers in knitting manufacturing (13170)
- in furniture manufacturing, women cannot be involved in tiling furniture parts (15212)
- women are barred from certain tasks within the food industry, including: manual dismantling of separators in manufacturing of food products (13959), fat melting (16636), vegetable salting (12237), manual compacting of fish in barrels (17071), meat carving or cleaning raw food materials with alkali (17920)
- women are restricted from work linked to press-operation, flavoring and bagging of tobacco by hand (11134)
- in the agricultural sector, women cannot drive tractors equipped with devices for pollination (19205)

¹⁷¹ Ibid.

¹⁷² Percentage of female population (ages 15-64, modeled ILO estimate) in the workforce is about 56%, according to the World Development Indicators, 2014.

¹⁷³ Labor Code of Kyrgyz Republic. 2000.

¹⁷⁴ Kyrgyz Republic. 2000.

¹⁷⁵ In contrast to similar legislative lists of other post-Soviet republics, where prohibited professions and tasks are sorted by specific sectors, such sorting is absent in case of the Kyrgyz Republic, i.e. the exact number of sectors cannot be counted, but the exact number of restrictive professions can.

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, the Kyrgyz Republic stands out as one of the most restrictive countries for women in Europe and Central Asia along with its other post-Soviet counterparts. Moldova, Kazakhstan, Russian Federation, Tajikistan and Uzbekistan have also inherited very similar lists of jobs from which women are barred from Soviet times. For example, Kazakhstan restricts women from numerous professions and tasks within roughly 25 sectors of the economy, including its major geological and exploratory oil and gas industry.¹⁷⁶ Women in Moldova are barred from numerous jobs within 29 sectors of the economy,¹⁷⁷ food industry alone lists around 60 prohibited professions and occupational tasks. In Tajikistan, women cannot take up positions within roughly 36 sectors of economy, including nearly 28 professions and occupational tasks in the metal industry.¹⁷⁸ In Uzbekistan, women are similarly restricted from hundreds of jobs across 44 sectors of the economy, including 47 professions in the railway and metro industry alone.¹⁷⁹ Armenia is the only post-Soviet economy that has managed to repeal regulatory prohibitions on women's participation in the labor market.

In comparison with numerous restrictions in the Kyrgyz Republic and other above-mentioned post-Soviet economies, the Labor Act of Turkey (Article 72) prohibits women only from sewage and tunnel construction within the mining sector.¹⁸⁰ In South Asia, Bangladesh Labor Law (Articles 39 and 87) prohibits women from working in hazardous jobs: mining (Articles 42 and 87) and certain jobs in factories (Articles 40 and 87).¹⁸¹ However, the Government of Bangladesh has preserved the leverage to expand the job listings risky for women at any time. In Nepal, Labor Act (Section 5) imposes limitations on working hours allowing women to work from six o'clock in the morning till six o'clock in the evening.¹⁸²

In contrast to the above economies of South Asia, Brunei Darussalam; Cambodia; Hong Kong, SAR; Indonesia; Lao PDR; Philippines; Singapore, Taiwan, China, Timor-Leste, or Tonga do not impose any restrictions on women's employment opportunities.¹⁸³ Similarly, high income economies like Belgium, Denmark, Germany, Greece, Estonia, Italy, Portugal, the Slovak Republic and Switzerland do not have any limitations on women's employment in their respective labor regulations.¹⁸⁴

The original intention of the restrictions was to protect women and women's reproductive health. However, a tendency to gradually reform these rather archaic, restrictive regulatory provisions to include a more gender-neutral protection has been picking up across the world. Governments, employers, and trade unions could work together to establish safe working conditions that protect women and men equally, without depriving women of making an employment choice of their own.

Removing restrictions on women's employment is not expected to create substantive costs for the Kyrgyz Republic. 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

¹⁷⁶ Kyrgyz Republic. 2011.

¹⁷⁷ Kyrgyz Republic. 1993.

¹⁷⁸ Ordinance No. 240 of 25 July available at http://www.lawrussia.ru/texts/legal_346/doc346a728x688.htm

¹⁷⁹ Order No. 865 of 5 January 2000 available at http://lex.uz/pages/getpage.aspx?lact_id=514958#523439

¹⁸⁰ Labor Act of Turkey available at <http://www.mevzuat.gov.tr/MevzuatMetin/1.54857.pdf>

¹⁸¹ Labor Law of Bangladesh available at http://bdlaws.minlaw.gov.bd/bangla_pdf_part.php?id=952

¹⁸² Labor Act of Nepal available at <http://dol.gov.np/ckeditor/kcfinder/upload/files/labor-act-english-2048.pdf#>

¹⁸³ Women, Business and the Law 2016 available at <http://wbl.worldbank.org/~media/WBG/WBL/Documents/Data/WBL2016-Full-Data.xlsx?la=en>

¹⁸⁴ Ibid.

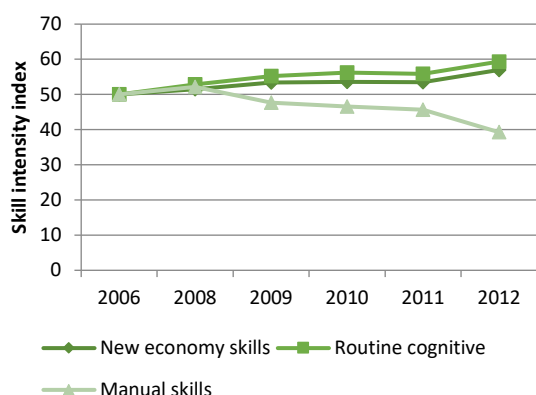
differences in education or the higher incidence of part-time work among women. In addition, World Bank's Women, Business and the Law 2016 found that in those countries where there was at least one restriction on women's employment, their estimated earned income was 12 percent less than men's income, relative to countries where such restrictions do not exist.¹⁸⁵

Workforce quality: Despite progress there remains a mismatch between jobseeker skills and employer needs

53. The Kyrgyz economy is changing and with it, the skills demanded and needed are changing. Since the fall of the Soviet Union, the structure of the Kyrgyz economy has changed dramatically, causing an important structural shift away from the traditional sectors (agriculture and mining) to more modern sectors (industry and services). This has had important implications for the types of skills demanded and needed for employment. Increasingly, firms in the Kyrgyz Republic have voiced a greater demand for “new economy skills”, that is higher-order analytical and organizational skills, including non-routine cognitive analytical and interpersonal skills. These new demands as well as the Kyrgyz broader aspiration to become a middle-income country, require a different, more diverse skill set for the labor force, this includes behavioral (non-cognitive) skills alongside high quality cognitive and technical skills.¹⁸⁶

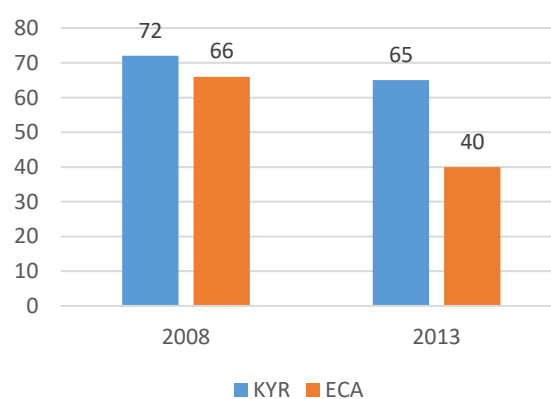
54. Kyrgyz firms are increasingly demanding higher-level skills. Figure 3.12 illustrates the change in an index of the skills intensity of jobs relative to 2006, measured in “centiles” (or less precisely, the percentile change in skills requirements in jobs in the Kyrgyz economy). The graph shows that new economy skills have risen since 2009, with the largest increase between 2011 and 2012. In addition, the demand for routine cognitive skills has shown a subtle increase as well.¹⁸⁷ New economy and routine cognitive skills are often associated with services and manufacturing jobs, while manual skills are often associated with agriculture and retail occupations. The increase in demand for higher level skills is paralleled by a high percentage of firms claiming that lack of relevant job skills and education in the labor force was a great impediment to doing business. (Figure 3.13).¹⁸⁸

Figure 3.12. The evolution of skill intensity reveals an increase in “new economy” skills, 2006–2012



Source: Ajwad et al. 2014.

Figure 3.13. Percentage of firms indicating skills and education of available workers are a problem, 2008 and 2013



Source: World Bank. 2014(a).

¹⁸⁵ Women, Business and the Law 2016 available at <http://wbl.worldbank.org/~media/WBG/WBL/Documents/Data/WBL2016-Full-Data.xlsx?la=en>

¹⁸⁶ ADB. 2015; Ajwad et. al. 2014.

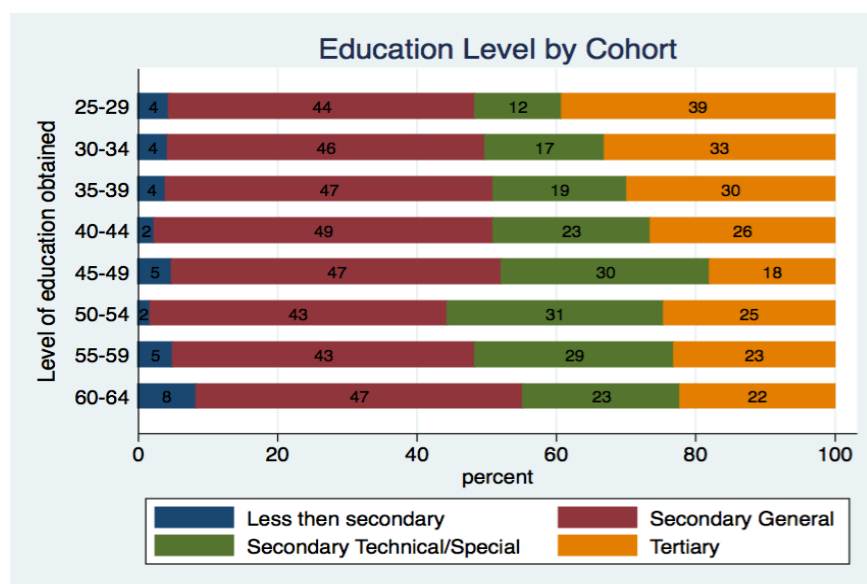
¹⁸⁷ Ibid.

