



**Competitiveness and
Private Sector Development**

CENTRAL ASIA

COMPETITIVENESS OUTLOOK



Competitiveness and Private Sector Development: Central Asia 2011

COMPETITIVENESS OUTLOOK



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Foreword

For almost a decade, the economies of Central Asia have achieved some of the world's best growth performances. Their significantly improved competitiveness has attracted a new wave of FDI into the region. The region's potential is fuelled by vast energy and agricultural resources, a strategic location at the crossroads of Europe and Asia and nearly universal literacy rates.

However, the global economic crisis has taken its toll, and over the past two years growth levels in most countries of the region have fallen by half. As a result, policy makers have realised the importance of ensuring the resilience of their economies. In Central Asia, further reforms to boost productivity would enable countries to attain higher income levels and reduce poverty and income inequality, which unfortunately remain widespread across the region. Since 2008, the OECD Central Asia Competitiveness Initiative has been working with the seven countries of the region – Afghanistan, Kazakhstan, the Kyrgyz Republic, Mongolia, Tajikistan, Turkmenistan and Uzbekistan – to support their efforts.

This first Central Asia Competitiveness Outlook highlights the region's competitive advantages and identifies barriers that need to be dismantled for its economies to reach their full potential. It highlights three major challenges to improving competitiveness: a deteriorating education system which is undermining the future of the region's human capital; a lack of access to finance for small- and medium-sized enterprises; and a need for better investment policy and promotion. The review highlights potential strategies to overcome these obstacles and includes a specific country case study where these strategies are in the process of being implemented.

This report is the product of a close collaboration between the OECD, the economies of the region and the World Economic Forum. It will support an informed debate on key policy issues which affect competitiveness by involving governments and the private sector in the region, encouraging the exchange of best practices, and developing a regional forum for dialogue. This report will provide investors with some of the information and insights they need to understand the considerable opportunities and challenges in Central Asia.



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Secretary-General, OECD



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Acronyms

ACDI/VOCA	Agricultural Cooperative Development International/Volunteers in Overseas Cooperative Assistance (US)
ADB	Asian Development Bank
AREDP	Afghanistan Rural Enterprise Development Programme
AUSAID	Australian Government's Overseas Aid Programme
BEEPS	Business Environment and Enterprise Performance Survey
BIT	Bilateral Investment Treaty
BRIC	Brazil, Russia, India and China
BS	Business services
CA	Central Asia
CAGR	Compound annual growth rates
CCS	Country Capability Survey
CET	Continuing education and training (lifelong learning)
CIS	Commonwealth of Independent States
DFID	Department for International Development (UK)
EBRD	European Bank for Reconstruction and Development
FCC	Food Contract Corporation (Kazakhstan)
FDI	Foreign direct investment
FIEZ	Free industrial economic zone
GCI	Global Competitiveness Index
GCR	Global Competitiveness Report
GDP	Gross domestic product
GNI	Gross national income
GRP	Gross regional product
HDI	Human Development Index
HE	Higher education
HEI	Higher education institution
HPI	Human Poverty Index
ICCO	Interchurch Organization for Development Cooperation
ICSID	International Centre for Settlement of Investment Disputes
ICT	Information and communication technology
IDB	Islamic Development Bank
IEA	International Education Association
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation (World Bank)
IGC	International Grains Council
IMF	International Monetary Fund
IPA	Investment promotion agency

IPF	Investment promotion and facilitation
IT	Information technology
KAFC	Kyrgyz Agricultural Financial Corporation
KfW	Kreditanstalt für Wiederaufbau
MCA	Microcredit agency
MCC	Microcredit company
MCO	Microcredit organisation
MENA	Middle East and North Africa
MFC	Microfinance company
MISFA	Microfinance Investment Support Facility for Afghanistan
MOF	Ministry of Economy and Finance (Turkmenistan)
NAFTA	North American Free Trade Agreement
NBK	National Bank of Kazakhstan
NCF	National Curriculum Framework
OECD	Organisation for Economic Co-operation and Development
OSS	One-stop shop
PfC	Policies for Competitiveness (Assessment Framework)
PFI	Policy Framework for Investment
PISA	Programme for International Student Assessment
PPP	Purchasing power parity
PSA	Production sharing agreement
SME	Small and medium enterprise
SMESO	Small and Medium Enterprises Support Office
TIMM	Trends in International Mathematics and Science Study
TRACECA	Transport Corridor linking Europe-Caucasus-Central Asia
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UOEC	Union of Economists (Turkmenistan)
UOEN	Union of Entrepreneurs (Turkmenistan)
URDF	Uzbekistan Reconstruction and Development Fund
USAID	US Agency for International Development
VCC	Vale Columbia Center on Sustainable International Investment
VET	Vocational education and training
WAIPA	World Association of Investment Promotion Agencies
WB	World Bank
WBC SD	World Business Council for Sustainable Development
WDE	World Development Indicators
WEI	World Education Indicators
WEO	World Economic Outlook
WIPO	World Intellectual Property Organization
WTO	World Trade Organization
WTO-TRIPS	WTO-Trade-Related Aspects of Intellectual Property Rights

Executive Summary

The competitiveness potential of Central Asia

With a total population of 92 million people, Central Asia boasts near universal literacy and abundant natural resources. However these resources are unevenly distributed amongst the countries of the region. Kazakhstan, Turkmenistan and Uzbekistan are heavily reliant on exports of energy resources, whilst the economies of Afghanistan, Kyrgyz Republic, Mongolia and Tajikistan are mainly based on agriculture or primary products like copper and gold.

Thanks to their significant resources, Central Asian economies have achieved some of the world's best growth performances over the past ten years: their labour productivity has grown consistently between 3% and 6% above the world average, GDP has risen by about 8% annually and FDI flows into the region have grown ninefold. However, the global economic crisis of 2008 and 2009 cut GDP growth levels in the region by half, exacerbating existing high levels of poverty and income inequality, and further weakening the business climate. The region's competitiveness was further diminished by pre-existing challenges such as a significant skills gap, limited opportunities for the development of small and medium-sized enterprises (SMEs), and an over-reliance on energy resources.

The OECD *Central Asia Competitiveness Outlook* analyses the competitiveness of the region's economies, with a focus on three areas: human capital development, access to finance for SMEs, and investment policy and promotion. It highlights the region's significant resources and strong potential, the major challenges it faces and the reforms needed to unlock further growth. The *Outlook* is the product of close collaboration between the OECD, the World Economic Forum and the economies of the region.

How Central Asian economies perform: Results from the Global Competitiveness Index

The competitiveness of four Central Asian economies – Kazakhstan, the Kyrgyz Republic, Tajikistan and Mongolia – is analysed according to the World Economic Forum's Global Competitiveness Index which considers the numerous determinants of competitiveness and their interaction. The 12 categories of component studied are: institutions, infrastructure, macroeconomic environment, health, primary education, higher education and training, goods markets efficiency, labour market efficiency, financial market development, technological readiness, market size, business sophistication and innovation. Key conclusions are that all four economies share the competitive advantage of labour flexibility but suffer from underdeveloped financial markets, low levels of

competition, inefficient infrastructure and a fairly poor quality of education. Performance across the region is uneven: recent efforts towards enhancing competitiveness have improved the positioning of Mongolia and the Kyrgyz Republic whereas Kazakhstan and Tajikistan have lost ground in the Global Competitiveness Index.

Towards higher quality education and training

A well-educated workforce is one of the cornerstones of competitiveness in an increasingly knowledge-driven global economy. Central Asia's educational systems have many distinctive advantages: high literacy rates, high primary and secondary school enrolment for both sexes and an above average enrolment in tertiary education. At the same time, systems suffer from excessive central control over educational curricula, low public spending per student, and low completion rates of advanced study, all of which lead to a misalignment between worker skills and job market requirements. To tackle these challenges, Central Asian countries should collect and report educational data to better understand where they stand in comparison to other countries, implement targeted policies to raise the quality of tertiary education and improve graduation rates, and create strategies for making vocational education and training (VET) more relevant to the labour market. Afghanistan, which is trailing behind other countries of the region in educational performance, must focus on laying a solid foundation for the future by investing in more highly-trained teachers, and promoting enrolment.

Improving access to financing for smaller enterprises

Ensuring that companies can access the financing they need to grow is critical to further enhancing the competitiveness of Central Asia. Financial systems in the region are not yet globally integrated (except in Kazakhstan) and often do not provide a diverse range of financial products to local businesses. A large interest rate spread further impedes firms' access to capital. Moreover, small and medium-sized enterprises (SMEs) – key drivers of employment and growth – are disproportionately affected by the lack of access to finance. They typically face more severe constraints than larger businesses and, when financing is secured, it is often under more stringent conditions, including higher interest rates and greater collateral requirements. In addition to pursuing reforms to improve the financial system as a whole, more support should be given to institutions that specialise in financing the SME sector, and to targeted instruments such as guarantee schemes to help SMEs grow and move up the value chain.

Capturing more and better investments

Foreign Direct Investment (FDI) flows are increasingly important as a source of finance for Central Asian economies. To unlock their full potential, a second generation of reforms is needed to improve the investment policy framework and to develop more targeted investment promotion capabilities. Despite the fact that between 2000 and 2009 FDI inflows in the region grew at 31 percentage points above the world average, the region has still attracted less per capita investment than its neighbours. Over-dependency on natural resources makes Central Asian economies vulnerable to the volatility of oil prices and

overly exposed to global commodity market fluctuations. Key areas to address are land reform, removing sector restrictions and restrictions of FDI from foreigners and enforcing intellectual property rights. Policy makers from Central Asia also need to focus on diversifying the sectors receiving FDI and on building further investment promotion and facilitation capabilities. Reducing state control over foreign capital flows and removing burdensome regulatory procedures should be accompanied by targeted investment promotion activities. Such activities would benefit from taking a sector-specific approach and should be based on efficient use of resources, linking promotion efforts to investment zones and industrial policy objectives, as well as supporting regional development. Governments should focus on attracting a higher quality of investment to support sustainable job creation, income growth, technological diffusion, innovation and enterprise development.

*Kazakhstan: A case study on diversification
and sector competitiveness*

Kazakhstan's strong economic performance has been driven largely by its natural resources. The oil and gas sectors alone attract three quarters of its foreign investment inflows. However, other high-potential sectors could be developed to increase its wider competitiveness. OECD's *Kazakhstan Sector Competitiveness Strategy Report*, preliminary version published in November 2010, proposes a strategy to help Kazakhstan enhance the competitiveness of several non-energy sectors. The report identifies priority sectors for FDI, including the agribusiness value chain (concentrating on the wheat, beef and dairy sectors, agrochemicals and logistics for agribusiness), information technology and business services. To sustain competitiveness reforms and make progress, three mutually-reinforcing pillars should be addressed by the Government of Kazakhstan: sector-specific policy barriers, developing human capital, and supporting investment policy, promotion and innovation. This type of sector-specific approach could be of benefit to other economies of Central Asia in increasing their competitiveness and laying the groundwork for sustainable growth.

*Unlocking Central Asia's competitiveness
potential: Key recommendations*

In order to attract further investment to a wide range of economic sectors, Central Asian governments need to consult more closely with the private sector to implement reforms that target three areas:

Developing human capital

- Consulting with employers to create a better balance between higher education, vocational education and training, and continuous education that meets job market requirements.
- Making public spending more cost effective: monitoring quality and avoiding unnecessary repetition of school years.
- Involving the private sector in education development strategies.

Enhancing SME financing

- Making SME financing a priority in financial sector reform.
- Providing incentives for financial institutions to invest in SMEs (especially in rural areas).
- Offering greater support for credit guarantee agencies.
- Improving skills through capacity building and linkage programmes between SMEs and foreign direct investors.

Capturing more and better investments

- Placing greater emphasis on land ownership regulations, titling and cadastre systems.
- Developing comprehensive investment promotion strategies to diversify FDI.
- Identifying and removing policy barriers to sector growth and responding to investor concerns.

These recommendations are examined in more depth in this report.

Chapter 1

The Competitiveness Potential of Central Asia

by

Fadi Farra, Claire Burgio and Marina Cernov

Central Asia's advantages of strategic location, high literacy rates and vast natural resources, coupled with growing foreign direct investment (FDI) and enhanced productivity, have led to above-average growth over the past 10 years. However, to sustainably raise its competitiveness, the region must make further gains in productivity. This chapter provides an overview of the key findings of the report in priority areas for reform: education, access to finance and investment policy and promotion. It notes that education must provide skills demanded by the market through dialogue with employers; SMEs, essential for growth, must have easier access to finance; and the investment climate must be enhanced by improving investment policy and promotion. A case study on Kazakhstan, the final chapter of the report, outlines possible strategies – which may be applicable to other economies of the region – to diversify sources of FDI and enhance sector competitiveness.

The authors would like to specifically thank for their expert review of this chapter William Tompson, Head of the Regional and Rural Development Unit, OECD Directorate for Public Governance and Territorial Development; and Richard Pomfret, Professor of Economics at the University of Adelaide; and for their input Anthony O'Sullivan, Alexander Böhmer, Head of the Middle East North Africa Programme; Dr. Alan Paic, Economist; and Ania Thiemann, Economist (DAF/PSD).

The OECD defines competitiveness as “the degree to which a country generates, while being and remaining exposed to international competition, relatively high factor income and factor employment levels” (OECD, 1997).¹ The World Economic Forum defines competitiveness as “the set of institutions, policies and factors that determine the level of productivity of a country”. Both definitions are complementary. Productivity is also at the centre of the concept of competitiveness.

In Central Asia (CA), after a decline in the 1990s, productivity surged dramatically over the last decade, consistently growing above world average. This positive development in part reflects the broad-based economic reforms these countries implemented after the end of the Soviet era, the significant endowments the region possesses but also the re-allocation of labour resources.

While economies of the region presently differ in their levels of natural resources and policy frameworks, all would benefit from a second or third generation of reforms to fulfil their competitiveness potential. In this report, 12 pillars of competitiveness were assessed by the World Economic Forum based on the Global Competitiveness Index methodology as well as three key policy reform areas by the OECD based on the Policies for Competitiveness Assessment Framework (PfC) (Box 1.1). Those include human capital development, access to finance for SMEs and investment policy and promotion.

Box 1.1. The Policies for Competitiveness Assessment Framework (PfC)

The Policies for Competitiveness Assessment Framework is a tool developed by the OECD Eurasia Competitiveness Programme, based on the OECD Policy Framework for Investment, which aims to assess, monitor and analyse the business environment in the countries of the Eurasia region. Through a series of surveys, the government, private sector representatives as well as the civil society are requested to express their views and experience related to key policy levers affecting a country’s business environment.

The Policies for Competitiveness Assessment Framework aims to:

- Independently and rigorously assess business-related policy settings and reform against international best practice.
- Give guidance for policy reform and development.
- Create a process that enhances the quality of policy development relating to the business environment.
- Facilitate prioritisation of donor activities supporting economic development and growth.

The governments of the Central Asian countries have identified three major policy dimensions that need to be addressed in more detail: human capital development, access to finance and investment policy and promotion for SME growth. The assessment framework breaks down each of these policy dimensions into sub-dimensions (Table 1.1). Sub-dimensions are themes that are important to consider in separate blocks. Sub-dimensions

Box 1.1. The Policies for Competitiveness Assessment Framework (PfC) (cont.)

are composed of a set of indicators, which are then used to collect and organise information. For each of them, best practices from both OECD and non-OECD countries used as a benchmark. The highest score represents the OECD standards against which the EESC economies were benchmarked. Improving the score of the selected indicators should, therefore, stimulate the development of the private sector and usher in social benefits.

Table 1.1. Policies for Competitiveness Assessment Framework dimensions and sub-dimensions

Human capital development	Access to finance	Investment policy and promotion for SME growth
Strategy formulation	Effective regulatory framework	Foreign direct investment policy
Inputs to initial education	Access to bank finance	Promotion and facilitation
Vocational education and training	Early-stage finance	Transparency
Continuing education and training	Guarantee schemes	
Human capital outcomes	Access to capital market	
	Improving skills (quality of demand)	

This overview chapter focuses on the endowments, increased attractiveness and performance, as well as common challenges and opportunities, of the Central Asia region, where Central Asia region includes the following countries: Afghanistan, Kazakhstan, the Kyrgyz Republic, Mongolia, Tajikistan, Turkmenistan and Uzbekistan.

Significant endowments

A strategically located region

Most countries of Central Asia are land-locked or even double land-locked. However, Central Asia is also surrounded by some of the world's fastest-growing and most dynamic economies, including three of the BRICs (Russia, India and China). Recognising the importance of being further connected to their fast-growing neighbours, Central Asian policy makers have embarked on a number of initiatives. The Central Asia-China gas pipeline for instance, launched in 2003 (with the first stage completed in 2009), is set to become the first pipeline to bring Central Asian natural gas to China. It connects Turkmenistan, Uzbekistan, Kazakhstan and China. This is conflating 1) the oil pipeline across Kazakhstan to China which was started in 2003 and is being built in sections, and 2) the gas pipeline from Turkmenistan through Uzbekistan and Kazakhstan to China which was begun in 2007 and completed at the end of 2009. Since independence, multilateral bodies and regional organisations have been active in supporting the so-called "corridor approach"² – the development of transport corridors in order to help boost trade and economic co-operation in the region. For example, the Asian Development Bank recently provided a grant to upgrade a section of the Bishkek-Torugart Road, one of the main transport arteries of the region, linking the Kyrgyz Republic with China and other Central Asian countries. The European Union's Transport Corridor linking Europe-Caucasus-Central Asia (TRACECA), launched in 1993, is another example.

High literacy and education enrolment rates

Despite overall limited human capital development, all countries of the region (except Afghanistan) have high levels of literacy compared to countries with a similar income level. Currently the regional adult literacy rate is 99%, compared to the world average of 83%.³ All the Central Asian economies (except Afghanistan) have strong basic education systems.⁴ Female participation rates in education and enrolment rates in both primary and secondary education are relatively high. The World Economic Forum recently ranked Mongolia as 7th in the world and Kazakhstan as 22nd in its Global Competitiveness Index ranking for female participation in the workforce. In addition, all the countries have inherited education systems in which achievement, excellence and specialist skills are highly valued, particularly in science, technology and engineering. These factors all create a solid basis for a competitive labour force.

Abundant natural resources

Energy. Central Asian economies have some of the world's longest energy supplies, which represent a strong basis for economic growth and a potential source of revenue. The OECD estimates that Kazakhstan holds 65 years of oil reserves and 308 years of coal reserves.⁵ Turkmenistan a leading producer of natural gas holds 223 years of natural gas reserves (reserves-to-production ratio based on the amount of resource used in one year at the current rate). Both the Kyrgyz Republic and Tajikistan are mountainous countries with rich water reserves whose most abundant potential resource is hydroelectricity.

Agriculture. Central Asia has one of the largest arable land areas in the world and produced 30.9 million tonnes of wheat in 2009 (5% of world wheat production).⁶ Kazakhstan is the major producer of grain in the region, while cotton is the main export for both Turkmenistan and Uzbekistan. Both benefited from buoyant world cotton prices in the first half of the 1990s, with Uzbekistan in particular exhibiting the highest gross domestic product (GDP) growth performance among its regional peers in the period due to this increase in prices. Tajikistan has a strong potential for cotton production and export.⁷

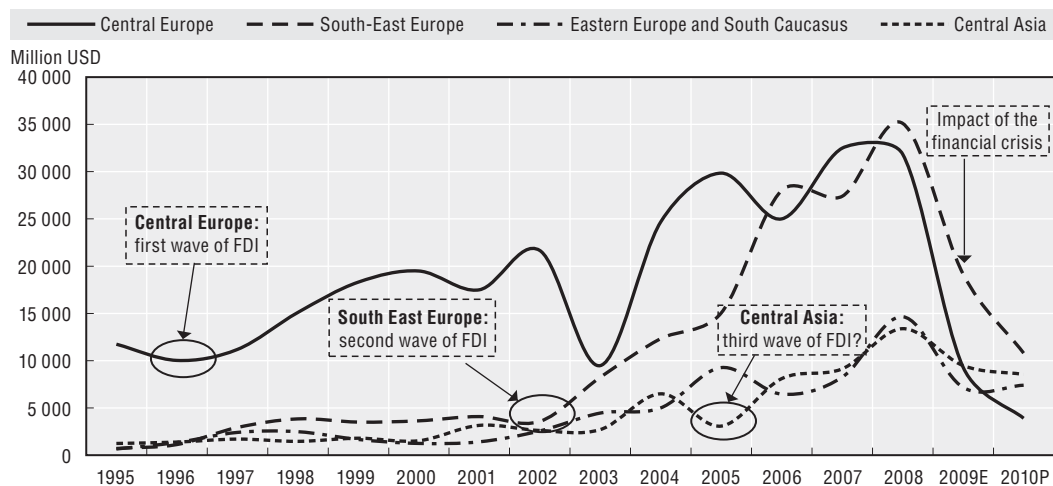
Other commodities. In Afghanistan, there are vast untapped mineral deposits, including iron, copper, cobalt, gold and lithium.⁸ Kazakhstan has significant reserves of minerals, iron and steel. The Kyrgyz Republic exports large quantities of gold: the Kumtor goldmine is the 8th largest goldmine in the world. Mongolia has coal and massive copper and gold reserves in the south (and perhaps the largest copper complex in the world). Tajikistan also has potential for aluminium production and export.⁹

Increased attractiveness and performance: FDI growth and enhanced productivity***Foreign direct investment (FDI) flows into the region increased fivefold in the period 2003-08***

Given the right conditions, FDI can play an important role in increasing both labour productivity and export performance in the recipient country via the import of technology, know-how and managerial expertise (Guellec and Van Pottelsberghe de la Potterie, 2001; Hemmings, 2005). However, it should be coupled with policies designed to facilitate the transfer of knowledge and technology between firms (OECD, 2004; Yudaeva *et al.*, 2002). There is a general consensus that the quality rather than the quantity of FDI is what really matters. This relates to export orientation, the level of technology and marketing

knowledge (Hayes, 2003; Basinger and Hallerberg, 2004). FDI in Central Asia rose for eight consecutive years in the 2000-09 period from USD 1 565 million to USD 15 440 million. The region has increasingly become the recipient of foreign investment from OECD countries, as well as Russia, but also China. Inward investment flows are primarily on natural resources, but not exclusively. In Kazakhstan for instance, other sectors such as construction, financial services, metallurgy and agribusiness have also become targets for FDI. Central Asia is arguably the recipient of a “third wave” of FDI although smaller in scale: the “first wave” targeted Central and Eastern Europe in the early 1990s, while the second targeted South East Europe in the early 2000s (see Figure 1.1).

Figure 1.1. **Investment waves towards Central Asia FDI net inflows, selected regions, 1995-2010**



Note: FDI inflows for 2009 are estimated, for 2010 – projected.

Source: OECD analysis based on data from IMF, EBRD.

Overall, Central Asian economies are successful in attracting their fair share of FDI. For example, for the period 2005-07, Mongolia, Tajikistan and Kazakhstan featured near the top of the UNCTAD rankings among 141 countries.¹⁰

The energy-exporting countries, which possess sizable deposits of oil, gas and minerals, managed to attract significant inflows of capital in the 1990s and 2000s. Kazakhstan, in particular, attracted USD 12.6 billion in FDI in 2009, more than six times its level of 2005.¹¹

Labour productivity growth above world average over the past 10 years

Having gained independence in 1991,¹² most Central Asian economies covered in this report faced three major shocks: the dissolution of the Soviet Union, the end of central planning and hyperinflation (Pomfret, 2003).¹³ Throughout the 1990s, the countries of the region experienced a significant economic downturn and faced major challenges to their competitiveness. Productivity, a measure of competitiveness, can be measured through labour productivity or multi-factor productivity, among other metrics (Kaci, 2006; Neary, 2006). Labour productivity, based on gross output, computed as gross domestic product (GDP) over the number of people employed (OECD, 2002), declined by close to 20% between 1992 and 2000.¹⁴ Figure 1.2 shows that since 2000, however, across the Central

Figure 1.2. **Labour productivity performance in Central Asia¹ compared to the world**



Note: GDP per employee is calculated as GDP in constant 2000 USD divided by employment over 15 years old; GDP per employee is not adjusted for cyclical fluctuations, number of work-hours and other factors that have an impact on GDP per employee but are not related to productivity.

1. Central Asia region does not include Afghanistan.

2. Labour productivity growth relative to the world is calculated as the difference between GDP per employee growth rate in the region and GDP per employee growth rate in the world.

Source: World Bank, *World Development Indicators Database*, October 2010; OECD analysis.

Asian economies GDP per employee has surged dramatically, from an average of USD 1 837 in 2000 to USD 2 848 in 2008 (constant USD 2000; does not include Afghanistan). This positive development in part reflects the broad-based economic rebound these countries experienced after the recessions of the 1990s. It also reflects a significant re-allocation of labour resources across the region, away from the oversized manufacturing sector and from agriculture toward the services sector. For example, between 2000 and 2008 the services share of total employment in Mongolia increased from 37% to 44%.¹⁵ Most of the productivity gained in the transition period was supported by the significant endowments of the region and was further enabled by “firm dynamics, as companies adapted their behaviour to a new, more competitive business environment” (World Bank, 2008). In the period from 2000 to 2008, agricultural productivity in Central Asia, as measured by value-added by employee,¹⁶ grew by an impressive 67%; it more than doubled in Kazakhstan and Turkmenistan. Following privatisation reforms, agriculture productivity growth in the region was driven by a shift from large-scale collective farming to small-scale individual farming in labour-intensive countries (such as the Kyrgyz Republic). In capital- and land-intensive countries (such as Kazakhstan), labour productivity gains were driven by large farms shedding labour after privatisation (World Bank, 2008; Swinnen et al., 2009).

Despite these improvements, there is ample room for further productivity gains derived from re-allocation and firm turnover (World Bank, 2008). Still, relatively low productivity hinders the ability of the region to provide competitive products and services on the international market, despite its low cost of labour.

Current competitiveness challenges in Central Asia: The need to build capabilities further

Many institutional and policy reforms for competitiveness have to be addressed. According to the World Economic Forum, the four countries of the region share similar features in terms of national competitiveness. Labour market flexibility is the main

competitive advantage across the region. However, most of the countries continue to struggle with underdeveloped financial markets, low levels of competition, inefficient infrastructures and fairly poor human capital development. In this report, the focus is on three areas in particular: human capital development, access to finance for smaller enterprises, and investment policy and promotion.

Human capital development is crucial for competitiveness. The literature suggests that each extra year of educational attainment in the population is associated with at least 5% increase in aggregate productivity, with stronger long-term effects through innovation (de la Fuente and Ciccone, 2003). Access to finance for SMEs allows the efficient re-allocation of resources by increasing firm dynamics, and also allows small business to develop and create jobs (WBCSD, 2007). Finally, attracting investments under certain conditions may bring competitive benefits to domestic firms via systematic, positive productivity spillovers and technology transfers (Rodriguez-Clare, 1996; Blomstrom and Kokko, 1997).

Human capital: Significant skills gap

Human capital is defined by the OECD as the knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being (OECD, 2007a). In the decade following independence, the significant decline in spending on education by the region's educational systems caused a marked deterioration in the quality of education. According to the Policies for Competitiveness (PfC) Assessment Framework results developed by the OECD Secretariat (Note 2), the educational systems of these countries do not meet the needs of employers, while vocational education is poorly funded and does not provide the skills demanded on the market (Figure 1.3, Panel A). Arrangements for involving employers in decision making on education policy, provision of training, syllabuses and standards are still weak.

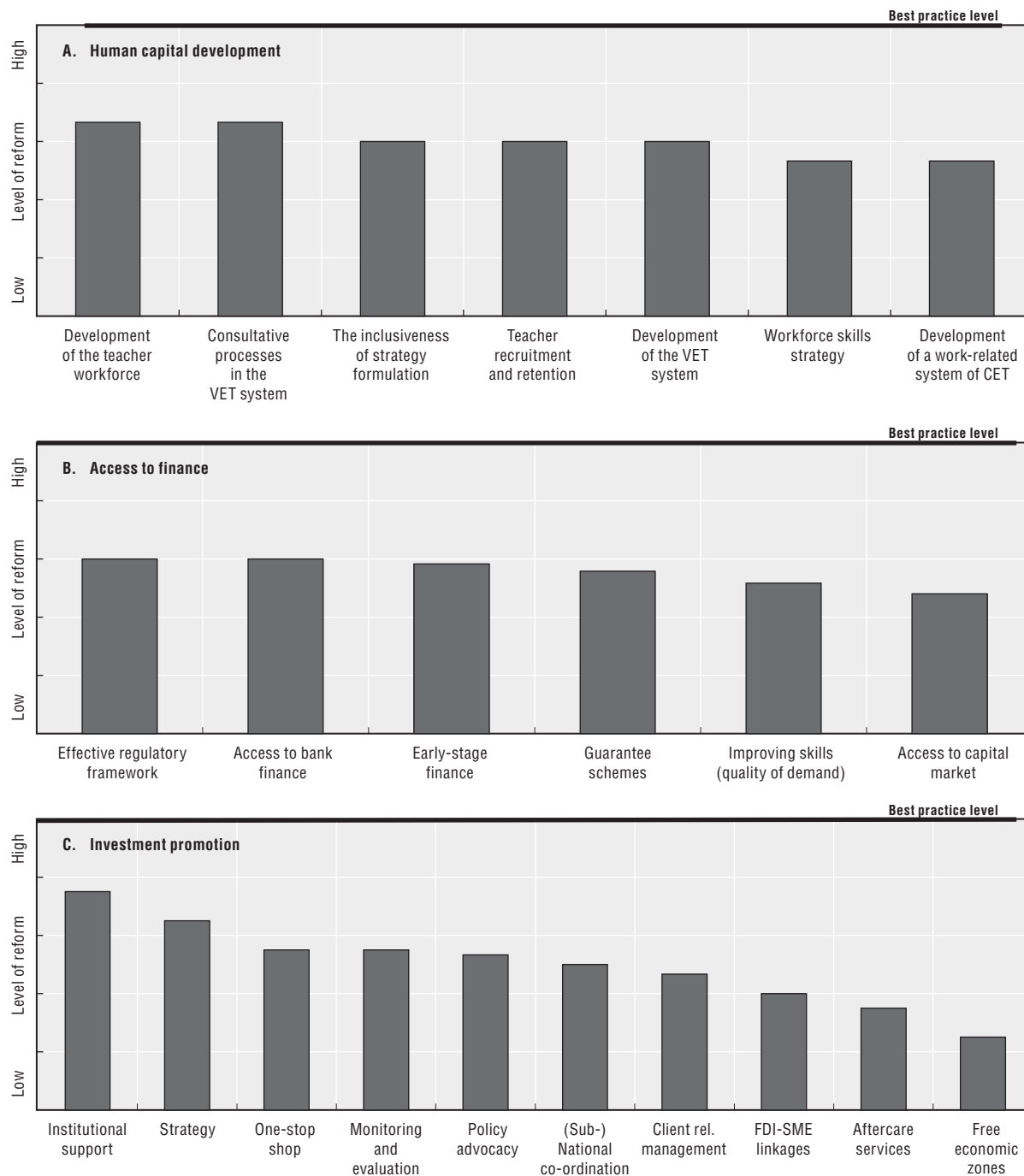
Human capital in Central Asia is thus less well-developed than it should and could be. This acts as a brake on productivity growth and competitiveness.

Limited access to finance for SMEs

Access to finance is critical for enhancing the competitiveness of Central Asia. The financial systems in the region are not yet globally integrated (except for Kazakhstan) and often do not provide a diverse range of financial products to the businesses in the region. The large interest rate spreads – 14%¹⁷ – and collateral requirements – on average 131% for the region in 2008¹⁸ – are further impeding firms' access to finance. For example, in the Country Risk Classification¹⁹ which is co-ordinated by OECD and constitutes the basis for calculating premium rates to cover risk of non-repayment of export credits on top of interest rates, the economies of Central Asia have low ratings.²⁰ As a result exporting firms from the region are facing higher interest rates.

According to the PfC surveys, in the Central Asia region there is a gap in access to finance which disproportionately affects small and medium enterprises (SMEs) (Figure 1.3, Panel B). Despite their importance as generators of employment and growth, SMEs typically face more severe constraints to growth than large companies. In emerging economies, in particular, there is a typical business landscape in which larger firms (including multinational and international corporations) are the preferred targets of banks. Moreover, for the available loans, the interest rates and collateral value are much higher for SMEs. The limited access to finance reduces opportunities for SMEs to grow and move up the value-chain.

Figure 1.3. Policies for Competitiveness Assessment Framework preliminary results for Central Asia across three dimensions: Human capital development, access to finance and investment policy and promotion



Note: No survey data available from Turkmenistan and Uzbekistan at the time of the publication. “Best practice” represents the benchmark used in the PFC surveys which corresponds to the OECD and non-OECD best practice. *High* represents a level of reform that meets best practice, *low* – lack of reform. This data was compiled as part of the Working Groups on Human Capital, Access to Finance, and Investment Policy and Promotion that took place in 2009 and 2010. Surveys were sent to the relevant Ministries and Business Intermediary Organisations countries of the region.

Source: PFC Assessment Framework 2010 results (OECD).