¹⁸⁸ The World Bank. 2014(a).

55. Given the changing skill demands, too many workers in the Kyrgyz Republic are not equipped with the skills that will make them employable and productive. Such skills may be gained through education systems or via other institutions/actors. Other studies have shown that the Kyrgyz Republic has made significant strides with access to education, but the country still struggles to provide quality education that is relevant in the labor market.¹⁸⁹ In general, though, relevant skills will change over time, adjusting to the economic structure of the country. Subsequently, equipping capable persons with the right skills to fulfill their productive potential requires investing in effective education and skills policies to better match training with labor market demands, and policies targeted at improving job quality.¹⁹⁰

56. Various challenges remain in the production and use of skills. First, while positive jobs outcomes are linked with educational attainment, there still seems to be a gap in terms of skill development. In the Kyrgyz Republic, education appears to be valued, and therefore, completion rates are high, especially among wealthier quintiles, and cohort analysis indicates an increasing trend. Only 4 percent of the population aged 25-29 fails to complete at least secondary education and over 39 percent of the same population complete tertiary education (Figure 3.14). By and large, cohort analysis indicates that individuals have been opting for tertiary education over secondary technical/special education. As a result, people 45 and over have secondary technical/special education completion rates of around 30 percent, while for 25-29-year olds, the secondary technical/special completion rates are close to 12 percent. However, around a fifth of all people over 45 has completed tertiary education, while almost 40 percent of 25-29-year olds completed tertiary education. Differences in tertiary education is also most notable between wealth quintiles. In 2013, 14 percent of men and 21 percent of women from the poorest quintile attained tertiary education, relative to 37 and 41 percent, respectively, in the richest quintile. For many employees, though, having the sufficient education credentials and completed education is not enough to improve jobs outcomes. Increasingly, there seems to be a mismatch between the skills employees are obtaining and the skills employers seek for carrying out the job. Studies show that the quality of education (not the quantity) can ensure that students develop the valuable and necessary skills that can contribute to the overall growth of the economy (Box 3.2).

Figure 3.14 Education Completion Rate is high, with tertiary graduates expanding



Source: World Bank/GIZ Kyrgyz Republic Jobs, Skills, and Migration Survey, 2013.

¹⁸⁹ Ajwad, et al. 2014.

¹⁹⁰ World Economic Forum. 2017.

Box 3.2. Do Skills Matter in the Labor Market?

Past work has shown a strong and robust relationship between cognitive skills and labor market outcomes. Studies using longitudinal household surveys in the US find that cognitive test scores during schooling years are good predictors of the level of wages. Moreover, the empirical evidence shows that a shortage of skills is one of the biggest barriers to employment. The empirical literature on cognitive skills/labor market outcomes distills two types of causal pathways: (i) direct—e.g. Murnane et al., 1995 assess the role of math skills of graduating high school seniors on their wages at age 24 and found a positive and increasing impact of cognitive skills on wages; and (ii) indirect: Cunha et al. (2005) argue that cognitive skills increase the likelihood of acquiring a higher level of education, which could lead to higher economic returns.

Similarly, there is growing evidence that behavioral skills are also important for labor market outcomes. Even though a more recent phenomenon, the empirical literature on the skills/labor market outcomes nexus finds a strong and robust relationship between certain behavioral skills, such as dependability, persistence, and docility and labor market outcomes. A separate strand of the literature has argued that behavioral skills are particularly valued in certain sectors (e.g. services). Finally, recent evidence in the context of high-income countries has suggested that employers value behavioral skills more than cognitive ability or independent thought.

Source: Adapted from Ajwad et al. 2014.

57. However, education completion rates are correlated with household wealth meaning that jobs outcomes are worst among the poorest and most vulnerable populations (Figures 3.15 and 3.16). Among 25-64-year olds, 10 percent of individuals from the poorest households have not attained secondary education, while less than 4 percent of individuals from the richest households have not attained secondary education. Similarly, 14 percent of men and 21 percent of women from the poorest quintile have attained tertiary education, but in the richest quintile, tertiary education completion rates are 37 for men and 41 percent for women.

Figure 3.15. Levels of Completed Education by consumption quintile, Males 2013

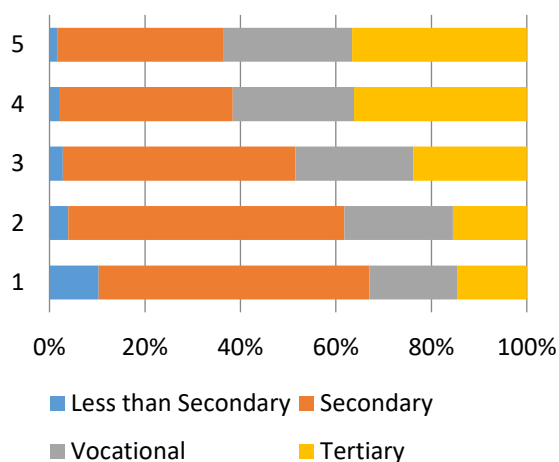
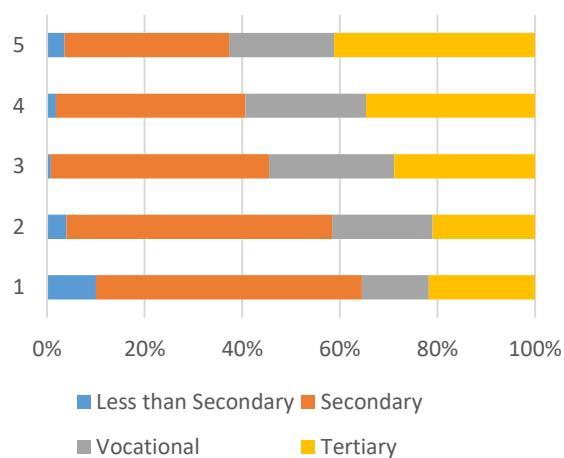


Figure 3.16. Levels of Completed Education by consumption quintile, Females 2013



Source: World Bank/GIZ Kyrgyz Republic Jobs, Skills, and Migration Survey, 2013

58. In terms of labor force participation, secondary technical/special graduates have better labor market outcomes than individuals with a general secondary education (Figure 3.17). Among women, university and secondary special/technical graduates are more likely to work than graduates with general secondary education. Among men, employment rates are high regardless of education levels. Overall, the employment rate among adults with a tertiary degree is 82 percent compared to those who have only completed general secondary education (74 percent). The impact of education on employment is greatest, though, among women where only

58 percent of female secondary graduates work compared with 72 and 75 percent among secondary technical/special and tertiary graduates who work.

Figure 3.17. Employment Rate by Education Level, 2013

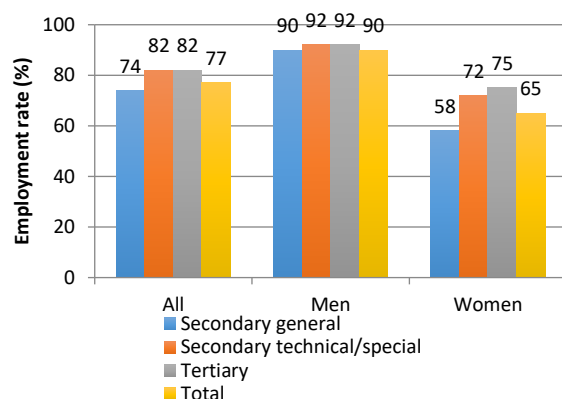
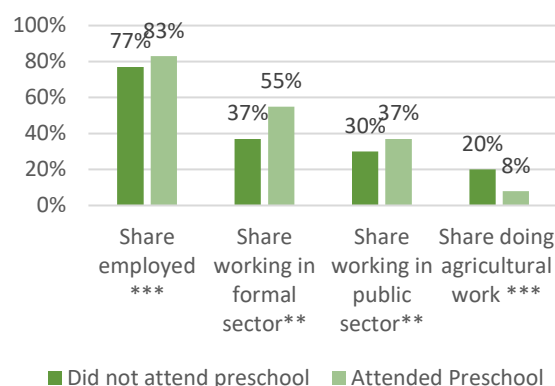


Figure 3.18. Employment Outcomes: Pre-school attendance, 2013¹⁹¹



Source: Ajwad et al. 2014

59. Additionally, preschool attendance in Kyrgyz Republic is highly correlated with the likelihood of being employed. Without implying causality, the data show that adults who attended preschool as a child, are more likely to be employed (83 percent) than those who did not attend preschool (77 percent). Among those employed, those who attended preschool were also more likely to work in the formal sector and least likely to work in the agricultural sector. Nevertheless, when considering demographic characteristics such as age, gender, marital status, geographic location, and overall educational attainment, there is no longer an effect of preschool attendance on employment outcomes (Figure 3.18). There is a wealth of research that shows how investments in early childhood development (ECD) can be one of the most cost-effective ways to reduce social costs and impart skills that contribute to higher productivity late in life (Box 3.3).¹⁹²

Box 3.3. Returns on Investments in Early Childhood Development

Skills are developed throughout all stages of life - from conception to preschool, primary, secondary, higher education, and on the job - and there are sensitive and critical development periods for each type of skill. Cognitive and behavioral (non-cognitive) skills are largely formed earlier on in life, while technical skills are developed later.

The early childhood period is critical in the development of cognitive skills. This stage marks the first step of skill-building, and it can be particularly critical in closing the gap between children from poorer and better-off households. In fact, there are strong indications that the most critical moment for cognitive skill-building is before a child turns 5. By ages 8 to 10, the foundation of an individual's cognitive abilities is well set. Technical skills are developed later, and are continuously developed throughout adolescence and into adulthood.