Over-dependence on natural resources: Need to improve investment policy and promotion

Improving investment policy frameworks and developing more targeted investment promotion capabilities is imperative to further attract FDI. Although FDI inflows in the region grew at 31 percentage points above the world average (CAGR) in the period 2000-09,²¹ the region has attracted less per capita investments than neighbouring regions such as Eastern Europe and the South Caucasus, and investments are mainly concentrated in energy and energy-related sectors. Most Central Asian economies are over-dependent on natural resources and the region's exports are heavily concentrated in a few primary products whose prices are determined in world markets. For instance, in 2009 64% of Kazakhstan's total exports were petroleum and petroleum-related products (as a share of total trade value). 29% of all Kyrgyz exports are gold. Copper accounts for 43% of Mongolia's total exports.²² This commodity concentration makes the economies vulnerable to the volatility of oil prices and overly exposed to global commodity market developments in general.

Opportunities to enhance policies for competitiveness

Developing human capital by developing comprehensive strategies

Findings of Chapter 3 suggest that to set effective goals for human capital improvement so as to increase competitiveness, Central Asian economies need to know where they stand, and in this respect all countries should ensure that in the future they collect internationally comparable data. To move forward, nation-wide workforce skills strategies must be developed to ensure the improvement of the educational system and the alignment of educational outcomes with labour market requirements.

It is recommended that governments give more power to local authorities in tertiary education and end central standard-setting that enforce uniformity rather than encouraging self-improvement. Economies from the region should consider, and consult employers' representatives on whether they have achieved the right balance between focusing on higher education, vocational education and training (VET) and continuous education and training (CET). All countries, but particularly those currently producing fewer trained scientists and engineers, should look again at how decisions are made on the numbers of tertiary places to be provided in each subject field. All countries should also aim to make public spending on education cost-effective by monitoring quality outcomes and by minimising repetition of school years.

Enhancing SME financing by focusing further on early-stage financing and guarantee schemes

Chapter 4 suggests that in addition to pursuing reforms in improving the financial system as a whole, more support should be given to institutions that specialise in financing the SME sector and those refinancing SME loans in other banks.²³ Leasing intermediaries, consumer credit and microcredit intermediaries, and other institutions providing a source of alternative financing (for bank loans) should be enabled and given incentives to invest and operate, especially in rural areas which have particular difficulty in accessing finance.

The PfC assessment shows that credit guarantee agencies play a particularly important role in SME development and need further support, given the high collateral conditions for loans in the region.

Improving skills is also a major issue. For banks and specialised financial intermediaries, second-level entities have to act not only as pure refinancers but also as “educators”, who play the very proactive and relevant role of transferring banking culture and knowledge about banking management to the potential borrowers. This would, for example, include investment readiness schemes, coaching entrepreneurs and developing business angel networks.

The keys to improving the country framework for SME development include: guaranteeing macroeconomic stability (in particular, keeping inflation under control in order to stimulate long-term loans); improving competition and production diversification and creating an “SME-first” policy i.e. policies tailored for the specific needs of SMEs and considering their characteristics when drafting laws and planning development programmes.

Improving both the quality and the quantity of FDI

The results of the assessment in Central Asian economies indicate that standards of policy reform in terms of FDI policy are high, while implementation – of investment promotion activities and of the facilitation services being provided to investors – is less advanced. Specifically, further emphasis must be placed on improving land ownership regulations as well as the titling and cadastre system. A coherent review process of the systems restricting FDI from foreigners would also help to further eliminate discriminative practices against foreign investors. Central Asian economies would benefit from taking a sector-specific approach to investment promotion, which helps focus scarce resources on positioning a country strategically among its global competitors. This would apply to the agribusiness and Information Technology sectors, for example.

The results show that to further build competitive economies, Central Asian economies will need to unlock the full potential of investment opportunities across their economic sectors. They must further improve their investment policy frameworks by reducing state control over foreign capital flows and by removing slow and burdensome regulatory procedures. Policy reform should be accompanied by targeted investment promotion activities aimed at attracting high-quality investments that support job creation, income growth, technological diffusion, innovation and enterprise development.

Developing diversification strategies: The case of Kazakhstan

The issue of diversifying sources of FDI remains a priority for many of the economies of the region. In Kazakhstan, for example, 70% of all FDI inflows to the country in 2009 went to the energy extraction sectors and related geological services – approximately twice the ratio level of the mid-1990s.²⁴ Yet, the country has other high-potential sectors that could be developed to increase its wider competitiveness.

In this context, the Government of Kazakhstan collaborated with the OECD to develop and implement a *Sector Competitiveness Strategy*, aimed at defining a strategy to diversify FDI and to help the country move up the value chain in selected sectors. In the strategy report, published in November 2010, the OECD Secretariat has identified several initial priority sectors for foreign direct investment, including the agribusiness value chain (concentrating on the wheat, beef and dairy sectors, the agrochemicals sector and the logistics sector for agribusiness), as well as information technology (IT) and business services. These sectors were selected for investment promotion purposes on the basis of market attractiveness (which incorporates the competitive advantage and potential

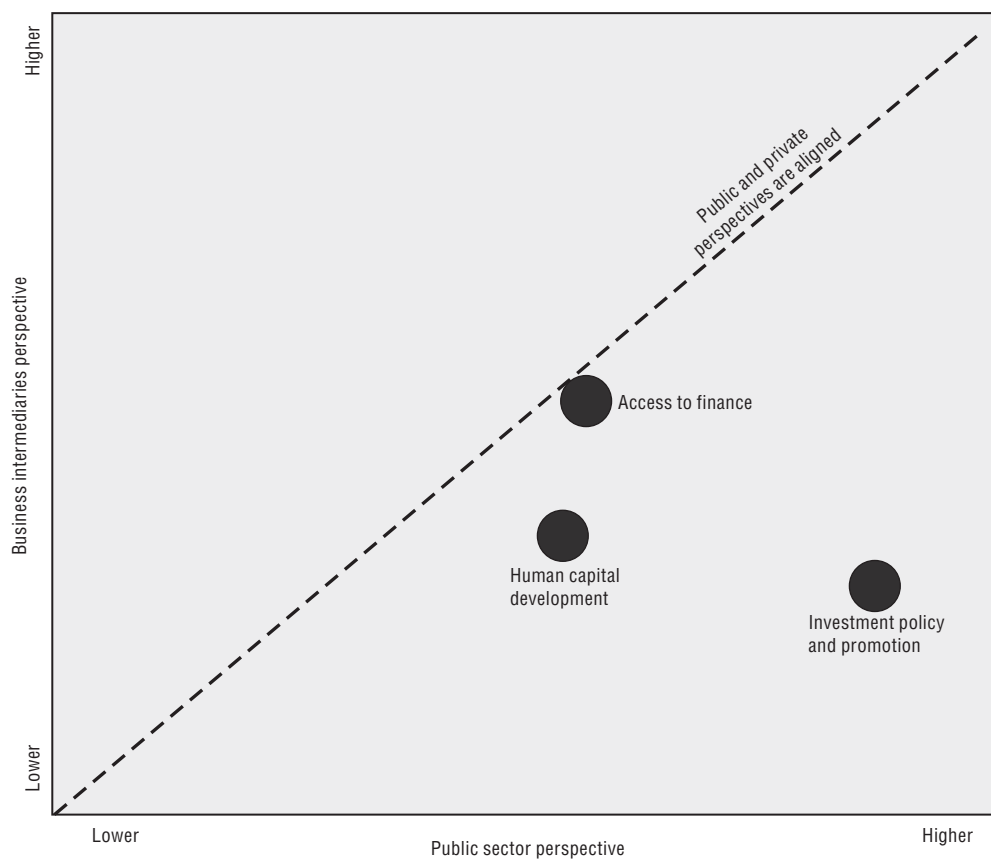
growth of a sector in a country and its FDI attractiveness) and country benefits (for example through transfers of skills and technology and higher employment).

In order to sustain competitiveness reforms and make progress, three mutually-reinforcing pillars should be addressed by the Government of Kazakhstan: addressing sector-specific policy barriers, developing human capital and supporting investment policy, promotion and innovation. This type of sector-specific approach could be of benefit to other economies of Central Asia in increasing their competitiveness and laying the groundwork for sustainable growth.

Developing public-private dialogue

The participation of business intermediaries, employers, civil society and other stakeholders in the consultation process with the policy makers is crucial for improving the transparency and effectiveness of policies (OECD, 2007b). Figure 1.4, based on the PFC²⁵ survey, highlights areas where the public and private sectors are aligned on the need for policy reforms – like access to finance – but also areas of misalignment like human capital development and investment policy and promotion.

Figure 1.4. **Gap in perceived level of reform between the public and private sectors**



Note: Public sector includes: Ministries of Economy, Finance, Education and Science, while the business intermediaries include Chambers of Commerce and Trade, Analytical Centres.

Source: PFC Assessment Framework 2010 Results (OECD).

For instance, there is a need to strengthen public-private dialogue between government officials and foreign investors through regular consultations to assess and improve the host country's regulatory environment concerning foreign investment or in the area of human capital development.

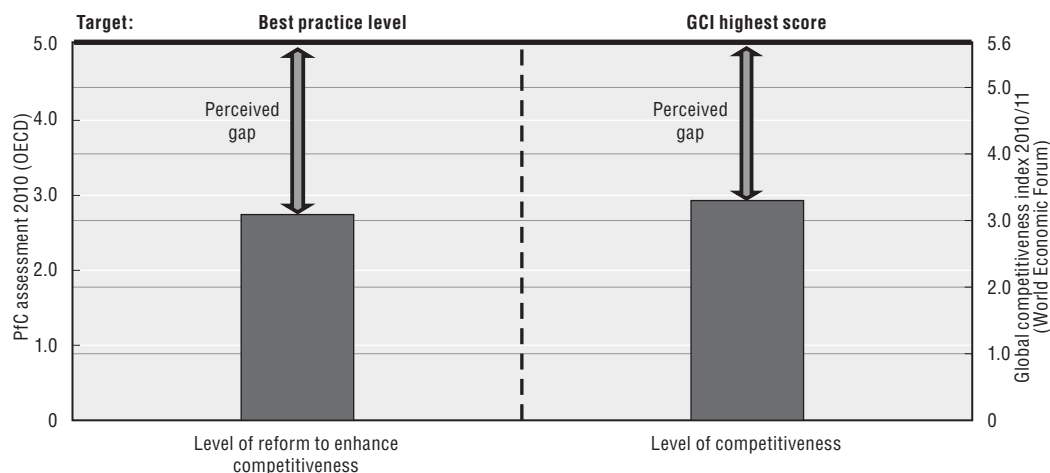
The misalignment on the perceived level of reform between private and public sector representatives may be the result of a lack of communication between the regulators and the business representatives, and their different perception about the success of reform in the country. It may also reflect difficulties in implementing reforms throughout the country and bottlenecks related to enforcement.

The OECD Secretariat is working with the countries of the region on further developing the public-private dialogue through policy working groups in the three key policy areas for competitiveness. The public sector is encouraged to engage in a more regular dialogue with representatives of business, civil society and other stakeholders in order to learn about their real needs and constraints and adjust their policies according to these needs in order to ensure private sector development.

How to enhance competitiveness?

Both the public and private sectors recognise that there is still room for improvement both in terms of reform and in terms of implementation. The level of reform (PfC) and level of competitiveness (GCI) are both perceived to be lower than the OECD best practice. The region would benefit from further reforms to address this competitiveness perception gap (see Figure 1.5).

Figure 1.5. **Competitiveness perception gap in Central Asia relative to OECD, 2010¹**



1. The level of reform index is based on the PfC assessment framework responses, which are those averaged across countries and three policy areas, with 5 representing OECD best practice. The level of competitiveness is based on the Global Competitiveness Index of the World Economic Forum, which includes 4 countries out of 7 of the Central Asian region (Kazakhstan, Mongolia, Tajikistan, and Turkmenistan). The index includes all 12 pillars of competitiveness of the World Economic Forum's methodology, and therefore it is not directly comparable with the level of reform index based on the PfC assessment.

Note: The PfC Survey is based on the 2010 Policies for Competitiveness Assessment Framework results averaged across three policy areas.

Source: Level of reform to enhance competitiveness: PfC Assessment Framework 2010 Results (OECD); Level of competitiveness – Global Competitiveness Report 2010-2011 (World Economic Forum).

In order to tap into its competitiveness potential, Central Asia has to leverage its endowments and further build capabilities in the areas of human capital, access to finance and investment policy and promotion. Education must provide skills demanded by the market through dialogue with employers; SMEs, essential for growth, must have easier access to finance including reforms related to early-stage financing and guarantee schemes; and the investment climate must be enhanced by improving investment policy and promotion reforms. The case study on Kazakhstan in Chapter 6 addresses possible strategies to diversify sources of FDI and enhance sector competitiveness.

This report is the result of a joint effort with the economies of the Central Asia region to enhance their competitiveness by addressing the following questions:

- Which policies to address as a priority to enhance competitiveness?
- What is the most effective way to implement these policies and reforms?
- How to enhance public-private sector dialogue?
- Which indicators measure most accurately the competitiveness performance in the region?

Notes

1. The definition of competitiveness proposed by OECD was also adopted by the European Commission as “the ability of companies, industries and regions, nations or supranational regions to generate, while being and remaining exposed to international competition, relatively high factor income and factor employment levels on a sustainable basis” (Pelkmans, J. [2006], *International Handbook on Industrial Policy*, Chapter 3, European Industrial Policy, Bianchi, Labory).
2. *Central Asia Regional Economic Co-Operation Transport Sector Strategy Study: Final Report*, prepared by TERA International Group, Inc., financed by the Asian Development Bank's TA Funding Program; Pomfret, Richard (2003), “Economic Performance in Central Asia since 1991: Macro and Micro Evidence”, *Comparative Economic Studies*, 45, pp. 442-465; ADB (2008).
3. World Bank, *World Development Indicators Database*.
4. Basic education includes primary and lower secondary education.
5. IEA OECD Analysis, *British Petroleum Statistical Review 2010*.
6. *Food and Agriculture Organisation Statistics: FAOStat*.
7. Before the start of the civil war in 1992, Tajikistan was a substantial exporter of cotton.
8. *New York Times*, published: 13 June 2010, www.nytimes.com/2010/06/14/world/asia/14minerals.html.
9. Before the civil war in 1992, Tajikistan was an exporter of aluminium, the country's main exporter being the Talco aluminum smelter.
10. UNCTAD's Inward FDI Performance Index ranks countries by the FDI they receive relative to their economic size – it is the ratio of a country's share in global inward FDI flows to its share in global GDP. For the 2007-07 period, Mongolia = 3.269 (16th), Tajikistan = 3.223 (17th), Kazakhstan = 2.73 (23rd), the Kyrgyz Republic = 1.79 (55th), Uzbekistan = 0.374 (124th).
11. UNCTADstat Database.
12. Except Afghanistan and Mongolia.
13. According to Pomfret (2003), dismantling the centrally planned economy created severe disorganisation, which led to output decline. The dissolution of the Soviet Union added to these problems as supply links and demand sources were disrupted by new national borders with attempts to retain resources within these borders. Finally, attempts to maintain existing commercial and political links by retaining a common currency fuelled hyperinflation.
14. Throughout this chapter, we use the gross domestic product (GDP) divided by the number of people employed as a definition for labour productivity. Two things should be noted: i) we use the number of people employed rather than work hours because of limited availability of data; and ii) labour

productivity reflects the joint influence of a host of factors, therefore it should not be misinterpreted as technical change or as the productivity of the individuals in the labour force. For Central Asian economies, in particular, this definition should be used with care due to a large shadow economy and the sensitivity of GDP to commodity price fluctuations.

15. World Bank, *World Development Indicators Database*.
16. Agriculture value-added per worker (constant 2000 USD): World Bank, *World Development Indicators Database*.
17. Kyrgyz Republic, Mongolia, Tajikistan – IMF, *World Development Outlook 2009*.
18. World Bank Enterprise Survey 2008/2009, does not include Turkmenistan.
19. Country Risk Classification is a system for assessing country credit risk and classifying countries into eight country risk categories (0-7). The Country Risk Classification Method measures the country credit risk, i.e. the likelihood that a country will service its external debt. The Country Risk Classifications are produced solely for the purpose of setting minimum premium rates for transactions covered by the Export Credit Arrangement (OECD), www.oecd.org/document/49/0,2340,en_2649_34171_1901105_1_1_1_1,00.html.
20. As of the latest OECD committee meeting session on 22 October 2010, Kazakhstan, the best ranked country, was downgraded in late 2009 from 4 to 5, and kept this position in 2010. Mongolia, Turkmenistan and Uzbekistan all rated 6, while Afghanistan, The Kyrgyz Republic and Tajikistan fared the worst (7).
21. UNCTADstat Database.
22. UNComtrade Database.
23. *Policies for Competitiveness Assessment Framework 2010*.
24. Agency of Statistics of the Republic of Kazakhstan.
25. The PfC survey was completed by four out of seven countries of the Central Asian region.

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Chapter 2

How Central Asian Economies Perform: Results from the Global Competitiveness Index

by

Margareta Drzeniek Hanouz, Danil Kerimi and Stephen Kinnock

In this chapter, the competitiveness of four Central Asian economies – Kazakhstan, the Kyrgyz Republic, Tajikistan and Mongolia – is analysed according to the World Economic Forum's Global Competitiveness Index. Key conclusions are that all four economies share the competitive advantage of labour flexibility but suffer from underdeveloped financial markets, low levels of competition, inefficient infrastructure and fairly poor quality of education. It notes that recent efforts towards improving competitiveness have improved the positioning of Mongolia and the Kyrgyz Republic, while Kazakhstan and Tajikistan have lost ground.

As most regions of the world, Central Asia was hard hit by the global economic crisis of 2008 and 2009. Import demand for the region's exports plummeted and international liquidity dried up, leaving financial sectors in some countries on the verge of collapse. Between 2008 and 2009, growth rates for most countries were cut in half. This severe downturn has highlighted the importance of competitiveness-enhancing reforms for the resilience of the region's economies and for making future growth sustainable. By increasing productivity such reforms would enable the countries to reach higher income levels and reduce poverty, which remains widespread across the region.

This chapter analyses the region's competitiveness using the World Economic Forum's Global Competitiveness Index (GCI). The analysis highlights the countries' competitive strengths and identifies challenges that will need to be addressed for the economies to more fully tap their productive potential and put their economies on a more sustainable footing.

World Economic Forum methodology

Competitiveness is defined as the set of institutions, policies and factors that determine the level of productivity of a country. The level of productivity, in turn, determines the rates of return obtained by investments in an economy. Because the rates of return are drivers of growth rates, a more competitive economy is likely to grow more and be more prosperous in the medium to long term.

Since its introduction in 2005, the GCI has been the key methodology used by the World Economic Forum in its assessments of competitiveness. The model, which was developed by Xavier Sala-i-Martin and the World Economic Forum, rests on the belief that the determinants of competitiveness are numerous and interact with each other in a complex manner. The GCI captures these interactions through a weighted average of many different components, each of which reflects one aspect of competitiveness. These components are grouped into 12 categories¹ as follows:

1. **Institutions** are crucial for competitiveness as they determine the legal and administrative framework within which individuals, firms and the government interact to create wealth. Examples of well-functioning institutions include clearly defined and enforced property rights, an efficient and transparent public administration, a fair and independent judiciary, provision of physical security, and high corporate governance standards.
2. **Infrastructure** is key for economic activity for a number of reasons. Transport infrastructure is crucial for getting goods to markets rapidly and at low cost, electricity for smooth and interruption-free production, and telecom for efficient communication.
3. Stability in the **Macroeconomic environment** is important, as its absence makes it difficult for businesses to operate. Inflation limits companies' ability to plan and invest, and continued fiscal lassitude, high government debt or inefficiencies in the financial system can result in high interest rates, restraining investment.
4. **Health and primary education** are crucial as a healthy workforce that has received at least a basic education is much better positioned to perform to its full potential.

5. Countries cannot move up the development ladder without investing in **Higher education and training**, as more complex products and production processes require a skilled workforce.
6. Healthy competition is an important driver of efficiency and innovation, as it forces inefficient businesses out of the market and enables new ventures to enter the market. This concept is captured under the **Goods markets efficiency** pillar.
7. **Labour market efficiency** is important to ensure that talent is always put to its best use in an economy. A flexible labour market, accompanied by meritocratic incentive structures, absent of discrimination against societal groups is best placed to contribute to competitiveness.
8. Much attention has recently been paid to the functioning of financial markets. The **Financial market development** pillar captures two major factors that contribute to competitiveness: the efficiency of the financial system as a source of finance for businesses and the stability and trustworthiness of the financial system.
9. **Technological readiness** reflects a country's ability to adopt the latest technologies and use them to increase domestic productivity. We distinguish between adoption of technology and technological innovation, as these two factors affect competitiveness in different ways. Adopting technology raises the productivity of existing processes, whereas innovation expands the technology frontier. Much of the productivity enhancing effect, in particular in emerging markets that do not operate at the technology frontier, can therefore be harnessed through adoption of foreign technologies.
10. **Market size** is taken into account because large markets, which are viewed as domestic markets, expanded by international markets, enable companies to realise economies of scale.
11. **Business sophistication** plays an important role for productivity. The presence of clusters raises the efficiency of many processes within businesses, while activities such as marketing and distribution raise productivity by increasing the value of products and services.
12. As noted above, **Innovation** is crucial, as it can expand the technology frontier. Businesses in advanced economies can only sustain the high wage levels in the country through moving the technology frontier outwards; they must therefore develop cutting edge products or services and/or use unique processes.

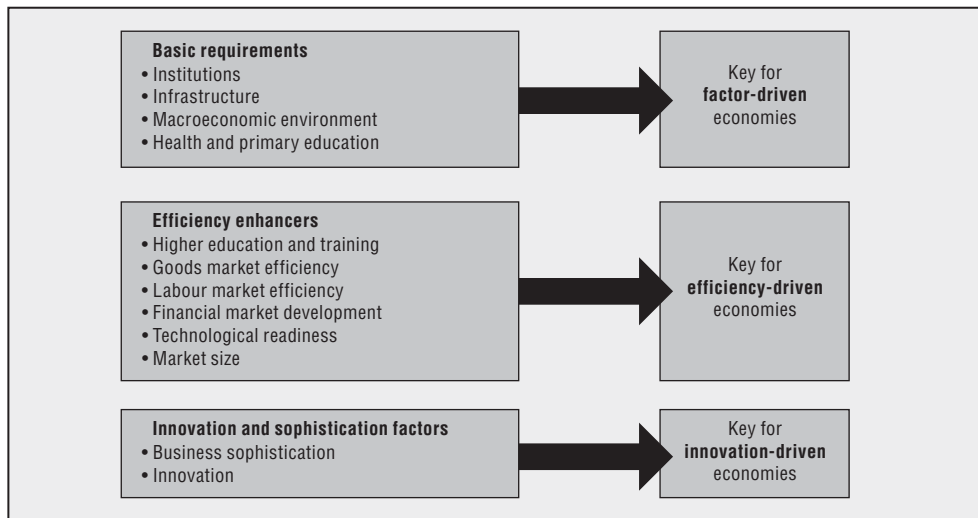
Although taken into account separately in the Index, the categories are highly interrelated. In fact, they tend to reinforce each other. For example, innovation (pillar 12) is not possible in a country where weak competition among companies (pillar 6) or poor protection of intellectual property (pillar 1) reduce incentives to innovate. A well-educated population (pillar 5) best contributes to raising productivity when the labour market is flexible and meritocratic incentives are common in the workplace (pillar 7).

The index also takes into account the fact that the different dimensions of competitiveness are not of equal importance to all countries. As a country becomes increasingly advanced in economic terms, its products and services must become increasingly sophisticated in order to sustain the rising productivity levels necessary to maintain an increasing wage level. The index therefore attributes different weighting schemes depending on the level of development of a country. Economies are grouped in three stages of development: the factor-driven stage, the efficiency-driven stage and the

innovation-driven stage, based on GDP per capita and the importance of natural resources in their economy.²

The pillars are grouped into sub-indexes as shown in Figure 2.1 and different weights are applied on the sub-indexes, depending on the stage of development. Basic requirements are relatively more important for factor driven economies, efficiency enhancers matter relatively more for efficiency-driven economies and innovation and sophistication factors also take on increasing importance for innovation-driven economies.

Figure 2.1. **The 12 pillars of competitiveness**



Source: Global Competitiveness Report 2010-11 (World Economic Forum).

A number of Central Asian countries have been added to the sample of economies covered by the GCI over the past decade. Presently, the index captures Kazakhstan, the Kyrgyz Republic, Mongolia and Tajikistan. Uzbekistan, which was covered in 2007, had to be dropped subsequently due to lack of survey data. Table 2.1 shows how countries in Central Asia are allocated into the three stages and provides details about the weighting scheme.

Table 2.1. **Central Asian countries according to their stage of development**

	Central Asian countries	Other countries in this stage	Important areas for competitiveness
Stage 1 (factor-driven): GDP per capita (USD) < 2 000	Kyrgyz Republic, Mongolia, Tajikistan	Bangladesh, Bolivia, Kenya, Pakistan, Vietnam	Basic requirements (60%) and efficiency enhancers (35%)
Transition from 1 to 2: 2 000 < GDP per capita (USD) < 3 000		Azerbaijan, Brunei Darussalam, Indonesia, Iran, Islamic Rep., Ukraine, Venezuela	Basic requirements (between 40% and 60%) and efficiency enhancers (between 35% and 50%)
Stage 2 (efficiency-driven): 3 000 < GDP per capita (USD) < 9 000	Kazakhstan	Argentina, Brazil, China, Malaysia, Mexico, Russian Federation, South Africa, Turkey	Basic requirements (40%) and efficiency enhancers (50%)
Transition from 2 to 3: 9 000 < GDP per capita (USD) < 17 000		Chile, Croatia, Poland, Trinidad and Tobago	Basic requirements (between 20% and 40%) and efficiency enhancers (50%) Innovation factors (10% to 30%)
Stage 3 (innovation-driven): GDP per capita (USD) > 17 000		Germany, Israel, Korean Rep., Norway, Spain, United Kingdom, United States	Basic requirements (20%) and efficiency enhancers (50%) Innovation factors (30%)

Source: Global Competitiveness Report 2010-11 (World Economic Forum).

It is important to note that the Index is calculated using two distinct types of data. About one third of the indicators are data obtained mainly from major international organisations, such as the World Bank, International Monetary Fund, UNESCO and so on. For the remaining part, indicators from the World Economic Forum's annual Executive Opinion Survey are used. By surveying business executives, it provides an assessment of the rather qualitative aspects of competitiveness, as well as on dimensions for which statistical sources are not available for all countries covered by GCI. The survey is conducted in collaboration with partner institutions in each country, which administer the survey process. In 2010, over 15 000 business executives were surveyed in 139 countries between January and May. In the Central Asia region the sample sizes are as follows: Kazakhstan: 122; the Kyrgyz Republic: 79; Mongolia: 81 and Tajikistan: 98. The vast majority of surveyed companies had less than 500 employees.³ Since 2007, the survey data is used as a moving average of the present and the previous year. There are several reasons for doing this. First, it makes results less sensitive to the specific point in time when the survey is administered. Second, it increases the amount of available information by providing a larger sample size. Additionally, because the survey is carried out during the first quarter of the year, the average of the responses in the first quarter of 2009 and first quarter of 2010 better aligns the survey data with many of the data indicators from sources other than the Forum, which are often year-average data.

Performance of Central Asia as a region: Significant challenges are yet to be addressed

Table 2.2 presents the rankings for the four central Asian economies covered by the GCI in comparison with the averages of Central Asia, transition economies, the European Union and the OECD member states. All Central Asian countries fall into the lower half of the GCI rankings, which assess 139 economies. The best-performing country in the region, Kazakhstan, ranks 72nd, followed by Mongolia at 99 and Tajikistan at 116. The regional ranking closes with the Kyrgyz Republic at 121.

Although the four countries look back at a joint history and share many common features, it is worth examining the competitiveness-related differences and commonalities across Central Asia. Figure 2.2 shows the performance of the four countries in comparison with the transition economies group. While in most categories, the performance of the four economies is remarkably similar, significant differences are noticeable in infrastructure and market size, (Kazakhstan does somewhat better on both indicators), and with respect to macroeconomic stability, where Kazakhstan and Mongolia outperform the other two economies by a sizeable margin.

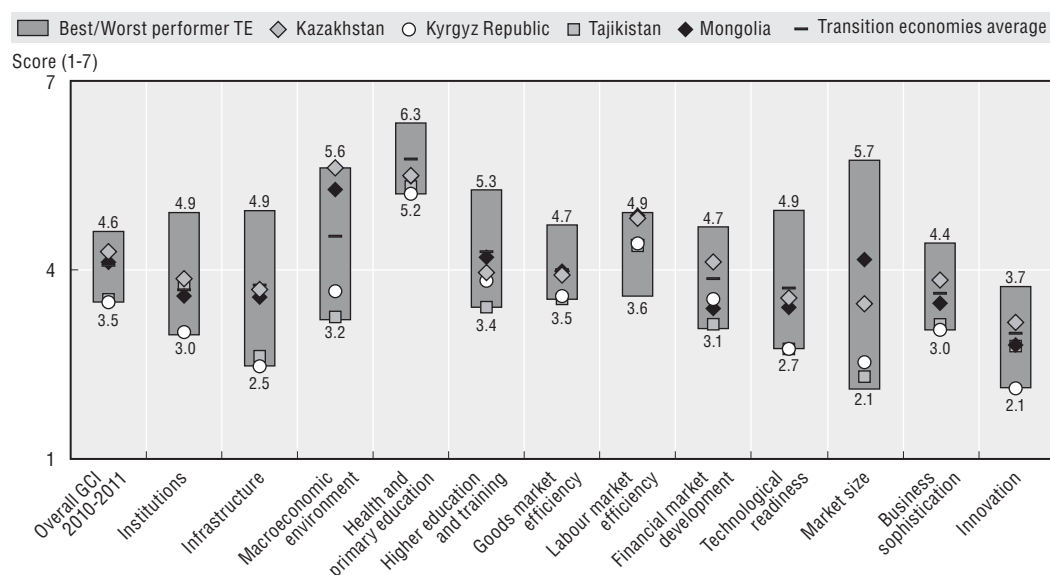
The relatively poor positioning of Central Asia reflects the many challenges the economies face in terms of competitiveness, although they also demonstrate a few competitive strengths and strong potential. Figure 2.3 compares the Central Asian average across the 12 pillars of the GCI to the OECD, the European Union and the transition economies. It shows that Central Asian economies have fairly efficient labour markets in comparison with the three country groups and on average, a rather stable macroeconomic environment and have a fairly high level of health and primary education. However, the region lags behind the EU and OECD in a number of categories, with most pronounced differences observed with respect to infrastructure, technological readiness, and market

Table 2.2. **Performance of Central Asian economies in the 12 pillars of GCI**

	Mongolia		Kazakhstan		Kyrgyz Republic		Tajikistan		EU27	OECD	Transition economies	Central Asia
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Score			
Overall GCI 2010-11	99	3.75	72	4.12	121	3.49	116	3.53	4.70	4.88	4.07	3.72
1st pillar: Institutions	122	3.17	91	3.58	131	3.01	77	3.76	4.65	4.87	3.68	3.38
2nd pillar: Infrastructure	117	2.61	81	3.57	124	2.47	116	2.63	5.03	5.24	3.76	2.82
3rd pillar: Macroeconomic environment	49	4.90	26	5.27	119	3.66	131	3.25	4.88	4.93	4.53	4.27
4th pillar: Health and primary education	98	5.22	85	5.48	101	5.21	97	5.32	6.25	6.30	5.76	5.31
5th pillar: Higher education and training	89	3.76	65	4.20	86	3.83	105	3.41	5.09	5.21	4.29	3.80
6th pillar: Goods market efficiency	99	3.84	86	3.98	121	3.58	128	3.54	4.63	4.75	4.00	3.74
7th pillar: Labour market efficiency	29	4.78	21	4.86	65	4.42	73	4.38	4.55	4.69	4.47	4.61
8th pillar: Financial market development	129	3.07	117	3.39	111	3.54	127	3.14	4.51	4.59	3.86	3.28
9th pillar: Technological readiness	105	3.03	82	3.40	119	2.75	120	2.74	4.83	4.96	3.71	2.98
10th pillar: Market size	123	2.33	55	4.16	115	2.53	126	2.30	4.31	4.78	3.47	2.83
11th pillar: Business sophistication	127	3.10	102	3.47	130	3.05	126	3.13	4.64	4.87	3.63	3.19
12th pillar: Innovation	100	2.81	101	2.81	139	2.12	103	2.79	3.96	4.29	2.99	2.63

Note: Transition Economies include Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, FYR Macedonia, Georgia, Hungary, Kazakhstan, the Kyrgyz Republic, Latvia, Lithuania, Moldova, Mongolia, Montenegro, Poland, Romania, Russia, Serbia, Slovak Republic, Slovenia, Tajikistan, Turkey and Ukraine.

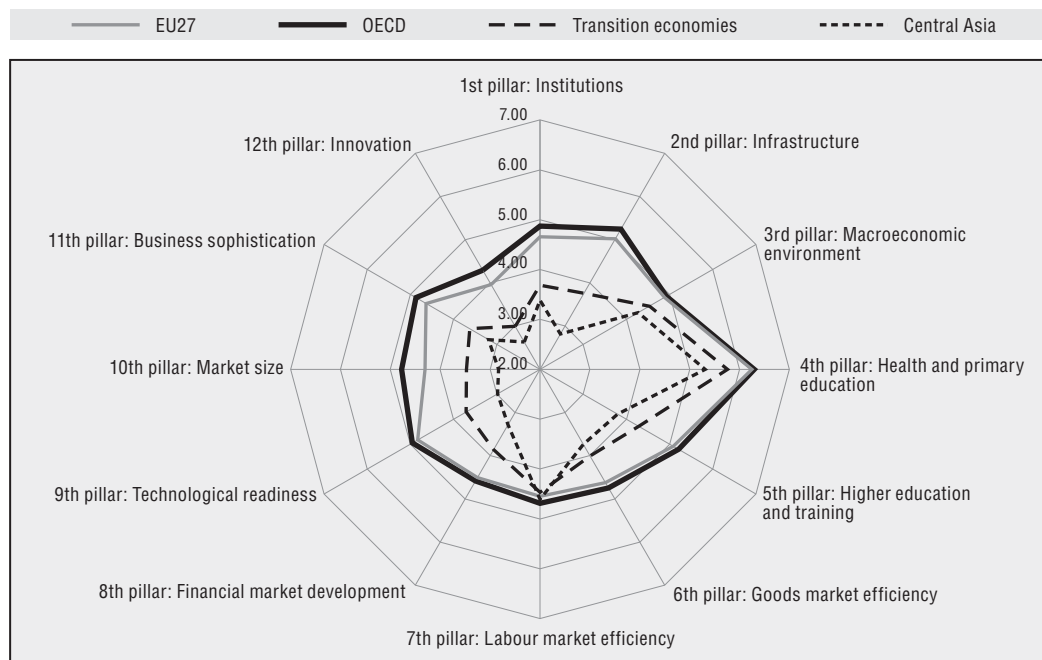
Source: Global Competitiveness Report 2010-11 (World Economic Forum).

Figure 2.2. **Performance of CA economies compared with transition economies**

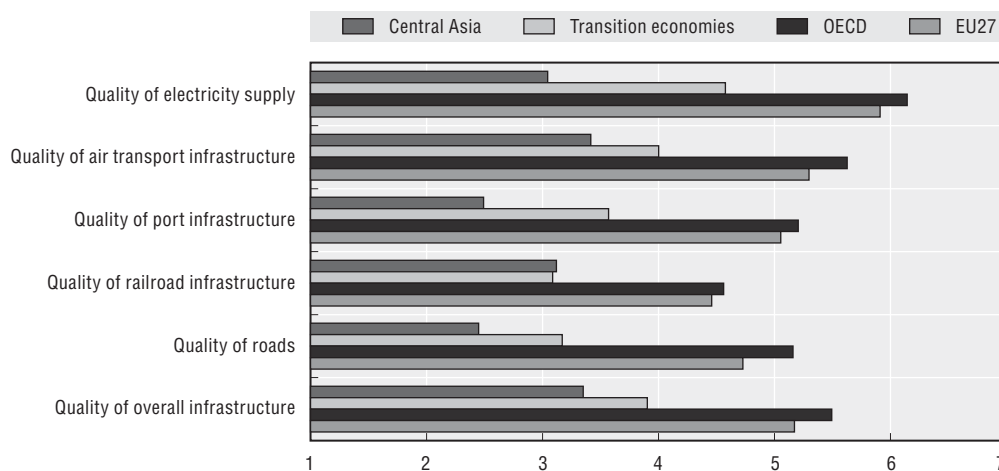
Source: Global Competitiveness Report 2010-11 (World Economic Forum).

size. Raising competitiveness will require economies from the region to address these numerous challenges, as follows:

- Improving **infrastructure** will necessitate increasing electricity production in the region as well as continued development of transport infrastructure across all modes. Figure 2.4 shows the performance of the region on selected infrastructure indicators from the GCI.

Figure 2.3. **Central Asia's performance across 12 pillars of the GCI**

Source: Global Competitiveness Report 2010-11 (World Economic Forum).

Figure 2.4. **Performance of CA on selected infrastructure indicators from the GCI**

Source: Global Competitiveness Report 2010-11 (World Economic Forum).

The most pressing priority appears to be upgrading of road quality, which is assessed very poorly by business leaders. Ground transportation and connectivity by air are the more crucial for the region as it has only limited access to global maritime routes. A number of infrastructure projects are currently under way in the region and the move towards more private sector involvement through public-private partnerships will certainly contribute to improving infrastructure quality.

- Unlike other economies at a similar level of development, most economies in the region boast high participation in **education** at the primary, secondary and tertiary levels, as captured by the measure of quantity of education in the GCI (see Figure 2.5). However, for

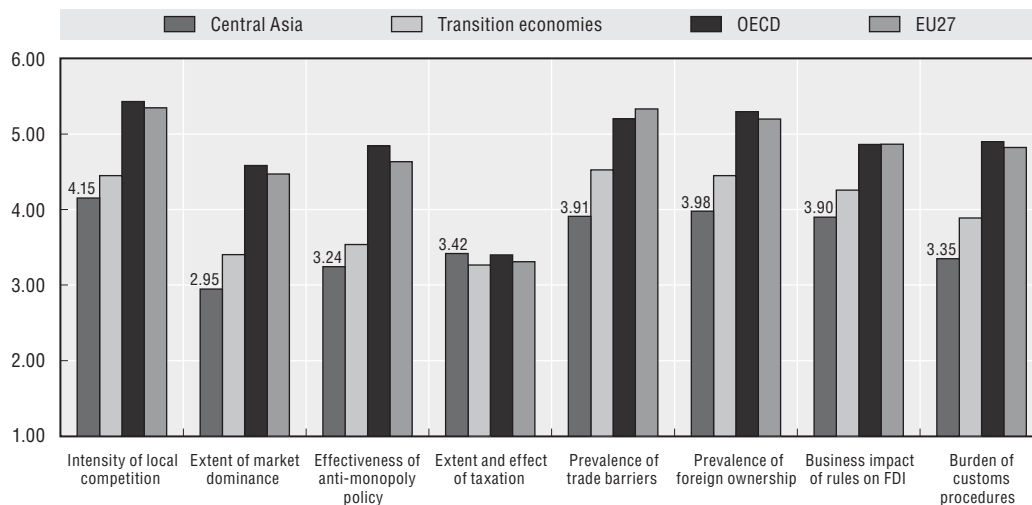
Figure 2.5. **Performance of CA on the Higher education and training pillar of the GCI**

Source: Global Competitiveness Report 2010-11 (World Economic Forum).

the high participation to translate into economic growth, countries will have to raise the quality of education to gear it more strongly towards the needs of the business community. When asked to evaluate to what extent the educational system meets the needs of a competitive economy, Central Asian business leaders assessed the situation at 2.9 on a scale of 1 to 7.

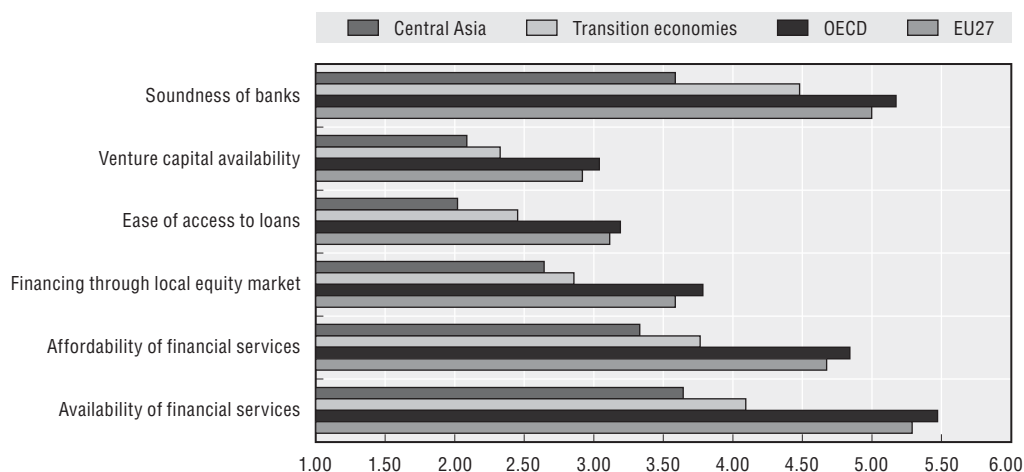
- The low **efficiency of markets for goods and services** in Central Asian economies has a significant bearing on productivity levels in the region. The economies inherited from the Soviet Union highly concentrated industrial structures that were geared towards heavy industry. Effective competition policy and a business environment that is supportive of entrepreneurship, entry of new business, trade and foreign direct investment (FDI) is key to reaping the benefits of more intense competition in the region. As shown in Figure 2.6, regulations in the region tend to deter FDI and trade is hampered by trade barriers and inefficient customs procedures. Moreover, room for improvement remains with respect to anti-monopoly policies across the region.
- The recent financial crisis revealed a number of weaknesses in the banking systems in the region and brought **financial markets** under stress. Many governments intervened to stabilise the banking systems and prevent a collapse. However, further reforms will be important to facilitate access to finance for the business community. As the selected GCI indicators in Figure 2.7 show, access to loans is significantly constrained in the region (2.02 on a scale of 1 to 7) and became more difficult in the course of the past five years. Equally, banks are assessed as being less sound and financing through the local equity market or venture capital is more difficult to access than five years ago.

Figure 2.6. **Performance of CA on selected indicators from the Goods markets efficiency pillar of GCI**



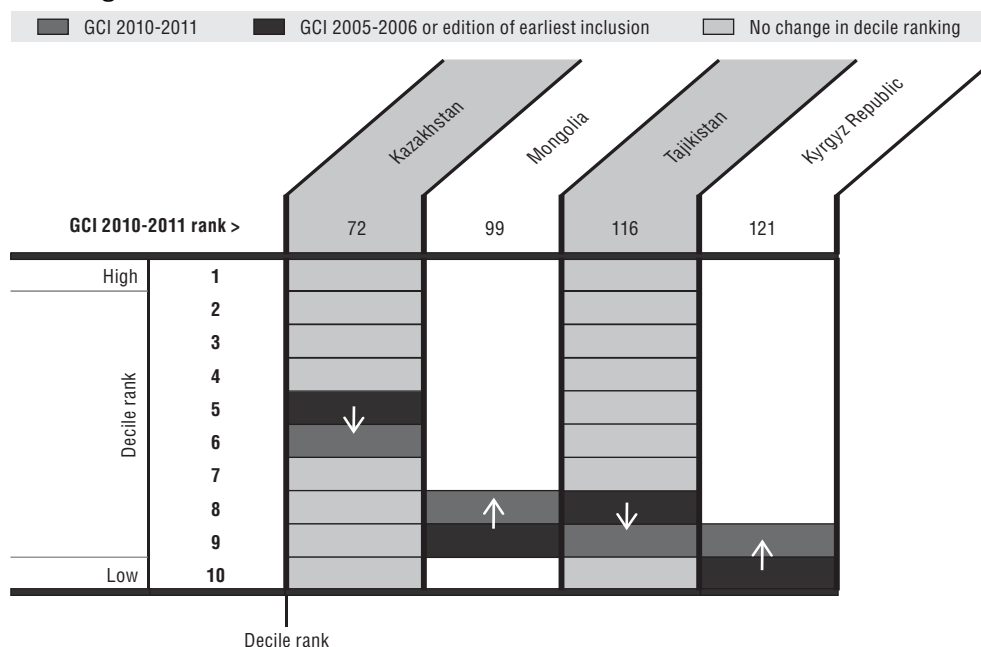
Source: Global Competitiveness Report 2010-11 (World Economic Forum).

Figure 2.7. **Performance of CA on selected indicators from the financial markets development pillar between 2005 and 2010**



Source: Global Competitiveness Report 2010-11 and Global Competitiveness Report 2005-06 (World Economic Forum).

Since their inclusion into the GCI in 2005, all four economies have made efforts to improve competitiveness and it is worth examining whether these efforts translated into improvements in rankings. An improvement would mean that countries have reformed more quickly than other economies covered in the GCI sample. Figure 2.8 provides an indication how the decile ranking for the four economies has evolved over time.⁴ While Kazakhstan and Tajikistan are less competitive in 2010 than in 2005 (moving from the 5th to the 6th and 8th to the 9th decile of the sample, respectively), Mongolia and the Kyrgyz Republic have improved their competitiveness by moving up one decile.

Figure 2.8. **Performance of CA economies between 2005 and 2010**

Source: Global Competitiveness Report 2010-11 and Global Competitiveness Report 2005-06 (World Economic Forum).

Box 2.1. **Developing a regional approach to competitiveness in Central Asia: Lessons from the European Union's Lisbon agenda for economic reform**

To position themselves firmly as a global force in international relations, the economies in the region need to develop a well-co-ordinated strategy to promote themselves and develop a unique competitive advantage. Creation of competitiveness councils would use competitiveness as a common denominator to enhance co-operation between the public sector, business and civil society, and promote it as an attractive strategy to focus national economic development efforts. The council, which should include the key public sector actors, but also business representation, could become extremely useful in facilitating public-private dialogue on such issues as links between national competitiveness, productivity and innovation gains, economic growth and prosperity.

The co-ordinating role of the Competitiveness Council could further be mirrored at the regional level by regular meetings of the national competitiveness councils to co-ordinate their outreach efforts, exchange best practices, brainstorm new strategies, etc. Such a regional approach could help to attract investors by offering them an opportunity to create a larger market for their products or a diversified and reliable supply chain. Such an approach could be useful for investors who raised concerns regarding a relatively small and unsophisticated consumer base in individual Central Asian states.

While considering these reforms, the economies in the region could learn a great deal from the European Union's (EU's) Lisbon Agenda for Economic Reform that has now been replaced with the *Europe 2020* strategy. *Europe 2020* was designed with the sole purpose of enhancing the EU's competitiveness in the globalised world. It highlights that to sustain and further enhance its competitiveness under global market conditions, the EU should be focused on smart, sustainable and inclusive growth. According to the strategy, smart growth can be achieved through "fostering knowledge, innovation, education and digital society", while to make it sustainable, EU countries need to become more resource-efficient. At the same time there is a tribute to the European social model that stresses

Box 2.1. Developing a regional approach to competitiveness in Central Asia: Lessons from the European Union's Lisbon agenda for economic reform (cont.)

inclusiveness through “raising participation in the labour market, the acquisition of skills and the fight against poverty”.¹

While using *Europe 2020* as an example of national and regional competitiveness strategy, Central Asian policy makers should be aware of significant structural differences between the EU and regional economies.

The World Economic Forum's annual Global Competitiveness Report (GCR) assigns each economy to one of three stages of development. Economies in the first stage of development are *factor-driven* and their competitive advantage is based on either their human capital or natural resources. The second phase is *efficiency-driven*. To thrive in this stage, countries need to ensure advances in production processes and product quality among other things. The final stage of development is *innovation-driven*. At this stage, to stay competitive countries need to show sustained productivity and innovation gains, as only these two components can ensure that they can and will stay competitive.

Since the economies of Central Asia are at a different stage of development than the EU27, just copying elements of *Europe 2020* will not be most productive. New national and regional strategies should be designed to reflect regional realities such as stage of development, differences between the economies in the region and their individual and collective strengths and weaknesses.

Indeed, some steps in this direction have already been taken. In the Concluding Statement adopted at the Regional Conference on “Investment and Competitiveness in Central Asia” (organised by the OECD in co-operation with the OSCE) in November 2008, the delegates of some of the Central Asian economies sought ways to create favourable conditions for increased domestic and foreign investment by means of enhancing competitiveness and private sector development. This could be achieved by designing and implementing policies aimed at improving business climate and encouraging regional co-operation for the overall benefit of economic development, security and stability.²

Higher competitiveness will enable economies to grow over the medium-to-longer term and is defined by the World Economic Forum as the set of institutions, policies and factors that determine the level of productivity of a country. Central Asian economies need sustained efforts for continuous improvements in all areas, starting from reliable public institutions to macroeconomic stability to infrastructure, education, healthcare, etc. Indeed, there has already been discussion on incorporating competitiveness thinking into national strategic planning.

Sustained and credible efforts should be made to make competitiveness a national as well as a regional strategy for economic development. Creation of national and regional competitiveness councils would make co-ordination of the national and regional economic development policies in Central Asia much easier. In their efforts economies in the region could use examples from Croatia, Saudi Arabia, USA, Ireland and the proposed EU ministerial council on competitiveness. The councils could devise a clear roadmap for further regional economic integration that would lead to development of the local consumption base, discover synergies and attract a larger share of global FDI flows. They could facilitate advancements in various aspects that could affect competitiveness such as institutional reforms, development of a sophisticated consumer base, improving human capital and monitoring risks and opportunities such as exchange rates and the external geopolitical and geo-economic environment. Properly implemented and supported at all levels of public administration, competitiveness councils could make the region more attractive to international business and assist governments in diversifying their economies.

1. Europe 2020: Commission proposes new economic strategy in Europe. Brussels, 3 March 2010 <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/225>.

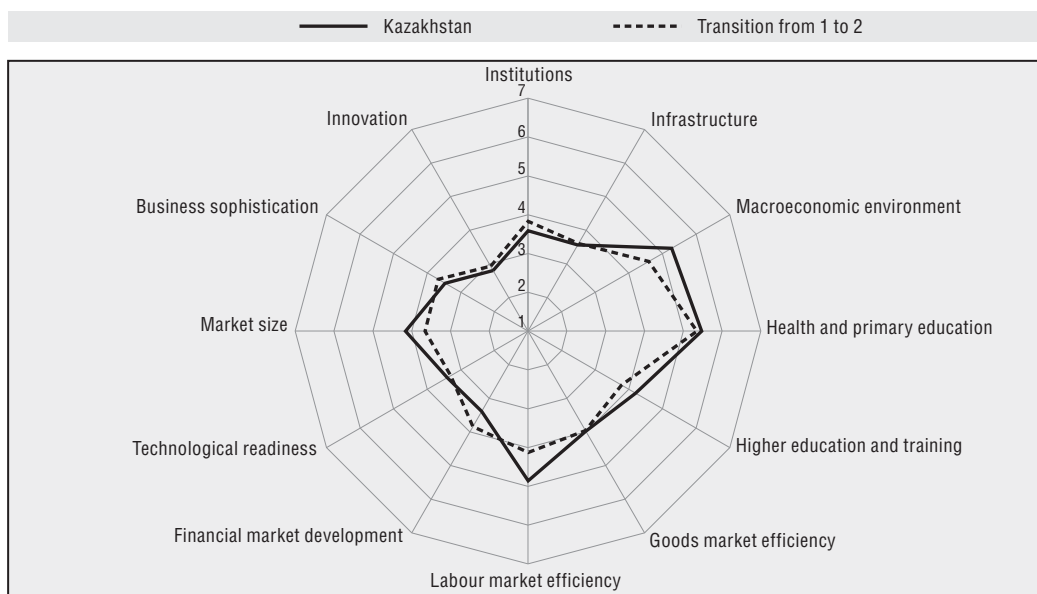
2. www.osce.org/documents/eea/2008/11/34754_en.pdf.

Country-level competitiveness

Kazakhstan: Need for more efficient institutions and financial markets

In the 2010-11 edition of the GCI, Kazakhstan occupies the 72nd position, attributable to a number of strengths as well as numerous challenges. According to the GCI methodology, Kazakhstan is in transition from the factor-driven to the efficiency-driven stage of development. This classification, which is driven by the country's GDP as well as by its economy's strong dependence on primary resources, indicates that its competitiveness will be raised most effectively through improvements in the areas of basic requirements and efficiency enhancers. Figure 2.9 shows the country's performance across the 12 pillars of competitiveness in comparison with the group of countries at the same stage of development. Compared with its peers, Kazakhstan's competitiveness environment is characterised by efficient labour markets, where it ranks 21st out of 139 economies, a stable macroeconomic environment (26th) and a reasonable market size (55th). Additionally, the country is slightly above average with respect to higher education and training (65th). Yet in order to take advantage of these competitive advantages, a number of challenges will need to be tackled. In particular, the institutional framework lacks efficiency and transparency (91st) and financial markets are underdeveloped (129th).

Figure 2.9. **Kazakhstan's performance in comparison with its peer group**



Source: Global Competitiveness Report 2010-11 (World Economic Forum).

Strengths in macroeconomic environment, labour markets and education

Not surprisingly given the country's wealth in natural resources, the macroeconomic environment, ranked 26th in international comparison and outperforming both the EU average as well as the CIS average by a significant margin, is one of Kazakhstan's competitive strengths. Although the country was severely affected by the financial crisis, it maintained a fairly low budget deficit (2.0% of GDP), solid national savings (28.9% of GDP), and low government debt (8.5% of GDP). Recent years have also seen a lowering of the inflation rate to single-digit levels (7.3% year on year in 2009). This is an area of strength supporting the country's competitiveness.

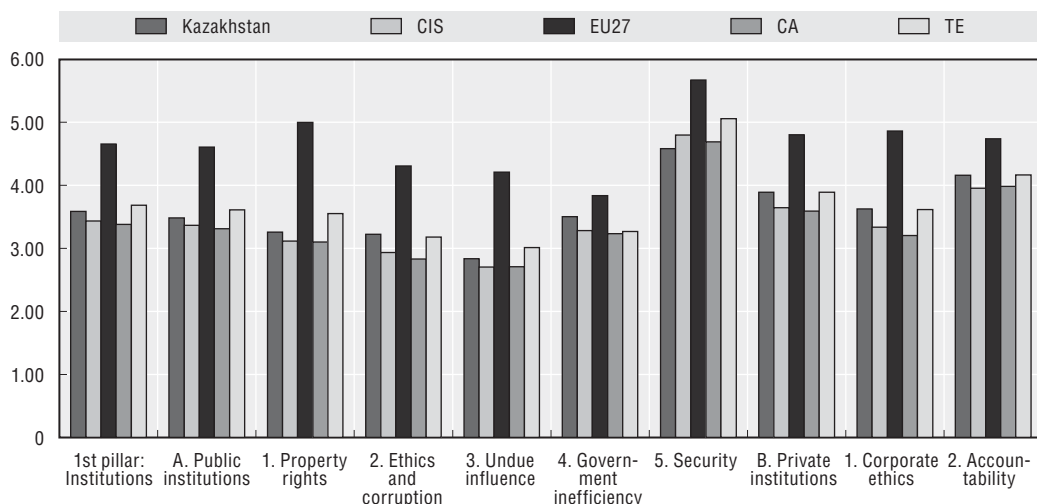
The high level of labour market efficiency is among the key strengths of Kazakhstan's competitive environment and ranked 21st. Flexibly determined wages (30th) and flexible regulations with respect to employing workers (29th) as well as low redundancy costs (16th), enable the business sector to optimise the employment of available human resources, depending on the evolving business needs. This bodes well for Kazakhstan's efforts to diversify the economy, which will necessitate a certain shift of labour towards newly emerging sectors. Furthermore, the country uses talent relatively efficiently (41st), pay is strongly tied to productivity (19th) and women participate actively in the labour market (22nd). However, management positions are often filled based on personal linkages rather than formal qualifications (118th), which does not sufficiently capitalise on the country's available talent and fuels brain drain (80th), in particular among the educated.

In terms of education, Kazakhstan's performance shows a mixed picture. The country provides almost universal access to primary education; however, the quality of primary education is assessed as sub-standard. On a scale of 1 to 7, Kazakhstan companies place it at a low 3.67 out of 7. On the other hand, higher education and training receives a somewhat better assessment, ranked 65th out of 139 economies. Access to higher education is easier in Kazakhstan than in many other economies of the Commonwealth of Independent States (CIS) and economies in other regions at the same level of development. Furthermore, schools in Kazakhstan provide better quality education than in other CIS countries, as assessed by the business community. However, the assessment of specific curricula is more uneven. While maths and science education is considered relatively good (ranked 73rd), the quality of management schools trails European standards considerably in the 104th position. Further investment in education will be crucial for diversification efforts, as the inadequately educated labour force is cited by business leaders as the second most important impediment to doing business in the country (see Figure 2.11 below).

Numerous challenges need to be addressed, such as institutions and financial market development

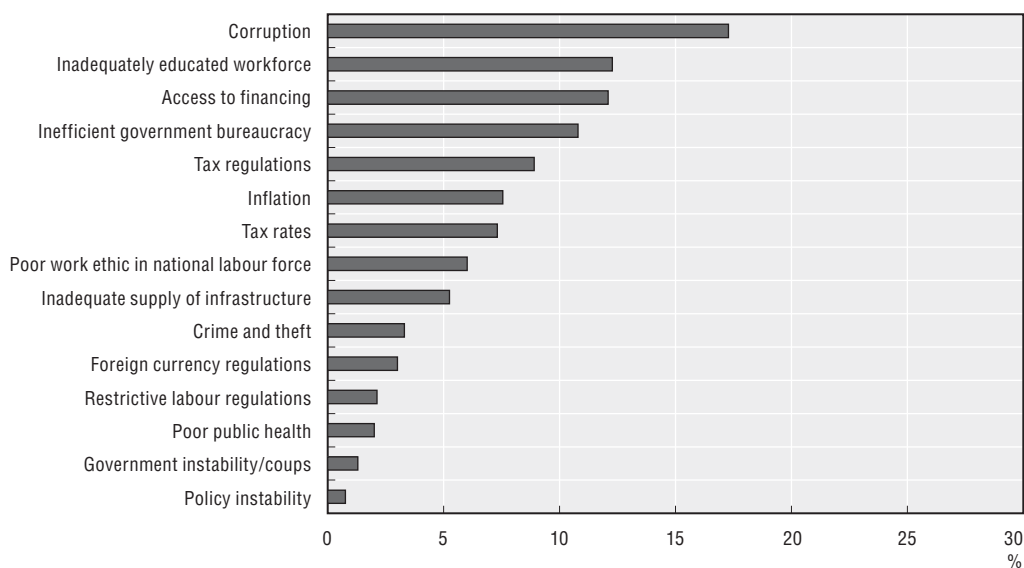
Against these positive elements stand numerous challenges to the country's competitiveness. As for many transition economies, adapting the institutional framework to the needs of a market economy still remains an important challenge for Kazakhstan. The country ranks 91st out of 139 economies covered in the GCI sample in this category with poor positioning on both components, public institutions (91st) and private institutions (88th). As shown in Figure 2.10, Kazakhstan trails the EU by a wide margin with respect to property rights, ethics and corruption and undue influence. With a rank of 110 and a score of 3.26 (on a scale of 1 to 7), property rights are assessed as particularly lacking by business leaders who raise concerns about both overall property rights (110th) and the protection of intellectual property (98th). This shortcoming is common across the CIS region, with Kazakhstan outperforming the regional average by only a small margin. As the comparison with the EU members underlines, well-defined and enforced property rights are a key component of most advanced economies, providing investors with protection from expropriation, and encouraging owners to maintain and upgrade their property. Effective protection of property rights also requires a well-functioning judicial system, which, according to the survey results, is too frequently subject to undue influence by actors from the public or private sectors. Kazakhstan ranks a low 109th on this measure. Challenges related to public institutions are considered a key impediment to economic development in the country by the business community. When asked to assess the most

Figure 2.10. **Kazakhstan's performance on the Institutions pillar compared with relevant country groupings**



Source: Global Competitiveness Report 2010-11 (World Economic Forum).

Figure 2.11. **The most problematic factors in doing business in Kazakhstan**



Source: Global Competitiveness Report 2010-11 (World Economic Forum).

problematic factors for doing business, the country's business leaders rated corruption as the single most important impediment (see Figure 2.11), whereas inefficient bureaucracy came in 4th with over 10% of responses.

The index captures the quality of corporate governance under private institutions, where Kazakhstan is ranked 88th. While investor's rights are relatively well-protected (45th), minority shareholders' rights and auditing and reporting standards should be strengthened (116th), particularly given that no improvement has taken place in this category, which is so important for encouraging investment in the country.

The assessment of Kazakhstan's overall physical infrastructure, ranked 81st overall, is uneven across the different types of infrastructure and the modes of transport. While

railroads are considered to be well- developed and efficient by international standards (32nd), businesses view road infrastructure as needing further investment and upgrading (124th). The government's most recent efforts to upgrade road and rail infrastructure will certainly contribute to improving this result over time.⁵ With regard to telephony infrastructure, mobile and fixed line connectivity has improved considerably over recent years and is now at somewhat reasonable levels, although there is still room for growth (66th and 54th).

Goods markets efficiency is a key component for former transition economies, as it captures the level of healthy competition in the country, and the extent to which products and services are traded efficiently. For historical reasons, goods markets tend to be inefficient in CIS countries. Kazakhstan's performance at 86th stands out positively on this indicator in comparison to its peers, as shown by the CIS average (score 3.98 against 3.77). Executives are most concerned about the ineffectiveness of anti-monopoly policy in the country (113th out of 139 and 3.37 out of 7) and consider domestic competition to be weak (109th). They are equally concerned about some aspects of openness to competition from abroad. Despite fairly low tariffs (50th), the business community considers trade barriers to be widely prevalent (116th) and customs procedures to be burdensome (107th), which points to an important presence of non-tariff trade barriers in the country.

Since Kazakhstan's inclusion into the GCR in 2005, the assessment of financial market development has declined considerably in international comparison, from 58th in the 2005-06 edition to 117th in 2010-11 (see Table 2.3). This decline is likely linked to the difficulties experienced by the Kazakhstan banking sector over the past few years.⁶ The stability of the banking system is ranked 131st of 139 economies and securities exchanges are considered to be insufficiently regulated (119th). Although the government has addressed some of the difficulties of Kazakhstan banks by injecting capital and supporting key sectors of the economy, the quality of assets remains a concern.⁷ Overall, inefficiencies in the financial sector appear to be an important impediment to business growth in the country, as it does not fulfil the financing needs of enterprises efficiently. Financial services are neither sufficiently available (93rd) nor affordable (102nd) and financing through loans (121st), the equity market (106th) or venture capital (82nd) is difficult to access.

Table 2.3. **Financial markets assessment in Kazakhstan, 2005-10**

	GCI 2010-11		GCI 2005-06	
	Rank (out of 139)	Score (1 to 7)	Rank (out of 114)	Score (1 to 7)
8th pillar: Financial market development	117	3.39	58	4.13
A. Efficiency	107	3.12	64	3.65
Availability of financial services	93	4.14	n/a	n.a.
Affordability of financial services	102	3.60	n/a	n.a.
Financing through local equity market	106	2.75	78	4.15
Ease of access to loans	121	2.09	60	3.20
Venture capital availability	82	2.39	46	3
Restriction on capital flows	106	3.73	n/a	n.a.
B. Trustworthiness and confidence	123	3.65	59	4.60
Soundness of banks	131	3.68	63	5.21
Regulation of securities exchanges	119	3.28	n/a	n.a.
Legal rights index	75	5.00	35	5.00

Source: Global Competitiveness Report 2010-11 (World Economic Forum).

Kazakhstan's technological readiness also requires improvement, ranked 82nd. While the use of ICTs is fairly common in the country (61st), particularly of the Internet, mobile telephony and fixed telephony businesses only slowly adopt technologies from abroad (105th). In this context, more targeted attraction of FDI flows that are linked to technology transfer would significantly contribute to raising productivity. Presently, the country ranks 108th on the related indicator and efforts appear to have slowed since 2005, when the country placed 87th.

The last two pillars – business sophistication and innovation – are less important for Kazakhstan's competitiveness given the country's stage of development. Kazakhstan ranks relatively poorly in both categories, which will become more important if the country diversifies further and moves up the development ladder. So, although these areas are currently not a priority, they should not be neglected in the longer term. Creating an environment that more strongly supports the development of industries higher on the value chain, with strong supply chains within the country and sophisticated marketing and distribution techniques, would be a step in the right direction. More concretely, the country should continue to upgrade scientific research institutions (112th) and strengthen collaboration between universities and industry (111th).

In historical perspective, the country loses ground

Overall, since Kazakhstan was first included in the Global Competitiveness Report in 2005, the country has fallen from 51st out of 114 economies to 72nd out of 139 in 2010. This corresponds to a move from the 5th decile to the 6th decile. Over recent years, the country has seen improvements in a number of areas, such as health and primary education as well as labour market efficiency, but these were not sufficient to outweigh the deterioration in financial markets, goods markets efficiency, innovation and business sophistication. To enhance the country's competitiveness, efforts will need to be stepped up, building on strengths and addressing the challenges identified. Economic reforms would enable Kazakhstan to take better advantage of the incipient recovery of the global economy and would support the country's diversification efforts. Presently, rising commodity prices could provide a window of opportunity for the country to implement a more ambitious reform programme.

The Kyrgyz Republic: Need to improve the basic infrastructure, institutions and educational system

Over the past few years, political instability and social unrest have shaken the Kyrgyz Republic, which was already one of the poorest Central Asian states. With a per capita GDP of USD 851 (in 2009), the country is placed in the first, factor-driven stage of development. As such, it should focus on strengthening the basic requirements of the GCI, which include institutions, infrastructure, macroeconomic environment and health and primary education, as well as paying sufficient attention to the efficiency enhancers. Placed 121st, the country is currently positioned in the 9th decile of the GCI sample. Since its inclusion in 2005, it has moved up from the 10th decile by improving its score in all pillars except those measuring business sophistication and innovation, which are not yet very important for the country's competitiveness.

Pockets of strengths despite many challenges

Overall, the country's performance is characterised by numerous challenges across virtually all categories of the index. Nevertheless a few encouraging pockets of progress are present and spread across different factors captured by the index. Table 2.4 shows the 15 indicators in which the country performs best among the 113 variables captured by the GCI. The Kyrgyz Republic achieves very good results with respect to some aspects of goods markets efficiency and the institutional environment, as measured by the World Bank's Doing Business report. It places 1st with respect to the Legal rights index, 6th with respect to number of procedures to start a business and 12th for the strength of investor protection.