Subsequently, investments in early childhood development for the development of these skills are critical. Not only does early education help to build the foundation for learning skills throughout life, but early childhood education is an important element in ensuring that youth have an adequate amount of schooling to prepare them to enter the labor market. Early childhood development includes teaching developmental skills to children, as well as proper health care and nutrition. These investments can contribute to lower social costs in the future, and to increased productivity.

Source: Adapted from Ajwad et. al. 2014.

¹⁹¹ Respondents aged 25–64; ***/**/* represent significant differences in outcome between individuals with and without preschool at the 1%/5%/10% significance level, respectively

¹⁹² Heckman, James. 2012.

60. Attempts have been made to improve job-relevant skills through vocational and on-the-job training; however, many of the TVET schools remain out of touch with current skills demands. As participation in tertiary education increases, secondary vocational training is declining. This is consistent with the structural shift in the labor market toward the services sector and similar to the experience of post-Soviet countries after the closure of some production facilities that were tied to vocational training. Many employers continue to recognize the professions that are offered in vocational training, as evidenced above by the better labor market outcomes for those with secondary technical/special education; however, standards and equipment have deteriorated contributing to outdated and low-quality content.¹⁹³ The agency responsible for vocational education and training has worked to improve connections with employers, but efforts are not considered widely successful.¹⁹⁴ Revisiting vocational training as a means of improving the skills of the labor force could be an important way of ensuring that employees have the relevant skills needed to participate in the labor market. Recent data also seem to indicate that firms have begun to offer more formal training to employees as a means of improving their on-the-job skills. The percentage of firms offering training to employees has increased from 30 percent in 2008 to 65 percent in 2013 (Figure 3.19). In the same study, lack of skills was cited as the fourth greatest barrier to doing business. Additional research is needed to determine the types of skills that are needed to better match employer demand.

61. An area of opportunity for further skill development is technology. Computer use in the Kyrgyz Republic is relatively low. In the services sector, only 27 percent of workers use a computer, in industry, 19 percent and in agriculture only 9 percent use a computer. Only 25 percent of youth use a computer at work, and overall, only 23 percent of Kyrgyz workers use a computer (Figure 3.20). Relative to comparator countries, this figure is low; in Sri Lanka the figure is 30 percent; in Bolivia and Vietnam it is 35 percent; and, in Yunnan province in China, 55 percent of workers use a computer. This skill use is low, especially given the structural changes in the labor market toward the services sector and the demand for more complex skills (in this case, computer skills). The use of digital technologies at work is correlated with higher earnings, even when educational attainment is held constant.¹⁹⁵ Encouraging skill development in information and communications technology will increase employment opportunities, and importantly, it will increase the welfare of workers.¹⁹⁶

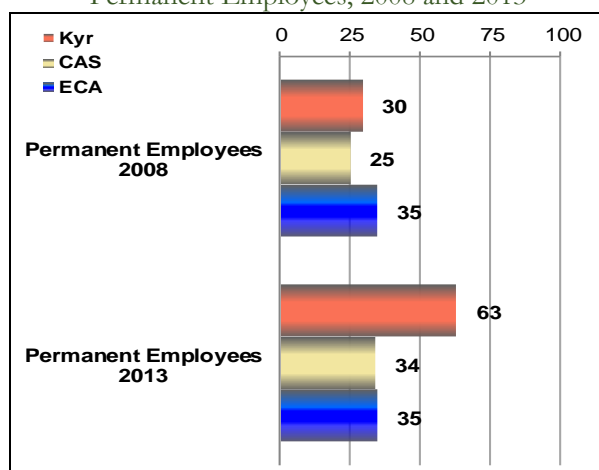
¹⁹³ Baumann, et al. 2013.

¹⁹⁴ World Bank. 2015(c).

¹⁹⁵ World Bank. 2016(b).

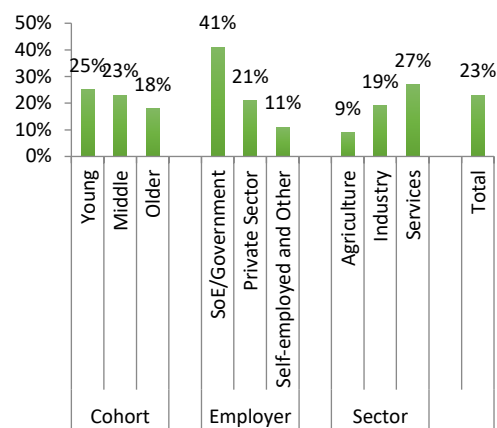
¹⁹⁶ Workers using “new economy skills” and technology are found to be better remunerated by 25-40 percent more than their peers with the same level of education but performing traditional tasks.

Figure 3.19. Percentage of Firms Offering Training to Permanent Employees, 2008 and 2013



Source: World Bank, 2014(a).

Figure 3.20. Percentage of Workers who use a Computer at Work



Source: Ajwad et al. 2014.

Constraints to Labor Matching: Current labor supply and demand mismatch

62. Labor market matching can improve jobs outcomes. When people move to jobs that better suit their skills and experience, to regions that better match their needs, unemployment can decrease, productivity can increase, and more generally jobs outcomes can improve. This sub-section analyzes two key factors that affect labor matching: (i) information to facilitate job matching; and (ii) spatial disparities.

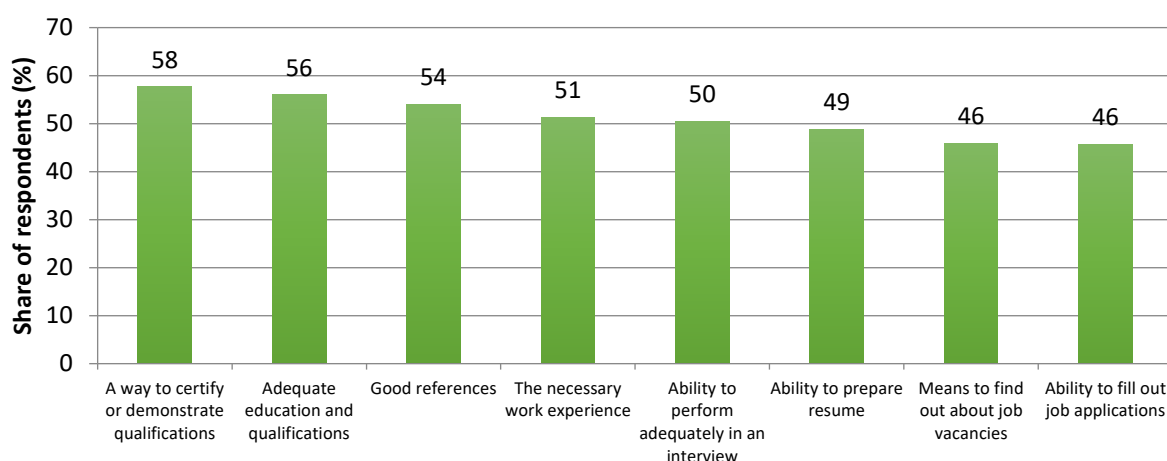
Information to facilitate job matching: too many workers have difficulty with job search and skill signaling

63. Information asymmetries in trying to match labor supply (job seekers) with labor demand (firms) can often be observed. It may be difficult for firms and workers to find each other; friends and family tend to facilitate most job matches informally often leading to somewhat inefficient allocations. Even if workers and firms find each other through more formal routes, it may be difficult to determine if the match will work out well as most skills are only revealed once the individual is on the job. Many jobs require tasks that are hard to define well, and many job seekers have skills which may not be captured during a formal or informal interview, or in a formal application process. These types of information asymmetries are most common in rural areas, for youth, and for flexible job seekers.

64. In the Kyrgyz Republic, there are deficiencies in job search methods and skill signaling among workers. In the Kyrgyz Republic, only about 40 percent of respondents from the recent World Bank/GIZ survey report that they can certify or demonstrate their qualifications to an employer, or have initial adequate qualifications (Figure 3.21). This aligns with findings that workers' qualifications are moderately applicable within the current labor market. Moreover, almost half of respondents report significant barriers to learning about vacancies, which is an integral component to matching labor supply and labor demand.¹⁹⁷ Almost half of respondents do not believe they have the means to learn about job vacancies, and if they did, almost half feel unprepared to prepare a resume, perform in an interview, or provide good recommendations.

¹⁹⁷ Qualitative studies suggest that young people and urban population have access to job postings on the internet, which is not the case for the rural population where access to the Internet is limited (World Bank, 2013b).

Figure 3.21. Constraints to Finding a Job



Source: Ajwad, et al. (2014) using World Bank/GIZ *Kyrgyz Republic Jobs, Skills, and Migration Survey*, 2013.

Spatial disparities: workers are internally and externally mobile

65. Promoting mobility in the labor market and mobility by employers can be an important strategy for promoting a more efficient worker-firm match. Jobs and labor may not be in the same place, and may give rise to information asymmetries (as mentioned above) or a market failure if workers or jobs cannot relocate to be near each other. Mobility allowances, relocation allowances, Economic Zones, etc. have all been used to alleviate the spatial disparities by moving jobseekers or employers.

66. Internal and external migration has become an important component of the Kyrgyz Republic's jobs strategy. This is expected to continue as international migration has alleviated the pressure on the Kyrgyz labor market by giving workers opportunities to earn higher incomes, sometimes many multiples of the wages that they would receive in the Kyrgyz Republic. Kyrgyz workers prefer to go to Russia, Kazakhstan, and to a lesser extent, Turkey, and United Arab of Emirates. Around US\$15 million from an estimated 6,000 workers in Kazakhstan was sent back to the Kyrgyz Republic in 2012, while an estimated US\$1.6 billion came from an estimated 500,000 migrants working in Russia.¹⁹⁸ Worryingly, Kyrgyz workers' reliance on the Russian Federation and Kazakhstan for migration leaves it vulnerable to economic shocks.