Table 2.4. Best and weakest-performing indicators for the Kyrgyz Republic

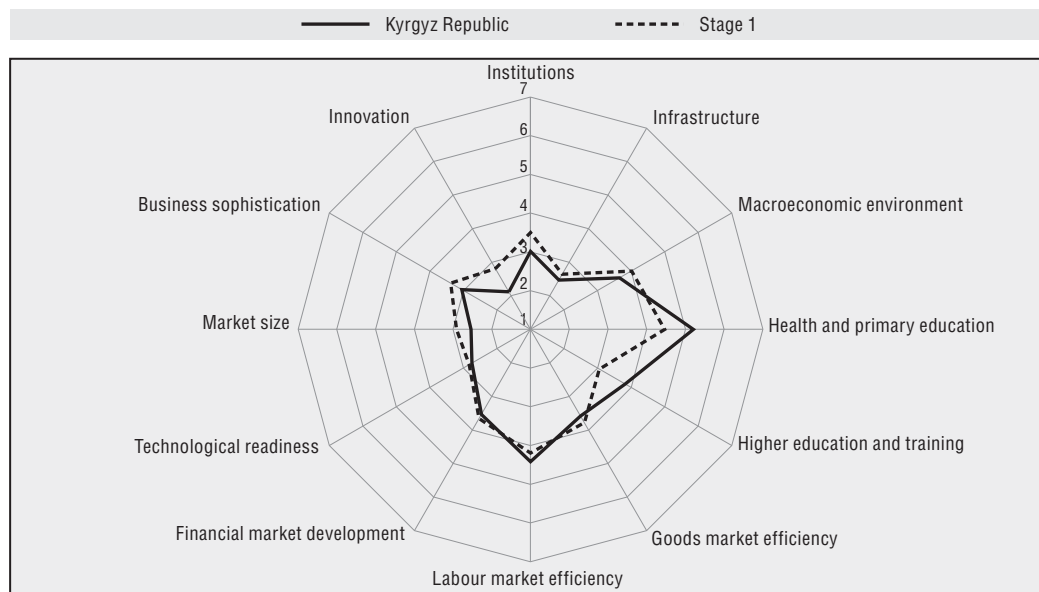
The 15 best indicators:	Rank/139	Score (1 to 7)	15 weakest indicators:	Rank/139	Score (1 to 7)
Legal rights index	1	10.00	Local supplier quantity	133	3.71
Number of procedures required to start a business	6	3	Control of international distribution	133	2.97
Imports as a percentage of GDP	9	80.60	Quality of scientific research institutions	134	2.18
Imports as a percentage of GDP	9	80.60	Ethical behaviour of firms	135	2.87
Strength of investor protection	12	7.70	Business impact of rules on FDI	135	3.20
Flexibility of wage determination	19	5.73	Availability of latest technologies	135	3.54
HIV prevalence	22	0.10	Protection of minority shareholders' interests	136	2.95
Hiring and firing practices	25	4.56	Availability of scientists and engineers	136	2.77
Redundancy costs	29	17.00	Firm-level technology absorption	137	3.55
Exports as a percentage of GDP	31	56.20	Company spending on R&D	138	2.00
Pay and productivity	32	4.42	Government procurement of advanced technology products	138	2.38
Time required to start a business	39	11	Quality of port infrastructure	139	1.40
Rigidity of employment	42	18.00	Brain drain	139	1.97
Tertiary education enrolment rate	44	51.96	FDI and technology transfer	139	3.10
Internet users	56	40.03	University-industry collaboration in R&D	139	2.18

Source: *Global Competitiveness Report 2010-11* (World Economic Forum).

Another positive cluster relates to the labour market efficiency pillar, which is the Kyrgyz Republic's most important competitive strength in international comparison (ranked 65th). Flexible hiring and firing procedures (25th), low redundancy costs (29th), and wages that are flexibly determined (19th) all contribute to an efficient and flexible labour market. In addition, the country benefits from a close link between pay and productivity (32nd), although the brain drain remains an important problem, indeed assessed as the worst out of all economies included in the index (139th).

In comparison with other economies at the same stage of development, the Kyrgyz Republic performs better than many of its peers with respect to health and primary education (101st) and higher education and training (ranked 86th) as shown in Figure 2.12. This relative competitive advantage with respect to its human capital stems mainly from relatively low HIV prevalence and fairly high enrolment in secondary and tertiary education, where it ranks 75th and 44th, respectively. In particular tertiary enrolment compares favourably with other CIS countries. However, improving the quality of education will be necessary if the country is to build on this important competitive advantage. Curricula, in particular those related to management training, are ill-adapted to the needs of the business community, and the country ranks 105th for the overall quality

Figure 2.12. **GCI results for the Kyrgyz Republic in comparison with countries at the same stage of development**



Source: Global Competitiveness Report 2010-11 (World Economic Forum).

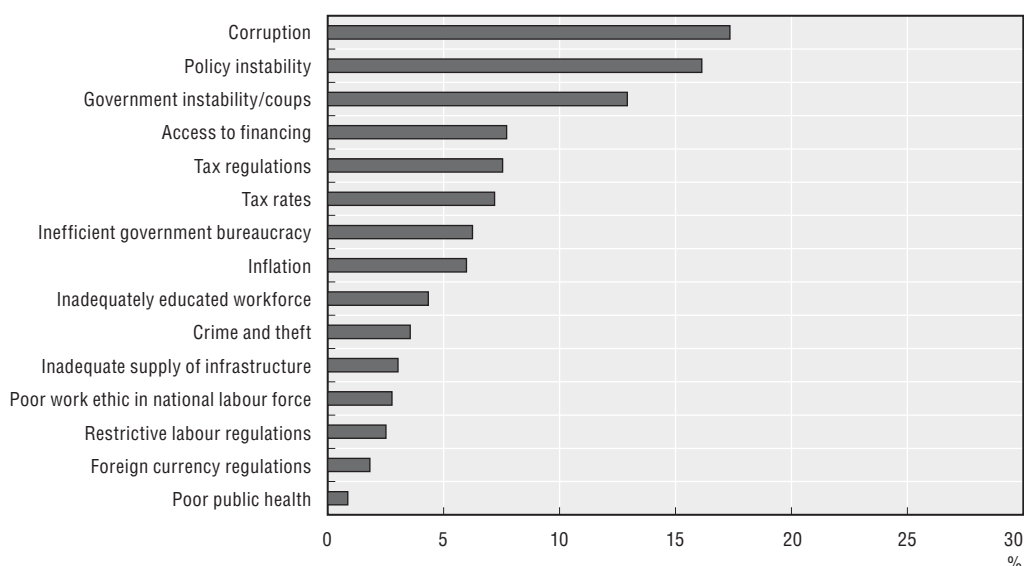
of education. In addition, on-the-job training is not sufficiently developed to compensate for shortcomings in the formal educational system (124th).

Significant room for improvement across most areas of competitiveness

Among the indicators on which the Kyrgyz Republic performs worst are a number of indicators related to business sophistication and innovation, such as university-industry collaboration in R&D (139th), the quality of scientific research institutions (134th), and company spending on R&D (138th). Although these elements may not be a priority for the Kyrgyz Republic at this point in time, the country should explore ways of enhancing technology absorption by firms (137th) and the availability of latest technologies to the business sector (135th). Adopting technologies from abroad would enable businesses from the Kyrgyz Republic to reap significant productivity gains within a short period of time.

The single most important challenge for the Kyrgyz Republic, however, will be the overhaul of the institutional framework. The country is among the poorest performers in the entire sample on the Institutions pillar, ranked 131st and underperforming with respect to both public institutions and private institutions. Reining in corruption, ranked by the business community as the most important impediment to doing business (see Figure 2.13), protecting property rights, establishing a judiciary that is free of undue influence and able to mete out justice fairly will all be crucial to the country's future development. Given the country's recent history of unrest, in the view of the business sector (see Figure 2.13), political as well as policy stability should remain key priorities for the government, so as to provide for a more predictable business environment.

The continued political and social instability in early 2010 had a severe impact on the country's economy and has further destabilised the already fragile macroeconomic environment (ranked 119th). After having deteriorated in 2009 (to 3.85% of GDP) the fiscal deficit is expected to rise to 8.1% of GDP in 2010, according to the IMF, due to increased

Figure 2.13. **Most problematic factors for doing business in the Kyrgyz Republic**

Source: Global Competitiveness Report 2010-11 (World Economic Forum).

spending on resettlement and rehabilitation.⁸ This is likely to further raise the country's already relatively high public debt (presently 54.8% of GDP). However, some positive developments have also been registered between 2008 and 2009, as inflation came down to single digit levels and the national savings rate improved.

Another area with significant room for improvement is infrastructure, which is insufficiently developed across all types and modes of transportation. With the exception of railroads (60th), the quality of transport infrastructure is poor across all modes, with access to ports rated as the most difficult in the entire sample. Roads assessed at 118th and air transport infrastructure at 132nd. To address this issue, the government has envisaged a greater role for the private sector in its 2009-11 development strategy, which if implemented properly could yield important benefits. As regards other types of infrastructure, connectivity via fixed telephone networks is insufficient (ranked 97th) but is somewhat compensated for by fairly good mobile penetration rates of 81.8 connections per 100 inhabitants.⁹ The country has also experienced electricity shortages during recent winter seasons as reflected in the low 126th ranking for the quality of the electricity supply. Construction of new power plants to expand electricity production in order to cover the demand for power across the seasons is underway.

As in all other economies in the region, the market for goods and services suffers from inefficiencies. Although market entry has been greatly facilitated by reducing the administrative burden related to setting up a business, markets remain overly dominated by large businesses (126th) and this, together with a fairly ineffective anti-monopoly policy, does not promote competition. In addition, the country remains sheltered from foreign trade and investment flows. Average weighted import tariffs amount to 11%, which corresponds to 105th position in the ranking, customs procedures are highly burdensome (128th) and rules on FDI tend to discourage foreign investment instead of promoting it. As a result, the prevalence of foreign ownership is low (127th).¹⁰

Last but not least, as mentioned above, major productivity gains could be achieved by raising technological readiness where the country currently ranks 119th. While innovation

(139th) and business sophistication (130th) are presently not crucial to the country's competitiveness, adoption of technologies from abroad could significantly raise productivity, move the economic structure higher up the value chain and thereby support the country's diversification process away from primary products. Currently, the Kyrgyz Republic does not use FDI as a means of technology transfer (139th) and firms are not aggressive at absorbing technologies from abroad (137th). Given the well-educated labour force, there appears to be some potential for increasing productivity that has remained untapped. In particular, the country is fairly familiar with the latest technologies, as reflected in the fairly high number of Internet users (56th).

Some timid progress has been achieved in the Kyrgyz Republic with respect to labour market efficiency and education; the agenda for the future remains very challenging. While stabilising the country politically is without doubt an important priority, economic reforms should tackle the different shortcomings of institutions and stabilise the macroeconomic environment. This, alongside other competitiveness enhancing measures such as investment in infrastructure and raising the efficiency of goods markets, would lay a solid base for faster growth.

Mongolia: Potential for better institutions, infrastructure and financial markets

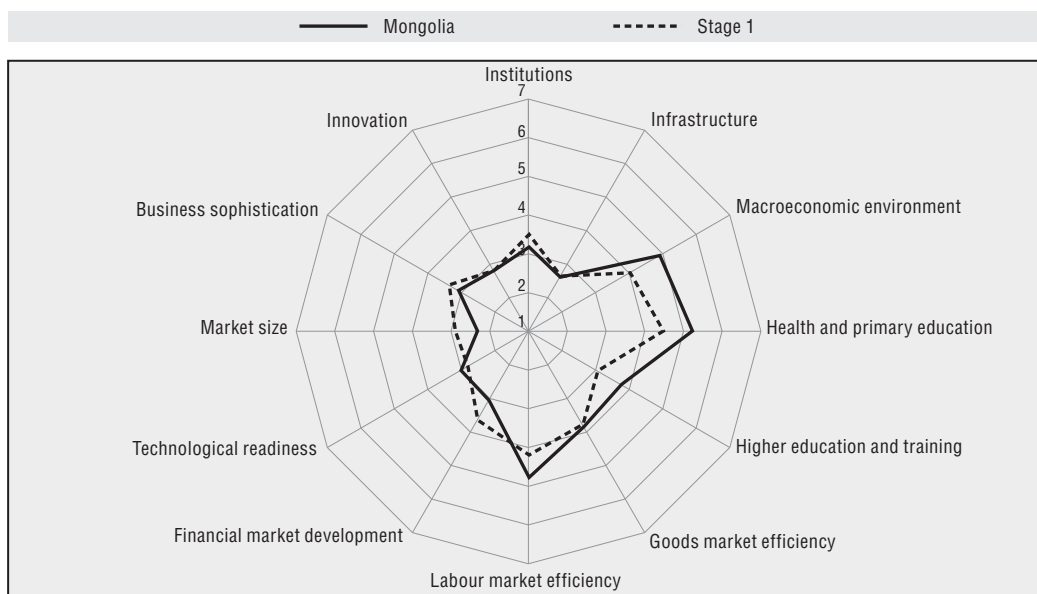
Mongolia ranks 99th in the 2010-11 edition of the GCI, moving up by 18 places compared to the previous edition. Since its inclusion in 2005, the country has moved up from the 9th into the 8th decile of the sample. With GDP per capita of USD 1 560 (in 2009) Mongolia is placed in the first, factor-driven stage of development, which implies relatively higher importance of institutions, infrastructure, macroeconomic environment and health and primary education, as well as those factors driving efficiency gains for the country's competitiveness.

Mongolia's competitiveness reflects notable strengths with respect to the macroeconomic environment and flexible and efficient labour markets, as well as a fairly well-educated labour force, but it is burdened by numerous weaknesses. The most important challenges are the country's inadequate institutional framework, poor quality infrastructure, underdeveloped financial markets and a combined domestic and export market size that does not allow for economies of scale (see Figure 2.15).

Macroeconomic stability and efficient labour markets support Mongolia's competitiveness

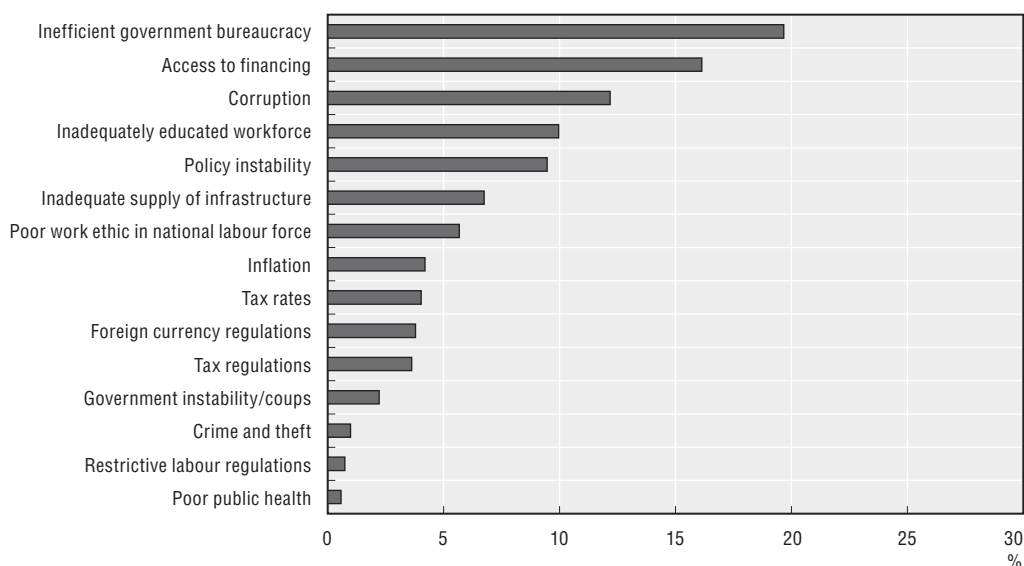
Mongolia was hit hard by the global economic crisis when demand and prices for the country's main export good, copper, fell sharply in 2009. Yet despite this significant economic shock, Mongolia managed to stabilise its macroeconomic environment over this time period and to move up to the 49th position in the GCI's macroeconomic environment pillar (from 108th). Taking advantage of IMF support, the country contained the budget deficit to 5.4% of GDP. For 2010 it is expected to come down to 2% of GDP. A fiscal responsibility law was passed by parliament to set the base for maintaining such discipline in the future. The sharp decline in inflation between 2008 and 2009 (from 26.8% to single digit levels) has further contributed to stabilising the macroeconomic environment. During the same time period national savings increased from 41.7 to 46.3% of GDP and government debt as share of GDP came down from over 33 to 26.8%. According to the IMF, the country has reached an appropriate level of macroeconomic stability and is set to benefit from its wealth in natural resources over the coming years.¹¹ Nevertheless, the

Figure 2.14. **GCI results for Mongolia in comparison with countries at the same stage of development**



Source: Global Competitiveness Report 010-11 (World Economic Forum).

Figure 2.15. **Most problematic factors for doing business in Mongolia**



Source: Global Competitiveness Report 010-11 (World Economic Forum).

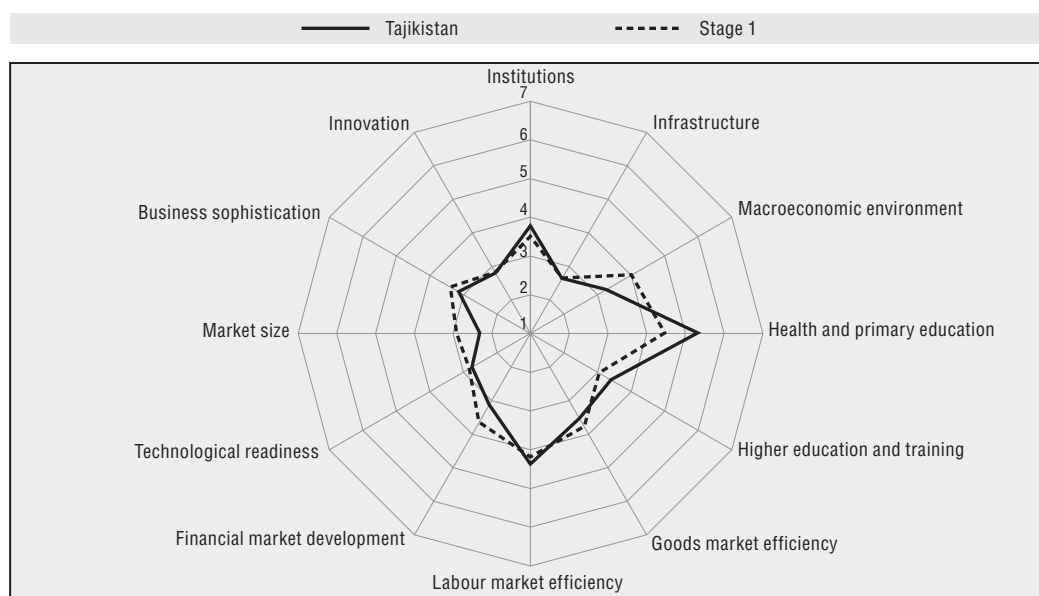
business community remains concerned about the efficiency of government spending which it judges as the least efficient in the entire sample.¹²

The second important strength of Mongolia's competitive environment is its flexible and efficient labour market. The country achieves a good 29th position in the 2010-11 edition of the GCI, moving up 10 places in comparison with the previous year. The very good 19th rank for flexibility mirrors aspects such as private sector control over wage determination (13th), employment that is not hindered by regulations (37th), flexible hiring and firing practices (23rd) and low redundancy costs (16th). Over the past two years the

country has improved most significantly in the first two indicators. Flexibility in employment is accompanied by a relatively efficient use of talent, although not all aspects in this area are positive. While pay appears to be closely related to productivity and thus ensures some meritocracy, many managerial positions are filled through personal ties as opposed to professional qualifications (125th). And while the country is among the best placed in the entire sample with respect to utilising female talent, brain drain out of the country remains a significant challenge (123rd).

Mongolia's educational system provides some pockets of strength, such as easy access to education, but struggles with challenges related to ensuring appropriate quality. Given the projected growth rates of the Mongolian economy, more active policies aiming at retaining talent in the country and upgrading the educational system will become necessary. Mongolia ranks 89th with respect to higher education and training, ahead of most other factor-driven economies, but slightly below the average of the Central Asian economies under discussion (3.78 vs. 3.8 on a scale of 1 to 7). Although significant shares of the relevant cohorts attend secondary schools and university, respectively, the quality of education is substandard – ranked 120th overall. Mongolian business leaders feel that the educational system is not preparing students for a competitive economy (136th). Furthermore, these shortcomings of the educational system are not compensated for by on-the-job training, which does not seem to be a priority for business (82nd) and for which specialised training institutions are not available in the country. It is therefore not surprising that business leaders consider the country's inadequately educated labour force as the fourth most important impediment to doing business (see Figure 2.16).

Figure 2.16. **GCI results for Tajikistan in comparison with countries at the same stage of development**



Source: Global Competitiveness Report 2010-11 (World Economic Forum).

In most economies in Central Asia, the institutional framework is inadequate as a result of the transition process and Mongolia is no exception, ranking 122nd on the related indicator. With a score of 3.17, the country remains below the average of the Central Asian

economies (3.38). Insufficiently protected property rights (115th), including those for intellectual property (130th), high levels of corruption (125th on the indicator measuring the diversion of public funds due to corruption), pervasive favouritism in decisions of government officials (134th) all contribute to this poor result. Moreover, the government does not fulfil its administrative role effectively. Regulatory bodies are riddled with red tape (113th), the judiciary is subject to undue influence (120th) and the legal framework is not effective in settling business disputes (124th). On a slightly more positive note, the level of physical security is assessed as significantly above the average of the economies under review, and is ranked 71st. In addition to public institutions, Mongolia's corporate governance is less stringently defined and enforced than in other economies of the region. Although investors are well protected (27th), minority shareholders' interests are neglected by the law (134th) and corporate boards and auditing and reporting standards do not fulfil their role effectively (128th and 117th).

The development of adequate infrastructure will be crucial for the country to benefit from its wealth of natural resources and to reduce differences between regions. Presently, according to the GCI, the development of transport, electricity and telephony infrastructure trails all other economies in Central Asia. In particular the quality of roads is substandard, assessed at 1.66 on a scale of 1 to 7, although it is somewhat compensated for by relatively better railroads (2.48 on a scale of 1 to 7, corresponding to 69th rank). Difficult access to ports for the landlocked country (112th) and an inefficient air transport infrastructure (129th) further reduce international connectivity of the economy. To date, progress in this area has been slowed down by fiscal constraints, so that public-private partnerships to develop infrastructure initiated by the government since 2009 are an important step towards upgrading infrastructure.

The financial sector in Mongolia has suffered considerably in the wake of the financial crisis, when non-performing loans started building up in 2009 following a credit boom of the previous years, requiring government intervention to support banks. These recent difficulties are reflected in the assessment of financial markets in the GCI, which deteriorated from 110th in 2008 to 129th in 2010. Stabilising the banking sector (136th) will need to be a priority for the government in order to enable the financial markets to better support the country's growth. Presently, access to finance represents the second most important bottleneck to developing private sector activity (see Figure 2.15), as financial services are not accessible due to their high cost (124th) and sheer lack of appropriate products (126th). Mongolian business leaders consider access to such a basic financing product as loans as the most difficult in the GCI sample, assessed at 1.52 on a scale of 1 to 7. Financing through other means, such as venture capital (136th) and the equity market (99th) is equally difficult. The government is working with international organisations to assess in more detail the stability of the banking system and strengthen banking supervision, which should also facilitate access to finance for the business community.¹³

According to latest GDP data estimates for 2010, Mongolia quickly emerges from recession with growth rates of 8.5%.¹⁴ The country is expected to benefit from rising commodity prices over the next few years and to reach double digit growth rates by 2013 according to the IMF. Competitiveness-enhancing reforms, such as improvements in infrastructure and upgrading institutions, would enable the country to translate this growth surge into higher productivity, thereby putting the country on a more sustainable growth path.

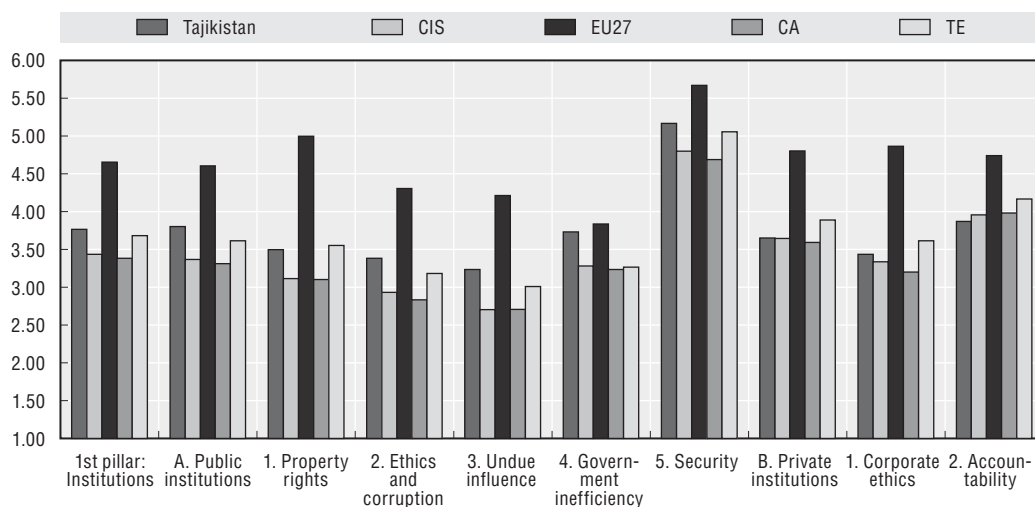
Tajikistan: Improvements needed in access to finance and infrastructure

Tajikistan ranks 116th on the Global Competitiveness Index, below the average for Central Asian economies and also below the average for the Commonwealth of Independent States. Yet the country boasts a number of competitive advantages according to the GCI. Some of these strengths concern areas that are considered a priority, given that the country falls into the factor-driven stage of development (GDP per capita was USD 767 in 2009).

The institutional framework in Tajikistan is the strongest in the region

The single most important competitive advantage of Tajikistan is the relatively higher quality of its institutional framework in comparison with other economies in the Central Asia region and with countries at the same stage of development (see Figure 2.16). Tajikistan's institutional framework is ranked 77th overall.¹⁵ As Figure 2.17 shows, the country outperforms all the comparator groups except the EU27 with respect to the overall assessment of the institutional framework as well as on most of the sub-components. Business leaders consider the protection of general and intellectual property rights in Tajikistan to be better than in the region on average and as almost as good as in the transition economies, a country grouping that includes a number of EU members. However, on a global scale, the country ranks a low 95th in this category. Tajikistan's performance is somewhat better with respect to the second category of the public institutions index, ethics and corruption, where the country ranks 66th. This ranking reflects a respectable level of public trust in politicians (42nd) however, which is somewhat counterbalanced by a fairly high incidence of irregular payments and bribes (119th) in dealings with the public administration. Tajikistan also registers levels of undue influence that are lower than in other economies in the region, in particular related to the favouritism meted out by government officials and the efficiency of government operations, where the country's assessments are close to those found in EU member states (3.73 vs. 3.84 for the EU).

Figure 2.17. **Tajikistan's results on the Institutions pillar in comparison with relevant country groupings**



Source: Global Competitiveness Report 2010-11 (World Economic Forum).

A somewhat different picture emerges when we consider the quality of private institutions, which captures corporate ethics and corporate governance standards. Tajikistan ranks 101st and 118th on the two components respectively, pointing to a number of challenges. In particular, the efficacy of corporate boards (135th) and the strength of auditing and reporting standards (124th) are poorly assessed.

An additional area of strength is Tajikistan's labour market efficiency, where it ranks 73rd. As is the case across the region, hiring and firing practices are more flexible than in many other economies (54th), wages are mainly determined by companies rather than through a central bargaining process (45th) and the link between pay and productivity is strong (17th).

Macroeconomic stability, infrastructure and access to finance remain priorities for reform

The country's low overall ranking in the GCI already points to a high number of challenges that will have to be addressed in going forward. First and foremost, the macroeconomic environment remains fragile although some progress has been made. The fairly high budget deficit (8.5% of GDP), an interest rate spread that points to inefficiencies in the financial sector (17.1% points), a low savings rate (16.1% of GDP) and what is one of the poorest country credit ratings in the sample (135th) are likely to affect productivity and future growth negatively. On most of these indicators, Tajikistan's performance is significantly below the Central Asian average.

Among the challenges that the country should address as a priority, the further development of infrastructure stands out. As in the entire region, the railroad infrastructure is relatively well-developed, but this does not compensate for inefficiencies in the other modes of transportation. Access to ports is extremely difficult (137th), and air transport infrastructure (107th) and roads (102nd) are of poor quality. The electricity supply in the country is also subject to significant shortages and interruptions (120th), while telecommunications connectivity, both through fixed and mobile telephone lines, trails the average of Central Asian economies.

Access to financing is considered by the business community in Tajikistan to be the most important obstacle to doing business in the country, accounting for about 18% of the responses. The country's financial markets are less well-developed than the region on average and occupy a low 127th position in the GCI ranking. Both efficiency as well as trustworthiness and confidence are assessed as poor, ranked 112th and 132nd, respectively. Financial services are difficult to access for the business community and when they exist, they are costly (118th on both indicators). Across the different financing means, equity financing appears to be the most difficult to attain (109th), whereas loans from banks and venture capital are more easily available (84th and 69th, respectively).

As in many other transition economies, Tajikistan is struggling to create the right competitive environment. This is reflected in its low 128th rank in terms of goods markets efficiency, which is considerably below the Central Asian average. As shown in Table 2.5, Tajikistan's challenges relate to both intensifying domestic competition and further opening the country to trade and investment. More intense domestic competition will require more effective anti-monopoly policy, as well as reducing administrative barriers to the entry of firms. Starting a business necessitates 12 different procedures and takes 25 days, as opposed to 7.25 procedures and 17.25 days in Central Asia on average. Facilitating

Table 2.5. **Tajikistan's results on the Goods markets efficiency pillar**

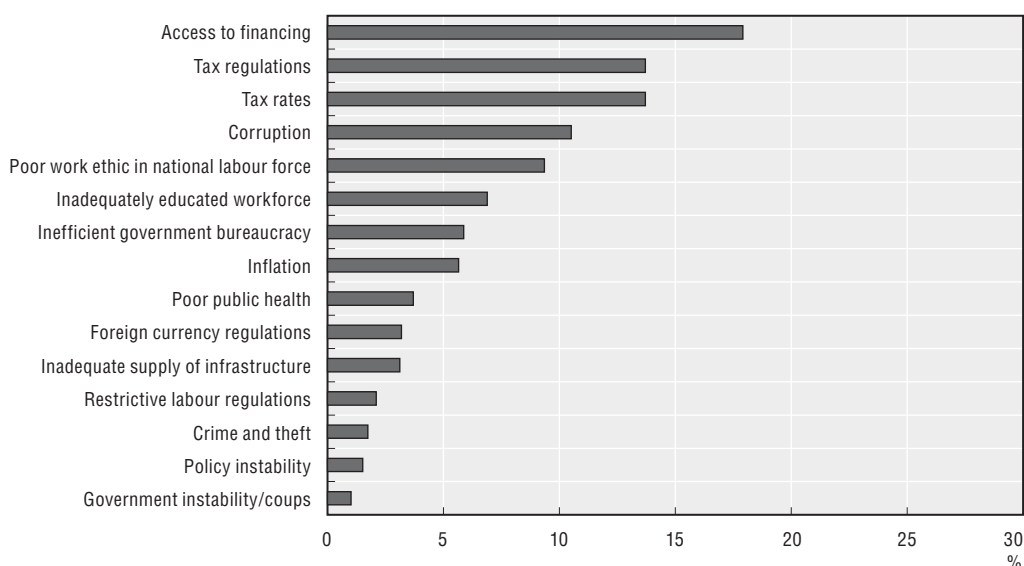
	Tajikistan		Central Asia average
	Rank	Score	
6th pillar: Goods market efficiency	128	3.54	3.74
A. Competition	122	3.63	3.86
1. <i>Domestic competition</i>	129	3.37	3.66
Intensity of local competition	123	4.01	4.15
Extent of market dominance	98	3.28	2.95
Effectiveness of anti-monopoly policy	115	3.32	3.24
Extent and effect of taxation	78	3.47	3.42
Total tax rate	132	85.90	51.00
Number of procedures required to start a business	114	12.00	7.25
Time required to start a business	82	25.00	17.25
Agricultural policy costs	83	3.72	3.60
2. <i>Foreign competition</i>	102	4.25	4.36
Prevalence of trade barriers	124	3.68	3.91
Trade tariffs	64	5.00	6.28
Prevalence of foreign ownership	128	3.42	3.98
Business impact of rules on FDI	107	4.08	3.90
Burden of customs procedures	104	3.56	3.35
Imports as a percentage of GDP	50	46.80	60.30
B. Quality of demand conditions	122	3.35	3.48
Degree of customer orientation	126	3.69	3.77
Buyer sophistication	104	3.00	3.19

Source: Global Competitiveness Report 2010-11 (World Economic Forum).

and encouraging start ups would lead to healthier competition in the economy. Another element that reduces the efficiency of markets is the relatively high rate of corporate taxes in the country, which, taken together, on average amount to a remarkable 85.9% of company profits. In addition, the business community is concerned about the complexity of the tax regime, which is considered the second most important barrier to doing business (see Figure 2.18), as well as by the disincentives to work and invest that such a tax regime creates (78th).