67. Internal migration has also had a notable impact on labor supply and demand over the past few years. The Kyrgyz Republic is one of the top four countries in Europe and Central Asia over the last 20 years the working population is highly mobile within its own country (Figure 3.22). Following the fall of the Soviet Union, a lack of jobs pushed workers toward employment in the agricultural sector. This shift was further compounded by the privatization of state-owned industries, which resulted in widespread job loss in urban areas.¹⁹⁹ By the early 2000s, the agricultural sector had begun to deteriorate because of overgrazing; low levels of investment; a lack of imported feed; and workers' need to leave unsustainable farm employment. Migration within the Kyrgyz Republic has recently been undertaken by individuals moving from the poorer south to the northern oblasts and urban centers of the country (Bishkek, Osh and Jalal-Abad).²⁰⁰ Unlike international migration, which is dominated by men, women are more likely to migrate internally and engage in small-scale trading activities,

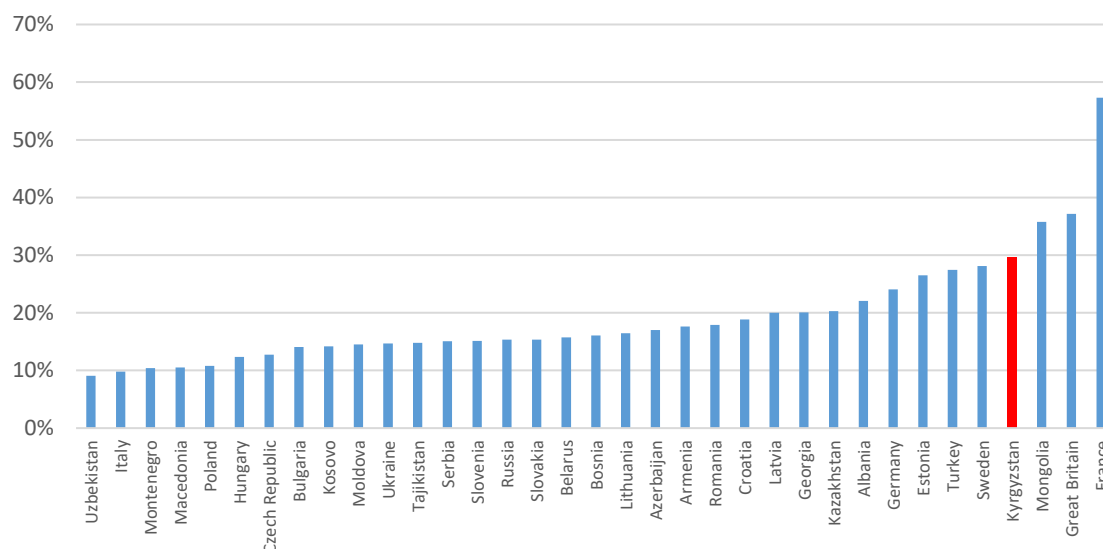
¹⁹⁸ Kuchins, Andrew, Jeffery Mankoff, and Oliver Backes. 2015.

¹⁹⁹ World Bank. 2015(c).

²⁰⁰ Fryer, et. al. 2014.

low-paid jobs in the service sector, and the semi-legal garment factories in the capital. Young people also tend to move to Bishkek or Osh to study and end up staying to work after they graduate.²⁰¹

Figure 3.22 Percentage of population 18 or older that moved to a different city in the last 20 years

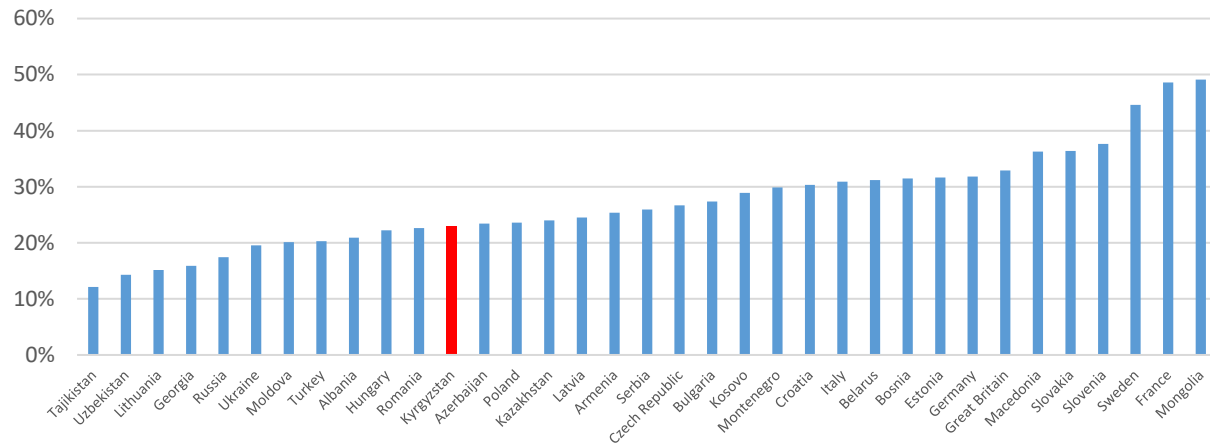


Source: Arias et. al. 2014.

68. Despite relatively high mobility over the last two decades, less than a quarter of the population is willing to move within the country for employment reasons. At the same time, more than 25 percent is willing to move abroad. This willingness to move is higher than the rates observed in Tajikistan and Uzbekistan, but is slightly lower than that of Kazakhstan (Figure 3.23). At the other extreme, the willingness of populations in France and Sweden to move internally is between 45 and 50 percent, and a relatively large share (35 percent and 46 percent in France and Sweden respectively) is willing to move to another country for employment (Figure 3.24). In the Kyrgyz Republic, about 27 percent of the population is willing to move to another country for employment reasons, while in Tajikistan and Uzbekistan the proportion of people willing to move for employment reasons is between 17 and 18 percent.

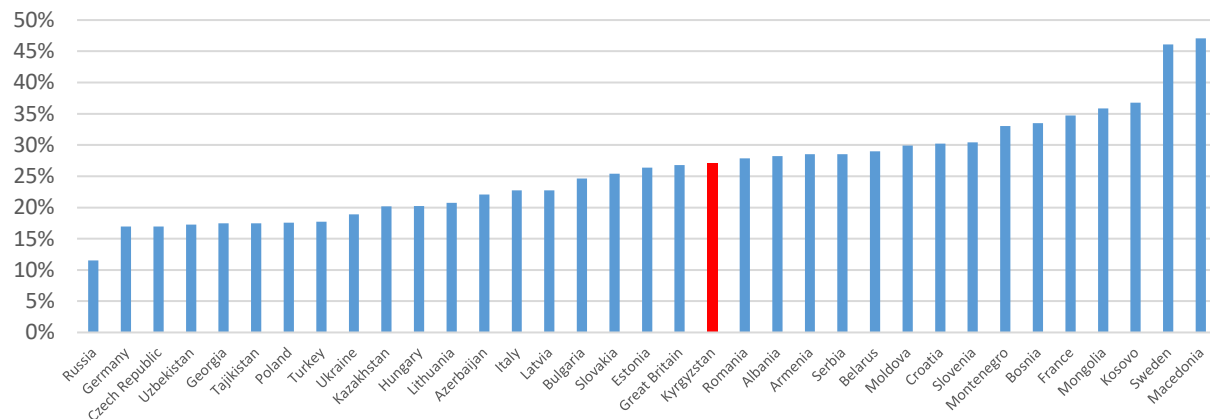
²⁰¹ Ibid.

Figure 3.23 Percentage of individuals who are willing to move within the country for employment reasons, 2013



Source: Arias et. al. 2014.

Figure 3.24 Percentage of individuals who are willing to move abroad for employment reasons, 2013



Source: Arias et. al. 2014.

69. There are many barriers that hinder internal mobility in the Kyrgyz Republic, possibly preventing migrants from entering labor market opportunities or improving their jobs outcomes. The urbanization rate of the Kyrgyz Republic has only moderately changed between 1960 and 2015, from 34 to 36 percent.²⁰² When they arrive in the urban areas many migrants face barriers to positive jobs outcomes including: (a) administrative procedures that require people to be officially registered at their place of residence to access services; (b) underdeveloped housing and credit markets, which make it difficult for people to rent or buy housing in key regions of the country; (c) inadequate human capital, as people in rural areas of the country often lack the necessary skills to access better economic opportunities in an urban environment; and (d) weak formal labor market institutions that reduce dynamism in the labor market, stimulate informal work arrangements and do not provide workers with enough reliable information about jobs openings and labor market conditions.²⁰³

²⁰² The World Bank. 2017(c).

²⁰³ Arias et al. 2014. Adapted from a long list of barriers to improved jobs outcomes currently faced in the Ukraine.

70. Actively supporting labor market mobility to larger urban centers can help the Kyrgyz Republic benefit from agglomeration. Recent evidence suggests that the clustering of similar economic activities (manufacturing or services) can lead to a reduction in transport costs, particularly in the services industry, allowing workers to move from a less productive firm to a more productive firm, and speed the flow of ideas.²⁰⁴ In the Kyrgyz Republic, the full potential of these economies is only expected to happen after the revision of key institutional and economic policies that reduce the cost of migration and support people to access more and better jobs, this is particularly important for poor people.

Summary

This chapter shows that there are significant labor demand, labor supply and labor matching constraints to improving jobs outcomes in the Kyrgyz Republic. The key messages are as follows:

The main labor demand constraints are:

- Macroeconomic instability is a significant factor. The key contributors to macroeconomic stability are frequent political changes, heavy dependence on commodities (especially gold) for exports, and unpredictable inflows of foreign currency due to remittances.
- There are imposing barriers to doing business in Kyrgyz Republic and include: inability to get electricity; complex and costly tax system; lack of contract enforcement; and, inability to settle insolvency issues.
- Governance is a concern and there is a widespread perception of corruption.
- Access to information and communications technology is weak.
- Access to finance has improved in recent years particularly for smaller firms, but obstacles remain for some small- and medium-sized firms.
- The Kyrgyz Republic remains behind the curve in terms of innovation, research and development investments remain low relative to other Central Asian countries.

The main labor supply constraints are:

- The workforce is large and continues to grow; social norms are inhibiting labor force participation for women, youth, and disabled persons.
- Despite progress, there continues to be a mismatch between jobseeker skills and employer needs. General education and vocational education have not kept pace with firms' increasing demand for higher level skills.

The main labor matching constraints are:

²⁰⁴ Glaeser, Edward L. and Joshua D. Gottlieb. 2009.

- The imperfect information flow between jobseekers and employers, are significant barriers to labor market matching.

Chapter IV. Unleashing the Jobs Potential

1. The policy recommendations delineated below aim to provide a comprehensive approach to creating and sustaining improved jobs outcomes. Policy recommendations are divided into three key areas: (i) increasing labor demand; (ii) increasing labor supply; and (iii) improving labor market matching. A summary of the policy recommendations is presented in Annex I. The policy recommendations target formal sector firm productivity, and may be equally useful when trying to increase informal sector firm productivity. This is important for countries like the Kyrgyz Republic, where about half of all workers are informal sector workers. The policy recommendations presented in this report need to be given priority, considering the implementation capacity. In addition, some recommendations may take several years to yield fruit, and so it would be helpful to consider a mix of policies that affect shorter-, medium-, and longer-term needs.

Increase labor demand through job growth

2. To improve job outcomes, the Kyrgyz Republic could do more to create conditions for private sector growth. This requires developing a more enabling environment that promotes macroeconomic stability and improves governance to reduce risks and uncertainty, building a favorable environment for businesses, and supporting innovation. Some of the most urgent reforms to achieving these objectives involve improving macroeconomic management and governance; upgrading business regulations and connectivity to reduce transaction costs; and rethinking investment incentives for technology adoption and business dynamism. 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 the social externalities related to jobs, or create sufficient jobs for vulnerable population groups, particularly in lagging regions.

3. The following policies need to be the focus: (i) policies to strengthen macroeconomic stability; (ii) policies that strengthen institutions; (iii) policies that increase connectivity; (iv) policies that increase access to finance; and (v) policies that increase innovation.

Improve macroeconomic stability

4. Over the past decade and a half, the Kyrgyz Republic has faced considerable macroeconomic instability. This instability is partly due to political changes; the country's dependence on commodity exports (especially gold); and remittances (mainly from the Russian Federation).

5. Reducing political changes and instability can benefit firms and households by providing stability and reducing the risk of changing ideologies. Data and empirical evidence suggest that even one cabinet change can reduce the annual real GDP per capita growth rate by 2.39 percentage points.²⁰⁵ This reduction is mainly due to the negative effects of political instability on total factor productivity growth, which account for more than half of the effects on GDP growth, as well as investment in new business and human capital development.²⁰⁶ While enacting these changes can be complicated, ensuring continuity in the bureaucracy can help give investors and consumers the stability they need even under circumstances in which political changes persist.

6. Strong macroeconomic management is also needed to smooth fluctuations in prices and dampen the impact on firms and households. As a country still somewhat dependent on commodity exports (gold), Kyrgyz Republic must contend with the effects of commodity price volatility. As noted earlier, fluctuations in the

²⁰⁵ Asian, Ari and Francisco Jose Veiga. 2010.

²⁰⁶ Ibid.

export of gold²⁰⁷ have had a notable impact on growth and the wellbeing of the overall economy.²⁰⁸ There have been strong efforts to increase manufacturing exports in recent years, but they have not been enough to offset the unpredictability of gold exports.²⁰⁹

7. Finally, if volatility in foreign transfers, particularly remittances, is not managed effectively, it can lead to unpredictability in real exchange rates.²¹⁰ These can have spillover effects on the tradables sector (manufacturing and agriculture), reducing the predictability and stability of profits, and therefore lowering incentives for firms to invest.²¹¹ Remittances have had a positive impact on the development of the non-tradable service sector, but their inflow is unpredictable.²¹² Unlike commodity booms, migration is a private decision that is also influenced by economic conditions and political arrangements abroad. Subsequently, this makes the Kyrgyz Republic highly vulnerable to the economic fluctuations of the countries where its citizens migrate.

Policy Options for improving macroeconomic stability

- Reduce changes in technical government staff during political transitions. Consider creating termed staff appointments²¹³ (versus appointees to the different ministries) to reduce turnover of key technical bureaucratic positions with a change in Government.
- Improve management of aggregate fluctuations. Pursue more exchange rate flexibility and build international reserves by minimizing unnecessary market interventions and eliminating exchange market restrictions.
- Strengthen financial intermediation of remittances. Improve the ability of the economy to mobilize savings and to direct savings to high-return projects. Provide remittance recipients access to other financial products (savings, insurance, etc.) and promote their use. Enable policy makers to monitor and react more effectively to changes in the flow of remittances.

Strengthen institutions and governance

8. Institutions related to jobs outcomes have a mixed record in the Kyrgyz Republic, and the country is perceived to have a corruption problem. Reforming institutions to better enable formal sector job creation and more generally improve jobs outcomes can be crucial. Where the institutional regulatory environment is onerous, firms will have a disincentive to register (e.g., where there is a high cost to getting reliable electricity, where registration means that a firm will face burdensome taxes and regulation, inspections, and corruption). They will also have a disincentive to thrive and expand, where the cost of contract enforcement is high and judiciary is weak and resolving insolvency is time-consuming in the former case, and where accessing finance and land or obtaining construction permits is costly and burdensome in the latter. Overall, evidence shows that higher employment growth (or better jobs outcomes) is correlated with lower corruption, more effective regulation, a more effective government, and greater voice and accountability.²¹⁴

9. While there has been some progress in improving the policymaking process and efficacy of institutions, policies often get watered down or stalled amid political rivalries in the parliament and government and

²⁰⁷ Fluctuations are a result of the market price and changes in output.

²⁰⁸ Asian Development Bank. 2014.

²⁰⁹ World Bank. 2015(b).

²¹⁰ World Bank. 2015 (c).

²¹¹ Ibid.

²¹² Ibid.

²¹³ With regular reviews and evaluation to ensure that the staff person is performing.

²¹⁴ Van Eeghen, et. al. 2014.

institutions give way to inefficiencies.²¹⁵ Many recently adopted legislative reforms fall short of taking root in practice. According to the Global Corruption Barometer 2013²¹⁶, citizens perceive the civil service as one of the most corrupt government institutions along with the police and the judiciary. In many ways, this has decreased the levels of predictability to help establish and expand business, make contracts, acquire factors of production and generally operate.

Policy Options for Strengthening Institutions and Improving Governance

- Improve the environment for formal firm entry, growth and improving job outcomes in key-job creating sectors, reducing the distortions that hinder formal small firm growth including the reliability of electricity, resolving insolvency, reducing the number of tax payments.
- Simplify and streamline business regulations. Creating a transparent and predictable legal environment (contracts, licenses, permits, etc.) can lead to improved firm investment and improvements in job outcomes.
- Improve tax administration for better compliance, and reduce the time it takes to collect taxes. Exploit risk-based methods in raising tax compliance by expanding the capability and comprehensiveness of an ICT system and establishing a data center to collect and mine data from third party sources (banking and other government agencies such as property registers, social security funds) on an automatic and regular basis. Improve e-filing rates to allow for better data access and ease of compliance by taxpayers.
- Promote broader anti-corruption measures at the Government level. Make permitting and licensing processes more efficient and transparent using e-government applications or e-procurement, which minimizes face-to-face contact between the public and government officials, thereby reducing opportunities for bribery (as well as improving turnaround time).
- Support community-level corruption monitoring initiatives. Community monitoring requires transparency and the disclosure of budget allocations for community-level service units (e.g., schools, hospitals, and public investment projects). Increased beneficiary and community participation in project planning and in the allocation of funding is also necessary. Citizens should have the opportunity to report corruption without retribution from Government officials or otherwise.

Increase firm connectivity

10. Addressing connectivity constraints will be critical for increasing job growth in the Kyrgyz Republic. Access to transport, telecommunications, and power networks are essential inputs for firms as they undertake productive activities, expand, and create jobs. The literature indicates that there is a positive relationship between infrastructure investments, particularly transport, power and gas and job creation.²¹⁷ Two main categories of jobs are created through infrastructure investment: jobs associated with construction, maintenance, and operation and second-order jobs, that is, jobs that are generated through greater industrial

²¹⁵ World Bank. 2016(c).

²¹⁶ The Global Corruption Barometer has been a central function of Transparency International since 2003, surveying the experiences of everyday people confronting corruption around the world. *Source*: Hardoon, Deborah and Finn Heinrich. 2013.

²¹⁷ International Finance Corporation. 2013.

production or expansion of private sector businesses.²¹⁸ As a result, investments in the power and transport sectors are indispensable for job growth Kyrgyz Republic.

11. While Kyrgyz Republic has made important investments in improving cross-border trading, it continues to be ranked poorly for transportation logistics. One of the greatest disadvantages that the Kyrgyz Republic faces about trade is the distance from production centers to seaports, which is between 4,500 and 5,200km compared to 1,500 to 2,000km for other landlocked countries. This increases transportation costs and impacts the competitiveness of domestic products, it also makes economic diversification more difficult.

12. The Kyrgyz Republic's lack of investment in its energy infrastructure continues to result in frequent outages, interruptions and fluctuations in voltage. This is a major constraint for doing business. In the 2017 Doing Business Report, the Kyrgyz Republic ranked 163 out of 189 countries in terms of reliable electricity, one of the lowest in the region. The reliability of electricity is further exacerbated by the amount of time it takes to set up electricity service. Poor electrical infrastructure outside the capital is significant, discouraging some private entrepreneurs from investing further.