While being on the accession path to the World Trade Organisation (WTO), the country has liberalised tariffs to a large degree and maintains an average tax according to a value tariff of 5%, which corresponds to the 64th position in the sample. However, business leaders still consider that other types of trade barriers and burdensome customs procedures affect imports (124th) and the country's imports amount to only 46.8% of GDP. Given the small size of the country, continuing the integration with the global economy will be crucial for future growth, in terms of promoting both trade as well as investment. Currently, rules and regulations governing FDI are not supporting investment sufficiently (107th) and foreign ownership remains rare (128th).

As the poorest among the four Central Asian economies under review, Tajikistan would benefit from a comprehensive competitiveness strategy to address the many challenges emerging from the GCI assessment, while building on strengths related to its institutional framework and flexible labour markets. The GCI-based analysis identifies upgrading infrastructure, stabilising the macroeconomy and ensuring better access to finance for the business sector as major priorities. This would raise the prospects for growth and lift income levels for the economy, thereby further reducing poverty.

Figure 2.18. **Most problematic factors for doing business in Tajikistan**

Source: Global Competitiveness Report 2010-11 (World Economic Forum).

Box 2.2. **Uzbekistan's performance in the Global Competitiveness Report 2007-08**

In 2007, the World Economic Forum worked with ABN TASMI-INFORM to conduct the Executive Opinion Survey in Uzbekistan and include the country in the 2007-08 edition of the GCI.^{*} Although the results are not comparable with 2010 data for other economies from the region, an analysis of the 2007 results for Uzbekistan can provide insight into the key structural strengths and challenges related to national competitiveness in the country, which are not likely to undergo significant changes over such a relatively short time span.

Figure 2.19 provides an overview of the results achieved by Uzbekistan in 2007 on the different dimensions captured by the GCI, both in terms of score as well as rank out of 131 economies covered. Uzbekistan was classified as a factor-driven economy (stage 1). In international comparison, Uzbekistan's competitiveness benefits from a number of competitive advantages such as efficient labour markets, a fairly well-educated labour force and an innovative environment. On the other hand, some challenges can be identified as primarily related to the macroeconomic environment and the development of financial markets.

As in other economies of the region, labour market efficiency is Uzbekistan's major area of strength. Frictionless co-operation between labour and employers (ranked 18th), flexible hiring and firing practices (12th) and a close link between pay and productivity (12th) all contribute to creating a labour market environment that enables business to easily adjust the mix of human resources to its needs.

An additional area of strength is the country's fairly high innovative capacity (42nd), which is fuelled by relatively strong quality of research institutions (37th) which co-operate well with the private sector (37th) and a fairly high overall capacity for innovation, which is assessed at 42nd place. By providing basic protection of intellectual property rights (52nd), the government has set an important base for further developing innovation, which will become more important for competitiveness once the country moves up the development ladder.

Despite these clear strengths, there remains some room for improvement in the country's competitive environment, in particular with respect to macroeconomic stability, financial

Box 2.2. Uzbekistan's performance in the Global Competitiveness Report 2007-08 (cont.)

markets and technological readiness. However, it is important to note that given the global economic crisis, the assessment of the macroeconomic environment, ranked 103rd, mainly as a result of high inflation, has evolved significantly since 2007. The budget balance reached 3.1% of GDP in 2009 and inflation came down slightly to 14.1% according to the IMF. In relative terms, these changes would most likely lead to a somewhat improved macroeconomic environment, as in many economies around the world the fiscal situation has deteriorated.

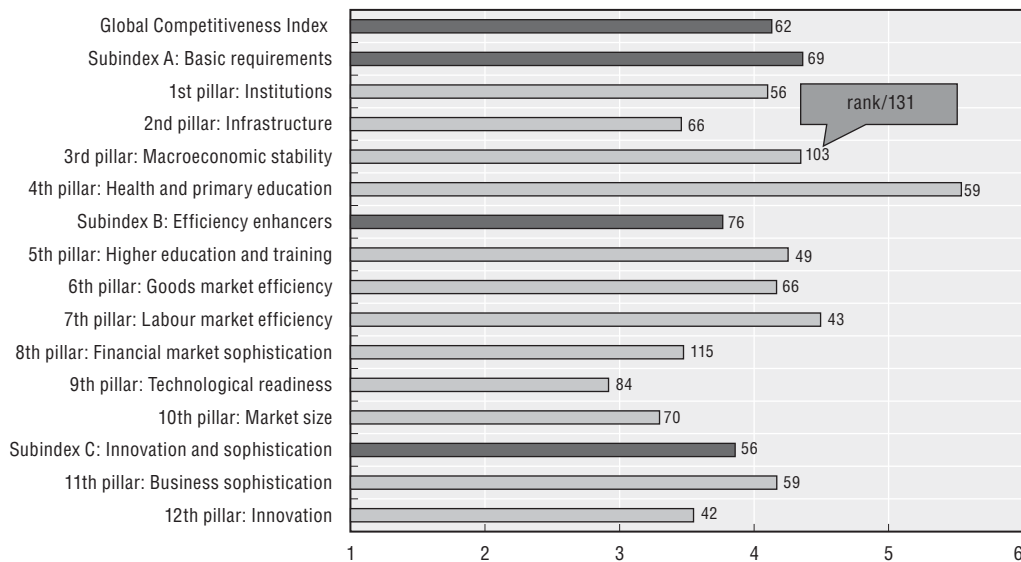
Already in 2007, Uzbekistan's financial markets were assessed as in need of reform. It was difficult for businesses to access finance through loans (96th), venture capital (92nd) or the local equity market (96th) and the country imposed significant restrictions on capital flows (121st). The need for reform results in particular from the fact that business executives considered access to finance as the most problematic area by far for doing business in 2007 as shown in Figure 2.20. In addition, local banks were considered to be among the least solvent and sound in the world, and were ranked 124th out of 131 economies. Despite these weaknesses, Uzbekistan's banking system was not significantly affected by the financial crisis as it exhibits very low levels of integration with international markets according to the IMF (2010a).

The third area with room for improvement is technological readiness, where the country ranked 84th in 2007. Uzbekistan could benefit more from higher usage of ICTs. The country lags behind in terms of penetration of latest technologies across all the areas assessed by the GCI, such as mobile telephones (127th), personal computers (92nd), the Internet (109th) and broadband connectivity (98th). Greater use of new technologies would enable the country to reap significant productivity gains within a relatively short period of time. In this context, supporting more competitive markets for these services would be a step in the right direction, as it would improve service quality and lower prices.

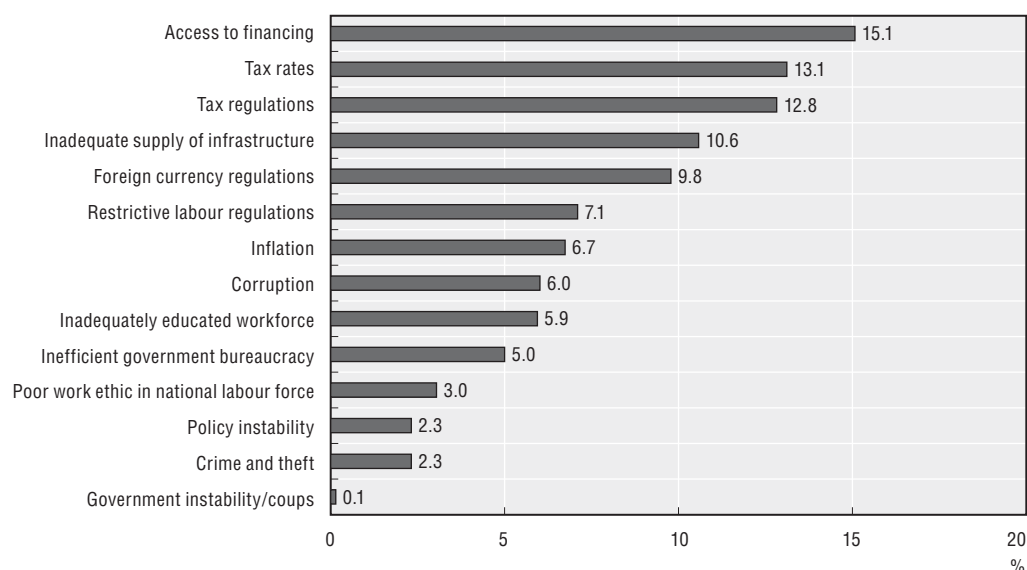
Some progress has certainly been made in these areas since 2007. However, further efforts would enable the country to take greater advantage of its important competitive advantages, integrate the country further into the global economy and put future growth on a more sustainable footing.

* In subsequent years, Uzbekistan could not be covered as no suitable partner institute could be identified.

Figure 2.19. Results for Uzbekistan in the Global Competitiveness Index 2007-08



Source: Global Competitiveness Report 2010-11 (World Economic Forum).

Figure 2.20. **Most problematic factors for doing business in Uzbekistan in 2007**

Source: Global Competitiveness Report 2010-11 (World Economic Forum).

Conclusion

Similar features in terms of national competitiveness

This chapter has analysed the performance of four Central Asian economies in terms of national competitiveness using the framework of the Global Competitiveness Index. The analysed countries include Kazakhstan, the Kyrgyz Republic, Tajikistan and Mongolia. The performance of Uzbekistan was analysed using results from the GCR 2007-08, as the country has not been covered since then.

The analysis finds that the four economies share similar features in terms of national competitiveness. Labour market flexibility is the main competitive advantage across the region, while most of the economies continue to struggle with underdeveloped financial markets, low levels of competition, inefficient infrastructure and fairly poor quality of education. Over the past five years, the efforts towards raising competitiveness have led to improvement in the positioning of Mongolia and the Kyrgyz Republic; however, Kazakhstan and Tajikistan lost positions.

The need for further public private dialogue

The chapter closes with an analysis of strengths and weaknesses of each country of the region covered by the GCI. Given the need to diversify the economies and to reduce the region's exposure to economic risks, the results of the GCI provide insight into the key challenges to competitiveness. By doing so, it can provide a basis for public-private dialogue on how barriers to competitiveness can be overcome to put economic development on a sounder and more sustainable footing for the benefit of future generations.

Notes

1. For a more detailed discussion of the 12 pillars and their contributions to competitiveness, see Sala-i-Martin et al. 2010. The Annex 2.A1 shows the detailed structure of the GCI.
2. This is proxied by the share of exports of mineral products as a share of total exports.

3. For the detailed break down of survey respondents and more details about the Executive Opinion Survey and the processing of the data see Browne and Geiger, 2010.
4. We analyse decile rankings, as it enables us to take into account the changing sample size of the GCI, which between 2005 and 2010 increased from 114 to 139.
5. The government is planning to rehabilitate the road corridor from western China to western Europe, with the assistance of the EBRD, the World Bank, the Asian Development Bank and the Islamic Development Bank. See EBRD, 2009.
6. See IMF, 2010a for a discussion of the banking sector in the region.
7. IMF, 2010a.
8. IMF, 2010.
9. Due to a number of countries achieving values above 100 mobile phones per 100 population, this still corresponds to a fairly low 87th position. Although slightly lower than the CIS average, this value is significantly higher than in factor-driven economies on average (47.3).
10. However, due to the small size of the domestic economy, the country's imports amount to 80% of GDP, which corresponds to 9th position in the ranking.
11. See IMF, 2010b.
12. This concept is captured under the Institutions pillar.
13. See IMF, 2010c for further details.
14. IMF, 2010d.
15. The country achieves a score of 3.76, which is above the 3.38 value achieved by Central Asian countries on average.

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ANNEX 2.A1

Computation and Structure of the Global Competitiveness Index 2010-11

This annex presents the structure of the Global Competitiveness Index 2010-11 (GCI). The number preceding the period indicates to which pillar the variable belongs (e.g. variable 1.01 belongs to the 1st pillar and variable 12.04 belongs to the 12th pillar).

The computation of the GCI is based on successive aggregations of scores from the indicator level (i.e. the most aggregated level) all the way up to the overall GCI score. Unless otherwise mentioned, we use an arithmetic mean to aggregate individual variables within a category.^a For higher aggregation levels, we use the percentage shown next to each category. This percentage represents the category's weight within its immediate parent category. Reported percentages are rounded to the nearest integer, but exact figures are used in the calculation of the GCI. For example, the score a country achieves in Pillar 9 accounts for 17% of this country's score in the *efficiency enhancers* sub-index, irrespective of the country's stage of development. Similarly, the score achieved on the sub-pillar *transport infrastructure* accounts for 50% of the score of the infrastructure pillar.

Unlike the case for lower levels of aggregation, the weight put on each of the three sub-indexes (*basic requirements*, *efficiency enhancers* and *innovation and sophistication factors*) is not fixed. Instead, it depends on each country's stage of development, as discussed in the article.^b For instance, in the case of Benin – a country in the first stage of development – the score in the *basic requirements* sub-index accounts for 60% of its overall GCI score, while it represents just 20% of the overall GCI score of Australia, a country in the third stage of development.

Variables that are not derived from the Executive Opinion Survey (survey) are identified by an asterisk (*) in the following pages. The Technical Notes and Sources section at the end of the *Global Competitiveness Report 2010-11* provides detailed information about these indicators. To make the aggregation possible, these variables are transformed onto a 1-to-7 scale to align them with the survey results. We apply a *min-max* transformation, which preserves the order of, and the relative distance between, country scores.^c

Variables that are followed by the designation “½” enter the GCI in two different pillars; to avoid double counting, we assign a half-weight to each instance.^d

Weight (%) within immediate parent category**Basic requirements****Pillar 1: Institutions 25%****A. Public institutions 75%**

- | | | |
|-------|--|-----|
| | 1. Property rights | 20% |
| 1.01. | Property rights | |
| 1.02. | Intellectual property protection ^{1/2} | |
| | 2. Ethics and corruption | 20% |
| 1.03. | Diversion of public funds | |
| 1.04. | Public trust of politicians | |
| 1.05. | Irregular payments and bribes | |
| | 3. Undue influence | 20% |
| 1.06. | Judicial independence | |
| 1.07. | Favouritism in decisions of government officials | |
| | 4. Government inefficiency | 20% |
| 1.08. | Wastefulness of government spending | |
| 1.09. | Burden of government regulation | |
| 1.10. | Efficiency of legal framework in settling disputes | |
| 1.11. | Efficiency of legal framework in challenging regulations | |
| 1.12. | Transparency of government policy making | |
| | 5. Security | 20% |
| 1.13. | Business costs of terrorism | |
| 1.14. | Business costs of crime and violence | |
| 1.15. | Organised crime | |
| 1.16. | Reliability of police services | |

B. Private institutions 25%

- | | | |
|-------|--|-----|
| | 1. Corporate ethics | 50% |
| 1.17. | Ethical behaviour of firms | |
| | 2. Accountability | 50% |
| 1.18. | Strength of auditing and reporting standards | |
| 1.19. | Efficacy of corporate boards | |
| 1.20. | Protection of minority shareholders' interests | |
| 1.21. | Strength of investor protection* | |

Pillar 2: Infrastructure 25%**A. Transport infrastructure 50%**

- | | |
|-------|---|
| 2.01. | Quality of overall infrastructure |
| 2.02. | Quality of roads |
| 2.03. | Quality of railroad infrastructure |
| 2.04. | Quality of port infrastructure |
| 2.05. | Quality of air transport infrastructure |

2.06.	Available seat kilometres*	
B. Energy, telephony infrastructure		50%
2.07.	Quality of electricity supply	
2.08.	Fixed telephone lines* ^{1/2}	
2.09.	Mobile telephone subscriptions* ^{1/2}	
Pillar 3: Macroeconomic environment		25%
3.01.	Government budget balance*	
3.02.	National savings rate*	
3.03.	Inflation* ^e	
3.04.	Interest rate spread*	
3.05.	Government debt*	
3.06.	Country credit rating*	
Pillar 4: Health and primary education		25%
A. Health		50%
4.01.	Business impact of malaria ^f	
4.02.	Malaria incidence* ^f	
4.03.	Business impact of tuberculosis ^f	
4.04.	Tuberculosis incidence* ^f	
4.05.	Business impact of HIV/AIDS ^f	
4.06.	HIV prevalence* ^f	
4.07.	Infant mortality*	
4.08.	Life expectancy*	
B. Primary education		50%
4.09.	Quality of primary education	
4.10.	Primary education enrolment rate* ^g	
Efficiency enhancers		
Pillar 5: Higher education and training		17%
A. Quantity of education		33%
5.01.	Secondary education enrolment rate*	
5.02.	Tertiary education enrolment rate*	
B. Quality of education		33%
5.03.	Quality of the educational system	
5.04.	Quality of maths and science education	
5.05.	Quality of management schools	
5.06.	Internet access in schools	
C. On-the-job training		33%
5.07.	Local availability of specialised research and training services	
5.08.	Extent of staff training	

Pillar 6: Goods market efficiency		17%
A. Competition		67%
	1. Domestic competition variable ^h	
6.01.	Intensity of local competition	
6.02.	Extent of market dominance	
6.03.	Effectiveness of anti-monopoly policy	
6.04.	Extent and effect of taxation ^{1/2}	
6.05.	Total tax rate*	
6.06.	Number of procedures required to start a business* ⁱ	
6.07.	Time required to start a business* ⁱ	
6.08.	Agricultural policy costs	
	2. Foreign competition variable ^h	
6.09.	Prevalence of trade barriers	
6.10.	Trade tariffs*	
6.11.	Prevalence of foreign ownership	
6.12.	Business impact of rules on FDI	
6.13.	Burden of customs procedures	
10.04.	Imports as a percentage of GDP* ^g	
B. Quality of demand conditions		33%
6.14.	Degree of customer orientation	
6.15.	Buyer sophistication	
Pillar 7: Labour market efficiency		17%
A. Flexibility		50%
7.01.	Co-operation in labour-employer relations	
7.02.	Flexibility of wage determination	
7.03.	Rigidity of employment*	
7.04.	Hiring and firing practices	
7.05.	Redundancy costs*	
6.04.	Extent and effect of taxation ^{1/2}	
B. Efficient use of talent		50%
7.06.	Pay and productivity	
7.07.	Reliance on professional management ^{1/2}	
7.08.	Brain drain	
7.09.	Female participation in labour force*	
Pillar 8: Financial market development		17%
A. Efficiency		50%
8.01.	Availability of financial services	
8.02.	Affordability of financial services	
8.03.	Financing through local equity market	

8.04.	Ease of access to loans	
8.05.	Venture capital availability	
8.06.	Restriction on capital flows	
B. Trustworthiness and confidence		50%
8.07.	Soundness of banks	
8.08.	Regulation of securities exchanges	
8.09.	Legal rights index*	
Pillar 9: Technological readiness		17%
A. Technological adoption		50%
9.01.	Availability of latest technologies	
9.02.	Firm-level technology absorption	
9.03.	FDI and technology transfer	
B. ICT use		50%
9.04.	Internet users*	
9.05.	Broadband Internet subscriptions*	
9.06.	Internet bandwidth*	
2.08.	Fixed telephone lines* ^{1/2}	
2.09.	Mobile telephone subscriptions* ^{1/2}	
Pillar 10: Market size		17%
A. Domestic market size		75%
10.01.	Domestic market size index* ^j	
B. Foreign market size		25%
10.02.	Foreign market size index* ^k	
Innovation and sophistication factors		
Pillar 11: Business sophistication		50%
11.01.	Local supplier quantity	
11.02.	Local supplier quality	
11.03.	State of cluster development	
11.04.	Nature of competitive advantage	
11.05.	Value chain breadth	
11.06.	Control of international distribution	
11.07.	Production process sophistication	
11.08.	Extent of marketing	
11.09.	Willingness to delegate authority	
7.07.	Reliance on professional management ^{1/2}	
Pillar 12: Innovation		50%
12.01.	Capacity for innovation	
12.02.	Quality of scientific research institutions	

- 12.03. Company spending on R&D
- 12.04. University-industry collaboration in R&D
- 12.05. Government procurement of advanced technology products
- 12.06. Availability of scientists and engineers
- 12.07. Utility patents*
- 1.02. Intellectual property protection^{1/2}

Annex Notes

a. Formally, for a category i composed of K indicators, we have:

$$category_i = \frac{\sum_{K=1}^K indicator_K}{K}$$

b. As described in the article, the weights are the following:

Weights	Factor-driven stage (%)	Efficiency-driven stage (%)	Innovation-driven stage (%)
Basic requirements	60	40	20
Efficiency enhancers	35	50	50
Innovation and sophistication factors	5	10	30

c. Formally, we have:

$$6 \times \frac{(\text{country score} - \text{sample minimum})}{(\text{sample maximum} - \text{sample minimum})} + 1$$

The sample minimum and sample maximum are, respectively, the lowest and highest country scores in the sample of economies covered by the GCI. In some instances, adjustments were made to account for extreme outliers. For those indicators for which a higher value indicates a worse outcome (e.g. disease incidence, government debt) the transformation formula takes the following form, thus ensuring that 1 and 7 still corresponds to the worst and best possible outcomes, respectively:

$$-6 \times \frac{(\text{country score} - \text{sample minimum})}{(\text{sample maximum} - \text{sample minimum})} + 7$$

d. For those categories that contain one or several half-weight variables, country scores for those groups are computed as follows:

$$\frac{(\text{sum of scores on full-weight variables}) + \frac{1}{2} \times (\text{sum of scores on half-weight variables})}{(\text{count of full-weight variables}) + \frac{1}{2} \times (\text{count of half-weight variables})}$$

e. To capture the idea that both high inflation and deflation are detrimental, inflation enters the model in a U-shaped manner as follows: for values of inflation between 0.5 and 2.9%, a country receives the highest possible score of 7. Outside this range, scores decrease linearly as they move away from these values.

- f. The impact of malaria, tuberculosis, and HIV/AIDS on competitiveness depends not only on their respective incidence rates but also on how costly they are for business. Therefore, to estimate the impact of each of the three diseases, we combine its incidence rate with the survey question on its perceived cost to businesses. To combine these data we first take the ratio of each country's disease incidence rate relative to the highest incidence rate in the whole sample. The inverse of this ratio is then multiplied by each country's score on the related survey question. This product is then normalised to a 1-to-7 scale. Note that countries with zero reported incidences receive a 7, regardless of their scores on the related survey question.
- g. For this variable we first apply a log transformation and then a min-max transformation.
- h. The competition sub-pillar is the weighted average of two components: domestic competition and foreign competition. In both components, the included variables provide an indication of the extent to which competition is distorted. The relative importance of these distortions depends on the relative size of domestic *versus* foreign competition. This interaction between the domestic market and the foreign market is captured by the way we determine the weights of the two components. Domestic competition is the sum of consumption (C), investment (I), government spending (G) and exports (X), while foreign competition is equal to imports (M). Thus we assign a weight of $(C + I + G + X)/(C + I + G + X + M)$ to domestic competition and a weight of $M/(C + I + G + X + M)$ to foreign competition.
- i. Variables 6.06 and 6.07 combine to form one single variable.
- j. The size of the domestic market is constructed by taking the natural log of the sum of the gross domestic product valued at purchased power parity (PPP) plus the total value (PPP estimates) of imports of goods and services, minus the total value (PPP estimates) of exports of goods and services. Data are then normalised on a 1-to-7 scale. PPP estimates of imports and exports are obtained by taking the product of exports as a percentage of GDP and GDP valued at PPP.
- k. The size of the foreign market is estimated as the natural log of the total value (PPP estimates) of exports of goods and services, normalised on a 1-to-7 scale. PPP estimates of exports are obtained by taking the product of exports as a percentage of GDP and GDP valued at PPP. The underlying data are reported in the data tables.

Chapter 3

Toward Higher-quality Education and Training

by

Caroline Macready and Mihaylo Milovanovitch

Central Asian economies can boost their competitiveness by building on the strengths of their education systems: high literacy rates, high primary and secondary enrolment for both sexes and an above average enrolment in tertiary education. Their numerous disadvantages include excessive central control and low public spending per student. Central Asian countries should collect and report educational data, develop strategies for raising the quality of tertiary education and improving graduation rates, create strategies for making vocational education and training (VET) more relevant for the labour market, reduce state control and consult with employers' representatives to achieve a balance between higher education and VET enrolments. Public spending should concentrate on better distribution of resources. Afghanistan, which is trailing other countries of the region in educational performance, must focus on laying solid a foundation for the future by investing in better and more equal enrolment and more highly-trained teachers.

The authors would like to specifically thank Ian Whitman, Head of Programme, EDU/NME for his supervision; and Bernard Hugonnier, Deputy-Director, EDU, for helping to establish the collaboration with the OECD Eurasia Competitiveness Programme in order to include this chapter in the Outlook.

The importance of developing human capital

Human capital is the term commonly used to refer to the combined skills, knowledge and aptitudes of workers. Research has shown that the state of development of a country's human capital is closely related to investment outcomes and overall economic development in the following ways:

- Each extra year of educational attainment in the population raises the stock of foreign direct investment by 1.9% (Nicoletti *et al.*, 2003) and raises aggregate productivity by at least 5%, with stronger long-term effects through innovation (de la Fuente and Ciccone, 2003). It is not only the length of schooling that matters; the overall level of cognitive skills of the school-age population can have a dramatic long-term impact on the economic development of countries. According to recent OECD research, modest improvements in the quality of learning outcomes, as measured by the OECD Programme for International Student Assessment (PISA), can result in surprisingly high gains in terms of gross domestic product (GDP) as measured by OECD¹ (OECD, 2010d).
- More highly-skilled and better-educated entrepreneurs tend to operate firms that grow faster and are more likely to survive. They are also more likely to innovate (Koellinger, 2008).
- The supply of university graduates affects a country's potential for absorbing, developing and disseminating advanced technology and equipping the labour market with highly skilled workers. Thus economies with large cohorts of well-educated scientists and engineers are likely to experience productivity advantages.
- Better-educated employees tend to earn more, and higher earnings imply higher productivity. While individuals' rates of return from education differ, in most countries graduates of tertiary-level education generally earn substantially more and are more likely to be in employment, than those with less education.
- Recent research, carried out mainly in OECD countries, suggests that a country able to attain literacy scores 1% higher than the international average will achieve levels of labour productivity 2.5% higher than those of other countries (Coulombe *et al.*, 2004).

This chapter aims to determine the key opportunities of Central Asian economies in the area of human capital that can boost their competitiveness prospects. The chapter describes the strengths of the human capital in the region with a focus on its strong educational system (Afghanistan is an exception). It continues with the challenges that remain to be addressed with a detailed analysis of the weaknesses of the educational system. The chapter concludes with a list of opportunities and recommendations that are still to be embraced by the Central Asian economies on their way to a more competitive environment.

Human capital development in Central Asia: Findings

Competitiveness strengths

By world standards the Central Asian countries all have high literacy rates for both men and women, for the adult population and for the young population. The exception is Afghanistan, which does badly on all counts.

All those countries for which we have Global Competitiveness Index rankings (Kazakhstan, the Kyrgyz Republic, Mongolia and Tajikistan) have high or quite high female participation in the workforce: Mongolia ranks 7th in the world and Kazakhstan 22nd.

Enrolment in primary and secondary education is also quite high for both sexes – except in Afghanistan, and perhaps Turkmenistan which does not publish these statistics. The other five countries all have 93% or more of the relevant age group enrolled in their primary schools and 84% or more of the relevant age group enrolled in secondary schools. Their primary completion rates do not vary much between girls and boys, though in all the five countries except Kazakhstan the rate for girls is slightly lower, with the biggest difference (4%) in Tajikistan.

The four countries featured in the Global Competitiveness Index (see above) all have tertiary enrolment rankings that are much higher than their overall rankings, indicating that tertiary enrolment levels are better than would be expected for countries at their state of development. There are several reasons for this:

1. All the countries except Afghanistan have inherited the education system of the former Soviet Union in which achievement, excellence and specialist skills are highly valued, particularly in science, technology and engineering.
2. Two of the seven countries, Kazakhstan and Turkmenistan, are rich in exploitable natural resources, particularly oil and gas.

Three countries – Uzbekistan, the Kyrgyz Republic and Mongolia – spend above the OECD average on education, both as a percentage of GDP and as a percentage of all public spending (see Table 3.2 below). Uzbekistan devotes 43% of all its public spending to education, more than any other country in the world.

From the limited information available, Uzbekistan appears to have useful and well-developed vocational education and training (VET) arrangements.

Tajikistan, Uzbekistan and Kazakhstan have relatively high percentages of scientists and engineers among their graduates. However, of these, only Kazakhstan and Mongolia have respectable graduation rates of above 50%.

Competitiveness weaknesses

Afghanistan – classified by the UN as a very low development country – must overcome massive challenges if it is to reach even the same level of development as the Kyrgyz Republic, Mongolia, Tajikistan and Uzbekistan. It has the world's second-highest birthrate and percentage of the population under 20, and its public spending on education amounts to just USD 15 purchasing power parity (PPP) per capita per year. It has a primary completion rate of 39% and a secondary enrolment rate of 29%, both much worse for females. The literacy rate for all adults is only 28%, for females only 13%; rates are better among the 15-24 year-olds but not much better. Only 2% of the relevant age-group enrolls in tertiary education.

The other six countries have not yet shaken off several disadvantages of the education system of the former Soviet Union. These include excessive central control over courses, curricula, standards and the organisation of teaching, which inhibit the system's ability to respond to the needs of the economy, students and employers. This is the case particularly, but not only, at the tertiary level.

In all seven countries, public spending on education per capita is very low, birthrates very high and the percentage of the population aged 5-19 high, by the standards of OECD member and partner countries.

Mongolia and Turkmenistan offer just 10 years of primary and secondary schooling. Only Afghanistan offers more than 11.

The Kyrgyz Republic, at present the only country to participate in PISA, achieved the lowest score of any country in all three PISA subjects: reading, mathematics and science.

Tertiary enrolment rates are a long way below the OECD average in Turkmenistan (a dismal 3.9%), Uzbekistan and Tajikistan. The same is true for the graduation rates where known. Kazakhstan's higher education (HE) entry rate has fallen by over 20% in the last five years as universities have been closed (mostly because of low quality and non-compliance with accreditation criteria), despite buoyant student demand and unmet economic needs.

Except (probably) in Uzbekistan, vocational education and training (VET) has low status, receives limited funding, provides too few places to meet employer needs and serves disproportionate numbers of less able or more disadvantaged students.

Arrangements for involving employers in decision making on education policy, provision of education, syllabuses and standards are weak in all Central Asian countries for which information is available.

In the latest World Economic Forum's Global Competitiveness Index (which does not cover Afghanistan, Turkmenistan or Uzbekistan), out of 139 countries Kazakhstan ranked 72nd and Mongolia 99th, but the Kyrgyz Republic ranks among the lowest 20 and Tajikistan among the lowest 30 countries. While these four countries had generally good rankings for education enrolment they tended to have relatively poor scores on quality aspects: for the quality of their education systems none ranked higher than 91. Human capital-related rankings in the bottom 20 include: the ranking of the Kyrgyz Republic of 139 for brain drain and university-industry collaboration on R&D, 137 for firm-level technology absorption, 136 for availability of scientists and engineers, 134 for the quality of its science research institutions, 131 for its capacity for innovation, 129 for the quality of its management schools, 124 for the extent of staff training and 120 for local availability of research and training; Tajikistan ranks 133 for the quality of its management schools, 122 for quality of maths and science education and firm-level technology absorption and 121 for local availability of research and training; and Mongolia ranks 139 for local availability of research and training, 136 for the quality of its education system, 135 for the quality of its management schools and 123 for brain drain.

Opportunities to develop human capital

In order to increase their competitiveness potential, all the Central Asian countries should be invited to consider the findings of this chapter and develop their own plans for improving the level of their human capital. More detailed recommendations are given at the end of the chapter.

To set effective goals for human capital improvement, countries need to know where they stand. They should therefore aim to ensure that in the future they collect data and report to an international organisation, such as OECD or UNESCO.

Moreover, it is recommended that each country adopt a work-force skills strategy that would address its weaknesses and turn its human capital into a competitiveness advantage. Kazakhstan, for example, is recommended to make urgent plans to reverse its recent decline in tertiary places and restore its higher education entry rates to internationally competitive levels, while Turkmenistan, Uzbekistan and Tajikistan are encouraged to develop strategies for raising their tertiary entry and graduation rates to more competitive levels. In the short-term Afghanistan should focus on building the foundations of its education system, i.e. primary and secondary education for all. In addition, the Kyrgyz Republic and Kazakhstan should also be guided by their recent OECD reviews (OECD, 2007; OECD, 2010b; OECD, 2010c).

Governments are recommended to lighten state regulation over tertiary education, end central standard-setting and reform quality assurance regimes that enforce uniformity rather than encouraging self-improvement. All countries should consider – and consult employers’ representatives on – whether they have already achieved the right balance between higher education and VET places. All countries, but particularly those currently producing fewer trained scientists and engineers, should look again at how decisions are made on the numbers of tertiary places to be provided in each subject field.

All countries should also aim to make public spending on education cost-effective by minimising waste in their education systems.

Overview of human capital development in Central Asia

The level of human capital development is a common weakness across all Central Asian countries. However, there are significant differences within these countries. On the scale of most relevant indicators, Kazakhstan is the outlier at the top, Afghanistan the outlier at the bottom, with the Kyrgyz Republic, Mongolia, Tajikistan, Turkmenistan and Uzbekistan grouped together in the middle.

Table 3.1 sets out some general indicators of economic and human development, available for all or almost all of these Central Asian countries. The indicators are:

- GDP total and GDP per capita. Per capita GDP is shown in two ways, USD (current) and USD (PPP).
- UNDP HDI rank. The UN Development Programme’s Human Development Index (HDI) provides a composite measure of three dimensions of human development: living a long and healthy life, being educated (measured by adult literacy and enrolment in education) and having a decent standard of living (measured by PPP income per capita). The latest UNDP HDI report, published in 2009, ranked 182 countries on the basis of 2007 data (UNDP, 2009). This report classified Kazakhstan as a “high development” country, Afghanistan as a “low development” country alongside the poorest countries of sub-Saharan Africa and the five other countries as “medium development”.
- UNDP HPI rank. The Human Poverty Index (HPI) focuses on the proportion of people below certain threshold levels in each of the dimensions of the HDI and has data for 135 countries. Turkmenistan had no ranking; Afghanistan ranked 135th; and the other five countries ranked from 31 (the Kyrgyz Republic) to 74 (Tajikistan).

Table 3.1. **Selected general indicators of economic and human development**

	GDP (1)	GDP per capita (USD current) (2)	GDP per capita (USD PPP) (3)	HDI Rank (of 182) (4)	HPI Rank (of 135) (5)
Afghanistan ^{1, 3, 4}	10 624	366	934	181	135
Kazakhstan ^{2, 3}	109 155	6 870	11 679	82	37
Kyrgyz Republic ^{2, 3, 4}	4 578	860	2 250	120	31
Mongolia ^{2, 3}	4 202	1 573	3 456	115	58
Tajikistan ^{2, 3, 4}	4 978	716	1 827	127	74
Turkmenistan ^{2, 3, 4}	19 947	3 904	6 076	109	No
Uzbekistan ^{2, 3}	32 816	1 182	2 808	119	42

1. GDP Data for 2008.

2. GDP data for 2009.

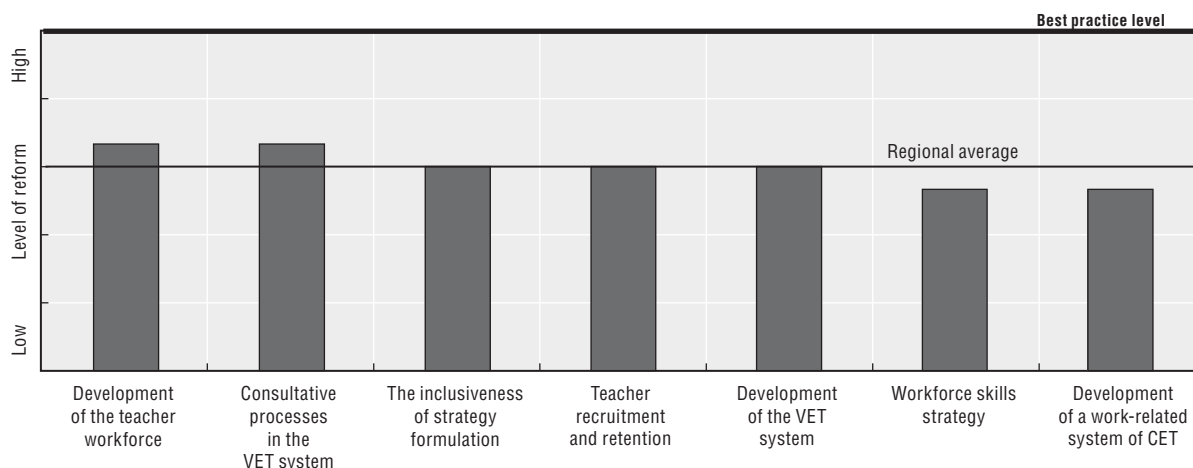
3. HDI and HPI ranks based on 2007 data.

4. GDP per capita in PPP USD based on estimations.

Source: World Bank WDI Database, IMF WEO Database.

The evidence presented in the rest of this chapter shows that, even in the most advanced of the Central Asian countries considered in this report, human capital is less well-developed than it should and could be. This acts as a brake on the country's national economy and limits its potential for competitiveness.

This evidence, however, is less than comprehensive. The Central Asian region is not well-documented, and data may differ substantially between international and national sources. There are many gaps in the information on these countries held by international organisations. Country data may not exist, or if it exists, may not be complete, reliable or comparable with information from other countries. Only four of the seven countries are included in the World Economic Forum's Global Competitiveness Index rankings. OECD has sought Competitiveness Assessments from local experts (Figure 3.1). Only Kazakhstan and the Kyrgyz Republic have participated in international comparisons of student performance. The authors have had to draw extensively on countries' own national statistical sources, which may not be comparable and may use differing classifications for collecting,

Figure 3.1. **Perceived level of reform in human capital development**

Note: "Best practice" represents the benchmark used in the PFC surveys which corresponds to the OECD and non-OECD best practice. High represents a level of reform that meets best practice, low – lack of reform.

Source: Policies for Competitiveness Assessment Framework 2010 Results (OECD).

aggregating and presenting the data. Even the national sources say very little about vocational education, training and how the education system relates to the labour market.

Common problems affecting the countries of Central Asia are:

- Over-theoretical, poor-quality education in schools and tertiary institutions, leading to a low level of performance and inability to apply what has been learnt in work and later life.
- Lack of investment in the improvement of the human capital stock to build a more productive workforce. In particular, with some exceptions such as the Kyrgyz Republic, there is low spending on students as a share of per capita income, at secondary and tertiary levels, relative to international averages.
- Many young people in the Central Asian region are unable to access tertiary-level education or skills training which could benefit both them as individuals and their nation's economy.
- Mismatch between what national education systems supply and what employers need, particularly in the area of vocational education and training.
- Shortages of skilled labour, meaning that jobs requiring more than a basic level of education or technological knowledge will be done inefficiently, go unfilled or have to be filled from the international market.
- Insufficient interaction, joint planning and joint working between the worlds of education and employment.
- Virtually every aspect of the development of human capital in Afghanistan is problematic.

Spending on education

Spending on education, as a share of the country's GDP and its overall budget, illustrates the degree of priority a country accords to education when allocating resources. Table 3.2 gives this information, along with other relevant indicators.

Table 3.2. **Public spending on education at all levels except pre-school, 2007**

	Education spending (% of GDP) (1)	Education spending (% of all public spending) (2)	Education spending (% of GDP per capita) (3)	Education spending (per capita in USD PPP) ² (4)
Afghanistan ¹	0.8	3.5	1.9	14.98
Kazakhstan ²	3.9	17.6	1.5	176.54
Kyrgyz Republic	5.6	21.2	72.7	1 462.13
Mongolia	6.0	15.6	21.2	686.42
Tajikistan ³	3.5	18.7	m	m
Turkmenistan	m	11.5	m	
Uzbekistan	8.9	43.0	2.9	68.4
OECD average ⁴	4.8	13.3	24.5	32 364

"m" in this and all subsequent tables indicates "missing data".

1. Data in column 3 for 2008.

2. Data in columns 1-3 for 2009.

3. Data for 2008.

4. For column 1 including public subsidies to households attributable for educational institutions, and direct expenditure on educational institutions from international sources.

Source: National Statistical Institutes/Agencies/Committees; OECD: *Education at a Glance 2010*; Tajikistan: UNESCO WEI Database; The Kyrgyz Republic: OECD: *Reviews of National Policies for Education*; The Kyrgyz Republic: *Lessons from PISA 2006*.

Kazakhstan increased its education spending, both as a percentage of GDP and as a share of all public spending, in the five years to 2009. When OECD reviewed higher education in Kazakhstan, the latest figures available indicated education spending of 3.6% of GDP in 2005 and 3.4% in 2004; in 2004, education received 14.4% of all public spending. The review report, published in 2007, noted that these figures were low by the standards of many other countries and could affordably be raised, given Kazakhstan's rapidly growing oil and gas revenues. The report recommended allocating at least 20% of the national budget to education. It is commendable that the country made good progress towards the 20% mark in the following two years, but though already above the OECD average on this indicator, Kazakhstan still has a little way to go to reach the OECD average for education spending as a percentage of GDP – a reasonable aim bearing in mind that it now ranks as a high development country. And when education spending is spread around Kazakhstan's population of nearly 16 million and considered in per capita terms, it remains very low, not only when compared with OECD countries and partner countries, but also when compared with some others in the region. As a percentage of GDP per capita, Kazakhstan spends less on education even than Afghanistan.

By contrast, in per capita terms, the Kyrgyz Republic, a small country in population terms, is Central Asia's biggest spender. In 2007, the country dedicated a massive 72.7% of its relatively modest per capita income to education spending and was the only country in the region to spend more than USD 1 000 (PPP) per head on education. Education also accounted for 21.2% of all public expenditure. The main issue for the Kyrgyz Republic, as will be seen later in this chapter, is how to get better value from this considerable investment.

Of the countries in the region, Uzbekistan spent most on education as a percentage of GDP (8.9%, well above the OECD average) and devoted an amazing 43% of all public expenditure to education. No country on the World Bank's database matches or exceeds this percentage. But as in Kazakhstan, when these amounts are spread around the country's sizeable population of nearly 28 million, education spending per capita looks very low.

Mongolia, with the smallest population of the seven countries and geography that makes education delivery particularly challenging, has figures above or approaching OECD averages for three of the four indicators in Table 3.2 and the second-highest education spending per capita.

Afghanistan, with the largest population and the highest proportion of young people, has increased its education spending recently with the help of foreign aid, and may well continue to do so given that the country attaches priority to expanding education coverage and recruitment of new teachers. Nonetheless, its 2007 figures show the lowest spending on three of the four indicators. Despite the positive trend, it is hard to see how the massive problems facing education in that country can begin to be tackled with education spending of USD 15 (PPP) per capita.

Efficiency of spending on education

Spending more on education does not automatically lead to better quality of education. The efficiency of spending is also very important. To assess this it is necessary to consider:

- the extent of education-related needs in each country;
- what public spending is buying by way of education inputs; and
- what public spending is buying in terms of outcomes.

Education-related needs

Needs depend to a large extent on the size of a country's young population, and whether this is likely to grow or decline. Table 3.3 shows each country's population size and its percentage of young people aged 5-19. The larger the percentage, the higher that country's potential in terms of human capital, but also the higher the demand for education services and the pressure on education budgets.

Table 3.3. **Populations, young populations and birthrates**

	Population 2009 (million) (1)	Population 5-19 (%) (2)	Birthrate 2008 (per 1 000) (3)
Afghanistan	29.803	36	47
Kazakhstan	15.888	20	23
Kyrgyz Republic	5.321	32	24
Mongolia	2.671	31	19
Tajikistan ¹	6.952	21	28
Turkmenistan	5.11	20	22
Uzbekistan	27.767	32	22

1. Data on share of school-age population from year 2008.

Source: World Bank WDI Database; UNESCO WEI Database; National Statistical Institutes/Agencies/Committees; UN Literacy indicators.

Five of the seven Central Asian countries have a higher percentage of young people in their populations than the developed countries of Western Europe and North America. The exceptions are Kazakhstan and Turkmenistan, whose percentage is similar to that of Canada, France and the UK. All seven have high birthrates compared to Western European countries, whose rates (with the exception of Ireland and Iceland) range from 9 to 13. In the foreseeable future they would need to invest more in education, in PPP terms, than most OECD countries to maintain competitive standards of education for all their people, even if all started from the same point.

As Table 3.3 shows, Afghanistan has the largest population, combined with by far the largest birthrate and percentage of the population aged 5-19, the typical years for being in education. Another 10% of Afghanistan's population is aged under 5. Only one country in the world – Niger – on the World Bank's database has a higher birthrate and percentage of the population under 20. Afghanistan's education services will be under immense pressure from its burgeoning population for the foreseeable future, and the management of quality in such a rapidly expanding education system will pose a serious challenge.

What public spending on education is buying: Inputs

The lack of relevant data makes it difficult to present a comprehensive picture, but Table 3.4 gives some relevant indicators: the number of years of primary and secondary schooling each country provides, and the age of transfer between them; the percentages of the school-age cohort enrolled in primary and secondary education; the percentages completing primary education; and pupil-teacher ratios.

Afghanistan offers – in principle – the most years of schooling (12) and has the highest school-leaving age (19). These facts may be a minor reason why the country has by far the lowest percentages of the relevant age groups enrolled in primary and secondary education. Four countries currently adopt the same pattern of 4 years' primary schooling

Table 3.4. **Primary and secondary years of schooling, enrolment and completion rates: Pupil-teacher ratios**

	Primary (P), Secondary (S) and Total (T) years' schooling (1)	P to S transfer age (2)	Primary % ¹ of cohort enrolled (3)	Primary completion rate % ² (4)	Secondary % ¹ of cohort enrolled (5)	Pupil-teacher ratio primary (2008) (6)	Pupil-teacher ratio secondary (2007) (7)
Afghanistan ³	P6 S6 T12	13	106	39 (M55,F21)	29	43.0	31.6
Kazakhstan ⁴	P4 S7 T11	11	109	105 (M105,F105)	95	16.6	10.4
Kyrgyzstan ⁵	P4 S7 T11	11	95	92 (M93,F92)	85	24.2	13.6
Mongolia ⁵	P4 S6 T10	12	102	93 (M94, F92)	95	31.1	m
Tajikistan ⁵	P4 S7 T11	11	102	95 (M97, F93)	84	22.7	16.5
Turkmenistan	P3 S7 T10	10	m	m	m	m	m
Uzbekistan ⁵	P4 S7 T11	11	93	95 (M95, F94)	101	17.6	13.1

1. Defined as total enrolment, regardless of age, as % of the age group that officially corresponds to the level of education shown.

2. Defined as total number of students in the last grade of primary school, minus the number of repeaters in that grade, divided by the total number of children of official graduation age.

3. Year of reference 2005 for primary completion, 2007 for secondary enrolment, 2008 for primary enrolment.

4. Year of reference 2009.

5. Year of reference 2008.

Source: World Bank WDI Database; UNESCO WEI Database.

from 7-11 then 7 years' secondary schooling from 11-18, though Kazakhstan plans to introduce a 12th school year, replacing the first 12-18 months of its present tertiary courses. Two countries provide just 10 years' schooling: Mongolia, whose students do not start primary school until age 8 and then continue until age 18 and Turkmenistan whose students start school at 7 but leave at age 17.

A number of the countries show enrolment rates above 100%. This indicates that many young people in the system are being required to repeat years before they are permitted to move on to the next year. This is a long-standing practice in many countries of the world but it is neither beneficial nor efficient. It de-motivates under-achievers, often causing them to drop out before completion, when better teaching and more individualised help with their learning blocks could put them back on track; and, of course, the public purse has to fund their extra years in school. Kazakhstan's 105% primary completion rate indicates that repetition is so rife that even when, by definition (see Table 3.4, Note 2), repeaters in that last primary grade are discounted, class numbers are still swelled by older-than-typical pupils who were made to repeat years at an earlier stage. Apart from Kazakhstan – and Turkmenistan, about which we know very little because it reports only the most basic facts about its education system – primary completion rates are not as good as they need to be for future competitiveness. It is also worrying that for the Kyrgyz Republic, Mongolia and Uzbekistan the 2008 primary completion rates were their lowest in four years; Tajikistan's rate was their second-lowest rate in four years. And in five of the six countries whose figures are known, the primary enrolment rate is lower for females than for males, dramatically so in Afghanistan.

Low pupil-teacher ratios indicate that national public spending is buying more inputs to education, but does not guarantee better results. In Kazakhstan, where the overall ratio is lowest for both primary and secondary schools, the OECD Review of 2006-07 found significant variations between urban and rural areas. More rural families had moved to the towns, but teachers had not moved – with the result that rural children were often taught in very small classes by older teachers, sometimes in mixed-age groups, with worse

outcomes judging by performance in university entry tests. Classes in towns had become very large, but obtained much better outcomes in the same tests. Kazakhstan participated in the 2007 Trends in International Mathematics and Science Study (TIMSS) performance towards the end of primary schooling, which also found that pupils in larger classes did better (IEA, 2007a; and IEA, 2007b). (Other findings from TIMSS are discussed in the section on education quality, below.) In the Kyrgyz Republic, which has average-to-low teacher-pupil ratios, a recent OECD PISA review suggested that the country would do better to invest in fewer but better teachers. On the other hand, Afghanistan's average ratio of 39:1 across primary and secondary is clearly excessive, particularly as this conceals large regional variations, from 20:1 in Paktika to as much as 75:1 in Helmand.

What public spending on education is buying: Outcomes

One important outcome is literacy rates, which are also very important to national competitiveness: as already mentioned, research suggests that a country able to attain literacy scores 1% higher than the international average might expect to achieve levels of labour productivity 2.5% higher than the international average. The seven countries' literacy rates among their adult populations (aged 15+), and their young adult populations (aged 15-19) who emerged most recently from education, are shown in Table 3.5.

Table 3.5. Literacy rates

	Literacy rate 15+ 2008 ¹ (1)			Literacy rate 15-24 2008 ¹ (2)		
	M	F	M + F	M + F	M	F
Afghanistan ¹	43	13	28	51	18	34
Kazakhstan	100	100	100	100	100	100
Kyrgyz Republic	100	99	99	100	100	100
Mongolia	97	98	97	93	97	95
Tajikistan	100	100	100	100	100	100
Turkmenistan	100	99	100	100	100	100
Uzbekistan	100	99	99	100	100	100

1. Afghanistan literacy rates from year 2000.

Source: World Bank WDI Database;; UN Literacy indicators.

Afghanistan's extremely low adult literacy rates place it second last (below Niger and above Mali) for adult literacy in the UN's human development indicators, though it should be noted that its latest figures are now 10 years old. The literacy rate for young adults aged 15-24 is better, but still nowhere near that of other countries in Central Asia or most of the rest of the world. For reasons associated with, but not fully explained by, recent history and the attitude of the Taliban towards female education, female literacy rates are extremely poor for all adults (30% of male rates) and not much better for young adults aged 15-24 (35% of male rates).

Mongolia is the only other country of the seven whose young adults have a literacy rate below 100%. At 95%, it is below the literacy rate for all adults (97%), suggesting that educational standards may be declining slightly. However, though young people aged 15-19 form a high percentage of the population the birthrate is no longer high, which should reduce demand for educational services longer-term, especially as Mongolia has the world's lowest immigration rate.

The other five countries all boast excellent literacy rates of 99-100% for all adults, 100% for 15-24s – one indicator of efficient spending on education in the recent past. However, literacy rates only tell us how many of a country's people can function in daily life and in entry-level jobs. They do not tell us how many are educated and skilled to the higher levels that are increasingly important in today's high-tech, high-skill global economy.

Table 3.6 shows first-year tertiary enrolment, gross enrolment rates in tertiary education, numbers of graduates and graduation rates from tertiary education. Only Mongolia with 52.7% and the Kyrgyz Republic with 48% approach the OECD average entry rate to tertiary education of 56%.² Kazakhstan comes next but, worryingly, its entry rates are declining (see Table 3.7). The entry rates of other countries are too low to meet the needs of their populations and their economies for higher-level education and training. Turkmenistan's entry rate, in particular, is far lower than it should be. This country has the region's second-highest GDP per capita, mainly thanks to its large oil and gas reserves and industries. Extraction industries are high-tech industries requiring high levels of education and skills training of their well-remunerated workers. If a country does not train its own people to take advantage of these opportunities a large part of their potential economic benefit will go to international firms and their imported employees rather than to the country's nationals. Uzbekistan's entry rate also seems very low by international standards, but part of the explanation may lie in the government's decision some years ago to prioritise vocational and technical education in colleges, classified as non-tertiary (see Box 3.3).

Table 3.6. Gross enrolment rates and graduation rates of relevant age groups, 2009

	1st year tertiary enrollments (1)	GER in tertiary education % (2)	Number of students in tertiary education per 100 000 inhabitants (3)	Graduates (4)	Graduation rate % (5)
Afghanistan ^{1, 2}	17 768	2.2	117.0163	8 944	1.8
Kazakhstan ³	101 711	41.0	4 092.6540	176 100	57.0
Kyrgyzstan ⁴	m	48.0	5 437.1690	33 540	29.4
Mongolia ¹	11 660	52.7	6 141.7500	33 007	53.7
Tajikistan	3 686	19.8	2 303.2480	21 568	13.5
Turkmenistan	m	3.9	m	m	m
Uzbekistan	90 400	9.8	1 106.1710	83 515	13.6

Notes: Data for Afghanistan from 2008. Data on the Kyrgyz Republic is from 2008. Estimates of school age population – tertiary are based on UNESCO classification. GER (gross enrolment rate) is the ratio of total enrolment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Graduation rate is the total number of graduates divided by the population of the relevant age.

1. Public and private universities.

2. Data in column 5 is from national sources and for 2008/09. Data in column 3 is from 2004.

3. Graduation: private 28.42%, public 28.58%. Data on graduation is from national sources.

4. Calculations of graduation rates based on data from OECD (2010b) and from 2008.

Source: UNESCO *WEI Database*; Afghanistan and Tajikistan: Data on enrolment from National Statistical Institutes; The Kyrgyz Republic: *Reviews of National Policies for Education: the Kyrgyz Republic: Lessons from PISA*; Kazakhstan: National Statistical Committee.

Graduation rates are usually lower than enrolment rates, for the obvious reason that not all entrants complete their courses. The OECD average graduation rate is 38%,³ indicating that of every three entrants, two go on to graduate successfully. However Table 3.6 shows for Kazakhstan a gross enrolment rate of 41% and a graduation rate of 57%. This is probably a statistical quirk connected to the sharp decline in the numbers entering tertiary education over the last five years, shown below in Table 3.7. Mongolia's rate – slightly higher graduation than enrolment – is more likely due to demographic factors.

Table 3.7. **Tertiary and post-secondary non-tertiary enrolment 2004-09**
(thousands)

	2006	2007 (% change)	2008 (% change)	2009 (% change)	2010 (% change)
	(1)	(2)	(3)	(4)	(5)
Afghanistan					
Tertiary	41.9	49.3 (+15.0%)	56.5 (+12.6%)		
Post-secondary	m	3.0	m		
Total					
Kazakhstan					
Tertiary	780.8	772.6 (−1.0%)	719.8 (−6.8%)	635.2 (−11.8%)	610.3 (−3.7%)
Post-secondary, non-tertiary	397.6	452.2 (12.06%)	499.6 (9.4%)	504.7 (1.0%)	495.2 (−1.9%)
Total	1 178.4	1 224.8 (3.8%)	1 219.4 (−0.4%)	1 140.0 (−7.0%)	1 105.5 (−2.9%)
Kyrgyzstan					
Tertiary	233.5	239.4 (2.5%)	296.3 (19.2%)	294.4 (−0.7%)	
Post-secondary, non-tertiary	35.6	40.3 (11.6%)	7.603 (−81.1%)	8.0 (4.9%)	
Total	269.1	279.6 (3.8%)	303.9 (8.0%)	302.4 (−1.0%)	
Mongolia					
Tertiary	138	142.4 (3.1%)	151.5 (8.2%)	162.2 (6.6%)	
Post-secondary, non-tertiary	1 234			11.5	
Total	139.3			173.8 (19.9%)	
Tajikistan					
Tertiary	133.4	147.3 (9.4%)	155.4 (5.2%)	157.5 (1.3%)	
Post-secondary, non-tertiary	31.8	32.4 (2.5%)	34.0 (4.7%)		
Total	165.1	179.7 (8.1%)	189.4 (5.1%)		
Turkmenistan	m	m	m	m	
Uzbekistan					
Tertiary	280.8	288.6 (2.7%)	299.0 (3.5%)	300.8 (0.6%)	
Post-secondary, non-tertiary		3.0			
Total		291.5			

Source: OECD calculations based on data from UNESCO WEI Database; Afghanistan: National Statistical Institute.

Box 3.1. Quality of the education system in Kazakhstan

Quality of education in schools

Kazakhstan participated in PISA, OECD's study of the comparative performance of 15 year-olds in secondary school, for the first time in 2009. Results from PISA 2009 are not yet available, but Kazakhstan also took part in the International Education Association's (IEA's) study of Trends in Mathematics and Science (TIMMS) in 2007, in the comparison of 4th grade students' performance. Kazakhstan's 10 year-old primary school pupils performed very impressively. In maths their average score was 549 points (553 for girls, 545 for boys) against an all-country average of 500, putting them 5th of 36 countries, behind only Hong Kong, Singapore, Chinese Taipei and Japan. In science their average score was 533 (533 for girls, 532 for boys) putting them 11th, behind the countries already mentioned and Russia, Latvia, England, the US, Hungary and Italy, but still well above the 500-point average.

Supplementary information in TIMMS 2007 suggests that Kazakhstan's primary schools have many characteristics associated with good-quality education in developed countries. Comparisons of Kazakhstan scores with international averages in the TIMMS Maths report suggest that the country does better, or considerably better, than average in ensuring that

Box 3.1. Quality of the education system in Kazakhstan (cont.)

teachers have appropriate tertiary qualifications, have specific initial training to teach their subject at primary level, get regular in-service training in their subject and have good working conditions. The country also does well in keeping class sizes down (though as mentioned above, the pupils in the largest classes scored best), encouraging parental involvement in schools, avoiding major school attendance problems and providing resources for instruction. Kazakhstan makes very heavy use of textbooks, but is not unique in this. It is unique in that the higher the percentage of pupils from disadvantaged homes in the school, the better that school's pupils performed in TIMSS tests.^{*} This reflects well on the quality and equity of the primary school system.

Until PISA 2009 results are available it is not possible to judge the quality and equity of Kazakhstan's secondary schooling with equal confidence, but the 2007 OECD/World Bank *Review of Higher Education* gives some pointers. In Kazakhstan, students go to general (comprehensive) secondary schools from age 11-15. They can then choose between academic secondary schools (gymnasiums), secondary vocational schools (lyceums), first-level vocational schools offering basic labour-market training, or colleges offering secondary and tertiary labour market training. The 2007 OECD Review mentioned a number of problems and issues facing the country's compulsory education system, most of which had already been highlighted in Kazakhstan's own *National Education Report* of 2006. These included: lower education quality in rural areas, where many schools are under strength and teaching different ages in the same classes; the relatively low status of vocational schools and poor quality of teachers in them, partly because good teachers are snapped up by industry at three times a teacher's salary; the lack of performance-related rewards to retain good teachers; and the poor state of many school buildings. Also, because secondary education tends to be regarded as preparation for further or higher education, pupils graduating from most secondary schools do not get a professional qualification useful for access to the labour market. Most school-leavers take the Unified National Test (UNT), a multiple-choice test which is both a school-leaving test and a university entry qualification. However, the OECD Review noted, a UNT pass would not generally meet the university entry standards of most European countries.

It is not clear how many of the OECD Review's recommendations on improving pre-tertiary education have been or are being implemented: if not, Kazakhstan still has room for improvement. Those recommendations included: a national curriculum for the 12th year that will equip school-leavers with subject knowledge and skills comparable to those of 18 year-old school-leavers in European countries; developing a new school-leaving exam, to give school-leavers a recognised qualification that will demonstrate the standards of knowledge and skills they have acquired; and giving secondary education students much better information to guide their further education and employment choices, with input from employers.

Since the OECD Review, Kazakhstan has made progress towards introducing a 12th year of compulsory schooling, which will raise the educational standards of school-leavers, entail changes in tertiary entry arrangements and shorten the length of bachelors degree courses, allowing the Bologna three-level model now used across Europe to be introduced.

Quality of tertiary education and research

The OECD *Higher Education Review* identified a number of strengths in Kazakhstan's tertiary education system. These included: the high literacy levels of the student population, good language skills and multi-cultural harmony; the size and diversity of the

Box 3.1. Quality of the education system in Kazakhstan (cont.)

university sector, with equal rights for private institutions; the free choice of university available to students who pass the UNT; strong demand from young people for higher education, even at some personal financial sacrifice; the Bolashak Scholarship Programme, which gives encouragement and prestige to international study; the considerable autonomy enjoyed by higher education institutions, especially the private ones; and the government's willingness to move towards international best practice in quality assurance, governance, teaching and research.

Weaknesses were also identified. In higher education these included: funding arrangements which make it more difficult for private than public universities to provide high-quality education; inequities in access to university and to student financial support; central controls over courses, curricula, organisation of teaching and degree standards, which limit universities' proper academic freedom and ability to respond to the needs of the economy, students and employers; a complex higher education quality assurance system, with too little emphasis on university self-evaluation and improvement; teaching and learning quality damaged by excessive teaching hours and uncompetitive teaching salaries; inadequate opportunities for teachers in higher education to update subject knowledge; poor equipment and information resources; lack of financial support for teachers' in-service training; and minimal links between higher education and the labour market. Vocational tertiary education suffered from problems in the tertiary colleges, including low student numbers, poor funding, low status and inadequate "ladders and bridges" to university education. Research, development and innovation also needed substantial strengthening.

Kazakhstan has now released a National Programme for Educational Development 2011-20, designed to achieve radical modernisation and quality improvement in all levels of general and vocational education. Improvements in hand or planned for higher education and research include establishment of a new "world class" international university, the Nazarbayev University in Astana, which will teach entirely in English and setting up laboratories for advanced engineering research in ten higher education institutions.

* Average Kazakhstan scores were 540 for schools with 0-10% of economically disadvantaged pupils (which contained 52% of students), 553 for schools with 11-25% (which contained 26% of students), 563 for schools with 26-50% (which contained 18% of students) and 588 for schools with over 50% (which contained 3% of students) – compared to international average scores of 490, 477, 466 and 443, and average proportions of 34%, 26%, 17% and 23%.

Table 3.7 shows how each country's tertiary numbers have changed from 2006 to 2009 (2010 where available). Bearing in mind that many of these countries regard all education undertaken after leaving school which does not lead to a university degree (such as vocational or technical education and training in colleges) as non-tertiary, even where the education or training in question would satisfy OECD's definition of "Type B" tertiary education, the table also shows post-secondary non-tertiary enrolment over the same period.

Kazakhstan has easily the largest enrolment – in 2009, very nearly 7% of the total population appears to be enrolled in either higher educational institutions or post-secondary colleges. Many of these may be in distance learning. The OECD Higher Education review recorded that in 2004-05 more than half the total – 392 000 of higher education students – were distance learners in private institutions; and that these might well be older people, perhaps in work and sponsored by an employer, perhaps already in possession of a degree but wishing to gain a further qualification in a different subject to

improve their employability. In 2006/07, the OECD review team observed strong demand for higher education among young people in Kazakhstan, and noted also that of the 744 200 students in higher education in 2004-05, 46.3% were studying in private universities, which made up 61% of all Kazakhstan's universities. But since 2005/06, the numbers enrolled in tertiary education have fallen every year. By 2010, tertiary numbers were 22% below their 2006 level, and there were 19% fewer higher education institutions. The numbers of students in post-secondary vocational and technical colleges continued to rise until 2009, though from 2008 not by enough to stem the fall in total numbers. In 2010, college numbers also fell.

The main cause of the decline in higher education numbers seems to be that in 2007/08 the government of Kazakhstan closed down a number of mainly private universities. Apparently this was on the basis that they were not seen to be meeting quality standards or fully complying with education regulations. The OECD review team of 2006/07 was asked to take a view on the size of the higher education system and did not advise reducing it until after the 12th year of schooling had been introduced. This was to take place after demand had declined as a result of falling numbers of young people (expected to happen after 2010) and after better quality assurance arrangements – based less on compliance with government regulations and more on meeting the needs of stakeholders – had been introduced. In due course, the 22% decline in enrolments over the last five years is likely to lead to a 22% decline in the number of graduates coming onto the market, which can be expected to damage Kazakhstan's competitiveness as well as reducing choice for students.

In the Kyrgyz Republic tertiary numbers have risen over the period shown in Table 3.7, (2006-10) apart from a tiny drop in 2009, offset by a welcome rise in non-tertiary (VET) numbers. At present, the numbers of young people on VET in the Republic is very small by international standards, both during and after upper secondary education. Though there seems to have been a big drop in non-tertiary numbers between 2007 and 2008, there was a more-than-compensating rise in tertiary numbers, suggesting a technical or classification change.

Afghanistan, Mongolia, Tajikistan and Uzbekistan all saw increases in tertiary numbers over the period shown. As so often, there is no information on Turkmenistan.

Quality of the education system

None of the indicators considered so far tells us about the quality of the education being bought by national spending. For most Central Asian countries there is a serious lack of reliable, internationally comparable information on the quality and value of education and skills training. At present the only international comparison to rate education systems for their quality is the World Economic Forum's Global Competitiveness Index (GCI). The 2010 GCI published in September 2010 rated four of the seven countries: Kazakhstan, the Kyrgyz Republic, Mongolia and Tajikistan (World Economic Forum 2010).

Global Competitiveness Index (GCI) rankings for education and research quality

As mentioned in Chapter 1, the GCI ranks world countries on the fundamentals underpinning economic growth and development. Competitiveness ranking is based on 12 "pillars of competitiveness", seen as important for countries around the world at all development stages. Table 3.8 shows 2010 World Economic Forum GCI rankings for the four

Table 3.8. **World Economic Forum GCI education and research rankings**

	Kazakhstan (1)	Kyrgyzstan (2)	Mongolia (3)	Tajikistan (4)
Overall rank (of 139)	72	121	99	116
Stage of development	1-2	1	1	1
Education ranks				
Primary enrolment	87	116	103	36
Secondary enrolment	51	75	40	78
Tertiary enrolment	51	44	47	90
Quality of primary education	74	81	106	113
Quality of education system	93	91	136	113
Quality of maths + science education	78	88	73	122
Quality of management schools	104	129	135	133
Internet access in schools	63	97	86	95
Research and innovation ranks				
Quality of science research institutions	112	134	111	100
University-industry collaboration on R+D	111	139	86	108
Local availability of research + training	76	120	139	121
Capacity for innovation	75	131	74	88
Survey of most problematic factors for doing Business				
Rank of “Inadequately educated workforce” among the 15 factors (the lower the number, the greater the problem)	2	9	4	6
Percentage of respondents who put this among the 5 most problematic factors	12.3	4.3	10	6.9

Source: World Economic Forum (2010).