13. Greater investment is needed in ICT; although increasing internet access alone will not necessarily lead to an improvement in jobs outcomes. ICT cannot be viewed as a substitute for other primary necessities, but rather as a complement that can accelerate and strengthen jobs and economic outcomes in Kyrgyz Republic. Enhancing ICT connectivity also has the potential to unlock a knowledge-based economy, and to give people and businesses greater access to information. It can also help them to develop specialized expertise in a certain area, and adopt new business methods.²¹⁹ It will be important for the Kyrgyz Republic to invest in the skill development needed to take advantage of an increase in ICT.²²⁰ Unlike investments in transport and power infrastructure, the number of direct jobs created by the expansion of digital technologies is modest, however, the number of indirect jobs enabled by it can be large.²²¹

Policy Options for Improving Firm Connectivity

- Reduce transport logistics costs: 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 overloading trucks. Investing additional resources in the development of procedures, as well as in equipment, to evaluate the road network data at project or network level is also recommended. Raise the limit on the weight of agricultural products exempt from border charges from 50 kilograms to 100 kilograms to promote more border trade in agricultural products with positive impact on incomes of the poorest segments of population.²²²
- Further improve the trade facilitation regime: Continue to develop the national Single Window approach for export, import and transit to allow improved levels of trade facilitation. Establish a National Trade Facilitation Committee and relevant working groups comprised of public and private sector representatives. Develop a centralized information portal where traders can find all information relevant to import/export and transit of goods. Reduce the number of documents required to import and export and reduce the overall costs of importing.
- Reform the Energy Sector: Establish an independent regulator to improve transparency within the

²¹⁸ Ibid.

²¹⁹ Deloitte LLP. 2014.

²²⁰ Kelly et. al. 2017. Emerging countries with the lowest levels of Internet use should focus on devoting more resources to early childhood development and improving the quality of primary and secondary education.

²²¹ World Bank.2016(b).

²²² Kaminski, Bartlomiej and Saumya Mitra. 2012.

energy sector; prioritize and rehabilitate existing power assets; gradually increase tariffs to help cover the costs of rehabilitation and maintenance; improve the quality of the services provided.²²³

- Lower the Barriers to Digital Adoption: Facilitate connectivity and develop the foundation for effective competition regulation through: (i) reducing, or unilaterally removing, tariffs on ICT capital goods, computers, and smartphones; (ii) providing information to firms about how the internet can improve their business; and (iii) implementing e-government systems such as online business registration and e-procurement systems to simplify processes and make transactions more transparent.²²⁴

Reduce the cost and obstacles to finance.

14. While the Kyrgyz Republic has made progress in reducing the cost and increasing access to finance, these two factors continue to inhibit the creation of new firms and the growth of existing ones. As noted earlier, there is no direct correlation between access to finance and job growth, but evidence has shown that access to finance positively affects jobs through: (i) increasing the number of start-ups; (ii) facilitating entrepreneurship; and (iii) promoting higher investments in capital, new technologies, research and innovation.²²⁵ Improving access to finance is critical to further developing the Kyrgyz business environment.

Policy Options for Reducing the Cost and Obstacles to Finance

- Revise and expand the MFI regulatory framework. Improve this framework to include innovative products (free savings accounts or accounts that do not have transaction fees for savings, acceptance and management of remittance transfers, mobile banking, start-up loans) and to strengthen the capacity of the Kyrgyz National Bank to regulate and supervise the microfinance sector.
- Increase access to firm and consumer-centered financial products. Allow the payment of direct taxes, patent payments, and fees for government services through the financial system; Develop remittance-backed finance products for domestic and external markets; encourage the banking system to offer basic banking with accounts requiring no (or very low) minimum balance requirements and very low service charges.²²⁶

Encourage innovation

15. Investment in research and development will be key for innovation in the Kyrgyz Republic. OECD figures show that investment in R&D (basic research, applied research and experimental development) indicates a thriving and entrepreneurial industrial spirit and is an important driver of economic growth.²²⁷

Policy Options to Encourage Innovation

- Provide tax incentives and subsidies to stimulate investment in research and development from the private sector, with attention to the regions.
- Governments can and should take on some R&D investments. In many countries, the private sector will take on investments with the lowest risks, and so there may be instances when the

²²³ Asian Development Bank. 2014.

²²⁴ World Bank. 2016(b).

²²⁵ World Bank. 2013(d).

²²⁶ Ibid.

²²⁷ Muggeridge, Paul. 2015. "Which countries spend the most on research and development?" World Economic Forum. Published online on July 9, 2015.

Government needs to carry out its own R&D investments in areas of highest uncertainty. This might mean that public organizations will need to take chances and learning from trial and error, but also that citizens are more tolerant of failure.

Prepare and develop a skilled and capable workforce

16. Labor supply in the Kyrgyz Republic has evolved over the last decade. The working age population is young, has skills and is highly mobile. Nonetheless, the lack of available jobs and relatively few opportunities to start and maintain a small business are discouraging. Access to jobs and job quality also remain issues. Skills gaps are also notable, and directly influence labor demand. Critical policies and programs are needed to improve the readiness of the labor supply, as well as the willingness and desire to work. This section provides policy recommendations aimed at strengthening the existing and future work force and addresses some of the social policies influencing the current labor force. The discussion is organized around the following set of policies: (i) policies that create incentives to work and, (ii) policies aimed at enhancing a worker's readiness.

Reform social policies to encourage labor force participation

17. The Kyrgyz Republic has a mixed record with respect to labor force participation. On one hand, the country has a young and growing population which should bode well as a source of labor. On the other hand, there are many impediments to labor force participation; for example, women and youth are disproportionately represented among those not included in the labor force, partly due to: social norms; lack of access to quality child care and/or early childhood development programs; and legislative restrictions on labor force participation for women. Employment opportunities are also limited for persons with disabilities.

Policy Options to Encourage Labor Force Participation

- Increase childcare and access to early childhood education. Expanding access to quality and affordable childcare and early childhood education can help bring women into the labor market. The lack thereof in the Kyrgyz Republic is a significant barrier to labor market participation, especially among young women²²⁸. Several studies have established that affordable childcare options can boost female labor supply. In addition, early childhood education programs can also be part of the Kyrgyz Republic's long-term jobs strategy to provide children with the cognitive and non-cognitive skills that are conducive to high productivity when they reach working age.
- Remove legislative restrictions to sectors and occupations. Removing gender-based restrictions, could increase employment opportunities for women and reduce occupational segregation. These legislative changes have the potential to improve women's earnings potential, as restricted jobs tend to be in higher-paying sectors.
- Consider interventions like information campaigns to overcome and influence social norms. Shift aspirations and expectations through role models and mentoring, also through media interventions like TV or radio campaigns, to expose people to information and role models; disseminate information on increased job opportunities for young women.
- Provide opportunities for persons with disabilities. Review Kyrgyz anti-discrimination legislation to ensure it includes protections and rights for persons with disabilities; develop services tailored to individual and community needs, rather than services of a "one-size-fits-all" nature; include persons with disabilities in labor market data collection activities, for instance labor force survey; encourage employers to develop partnerships with local employment agencies, educational

²²⁸ Davalos et al. 2016

institutions, skill training programs, and social enterprises to build a skilled workforce that includes people with disabilities.

Cultivate relevant job skills

18. The Kyrgyz economy is changing and the demand for skills is changing. The services sector has been growing fast and the industrial sector has also started to grow. These structural changes, as well as the Kyrgyz aspiration to become a middle-income country, require a different, more diverse set of skills for the labor force. These could include behavioral skills alongside high quality cognitive and technical skills.²²⁹ Increasingly, firms in the Kyrgyz Republic have a greater demand for “new economy skills”, that is higher-order analytical and organizational skills, including non-routine cognitive analytical and interpersonal skills. Policies need to target the future workforce by focusing on families and communities to cultivate relevant skills for participation in the labor market. They also need to focus on the formal education system, and/or the current workforce, by promoting adult training institutions and on-the-job training

Policy Options for cultivating job relevant skills

- Enhance foundational skills and create an enabling environment for the development of cognitive and behavioral skills in all children aged 3-15 years of age through expanded preschool and improved basic education.
- Equip secondary school aged children with customized vocational education and training. Target secondary school aged children, both in and out of school, and provide them with job-relevant skills and entrepreneurship training post-secondary, together with support for school-to-work transition.
- Profile adult job seekers/unemployed people to link with activation services such as training/retraining, job counseling, and facilitate physical links to available employment.
- Upgrade skills for the existing workforce through on-the-job training/retraining on relevant emerging technology and new skills for increased productivity.

Labor equilibrating policies

Reducing information asymmetries

19. In the Kyrgyz Republic there are information asymmetries in trying to match labor supply (job seekers) with labor demand (firms). Because of these information asymmetries, students may not have the information needed to decide on a field of study; job seekers may not know which firms are hiring; and firms may not know what kinds of skills are available in the labor market. There are also deficiencies in job search methods, with workers not knowing how best to certify or demonstrate their qualifications.

Policy options for reducing information asymmetries

- Labor market observatories (LMO) can offer students information about labor market outcomes to help them make informed choices about what topics to specialize in. They can also facilitate movement across geographic areas and provide the information about job vacancies and wages. Several countries have successfully implemented labor market information systems to reduce information asymmetries. In Poland, for example, an LMO was

²²⁹ Ajwad et. al. 2014.

introduced to provide information on job availability, wages, career prospects, and hiring expectations²³⁰. LMOs have also been established in Chile and Colombia. The rationale behind employment observatories is that information about: major industries; recent areas of growth; occupation with 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.

- Implement labor market intermediation services to help improve the job search. Intermediation services can be extremely useful in countries like the Kyrgyz Republic, where job seekers have difficulty demonstrating their qualifications to potential employers.

Diminish spatial disparities

20. The Kyrgyz Republic has seen a high rate of mobility over the last two decades, international migration has accelerated over the last decade. There is however some resistance to moving away from home recently. Easing movement within the country, and in fact providing incentives to mobility, can be beneficial. Internationally, the Kyrgyz Republic should consider diversifying migration destinations and providing potential migrants with the skills needed to improve their job prospects in the destination country, as well as providing reintegration assistance for return migrants.