Central Asian countries rated for a number of aspects of education and research quality. Rankings for enrolment rates are also shown.

These rankings tell a clear story. The four Central Asian countries do relatively well on quantity of education as measured by enrolment rates: all of them have higher ranks for secondary and tertiary enrolment than overall, indicating a competitive advantage. They do not do badly on Internet access in schools, which is important given the geography of the region. But the quality of their education systems tends to let them down.

Kazakhstan had the highest overall rank – 72 of 139 countries – but ranked lower on all four of the quality measures highlighted in the table, including “quality of education system” (93). Executive survey respondents thought its “inadequately educated workforce” the second most problematic factor for doing business, after corruption. Mongolia, with the next highest overall rank (99), ranked lower for all quality aspects except “quality of maths and science education”. “Quality of education system” ranked extremely low at 136, beating only Paraguay, Libya and Angola; and “inadequately educated workforce” was the fourth most problematic factor for doing business. Tajikistan was ranked 116 overall, and similarly (113) for the quality of its education system. The Kyrgyz Republic, ranked the lowest of these countries overall at 121, did achieve quality rankings somewhat higher than this (except for “quality of management schools”, a competitive disadvantage for all four countries. Respondents to the survey showed less concern about an “inadequately educated workforce” than elsewhere. The Kyrgyz Republic’s GCI quality rankings may be a little generous, and Kazakhstan’s ranking for quality of primary education a little ungenerous, in the light of the other information presented below.

The Forum's GCI research and innovation rankings, which reflect to at least some extent on the countries' higher education systems, tell a slightly different story. Although none of the Central Asian countries makes it into the top 100 countries (out of 139) for the quality of their research institutes, Kazakhstan ranks reasonably well on its capacity for innovation and the local availability of research and training to firms. Mongolia and Tajikistan both do significantly better than their overall ranks on capacity for innovation; Mongolia also does better on university-industry collaboration on R&D. However, Mongolia also ranks the lowest of 139 countries on local availability of research and training to firms, while the Kyrgyz Republic ranks the lowest of 139 countries on university-industry collaboration on R&D.

We can only guess at the ratings that might have been given to Turkmenistan and Uzbekistan had they featured in the Forum's GCI rankings, but it is likely that they would have performed similarly to the Kyrgyz Republic, Mongolia and Tajikistan. These two countries are both quite inward-looking in education matters, particularly Turkmenistan. For example, both have been phasing out Russian and replacing it with their own language for school instruction, which is thought to have affected educational achievement, and both have recently been reported as placing obstacles in the way of nationals wishing to leave the country for higher education elsewhere. Afghanistan would undoubtedly have ranked lowest of all.

Quality information from OECD reviews and international student performance comparisons

The only two countries for which other substantial information on the quality of the education system exists are Kazakhstan and the Kyrgyz Republic. Within the last four years, both these countries have participated in international comparisons of their school students' performance and both have had OECD reviews of their national policies on education.

Box 3.2. Quality of the education system in the Kyrgyz Republic

Quality of education in schools

The Kyrgyz Republic was the only Central Asian country to participate in PISA 2006. Sadly, the Kyrgyz Republic's 15 year-olds performed least well of the 30 OECD and 27 other countries in the survey in all three subjects. In science, the focus subject in 2006, they scored 322 (319 for males, 325 for females). The next lowest scorer was Qatar, with 349. The OECD average score was 500: an international average for all countries surveyed was not given. In mathematics, the Kyrgyz Republic scored 311 (311 males, 310 females); Qatar was again second lowest with 318; and the OECD average was 498. In reading, the Kyrgyz Republic scored 285 (257 males, 308 females); Qatar managed 312; and the OECD average was 492. PISA, like TIMSS, asks supplementary questions which can shed light on good or bad results, though, unlike TIMMS, these questions do not cover teacher aspects. On the positive side, the Kyrgyz Republic reported higher parental expectations of high standards than the OECD average, and the survey's highest percentage of students whose parents had completed tertiary education (77.5%). On the negative side, the country reported a higher-than-OECD-average proportion of schools with unfilled science teacher posts and that in 75% of these schools, instruction was being hindered as a result; a higher-than-OECD-average student-teacher ratio in science; the second-highest socio-economic status impact on future-oriented motivation to learn science; the lowest-quality educational

Box 3.2. Quality of the education system in the Kyrgyz Republic (cont.)

resources of any country; and the highest percentages of students whose instruction was hindered by lack of resources (90% or more in all 7 science areas, compared with OECD averages of 20-42%).

In 2009, OECD conducted a PISA Review of the Kyrgyz Republic (to be published in 2010), to help the Kyrgyz government to understand the reasons for their students' low performance. The report recognised that significant efforts and resources had been invested in education by schools, parents and government, but revealed the following aspects in need of attention.

School student achievement and the quality of teaching and learning in schools suffer from a curriculum which is narrowly subject-based and academically oriented, and offers limited choice to the students. There is an overload of subjects and hours, and the time for practical, creative or integrated learning is too limited. Textbooks and learning materials are inadequate to support the curriculum, in short supply and, where available, often out-of-date. The system for assessing pupils' achievement is seriously deficient and may go a long way to explaining why students from the Kyrgyz Republic performed so badly in PISA 2006. Assessment tends to focus on the reproduction of content rather than on how well pupils apply, analyse and understand the material. The questions students face in the national exams taken at grades 9 and 11 are in most cases known and published in advance; so students are never faced with an exam question they have not seen before, or with a task that requires them to apply their knowledge in a different way – very poor preparation for further education and working life. Undue emphasis is placed on coaching the small percentage of high-ability students for success at the “Olympiads”; too little attention is given to the needs of the average and the low-achievers.

Quality also suffers from the state of the teaching profession. Though teacher contract hours and pupil teacher ratios are more favourable in the Kyrgyz Republic than in many richer, developed countries and teachers have had good percentage salary increases in recent years, their salaries only amount to about 60% of the average wage. Teacher recruits are of generally low quality. The profession is largely female and ageing. Initial teacher training is provided by a diverse range of institutions of greatly varying quality. In-service training is done regularly, but poorly.

The OECD Review Team's recommendations for improving education quality included: introducing a National Curriculum Framework (NCF) to provide a coherent (also cross-subject) view of educational objectives for each major stage of education; allowing schools to adapt parts of the Framework to their own needs; reducing the number of subjects to allow for more in-depth studying; establishing standardised educational goals and a standardised assessment system; strengthening the existing selection test for university entry by expanding the subject content to better reflect students' mastery of the national curriculum; and reforming textbook renewal, development and supply. OECD also recommended moving to a smaller but better-paid teaching force; mobilising the potential of good school leadership; setting up an independent agency to license and accredit teacher training institutions; a new framework for pre-service teacher training; and new, higher standards for entry to the profession.

Quality of tertiary education and research

The Kyrgyz government has started to align higher education with the Bologna model, but the vast majority of undergraduate programmes are still the traditional five-year specialised courses. Though a National Accreditation Council has been set up to cover all post-secondary education and training, it is estimated that only about 20% of universities

Box 3.2. Quality of the education system in the Kyrgyz Republic (cont.)

are ready for the relatively sophisticated form of quality assurance it will be introducing. Students are worried about the quality of course offerings and degrees, their relevance to the labour market, the quality and preparedness of faculty to teach and the quality of the facilities within the higher education institutions (HEI). Many stakeholders fear that corruption affects student access, assessment and degree-awarding. Teaching and learning methodologies are old-fashioned and the level of HEI teacher qualifications is exceptionally low. The OECD Review Team identified a pressing need to modernise higher education in the Kyrgyz Republic if the country is to respond to the needs of a small economy for educated human capital, while also meeting individual needs. Recommendations included: development of a national strategy for higher education, addressing the size and efficiency of the sector and ensuring optimal use of resources, including buildings and equipment; improving degree recognition and career progression through the proposed National Qualifications Framework; relevant Ministries to collect, analyse and disseminate labour market information to ensure a better match between university programmes and economic needs; and increased employer involvement in course development and advice to students.

OECD also found that levels of research investment are low and that the institutions involved do not co-ordinate their work. The research infrastructure is often old or obsolete, there are no resources to replace it, and salaries for scientists and researchers are low. The review team recommended shifting the focus of research funding from basic to applied research.

Relevance of education to economic needs

Even the highest-quality education may be less than useful to a country's economy and competitiveness if it is in subjects that are not in demand in the labour market, or if what is taught is out-of-date, or if students have been given knowledge but not taught how to apply it effectively in the situations they will encounter at work. If the provision of education fails these tests it lacks relevance. It is also important for employers to be able to find suitably qualified people, preferably locally, to fill vacancies in all occupations important to the country's economy. Mismatches between employers' needs and what the education and training system provides lead to skills gaps, over-reliance on imported labour, domestic unemployment and economic under-performance.

Unemployment by education level

One important indicator of relevance is unemployment rates, and how these vary between people who have been educated to different levels. The unemployment statistics available for the Central Asian countries do not support a full analysis but do allow a breakdown of the registered unemployed by education level in four countries. Table 3.9 shows the rates of registered unemployment and registered youth unemployment in different countries. Table 3.9 shows the proportions of total registered unemployed by number of people with each level of education, in Kazakhstan, the Kyrgyz Republic, Mongolia, Tajikistan, two OECD member countries and four OECD partner countries.

Overall registered unemployment is highest in Afghanistan, followed by the Kyrgyz Republic; it is lowest in Uzbekistan (although the vagueness of that country's figure raises doubts about its reliability), followed by Tajikistan and Mongolia. Youth unemployment figures are not available for Afghanistan, Turkmenistan or Uzbekistan. For the other

Table 3.9. **Total unemployment and youth unemployment, 2008**

	Registered unemployment, all levels of education (3)	Youth unemployment (15-24) (4)
Afghanistan ¹	8.5	m
Kazakhstan ²	6.6	7.4
Kyrgyz Republic ³	8.2	23.9
Mongolia ^{4, 5}	1.8	11.3
Tajikistan ⁶	1.1	23.4
Turkmenistan	6.4	m
Uzbekistan ²	Below 0.5	m
OECD average	4.8	13.2
Partner countries		
Brazil ²	4.9	25.5
Estonia	4.7	26.0
Israel	5.3	25.8
Slovenia	3.7	23.3

1. Data for Afghanistan from 2005.

2. Data for Kazakhstan for 2008.

3. Data for the Kyrgyz Republic for 2008, except for youth unemployment (2007).

4. Data for Mongolia for 2007, for youth unemployment for 2006.

5. Youth unemployment based on data from 2006. All other data from 2008.

6. Data for Tajikistan for 2007.

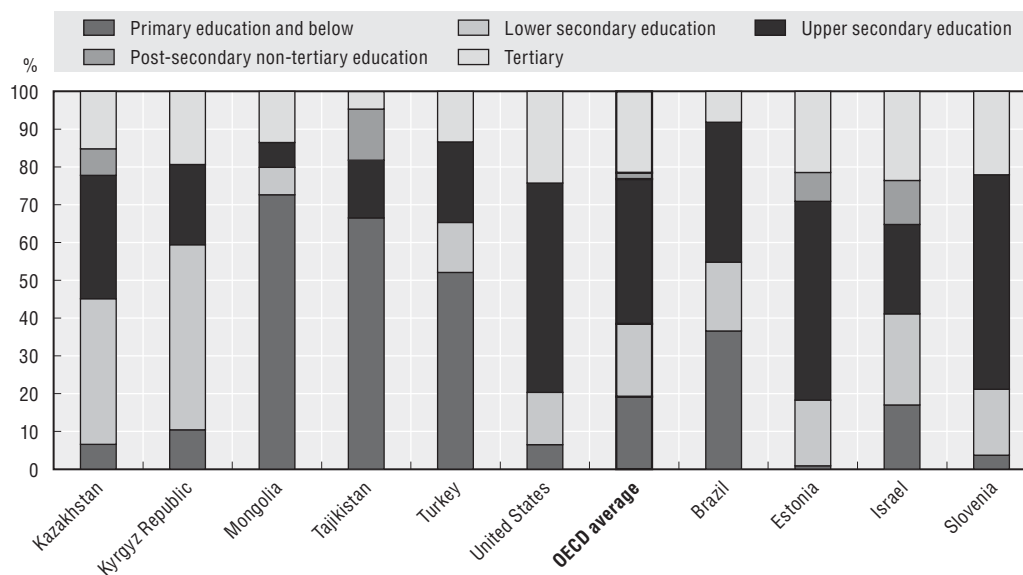
Source: OECD; ILO *Laborsta Database*; National Statistical Institutes/Agencies/Committees; Uzbekistan: State Committee on Statistics.

countries, compared to general adult unemployment, youth rates are 12% higher in Kazakhstan, nearly three times as high in the Kyrgyz Republic, over six times as high in Mongolia and over 20 times as high in Tajikistan. But only the Kyrgyz Republic and Tajikistan have youth unemployment rates above the OECD average.

Figure 3.2 shows that those people without any education at all account for over 70% of the registered unemployed in Mongolia and that those with only primary education or none account for over 65% of the registered unemployed in Tajikistan. The groups with lower secondary education or less account for 45% of the unemployed in Kazakhstan, almost 60% of the unemployed in the Kyrgyz Republic, over 75% of the unemployed in Tajikistan and close to 80% of the unemployed in Mongolia. The position is likely to be even worse for young people with lower secondary education or less, particularly in countries like the Kyrgyz Republic and Tajikistan which have high rates of youth unemployment. All these under-educated and unemployed people represent a sad waste of human potential. They will also be relatively expensive to train or retrain because they start from such a low educational base.

Relevance of vocational education and training

To individual employers, what matters is the relevance of education and training at the level at which they are recruiting. This may be from upper secondary schools, from post-secondary colleges or from higher education institutions. All seven Central Asian countries provide vocational education and training (VET) both in separate vocational schools or streams in upper secondary education, and in post-secondary institutions. However, post-secondary VET may be classified as non-tertiary or tertiary Type B, depending on the country, the providing institution and the length of study. Table 3.10 shows the numbers enrolled in each country's upper secondary schools; the percentage of

Figure 3.2. **Distribution of unemployed people by level of educational attainment**

Source: OECD; ILO Laborsta Database; National Statistical Institutes/Agencies/Committees; Uzbekistan: State Committee on Statistics.

Table 3.10. **Numbers of school students on VET: First-year, post-secondary and tertiary enrolments (2009)**

	Total numbers in upper secondary schools	Numbers on VET, % of numbers in upper secondary schools	First-year enrolment in post-secondary, non-tertiary (est.), % of population in relevant age group*	First-year enrolment in tertiary Type B + A (est.), % of pop. in age group
	(1)	(2)	(3)	(4)
Afghanistan ^{Note: 1}	285 290	2.60	1 483 (0.3%)	15 063 (3.4%)
Kazakhstan ²	421 120	25.70	247 582 (80.1%)	101 711 (32.9%)
Kyrgyzstan ³	154 685	14.20	3 802 (3.2%)	49 378 (42.0%)
Mongolia	102 934	25.60	5 765 (9.3%)	27 036 (43.8%)
Tajikistan ⁴	204 117	10.50	17 004 (5.6%)	23 736 (7.8%)
Turkmenistan	m	m	m	m
Uzbekistan	1 492 084	72.10	m	50 130 (8.0%)

Note: Calculations assume two-year duration for post-secondary non-tertiary courses.

1. Data from 2007.

2. Data from 2009 (secondary), 2010 (post-secondary).

3. Data from 2008 (secondary), 2009 (post-secondary).

4. Data from 2008.

Source: Calculations based on data from UNESCO WEI Database.

these on VET; estimated first-year enrolment in post-secondary non-tertiary education, the great majority of whom can be assumed to be on VET; and estimated first-year enrolment in tertiary education. This may be Type B or Type A (no breakdown is available), but in most of the countries the great majority of students are likely to be on Type A courses; courses leading to work in a specific occupation also tend to be Type A.

It may be helpful at this point to explain the patterns of upper secondary, post-secondary and tertiary education in Central Asian countries, which continue to follow the former Soviet model in many respects. Box 3.3 (based on a 2009 report by Majidov,

Box 3.3. Education system at upper secondary level and above in Uzbekistan

Since 1997, the government of Uzbekistan has been carrying out a reform programme designed to improve a system in which, formerly, only 10% of school graduates were able to enroll in higher education institutions (HEIs). The remainder had to enter the labour market untrained. To provide better opportunities for these young people, an extra school year was added and the former secondary schools were replaced by a network of academic lyceums and professional colleges. The colleges are specialised vocational institutions offering young people a chance to gain technical and vocational skills and increase their employability. Under the reform programme hundreds of new colleges and lyceums were built: according to official statistics, there were 303 colleges in 2001, 414 in 2002, 533 in 2003, and 827 in 2004. As a result, the total number of students enrolled in vocational colleges increased from about 60 000 students in 2000 to over one million in 2006. (These colleges seem to encompass the range of VET opportunities offered separately by upper secondary VET schools and post-secondary VET colleges in Kazakhstan, and are similar to further education colleges in the United Kingdom.)

Uzbekistan's higher education system has also seen reforms. The government opened new universities, upgraded the status of older ones and adopted the Bologna three-cycle model. First degrees were reduced in length from five to four years and Western-style masters and PhD programmes replaced research-based *aspirantura* programmes. (In this respect, Uzbekistan is ahead of the other Central Asian countries.)

HEIs in Uzbekistan are of three types: academies, universities, and institutes. Academies have the highest status: they offer postgraduate education only, and spearhead scientific research. The most prestigious is the Academy for State and Social Construction, set up to take over the role of the old party schools in selecting and training potential leaders: students are chosen from among the administration's middle managers. Others are the Academy of Banking and Finance, the Tax Academy and the Academy of Medicine. Most of the 24 universities are generic, offering undergraduate and postgraduate degrees in various subject areas. Six of them specialise in specific areas, including the Tashkent State University of Economics, the University of World Economy and Diplomacy and the Technical University (engineering). There are 40 institutes, all offering degree programmes in their own specialised field. Universities and institutes offer postgraduate as well as bachelors' degrees. In 2005, Uzbekistan had nearly 2 000 HEIs.

Apart from branches of foreign universities – which include Westminster University (UK), Moscow State University, Plekhanov Academy of Economics and Gubkin Institute of Oil and Gas (Russia), the Management Development Institute of Singapore and the Polytechnic University of Turin (Italy) – all are state-owned and state-funded. Unlike Russia and Kazakhstan, the authorities in Uzbekistan did not allow private sector involvement, fearing a decline in the standards of higher education. The government therefore determines the number of places available. University education is no longer free to students, except those who do best in the national entry test administered by the State Testing Centre, whose fees are paid by the government. Others must pay their own tuition fees. Despite this and the government's strategy of gradually reducing the percentage of paid-for places in order to divert more resources to professional and technical education, the total number of students in HEIs increased dramatically between 2000 and 2006, from 184 000 to 286 000.

Reforms are also in hand to develop better teaching content, improved textbooks, electronic and online learning materials, and to improve the skills of teaching personnel.

Ghosh and Ruziev⁴) describes the system in Uzbekistan, the only Central Asian country that not only maintained but increased its level of education spending in its early years of transition in the 1990s; since then it has introduced significant reforms and over two-thirds of its upper secondary students take the vocational path.

Employers seeking recruits with good-quality vocational/technical education and training below the level of a professional degree may be quite well-served in Uzbekistan, judging from the description in Box 3.3. In Kazakhstan, however, the Forum's GCI results in Table 3.8 show serious employer concerns about what they see as an inadequately-educated workforce. The OECD review of higher education in Kazakhstan found in 2006/07 that employers were not discontented with graduate standards but felt that the system was producing too few graduates with scientific and technical qualifications. However, a far bigger labour market issue for employers was the inadequate number of graduates from technical and vocational colleges with lower tertiary (or, as Kazakhstan would call them, non-tertiary) qualifications, who could be recruited as technicians or middle managers. University graduates, according to employers in Kazakhstan, often felt that their education entitled them to high-level jobs straightaway; they were not interested in joining a company at a lower level, "getting their hands dirty" and working their way up. The OECD review found that Kazakhstan's vocational colleges suffered from low status, underfunding and not perceived as being part of the higher education system. The lack of ladders and bridges between the two systems made it unnecessarily difficult for students to progress from one to the other. Since the review the government of Kazakhstan has taken steps to limit the numbers of students enrolling for degrees in the humanities and there has also been some increase in enrolments in vocational colleges. However, the government has yet to implement its own long-standing plans to set up a network of higher technical schools and to act on the OECD review recommendations for boosting the status of colleges and funding and integrating them into the tertiary system.

Similarly, in the Kyrgyz Republic the OECD review noted that the VET system was weak and growing weaker, in sharp contrast to the rising demand of the economy of the Kyrgyz Republic for VET services and the acute need of young people to obtain marketable qualifications. The review report notes that half of those aged 15 to 29 are unemployed, following the decline of state-owned enterprises and the loss of traditional jobs. Below the "higher professional" level, equivalent to a first degree, the Kyrgyz Republic offers VET at the "initial" or upper-secondary-school-equivalent level (VET I) and "secondary" or lower tertiary level (VET II). They are administered by different national agencies; only VET II is administered by the Ministry of Education. VET I provides some basic training for employer-sponsored adult workers, but its other clients are not the most promising of potential recruits for employers, consisting mainly of the lowest achievers from the last year of lower secondary schools, other than those who drop out of school altogether at this point. many of them vulnerable, without parental support or otherwise disadvantaged; the unemployed supported by active labour market programmes of the state; and learners in the penal establishments of the Ministry of Justice. VET II serves a wide range of students, mostly self-funded. The percentage of those funded by the government dropped from half to one third between 2002/03 and 2007/08. Many of them are in VET because they could not afford the fees for higher education and think that they may be able to progress to higher education on graduation. However their chances both of graduating, and of being accepted into universities if they do, appear to be diminishing. The OECD review recommended a number of steps to improve VET in the Kyrgyz Republic, including according it higher status, better

funding, involving more private funding, a unified administration, better management, achieving better quality outcomes and services across the VET system, better arrangements for recognising and certifying VET learning within a national qualifications framework, improving quality assurance, better interaction with stakeholders (employers and students), and boosting VET supply in response to labour market signals.

There is little information on the VET systems of the other Central Asian countries, but there is little reason to believe that they are free of the problems found in Kazakhstan and the Kyrgyz Republic.

Relevance of tertiary education: Subjects studied

Employers seeking to recruit graduates judge the higher education system on whether it produces the graduates trained in the subject fields they require, combined with the theoretical, practical and other skills they need. In Kazakhstan, for example, the skills gap is a development constraint for firms, and is particularly felt in areas such as information technology (IT), which are key to the competitiveness of the country (OECD, 2010b). These may be equally important in other countries of the region whose economic wealth depends significantly on oil, gas and other extractive industries. And research has shown that economies with large cohorts of well-educated scientists and engineers receive a productivity bonus. Table 3.11 shows the fields of study in which university graduates in the seven countries are trained. Technical sciences, natural sciences and maths and computer science (the classic science and engineering subjects) together account for 12.9% of Afghanistan's output; 19.8% of the Kyrgyz Republic's; 13.1% of Mongolia's; 23% of Tajikistan's and 21% of Uzbekistan's. Comparable figures are not available for Kazakhstan, but their assessors' report mentioned that 20.4% of bachelor's degree students in 2008 were

Table 3.11. Graduations by field of study

	Afghanistan ^{1, 2} (1)	Kyrgyzstan ³ (2)	Mongolia ^{1, 4} (3)	Tajikistan ^{3, 5} (4)	Uzbekistan ³ (5)
1 Law	6.9%	10.0%	6.2%	See row 13	See row 13
2 Business + management	None yet	5.8%	28.7%	See row 13	See row 13
3 Economics + commercial	5.9%	19.2%	m	See row 13	See row 13
4 Education	14.6%	23.3%	12.6%	5.0%	36.0%
5 (Other) humanities and arts	15.2%	13.1%	10.1%	33.0%	13.0%
6 Health	10.9%	2.7%	7.5%	4.0%	4.0%
7 Maths + computer science	m	m	2.9%	See row 12	See row 12
8 Technical sciences	8.6%	15.7%	7.8%	8.0%	15.0%
9 Agricultural science	10.4%	0.9%	2.7%	3.0%	3.0%
10 Services	0.9%	0.7%	5.4%	1.0%	2.0%
11 Interdisciplinary	m	4.6%	m	m	m
12 Natural sciences	4.3%	4.1%	2.4%	15.0%	6.0%
13 Social sciences	4.8%	m	8.2%	30.0%	21.0%
14 Mass communication	1.4%	m	1.3%	m	m
15 Other	16.1%	m	4.2%	m	m

1. Public and private universities.

2. 2008/09.

3. 2008/09.

4. 2006/07.

5. Some of the data are available for aggregate categories, as follows: humanities and arts; social sciences, business and law; engineering, manufacturing and construction.

Source: OECD (2010b), *Statistical Yearbooks*; UNESCO WEI Database.

on engineering and technology courses, a higher proportion in this field than in any country in Table 3.11. Among master's degree students, 17.8% were studying engineering and technology and 9.9% natural sciences.

If agricultural sciences are included in science and engineering output, Afghanistan adds over 10%; its science and engineering output figure becomes 23.3%, the Kyrgyz Republic's 20.7%, Mongolia's 15.8%, Tajikistan's 26% and Uzbekistan's 24%. Afghanistan also has the highest percentage of graduates in health (10.9%), followed by Mongolia. Tajikistan's percentage of graduates in the humanities, at 33%, is more than twice as high as that of any other country in Table 3.11.

Uzbekistan has the highest proportion of graduates in education (36%), followed by the Kyrgyz Republic (23.3%) and Kazakhstan (22.7% in 2008, according to their assessors' report). The Kyrgyz Republic also has a very large number of students who enter an education course, but then switch to another discipline. This relates to the facts that only a small proportion of education students in The Kyrgyz Republic (12% in 2008/09) are helped with their fee payments by state scholarships, and 50% of all state scholarships are for teacher-training places. As well as suggesting that the country would do better with fewer but better teachers, the OECD review recommended changing the current system of earmarking scholarships.

Relevance of tertiary education: Other skills gaps

Getting the right balance of graduate output between subject fields is not a full guarantee of meeting economic needs. Employers also care about whether graduates have had enough practical experience during their courses to be able to apply their knowledge in a work situation, and have the other skills needed to become useful employees.

Higher education students can be given practical experience in two ways. One way is for their courses to include a period of internship, or work experience, with an employer. This appears to be fairly standard Central Asian practice, at least in some subject fields. Though OECD received assessments contributing to this study from only three of the seven countries, Kazakhstan, the Kyrgyz Republic and Tajikistan, all three said that a period of compulsory traineeship was generally required in HE courses for regulated professions (nurse, doctor, lawyer, etc.) and some other occupations and in VET courses. The second way is for university courses themselves to provide practical as well as theoretical knowledge and skills. This is less common in Central Asia.

In the OECD's Kazakhstan review of 2006/07, both employers and students complained of insufficient practical experience during training, particularly in medicine, health and teaching (OECD, 2007). Kazakhstan employers also said that they wanted university graduates to have better skills in key foreign languages, such as English, and in information and communication technology (ICT); they also felt that many graduates lacked other skills needed to succeed in the workplace, such as team working, learning to learn, critical thinking and entrepreneurial and organisational skills. Significant numbers of ambitious young people from Kazakhstan with Bolashak scholarships or private means go to American and British universities for a less narrowly-specialised and more rounded higher education (2 636 in 2008).⁵

A recent OECD *Country Capability Survey* in 2010 showed that Kazakhstan employers remain concerned about inadequate education system output of people with the right job-related and other skills. When two sets of employers in business services (BS)

and IT firms were asked about major skills deficiencies in their workforces, “formal qualifications” ranked 1st in BS and 2nd in IT, after “culture of communication”; “problem-solving skills” ranked 2nd in BS and 3rd in IT; “communication skills” ranked 3rd in BS and 4th in IT; and “ability to learn”, “leadership skills”, “management skills” and “team-working skills” were among the top ten skills deficiencies in both lists. When asked to name “major barriers to business”, both groups placed “skills and education of available workers” at the top of their lists, well ahead of tax rates, tax administration and corruption. Among BS employers, 29.3% considered this a “major barrier” and 28.7% considered it a “moderate barrier”. Among IT employers, 24.7% said it was a “major barrier” and 31.3% said it was a “moderate barrier”. OECD’s 2010 *Competitiveness Survey of Kazakhstan* noted that “Both local and foreign investors operating in Kazakhstan consider the level of IT education in the technical universities to be limited. Technical, business and marketing curricula and specialisations in higher education institutions are all very theoretical and a large part of them do not correspond to the present market requirements. One reason is that most students in universities and high schools of Kazakhstan do not have access to good trainers, as teachers have outdated knowledge. Another reason is that career centres in universities are not developed to provide the necessary guidance and assistance to students. Students have very limited practical experience, firstly because there is no one to guide them in finding an internship, and secondly because the time allocated for practical training is very limited, while the practical training itself is carried out in an old-fashioned way. Short-term training, retraining and professional development programmes are costly and not well-developed.” It should be borne in mind, however, that Kazakhstan is by some margin the most economically successful and developed country in the Central Asian region and the most attractive for foreign investors; if comparable information were available for all countries, we would expect it to show that the other countries have even greater problems in most areas of human capital development.

During their OECD review, employers in the Kyrgyz Republic made similar points to Kazakhstan employers. The employers in the Kyrgyz Republic wanted to see much more national investment to produce well-trained specialists, particularly technical specialists and human resources personnel. They too wanted graduates to have more practical experience, perceiving university courses to be too academic and not related to the labour market. (Students shared these concerns.) They too wanted recruits with “soft skills” – working with people, communication skills and the ability to work in teams – and skills in languages, preferably English or Russian. The employers in the Kyrgyz Republic worry that a university diploma does not necessarily prove that a candidate possesses the knowledge and skills required for specific occupations, and that curricula and courses do not sufficiently reflect the changing work environment – in the Kyrgyz Republic there is minimal input from employers into objective-setting and curriculum reform. Employers are uncomfortable with the absence of comparative and reliable information on the quality of university outcomes or on the employability of graduates from different HEIs; they also worry about the absence of up-to-date career information in schools and in HEIs.

Global Competitiveness Index (GCI) rankings for relevance and labour force skills

For up-to-date insights into the relevance of education and the extent to which it is meeting labour market needs in the Central Asian countries, Table 3.12 presents more rankings from the World Economic Forum’s Global Competitiveness Index – unfortunately not available for Afghanistan, Turkmenistan or Uzbekistan. The four remaining countries

Table 3.12. **Additional World Economic Forum GCI rankings**

	Kazakhstan (1)	Kyrgyzstan (2)	Mongolia (3)	Tajikistan (4)
Overall rank (of 139)	72	121	99	116
Relevance and Labour Force Skills ranks				
Brain drain	80	139	123	111
Availability of scientists and engineers	91	136	72	111
Female participation in labour force	22	85	7	52
Extent of staff training	98	124	82	118
Firm-level technology absorption	105	137	84	122
Worker-employer co operation	85	87	89	95

Source: World Economic Forum (2010).

show a mixture of strengths and weaknesses. All rank highly for female participation in the labour force – these ranks being 36 above the overall country rank (row 1 in Table 3.12) in Tajikistan, 50 above in Kazakhstan, 64 above in Tajikistan and a stunning 92 above in Mongolia, which ranks 7th in the world. For availability of scientists and engineers, Kazakhstan and the Kyrgyz Republic rank below their overall rank (The Kyrgyz Republic is ranked with only three featured countries below it), and Mongolia and Tajikistan above their overall rank. For brain drain, all countries except Tajikistan are below their overall rank, but Kazakhstan at 80 is only a little below, whereas the Kyrgyz Republic ranks below all other featured countries. For the extent of staff training, only Mongolia beats its overall rank. The same is true of firm-level technology absorption, where the other three countries are all in the bottom 40 and the Kyrgyz Republic is in the bottom three. However, rankings are not bad for co-operation in employer-worker relationships: Kazakhstan ranks highest of the four countries and the other three all beat their overall rank.

Employer involvement in education planning and development

Another indicator of how well an education system meets employers' needs is the extent of employer involvement – by national agencies when formulating education policy; by HEIs and VET colleges when deciding what courses to offer, developing curricula and assessing standards; and by research and training institutions. The assessments received from Kazakhstan, the Kyrgyz Republic and Tajikistan shed some light on this issue.

Tajikistan's assessment was submitted by its Ministry of Economic Development and Trade together with the Chamber of Commerce and Industry – which in itself is positive evidence of ministries and employer representatives working together at the national level. It records that a workforce skills strategy is being prepared, and that consultation across some ministries and with external stakeholders, such as employers, is being used to improve programmes and policy, but on an *ad hoc* basis. Plans exist and budgets are allocated to monitor the VET system and its outcomes. Employers and unions are consulted on VET programmes, but on an *ad hoc* basis. These consultations span only a limited number of issues affecting VET policy and implementation, but do address issues of qualifications and competences. Specialised programmes in some fields of VET are available to all upper-secondary students, and the assessment records that 25% of those on VET in upper secondary schools have some work-based training. A continuing education and training (CET) strategy is in the drafting stage.