Policy options for diminishing spatial disparities

- For internal migrants, provide incentives (housing, living) and links with services. Provide temporary social assistance to give internal migrants access to needed services while looking for a job during relocation; establish information systems to monitor internal migration (trends) to better inform policies (especially region to region).
- Diversify migrant destination countries. Most migrants from the Kyrgyz Republic travel to the Russian Federation for work. There are economic and cultural reasons for this migration, but the Kyrgyz Republic should consider diversifying migration destinations to ensure that households in the Kyrgyz Republic are not too tied to the fate of one economy.
- Upgrade migrant skills. Implement systems for skills upgrading or offer complimentary courses to improve skills needed in receiving countries. This can increase the demand for Kyrgyz labor abroad. In addition, pre-departure seminars could help provide information and orient 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 countries of destination.
- Certify skills of returning migrants. Returning migrants often have skills that are valued in the labor market. However, in some instances, there is way of certifying those skills that were acquired internationally.

²³⁰ Arias et al. 2014

Chapter V. Conclusions

1. This report has employed a simple framework to analyze the main constraints to jobs outcomes in the Kyrgyz Republic. Three main categories of constraints to improving jobs outcomes have been defined: (i) labor demand constraints, (ii) labor supply constraints, and (iii) labor matching constraints.²³¹ These constraints limit job creation, productivity growth, job quality, and inclusiveness in the labor market. This framework is applied to the formal and informal sectors.
2. The main finding of the report is that jobs outcomes have fallen short of expectations in the Kyrgyz Republic on at least four dimensions. First, job creation is not keeping pace with the rapidly growing population. Second, labor productivity, or output per worker, is the lowest in Europe and Central Asia, and artificial increases in wage rates have led to concerns about competitiveness. Third, job quality is a concern, with high rates of informality, as well as temporary, occasional, and seasonal work. Finally, jobs outcomes are weak for youth and women, and there is a lot of geographic variation.
3. This report attempts to contribute to the discourse on how stakeholders in the Kyrgyz Republic could improve jobs outcomes. There is agreement that jobs are the key to people working their way out of poverty and hardship (World Bank, 2013), and the Kyrgyz Republic has devoted time and significant financial resources to improving jobs outcomes. The objectives outlined in the National Sustainable Development Strategy (NSDS), *Forty Steps to a New Era* (2018-2023) are expected to have a significant direct or indirect impact on jobs outcomes in the country, becoming “a free country with a strong economy, high quality of life, competitive human capital and recognized new contribution to world’s culture” by 2040. A comprehensive diagnostic of the jobs problem has been lacking, and across-sectoral, coordinated, and evidence-based strategy is required to confront weaknesses. This report has presented a comprehensive diagnostic of the jobs challenges in the country, and has outlined a cross-sectoral, coordinated, and evidence-based strategy for creating good quality jobs. It is hoped that the various policy recommendations in this report will be prioritized. It is important to remember that some recommendations may take some time to yield any benefits, and therefore, there may be a need to consider a mix of policies that affect shorter-, medium-, and the longer-term.
4. While implementing a jobs strategy is more urgent than ever, there are also new headwinds for policymakers to contend with. The IMF has warned that weaker growth prospects in the Russian Federation from another oil price shock, or the reorientation of the Chinese economy away from investment could affect remittances, trade, and foreign investment and negatively impact the Kyrgyz economy.

²³¹ We use a framework outlined in Ajwad, et al. (forthcoming).

References

- Abdih, Yasser and Leandro Medina. 2013. "Measuring the Informal Economy in the Caucasus and Central Asia." International Monetary Fund Working Paper, Middle East and Central Asia Working Department. Washington, DC.
- Ajwad, Mohamed Ihsan, Joost de Laat, Stefan Hut, Jennica Larrison, Ilhom Abdulloev, Robi Audy, Zlatko Nikoloski, and Federico Torracchi. 2014. "The Skills Road: Skills for Employability in the Kyrgyz Republic." World Bank, Washington, DC.
- Ajwad, M., W. Cunningham, and J. Posadas. 2016. "A Framework for More and Better Jobs." Draft version November 9, 2016. World Bank. Washington, DC.
- Arias, Omar S., Carolina Sánchez-Páramo, María E. Dávalos, Indhira Santos, Erwin R. Tiongson, Carola Grun, Natasha de Andrade Falcão, Gady Saiovici, and Cesar A. Cancho. 2014. "Back to Work: Growing with Jobs in Europe and Central Asia." Washington, DC: World Bank.
- Asian Development Bank. 2014. "The Kyrgyz Republic Strategic Assessment of the Economy: Promoting Inclusive Growth." Mandaluyong City, Philippines.
- Asian Development Bank. 2015. "Assessment of Higher Education Kyrgyz Republic." Manila, Philippines.
- Aisen, Ari and Francisco Jose Veiga. 2010. "How Does Political Instability Affect Economic Growth?" The International Monetary Fund. Washington, DC.
- Ayyagari, Meghana; Juarros, Pedro Francisco; Martinez Peria, Maria Soledad; Singh, Sandeep. 2016. Access to finance and job growth: firm-level evidence across developing countries. Policy Research working paper; no. WPS 7604. Washington, D.C: World Bank Group.
- Baumann, Arne, Eva Jansova, and Ellu Saar. 2013. "Transition from School to Work in Kyrgyzstan: Results for the 2011/12 Transition Survey." European Training Foundation (ETF), Torino, Italy.
- Bertelsmann Stiftung's Transformation Index. 2017. "Methodology." Website: <https://www.bti-project.org/en/index/methodology/> Accessed on January 20, 2017.
- Bertelsmann Stiftung (Ed.). 2017. "Transformation Index BTI 2016: Political Management in International Comparison. 1st edition ebook.
- Broka, Sandra, Åsa Giertz, Garry Christensen, Charity Hanif, Debra Rasmussen, and Rhoda Rubaiza. 2016. "Kyrgyz Republic Agricultural Sector Risk Assessment." The World Bank Group: Document No. 23764. Washington, DC.
- Davalos, María Eugenia, Giorgia Demarchi, Barbara Kits, Isil Oral, and Indhira Santos (2016) "Voices of Europe and Central Asia: New Insights on Shared Prosperity and Jobs" World Bank, Washington, DC.
- Deloitte LLP. 2014. "Value of connectivity: Economic and social benefits of expanding internet access." Deloitte.
- Economic Complexity Observatory. 2014. "Kyrgystan Export Treemap." MIT Media Lab and the Center for International Development at Harvard University. (TC) <http://atlas.media.mit.edu/>
- European Forum for Democracy and Solidarity. <http://www.europeanforum.net/country/kyrgyzstan> Webpage accessed May 1, 2016

Frey, C.B. and M.A. Osborne. 2013. "The Future of Employment: How Susceptible are Jobs to Computerization?" University of Oxford. <http://www.oxfordmartin.ox.ac.uk/publications/view/1314>;

_____. "The Risk of Automation for Jobs in OECD Countries: A Comparative Analysis." OECD Social, Employment and Migration Working Papers, No. 189, OECD Publishing, Paris. <http://dx.doi.org/10.1787/5j1z9h56dvq7-en>

Fryer, Paul, Emil Nasritdinov, and Elmira Satvbaldieva. 2014. "Moving Toward the Brink? Migration in the Kyrgyz Republic." *Central Asia Affairs*. Vol. 1 (2014).

Glaeser, Edward L. and Joshua D. Gottlieb. 2009. "The Wealth of Cities: Agglomeration Economies and Spatial Equilibrium in the United States." National Bureau of Economic Research. Working Paper No. 14806.

Goldberg, Itzhak; Goddard, John Gabriel; Kuriakose, Smita; Racine, Jean-Louis. 2011. *Igniting Innovation: Rethinking the Role of Government in Emerging Europe and Central Asia*. World Bank, Washington, DC.

Hardoon, Deborah and Finn Heinrich. 2013. "Global Corruption Barometer 2013 Report." Transparency International.

Heckman, James. 2012. "Invest in Early Childhood Development: Reduce Deficits, Strengthen the Economy." *The Heckman Equation*. Chicago, Illinois

Hoyos, Rafael de, Halsey Rogers, and Miguel Székely. 2015. "Out of School and Out of Work: Risk and Opportunities for Latin America's Nins." World Bank, Washington, DC.

International Labour Organization. 2012. "Measurement of the Informal Economy." Geneva, Switzerland.

International Labour Organization, United Nations Conference on Trade and Development, United Nations Department of Economic and Social Affairs. 2012. "Macroeconomic stability, inclusive growth and employment." UN System Task Team, Thematic Think Piece. New York, NY.

International Monetary Fund. 2016. "Kyrgyz Republic: Selected Issues." International Monetary Fund Country Report No. 16/56. Washington, DC.

International Organization for Migration. 2011. "Internal Migration in Kyrgyzstan." International Organization for Migration. Bishkek, Kyrgyzstan.

Kaminski, Bartłomiej and Saumya Mitra. 2012. "Borderless Bazaars and Regional Integration in Central Asia: Emerging Patterns of Trade and Cross-Border Cooperation." World Bank. Washington, DC.

Kelly, Tim, Aleksandra Liaplina, Shawn W. Tan, and Hernan Winkler. 2017. "Reaping Digital Dividends: Leveraging the Internet for Development in Europe and Central Asia." Washington, DC: World Bank.

Knoema. 2016. "Global Innovation Index, 2016." <https://knoema.com/GII2017/global-innovation-index-2016>. Accessed on April 7, 2017.

Koettl, Johannes; Packard, Truman; Montenegro, Claudio E. 2012. "In From the Shadow: Integrating Europe's Informal Labor. *Directions in Development: Human Development*." Washington, DC: World Bank.

Kotsadam, Andreas and Anja Tolonen. 2015. "African Mining, Gender, and Local Employment." World Bank Development Research Group: Policy Research Working Paper 7251. Washington, DC.

Kuchins, Andrew, Jeffery Mankoff, and Oliver Backes. 2015. "Central Asia in a Reconnecting Eurasia: Kyrgyzstan's Evolving Foreign Economic and Security Interests." Center for Strategic and International Studies. Rowman and Littlefield. June 2015. Lanham, Maryland.

Kyrgyz National Statistics Committee. 2016. "Quarterly Labor Market Brief: Q4 2014." Labor Force Department. Bishkek, Kyrgyz Republic.

Kyrgyz Republic. 1993. Government Decision No. 264 of 6 October 1993. Accessed in November 2016. Available at <http://lex.justice.md/index.php?action=view&id=300608&lang=1&view=doc>

Kyrgyz Republic. 2000. Government Decree No. 158. Decree date: 24 March 2000. Accessed in November 2016. Available at <http://cbd.minjust.gov.kg/act/view/ru-ru/7182>

Kyrgyz Republic. 2011. Government Resolution No. 1220 of 28 October 2011. Accessed in November 2016. Available at <http://atyrau.mzsr.gov.kz/sites/default/files/1220%20%D1%80%D1%83%D1%81.doc>

Labor Code of Kyrgyz Republic. 2000. Accessed on November 15, 2016. Available at http://online.adviser.kg/Document/?doc_id=30296269&mode=all

Maloney, William. 2004. "Informality Revisited" *World Development*, Vol. 32, No. 7, pp 1159-1178.

NationMaster. 2013. "Kyrgyzstan People Stats", NationMaster. Retrieved from <http://www.nationmaster.com/country-info/profiles/Kyrgyzstan/People> on June 12, 2017.

Nasritdinov, Emil, Roza Rayapova, Nodira Kholmatova, Eliza Damirbek kyzy, and Natalia Igoshina. 2010. "Informal Economy and Social Vulnerability in Kyrgyzstan and Tajikistan." American University in Central Asia.

Ortiz, Isabel and Matthew Cummins. 2012. "When the Global Crisis and Youth Bulge Collide: Double the Jobs Trouble for Youth." UNICEF Social and Economic Working Paper. UNICEF. New York, NY.

Özden, Oktay. 2016. "Discouraged Workers in the Turkish Labor Market: 1988-2014." Istanbul Kemerburgaz University. Istanbul, Turkey.

Perry, Guillermo E., William F. Maloney, Omar S. Arias, Pablo Fajnzylber, Andrew D. Mason, and Jaime Saavedra-Chanduvi. 2007. *Informality: Exit and Exclusion*. Washington, DC: World Bank.

Rutkowski, Jan J.; Scarpetta, Stefano; Benarji, Arup; O'Keefe, Philip; Pierre, Gaelle; Vodopivec, Milan. 2005. *Enhancing job opportunities - Eastern Europe and the former Soviet Union*. Europe and Central Asia reports. Washington, DC: World Bank.

Schneider, Friedrich and Dominik Enste. 2002. "Hiding in the Shadows: The Growth of the Underground Economy." International Monetary Fund. Washington. DC.

Schwab, Klaus and Xavier Sala-i-Martin. 2017. *Global Competitiveness Report 2016-2017*. World Economic Forum. Geneva, Switzerland.

Singh, Anoop, Sonali Jain-Chandra, and Adil Mohommad. 2012. "Growth, Institutions, and the Underground Economy" IMF Working Paper (WP/12/47). Washington, DC.

Strokova, Victoria; Ajwad, Mohamed Ihsan. 2017. *Tajikistan Jobs Diagnostic: Strategic Framework for Jobs Series; No. 1*. World Bank, Washington, DC.

The Economist. 2013(a). "Generation Jobless." The Economist. April 27, 2013. International print edition.

The Economist. 2013(b). "Mining in Kyrgyzstan: Gold in the Hills." The Economist. March 16, 2013. International print edition.

Transparency International. 2016. *Corruption Perception Index: Kyrgyzstan*. Transparency International

UNDP. 2006. "The Shadow Economy in the Kyrgyz Republic: Trends, Estimates and Policy Options." UNDP, Bishkek 2006.

UNDP. 2016. "Give us a Convention." UNDP webpage on Kyrgyz Republic. Accessed on April 10, 2017.

UNESCO. 2015. "UNESCO Science Report: Towards 2030." Paris, France.

United Nations. 2015. "World Population Prospects." Department of Economic and Social Affairs, Population Division. The 2015 Review. <http://esa.un.org/undp/epp/>

Van Eeghen, M. Willem; Gill, Indermit S.; Izvorski, Ivailo V.; De Rosa, Donato. 2014. Diversified development: making the most of natural resources in Eurasia. Europe and Central Asia Studies. Washington, DC; World Bank Group.

World Bank. 2012. World Development Report 2013: Jobs. World Development Report. Washington, DC.

World Bank. 2013(a). Migration and Development Brief 21. World Bank Group. Washington, DC.

World Bank. 2013(b). "Road Transport and Logistics Providers in Central Asia: Kazakhstan, Kyrgyz Republic and Tajikistan." World Bank Group. Washington, DC.

World Bank. 2013(c). "Kyrgyz - Country partnership strategy for the period FY14-17." World Bank Group. Washington DC. World Bank.

World Bank. 2013(d). "IFC jobs study: assessing private sector contributions to job creation and poverty reduction." Washington, DC: World Bank Group.

World Bank. 2014 (a). "EBRD-World Bank Business Environment and Enterprise Performance Survey (BEEPS) at a Glance: Kyrgyz Republic." The World Bank Group. Washington, DC.

World Bank. 2014(b). "Improving Trade and Transport for Landlocked Developing Countries: A Ten Year Review." World Bank-United Nations report in preparation for the 2nd United Nations Conference on Landlocked Developing Countries (LLDCs). Washington, DC.

World Bank. 2015(a). "Investment Climate in Kyrgyz Republic. Views of Foreign Investors." The International Finance Corporation. Bishkek, Kyrgyz Republic.

World Bank. 2015(b). "Kyrgyz Republic: Biannual Economic Update: Resilience and Turbulence." Fall 2015. Washington, DC.

World Bank. 2015(c). "Transitioning to Better Jobs in the Kyrgyz Republic: A Jobs Diagnostic." Report No. 99777-KG. World Bank, Washington, DC.

World Bank. 2016(a). "Kyrgyz Republic: A resilient economy on a slow growth trajectory with a special focus on Tax Reform." Economic Update No. 4. Winter 2016. Washington, DC.

World Bank. 2016(b). World Development Report 2016: Digital Dividends. Washington, DC: World Bank. doi:10.1596/978-1-4648-0671-1. License: Creative Commons Attribution CC BY 3.0 IGO.

World Bank Group. 2016(c). "Do the Poor Pay Twice? The Impact of Corruption in the Kyrgyz Republic." A Poverty and Social Impact Analysis. World Bank. Washington, DC.

World Bank. 2016(d). "Women, Business and Law 2016". Washington, DC: World Bank.

World Bank. 2017(a). Doing Business 2017: Equal Opportunity for All. Washington, DC: World Bank. DOI: 10.1596/978-1-4648-0948-4. License: Creative Commons Attribution CC BY 3.0 IGO.

World Bank. 2017(b). “About Doing Business.” Washington, DC.

World Bank. 2017(c). “United Nations: World Urbanization Prospects.” Accessed through the World Bank databank on May 7, 2017 at <http://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=KG>.

World Bank. 2017(d). Kyrgyz Republic’s Agriculture Sector Performance. World Bank SCD Input. Washington, DC.

World Bank. 2018. “About Doing Business, 2018.” Washington, DC.

World Economic Forum. 2017. The Inclusive Growth and Development Report. Geneva, Switzerland

Worldwide Governance Indicators. 2016. World Governance Index 2015. World Bank. Washington, DC.

World Health Organization. 2011. “World Report on Disability.” Report No. 62783. Geneva, Switzerland.

Zozulinsky, Artyom. 2007. “Kyrgyzstan: Mining Industry Overview.” U.S. and Foreign Commercial Service and U.S. Department of State. Washington, DC.

Annex I: Unleashing the Jobs Potential in the Kyrgyz Republic

Overall Recommendation	Proposed Sub-Policy	Description
Increase Labor Demand through Job Growth	Improve Macroeconomic Stability	Reduce changes in technical government staff during political transitions to promote greater economic stability, better manage aggregate fluctuations, and strengthen financial intermediation of remittances.
	Strengthen Institutions and Governance	Simplify and streamline business regulations and improve tax administration, promote broader anti-corruption measures at the national level, and support community-level corruption monitoring initiatives.
	Increase Firm Connectivity	Reduce transport logistics costs, further improve the current trade facilitation regime, and reform the energy sector and lower barriers to digital adoption.
	Reduce the cost and Obstacles to Finance	Increase access to firm and consumer-centered financial products and revise and expand the micro-finance institutional regulatory framework.
	Encourage Innovation	Provide tax incentives and subsidies to stimulate investment in research and development in the private sector, with particular attention to the regions, and increase Government R&D investments in risky and uncertain areas.
Prepare and Develop a Skilled and Capable Work Force	Reform Social Policies to Encourage Labor Force Participation	Increase childcare and early childhood education access, remove gender-related legislative restrictions to sectors and occupations, consider interventions to overcome and influence social norms, and increase access to jobs for persons with disabilities.
	Cultivate Job Relevant Skills	Enhance foundational skills, equip secondary school aged children with customized vocational education and training, profile the unemployed and job seekers to link with activation services, and upgrade skills for the existing workforce.
Labor Equilibrating Policies	Reducing Information Asymmetries	Develop a labor market observatory and implement labor market intermediation services.
	Diminish Spatial Disparities	Provide internal migrants with incentives (housing and living) and links with services, encourage the diversification of migrant destination countries, upgrade potential migrants' skills, and certify skills of returning migrants.