The Kyrgyz Republic's assessment was submitted by the EdNet (Education Network) Association of Educational Institutions, a body commended in OECD's Kyrgyz Republic review for its work in building linkages between HEIs and employers. EdNet's contributions have included setting up career centres in almost all Kyrgyz HEIs, bringing together employers and students; developing career planning handbooks which are a first step towards addressing the information needs of graduates; and working actively to involve employers in objective-setting and curriculum reform. The assessment records that a workforce skills strategy is being prepared. Consultation across ministries is conducted, but on an *ad hoc* basis. The key issues are mainly discussed inside the government, without stakeholder involvement: "there is no system in the mutual dialogue between the government, private sector, and civil society on the issues of workforce qualification." The assessors note that the Kyrgyz Republic lacks any independent body which could link up with and include the stakeholder groups, and that the Ministry of Education and Science does not cope with this task. Plans exist and budgets are allocated to monitor the VET system and its outcomes. Specialised programmes in some fields of VET are available to all upper-secondary students. However, the assessors note that the VET students are mainly children from families with limited financial resources, particularly from remote and rural regions; that the VET system needs considerable development and up-grading; and that it receives greater financial support from international donors than from the state budget. The systems for monitoring and quality control of VET, and the work now being done to introduce accreditation of vocational and technical schools owe their existence to internationally-funded programmes. Consultation occurs with employers and unions, but on an *ad hoc* basis, spanning the widest range of VET strategy and implementation issues where international donors are involved. However, the Kyrgyz Republic is focusing on continuing education and training (CET). A CET strategy has been adopted, based on input from relevant public and private sector institutions and civil society: it includes indicators of success, an action plan, allocated budgets and resources to monitor the strategy's implementation.

Kazakhstan's assessment was submitted by its National Analytical Centre. It states that human capital development is defined as a high priority for long-term development in the Republic of Kazakhstan until the year 2020, and that over the next decade particular attention will be given to quality improvement in education and health services – acknowledging however that the country is presently "in transition" to its desired position. A Workforce Skills Strategy has been defined and published: the strategy includes analysis of sector-specific skills requirements; strategy implementation is guided by an action plan, with specified objectives, timelines and budget. The intention is to gather a wide variety of evidence to evaluate the effectiveness of the strategy, including private sector consultations and formal policy evaluations conducted by independent evaluators; it is hoped that in due course this evidence will show that skills gaps are decreasing. Specific aims are to increase the proportion of highly skilled labour in the working population to 50% by 2020; to reduce the unemployment level to 5.5% by 2015; and to help at least 70% of those currently unemployed into work. The assessor records that there is comprehensive inter-ministerial co-ordination and consultation with external stakeholders because Kazakhstan's Law on Education requires the Ministry of Education and Science, in co-operation with relevant ministries, other central executive bodies, employers and other social partners, to approve the classification of professions and occupations. The Ministry of Labour and Social Security, in collaboration with the

Education Ministry, is required to promote VET in line with economic demand in the labour force. At present, proposals are being developed to identify training needs for 2010-15.

As in Tajikistan and the Kyrgyz Republic, Kazakhstan makes VET programmes available to all upper-secondary students, and plans and budgets are allocated to monitor the VET system and its outcomes. Specific aims for 2011-20 are to increase by 80% the number of VET graduates who pass on first attempt an independent assessment of qualifications organised by employers collectively; to re-equip over 70% of public VET colleges with modern educational, industrial and technological equipment and to provide more internships, practical training and apprenticeships. It remains true that consultation with employers and unions occurs, but only on an *ad hoc* basis: consultations cover a limited number of issues affecting VET policy and implementation. Arrangements are most developed in the oil and gas industries, where they include development of a system of professional standards; assessing and certifying employees' qualifications; creating public educational standards and curricula at all levels; and organising advanced training and internships for teachers of special subjects. Kazakhstan has also adopted a CET strategy, with input from employers and other stakeholders. The strategy provides indicators of success, an action plan, allocated budgets and resources to monitor its implementation. It gives each person a right to "personalised learning", i.e. to personalise the whole education process. Employers will be involved in co-funding the training programmes.

Clearly Kazakhstan has important plans for improvement over the next decade and the right ideas about employer involvement with the education system in the future. However, as the OECD review team said in 2007, it is difficult to comment on planned reforms because, even where the concept looks impressive, all depends on the implementation. In 2006/07, a number of deficiencies were identified. Employers were not adequately involved in delivering the (then minimal) information and guidance provided in schools on further education and career choices. Universities were not responding to labour market needs when deciding which subjects to offer and what syllabuses to teach: they rarely consulted employers on these matters and often could not respond even if they wished to, because Ministry of Education and Science controls allowed universities little room to change course provision, content or numbers of places. Employer involvement was not among the criteria for institutional accreditation. The proven labour market did not help tertiary institutions to secure public funding for specific programmes, unless or until the government's own manpower planning identified the same need. The manpower planning of ministries did not involve employers and consequently failed to identify emerging market needs in time for the education system to meet them. There was no independent or reliable system for measuring whether graduates were finding employment. These and many other factors combined to produce a shortage of highly-trained scientists and engineers and a more serious shortage of workers with vocational and technical skills and qualifications. It is not clear whether these deficiencies have been addressed.

Policies for competitiveness: The need for a comprehensive human capital strategy

To set effective goals for human capital improvement, Central Asian countries need to know where they stand now. Therefore going forward they should seek to ensure the collecting and reporting of all data introduced in this chapter to an international organisation, such as the OECD or UNESCO. This complete set of data is key for improving

future competitiveness. Countries which have not yet tested the effectiveness and quality of their education systems by participating in international studies of student performance, such as PISA, should consider doing so.

Other recommendations applying to all countries of the region include:

- Consider whether they have yet achieved the right balance between higher education and VET places by consulting employers' representatives. In all countries except perhaps Uzbekistan, it is likely that employers will see a need for more, better-funded, higher-status VET provision.
- Look again at how decisions are made on the numbers of tertiary places to be provided in each subject field. The best way is to allow tertiary institutions to make their own decisions in consultation with local employers. The next best way is to retain central planning but ensure that employers in all industry sectors are fully consulted and that their views are heeded. The worst scenario is to rely solely or mainly on central manpower planning uninformed by employer involvement.
- Make public spending on education cost-effective by minimising waste in their education systems. This involves, for example, ensuring that every teacher on the public payroll is a good teacher; monitoring quality by monitoring outcomes; minimising repetition of school years; and establishing national qualifications frameworks with ladders, bridges, credit accumulation and transfer arrangements, so that individuals can move easily from one type and level of provision to another without having to start again from the beginning.
- Lighten state regulation over tertiary education, and end central standard-setting and reform quality assurance regimes that enforce uniformity rather than encouraging self-improvement. This will enable tertiary institutions to respond better and faster to labour market needs, as they do in more competitive countries.

Tailored recommendations for individual countries include:

- The **Kyrgyz Republic** and **Kazakhstan** should be guided by their recent OECD Reviews. If **Kazakhstan** has not yet implemented or incorporated in its plans for 2011-20 the recommendations made in the 2007 review, those recommendations should be addressed again.
- **Kazakhstan** is advised to make urgent plans to reverse the recent decline in tertiary places and restore its higher education entry rates to internationally competitive levels. Introducing more tertiary Type B opportunities could be part of the answer, provided these are of good quality and adequately funded and both students and employers want them.
- **Turkmenistan, Uzbekistan** and **Tajikistan** are encouraged to develop strategies for raising their tertiary entry and graduation rates to more competitive levels.
- In the short-term, **Afghanistan** should focus on building the foundations of its education system, i.e. primary and secondary education for all. Enrolment and completion rates must be driven up and better teachers must be trained and recruited, even it means tying up the lion's share of education spending for the next few years. Quality should thereby not be traded in for quantity. Access, participation rates and outcomes must be equalised for girls and boys, pupil-teacher ratios must be reduced, and the government should continue to pay special attention to the quality as well as the size of the teaching workforce. Countries which expanded education coverage rapidly and massively, such as India, are now coping with serious problems related to

hastily-accredited teacher-training institutions and unqualified teachers. Improving the quantity and quality of tertiary education is important but less urgent. Tertiary education is becoming more and more globalised: if opportunities are not available within Afghanistan they can no doubt be found in neighbouring countries.

Notes

1. This study on the economic impact of low educational performance suggests that in the OECD countries a boost of average PISA scores by 25 points over the next 20 years implies an aggregate gain in OECD GDP of USD 115 trillion over the lifetime of the generation born in 2010.
2. OECD Factbook 2010.
3. Ibid.
4. Majidov, Ghosh and Ruziev, *Keeping up with Revolutions: Evolution of Higher Education in Uzbekistan*, 2009.
5. OECD, *Education at a Glance 2010*, Table C.2.7.

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Chapter 4

Improving Access to Financing for Smaller Enterprises

by

Roberto Calugi, Stefano Caselli and Marina Cernov

Access to finance is critical to further enhance the competitiveness of Central Asia. Financial systems in the region are not yet globally integrated (except for Kazakhstan) and often do not provide a diverse range of financial products to local businesses. Moreover, there is still a gap in access to finance which disproportionately affects small and medium-sized enterprises (SMEs). This chapter concludes that in addition to pursuing reforms to improve the financial system as a whole, more support should be given specifically to institutions that specialise in financing the SME sector, and to targeted instruments such as guarantee schemes.

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The importance of access to finance for SMEs

Small and medium-sized enterprises (SMEs) constitute a major source of knowledge, skills and innovation (OECD, 2010a) and generate employment and economic growth (World Business Council for Sustainable Development, 2007). They are particularly important for countries in transition, facilitating the shift from mass production to a demand-driven and market-oriented economy (Smallbone, 2001). SMEs also compensate for the unemployment created by down-sizing of the public sector and can react quickly to changing market conditions (Woodward, 2001).

Access to finance is a key issue for SMEs as banks and financial institutions have lower incentives to provide higher risk credit to SMEs, concentrating their attention on large firms (Naïm, 2008; *OECD Policy Brief on SMEs*, 2000). This limited access is mainly associated with the high administrative costs of small-scale lending, the underdeveloped financial system, the high risk perception attributed to small enterprises, asymmetric information and small firms' lack of collateral. Moreover, in the context of the recent financial crisis, credit tightening has further decreased SMEs' access to external resources. Paradoxically, although it is during a period of crisis that SMEs need financial resources the most (OECD, 2010b), this is when they become more scarce. This typically leads to a so-called "SME financing gap".

Economic growth is strongly and positively related to a country's level of financial development (Levine and Renelt, 1992). Improving access to funding for businesses, including for SMEs, improves this financial climate and has a beneficial impact on the economy as a whole, thus creating a more vibrant economic environment.

This chapter presents an overview of the business climate in the Central Asia region and focuses on the policy challenges facing SMEs and specifically on the reforms required to enhance access to finance. Both publicly available data and results from the Policies for Competitiveness Framework (PfC) Assessment (OECD) (Note 2) were used to develop the chapter. In addition, the analysis benefits from contributions of the Milan Chamber of Commerce, which provided information from a number of Italian and foreign entities operating in the countries that were examined.¹

Business environment: Access to finance is one of the key obstacles to private sector development

It should be noted that, when available, most of the data from the national statistical bodies is not comparable due to the different definitions of SMES used by the agencies. For example, only Kazakhstan, the Kyrgyz Republic and Uzbekistan report detailed data on SMEs. The latest data for Tajikistan is from 2002.

Even with the information available, it is difficult to show a comprehensive picture of the SME sector in Central Asia due to the large informal sector, especially for SMEs. According to Schneider (2010), the informal sector in Mongolia was estimated to be 17.6% of GDP in 2007, while in Kazakhstan, the Kyrgyz Republic and Tajikistan it represented approximately 40%. In Afghanistan, the informal economy accounted for approximately

80-90% of economic activity in 2004 (WB, 2004), which is mainly due to informal and illegal activities. Most SMEs are traditionally in the agricultural sector, which is largely informal.

Approximately 80% of the firms interviewed in the World Bank Enterprise Survey are of small or medium size, i.e. with the number of employees between 5 and 100. Therefore, most of the results reflect the obstacles encountered by such small and medium enterprises. Only 2-3% of participating firms are in the micro category with less than 5 employees. The segmentation between micro-enterprises within a general classification of SMEs is important, as they represent a special majority that can rarely achieve the capacity of an SME (Gibson, 2008). Micro-enterprises, unlike SMEs, are more likely to stay in the informal economy and hence are not affected by the same policy measures as SMEs. The same logic applies to individual entrepreneurs. Micro-enterprises usually face even further barriers in reaching small or medium levels as SME policy barriers usually have an even greater impact on micro-enterprise performance. This chapter focuses mainly on the financing obstacles encountered by SMEs.

The state has an important role to play in supporting the growth of SMEs in Central Asia. Governments of the region have already begun to develop SME support strategies which have had an initial impact. For example in Uzbekistan the implementation of the application-based procedure for business registration has reduced the time and costs of opening a business (IFC, 2009). However, coherent SME policies that foster entrepreneurship and facilitate access to finance still need to be developed.

There are indeed many obstacles to business development in the Central Asian economies. Key obstacles include corruption, unfavourable tax rates and limited access to finance.² According to the 2011 *Ease of Doing Business* report, Afghanistan, Tajikistan and Uzbekistan are positioned in the bottom half of the ranking. Kazakhstan, the Kyrgyz Republic and Mongolia are positioned a bit better but still low compared to other countries from Eastern Europe and the Central Asia region.³ Turkmenistan is not covered by the survey at all.

The same survey highlights high rankings in enforcing contracts (except for Afghanistan) and starting a business (except for Tajikistan and Uzbekistan). On the other hand, all the countries rank low in the areas of trading across borders (with an average position of the region at 171 out of 183). Other areas that are much less developed compared to the rest of the world are dealing with construction permits and closing a business.

The 2008 and 2009 *World Bank Enterprise Survey* revealed that the main concerns of businesses are related to corruption, tax rates access to finance, electricity, and an inadequately educated workforce. Among these, access to finance is identified in all of the countries as one of the top three business concerns.

Corruption is an important issue in all Central Asian economies. All countries of the region rank low in the Corruption Perception Index,⁴ the regional average being 151 out of 178 positions. Moreover, the *World Bank Enterprise Survey* shows that approximately half of firms participating in the surveys in Afghanistan, Kazakhstan and the Kyrgyz Republic see corruption as a major constraint, and more than 30% in Mongolia, Tajikistan and Uzbekistan. In Uzbekistan in particular more than half of the firms expect to give gifts to government officials to obtain an operating license, to secure a contract and when meeting with tax officials. Most countries are addressing this issue – for example joining the Anti-Corruption Network for Eastern Europe and Central Asia of the OECD.⁵

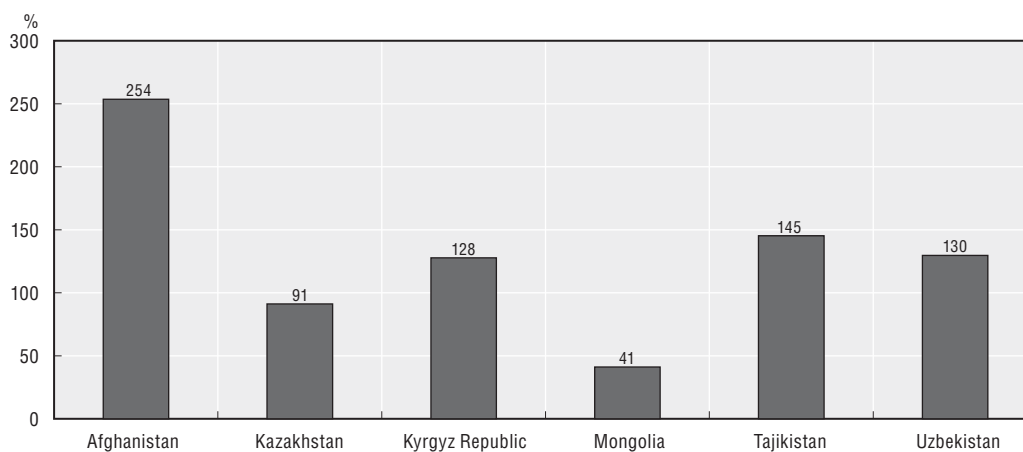
High tax rates are an important obstacle for SME development, too. On average, across the region there are 43 payments per year and the total tax represents 54% of the profit, with Tajikistan and Uzbekistan showing the highest rates, 86 and 96% of profits respectively. Kazakhstan has recently improved its position in this area (from 53rd to 39th) due to a decrease in the total tax rate from 36% to 30% of profits. Nevertheless, tax rates are still the top business concern, according to the *World Bank Enterprise Survey*.

According to the 2008 *World Bank Enterprise Survey* access to finance is identified as the first top concern in Mongolia, second in the Kyrgyz Republic and Uzbekistan and third in Afghanistan, Kazakhstan, and Tajikistan. Access to credit, in particular, is perceived as a major constraint to growth by approximately one third of firms in all Central Asian economies.

Very few firms use banks for financing their investments. In Afghanistan and Uzbekistan, only 1.4% and 8.2% of firms respectively use banks to finance investments. In other countries the share is also very low, the highest being for Kazakhstan – 31%. This is particularly true for SMEs. For example in Tajikistan, only 7% of micro- and small companies use banks to finance development or technological upgrades (IFC, 2008).

One of the reasons for the limited access to finance is the unfavourable conditions for contracting a bank loan. The collateral requirements relative to the loan value are very high (Figure 4.1). Such conditions cannot be met by SMEs seeking credit and prevents them from pursuing new investments. Afghanistan in particular has the region's worst lending conditions. According to the same survey, the value of collateral requirements amounts to 254% of the loan value, one of the highest in the world.

Figure 4.1. **Value of collateral requirement**



Source: 2008/2009 *World Bank Enterprise Survey*.

The average spread between lending rates and deposit rates is also high compared to OECD countries or Europe and the Central Asia region (Table 4.1). Moreover, small- and medium-sized enterprises usually face higher interest rates than their larger counterparts, due to the higher perceived risk.

Apart from the above mentioned common features, the countries of the region display some differences in the issues that affect their business environment and need to be addressed.

Table 4.1. **Interest rate spread (lending rate minus deposit rate, %)**

	2004	2005	2006	2007	2008
Afghanistan	–	–	–	–	–
Kazakhstan	–	–	–	–	–
Kyrgyz Republic	22.57	20.84	17.63	19.92	15.86
Mongolia	17.32	17.57	13.93	8.37	9.42
Tajikistan	10.57	13.52	15.28	14.44	–
Turkmenistan	–	–	–	–	–
Uzbekistan	–	–	–	–	–
Europe and Central Asia	5.04	4.63	5.72	4.85	–
OECD members	3.65	3.26	–	–	–

Source: International Monetary Fund, *World Economic Outlook Database*, December 2010.

In Afghanistan, the business environment remains very low in international rankings mainly due to its political instability and lack of security. The illegal economy, which covers more than one third of GDP,⁶ has a negative effect on the formal economy, as it spreads corruption, weakens law enforcement and therefore the rights of legal SMEs. In the Kyrgyz Republic, despite some improvement in the country's business environment before April 2010, the uncertain political and economic prospects have damaged confidence within the private sector and reduced national and already scarce international investments. This has had a negative impact on the entire economic system with considerable losses for private sector businesses.

For Kazakhstan and Mongolia, sector and regional diversification remain a challenge. In Kazakhstan, the presence of an extensive, prospering oil sector has a negative effect on the economy and particularly small business. In Mongolia the mining sector is a major contributor to the national economy, accounting for almost 30% of GDP and 65% of export revenues. An excessive dependence on oil, gas products or other single commodity makes any economy particularly sensitive to price shocks within that industry, and represents a risk for non-oil-related sectors whose activities and products could be crowded out by the rise of the real exchange rate.

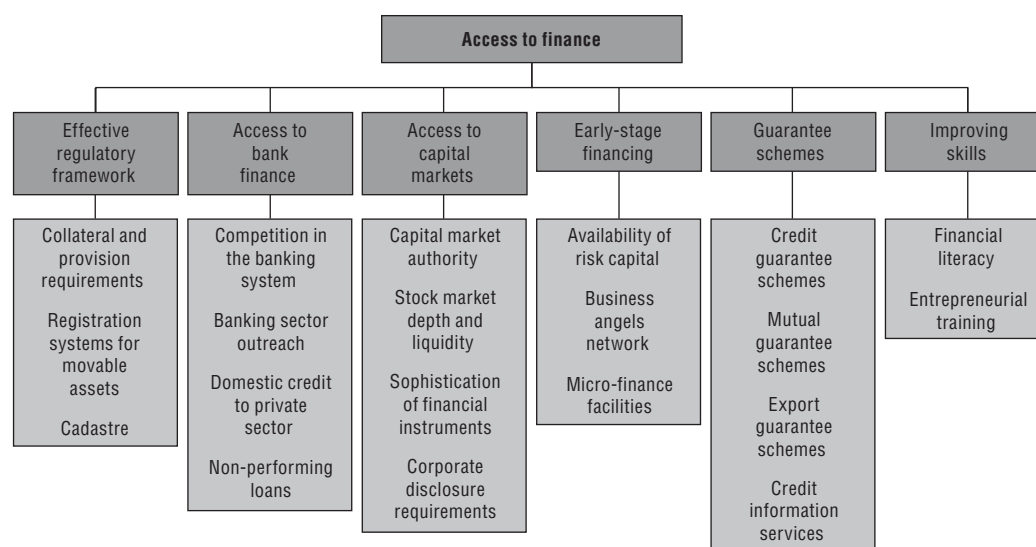
Uzbekistan and Turkmenistan lag in terms of private sector development and still need to focus on reducing the public sector's share in the economy. According to the latest *EBRD Transition Report (2010)*, Turkmenistan shows the lowest share of private sector contribution to the GDP – only 25%, with Uzbekistan immediately following with 45% of private sector share. Despite political and economic reforms, the economies of both Turkmenistan and Uzbekistan are still far from being fully market-oriented with business-friendly environments.

Overall, access to finance seems to be one of the major constraints for business development in the region. Policy makers from the region also agreed to focus further on this area as part of the OECD Central Asia Ministerial roundtable in Paris 17-18 June 2010.

Access to finance: The need for a comprehensive reform strategy

In order to evaluate the level of reform related to access to finance, the Policies for Competitiveness (PfC) Assessment Framework has been used in this chapter. Figure 4.2 highlights the six sub-dimensions included in Access to finance. The focus was set on both the supply and the demand side. Therefore, the framework aims at assessing the performance of all actors involved in the access to finance process. Moving from the

Figure 4.2. **Access to finance: Policies for Competitiveness (PfC) Assessment Framework (OECD)**



Source: PfC Assessment Framework 2010 (OECD).

macro- to the micro-level: from central financial authorities to banks, capital markets, large firms or SMEs (whether they are established businesses or start-ups), concluding with business managers and individual clients themselves. The structure of the sub-dimensions is as follows:

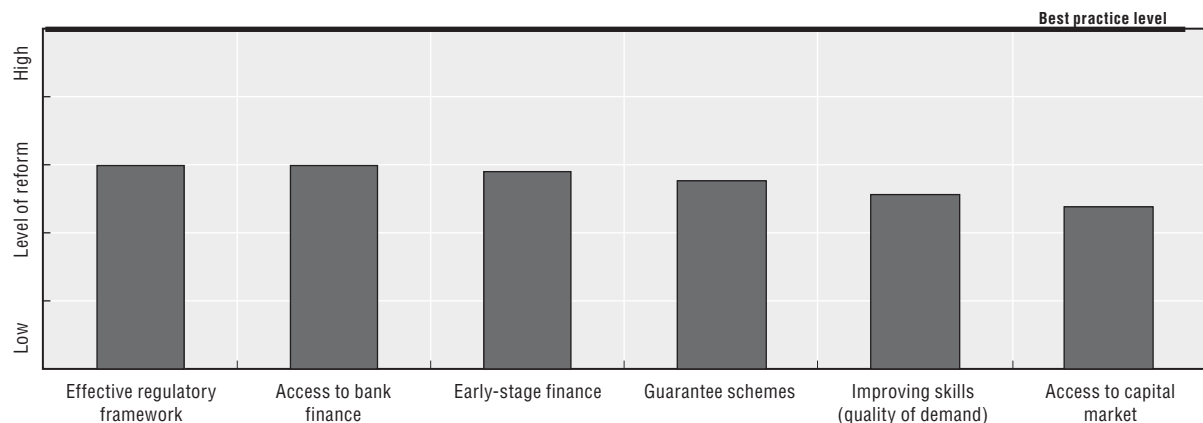
- Effective regulatory framework.
- Access to bank finance.
- Access to capital market.
- Early-stage finance.
- Guarantee schemes.
- Improving skills (quality of demand).

Sub-dimensions are composed of a set of indicators. For each, best practices from OECD (and some non-OECD) countries have been used as a benchmark against which the Central Asian economies have been assessed. It is noteworthy that the framework functions as a self-assessment provided by both public and private representatives of a given Central Asian economy.

All governments and private sector representatives from the region responded to the self-evaluation with the exception of Mongolia, Turkmenistan and Uzbekistan. The results highlight the fact that there is room for improvement across all sub-dimensions (Figure 4.3).

Effective regulatory framework

The institutional and regulatory environment covers the laws and regulations that allow the development of deep and efficient financial intermediaries, markets and services. This encompasses all the indirect measure that the policy makers can apply to facilitate and promote the development of the financial sector, and namely the laws, regulations and the supervision of the financial market.

Figure 4.3. **Perceived level of reform of access to finance policy area**

Note: “Best practice” represents the benchmark used in the PfC surveys which corresponds to the OECD and non-OECD best practice. High represents a level of reform that meets best practice, low – lack of reform.

Source: Policies for Competitiveness Assessment Framework 2010 Results (OECD).

Collateral and provision requirements

Collateral and provisioning requirements are important insofar as high collateral requirements can be an important obstacle to lending, especially to SMEs who may not have enough assets to offer. It is important that the collateral requirements are flexible and allow for case-by-case adjustments, so that the smaller enterprises can afford to contract loans with reasonable amounts of assets.

In Kazakhstan, the collateral requirements are determined individually for each contract and depend on the internal regulations of the financial institutions. In the Kyrgyz Republic and Tajikistan, on the other hand, the rules for collateral are stricter: in the Kyrgyz Republic for example, the value of collateral should be higher than 120% of the loan value.

In the Kyrgyz Republic reforms in the use of land property as collateral were adopted in June 2009. In principle, this measure should lead to easier access to financial resources and new investments, particularly for companies operating in the agricultural sector.

In Afghanistan a Mortgage Law on Immovable Property was enacted in 2009, which is expected to open new financing opportunities for home owners, businesses, and investors.⁷

Registration systems for movable assets

Registration for movable assets allows SMEs to use collateral other than land or real estate for obtaining a loan and assure the lender that the same collateral was not used for another loan.

In Afghanistan, a Law on Movable Property was enacted in 2009. Its implementation will broaden access to financing. The law will also protect collateral rights and improve enforcement in the event of default, while protecting the interests of borrowers.⁸

Kazakhstan again provides an example of an advanced system for registering movable assets, which is open to the public. According to the standards of “registering movable asset collateral”, registration is completed in two days and is available to everybody. The Kyrgyz Republic and Tajikistan have registries of movable assets, but these are not fully operational as they cannot be easily accessed by users.

In Mongolia the system allows for registration of movable property in the Land Registry (despite the contradiction in the name), but is not adapted to market practices. The type of movable assets and rights that can be offered as collateral is limited and does not allow for generally described assets (*e.g.* inventory, future equipment) to be charged.⁹

A cadastre is a comprehensive register of real estate property that also facilitates the use of real estate as collateral. Cadastre is well developed in Kazakhstan, and the Kyrgyz Republic. Tajikistan and Afghanistan do not have cadastre registers.

Access to bank finance

The role of banks is to improve the acquisition of financial information and to lower transaction costs, as well as to allocate credit more efficiently. This role is especially important in the developing economies of Central Asia, as it ensures the efficient allocation of financial resources.

Competition in the banking system

Competition is a very important aspect of banking sector efficiency; a highly concentrated banking sector may result in a lack of competitive pressure to attract savings and channel them efficiently to investors. The banking system in Kazakhstan and Mongolia is less concentrated than in other economies.

In Kazakhstan five banks owned 74% of assets at the end of 2009.¹⁰ There are also 20 banks with foreign capital and 31 representatives of foreign banks. Some restrictions for banks with foreign capital remain, *e.g.* restrictions on opening foreign banks branches in Kazakhstan. The concentration of assets in the top three banks in the Kyrgyz Republic is also low (less than 50% according to the survey responses). In 2009, 15 commercial banks were operating in Mongolia, all owned by the private sector (except for the Anod Bank and Zoos that were under central bank conservatorship from 2008 and 2009 respectively) (EBRD, 2010b).

In Afghanistan, most recently, the financial sector has expanded with new entrants, an expanded branch network and new products designed specifically for SMEs. In addition, new firms have emerged offering consulting services to the private sector (USAID, 2009).

In other countries, however, the market seems to be quite concentrated. In Tajikistan, for example, the top two banks (Orienbank and Agroinvestbank) out of 14, accounted for over 50% of total loans outstanding at the end of 2007.¹¹ In Turkmenistan, the financial sector remains small and controlled by nine state-owned banks and only one bank with a private majority. The market is concentrated, as the five largest state-owned banks share 95% of activity (EBRD, 2010a). In Uzbekistan at the end of 2005, out of 28 existing banks, the five state-owned banks accounted for more than two-thirds of total assets, while private institutions were operating in a small share of the market.¹²

Banking sector outreach

The coverage of the banking sector is important as it captures the geographic and demographic penetration of the banking sector.

In Turkmenistan for example, the limited use of financial services is a concern of the government; it recognises the need for expanded access to financial services, in particular for people living in remote and rural areas.¹³

Domestic credit to the private sector

Among all the Central Asian countries, the financial crisis hit Kazakhstan financial sector most severely, as it had the most globally integrated financial system. Following years of expansion in lending activities that created a boom in the real estate and construction industries, domestic credit to the private sector declined sharply from 58.9% in 2007 to 49.6% in 2008 (Table 4.2). The bank capital-to-asset ratio also declined to 12.2%, losing three points compared to the previous year and leading the financial system to shrink lending activities. In Kazakhstan loans are concentrated in strategic sectors, and namely in trade, construction and industry.

Table 4.2. **Domestic credit to the private sector (% of GDP)**

	2004	2005	2006	2007	2008
Afghanistan	–	–	4.13	6.57	8.92
Kazakhstan	26.49	35.69	47.78	58.94	49.65
Kyrgyz Republic	7.08	7.98	10.47	15.05	–
Mongolia	28.44	30.57	33.05	45.51	43.62
Tajikistan	17.37	17.21	16.04	28.99	–
Turkmenistan	–	–	–	–	–
Uzbekistan	–	–	–	–	–
Europe and Central Asia (developing only)	21.71	25.37	31.44	38.13	41.50
OECD members	161	165.3	169.9	170.2	162.9

Source: International Monetary Fund, *World Economic Outlook Database*, April 2010.

Despite the international financial credit crunch and the domestic crisis, other countries were less affected. The Kyrgyz Republic, due to the isolation of its financial system, was mainly affected through the decrease in economic exchanges (mainly remittances) with Russia and Kazakhstan.

The lending capacity of the Mongolian bank system has expanded rapidly over the last few years, especially in urban areas, with only a two-point drop for domestic credit provided to the private sector in 2008 (from 45.5% to 43.6%).

In Turkmenistan, while the isolation of the financial system has protected its domestic banks from the recent financial crisis, lending activity to the private sector remains extremely limited. The financial sector is dominated by the state and the lending is directed to the strategic sectors (EBRD, 2010b). Lending is largely directed to public-owned companies, with subsidised interest rates below market level. At the same time, the debt-pricing policies of private companies by state-owned commercial banks are closely monitored by the central bank which recommends maximum interest rates (EBRD, 2010a). Despite the initiative undertaken by the government in 2009 to increase financing to SMEs through subsidised interest rates of 5%, access to credit is often based on high levels of collateral and constrains private business development (EBRD, 2010a).

There is little reliable and recent data on Uzbekistan. As an anti-crisis programme, the government has promoted a recapitalisation of the commercial banks to support lending. As a result, in 2009 the banking sector increased its lending to small businesses by 50%, serving a growing demand for small- and micro-lending (ADB, 2010).

Non-performing loans

The share of non-performing loans has increased during the financial crisis in Kazakhstan and Mongolia, one of the main reasons being the over-dollarisation of the economy. In Kazakhstan for example, at the end of 2009, 13.1% of loans were non-performing, compared to 3.3% at the end of 2008 and 1.3% at the end of 2007.¹⁴ Non-performing loans were concentrated in construction and trade and resulted in the sudden decrease of collateral market values. To guarantee the stability of the entire system and the reliability of the financial market, the state has recently significantly increased its involvement in the banking system, taking minority and majority shares in several banks (EBRD, 2010b).

At the end of 2009, the share of non-performing loans in the Kyrgyz Republic was 4.1% of the total value of loans.¹⁵ In addition, the largest bank in the country, the Asia Universal Bank with more than 20% of its deposits in the Kyrgyz Republic, is facing constraints due to deterioration in the loan quality that may not be completely recoverable (IMF, ADB, WB, 2010).

Access to capital markets

A move away from banking intermediation for SMEs should be considered as a long-term objective for many countries, as it provides more alternatives and flexibility to the firms. Among all the countries, Afghanistan is the only one lacking a capital market. Other countries have capital markets at different levels of development that require better regulation and transparency.

Capital market authority

The capital market authority is responsible for regulating the securities market with the aim of maintaining a fair, efficient market and to facilitate the development of an innovative and competitive capital market, which consequently may become a source of funds for high-growth SMEs.

In Mongolia the institutional legal framework for the financial sector has improved in recent years. In 2006, an independent regulator was established, and in 2008 the Credit Information Bureau was launched to promote stronger transparency within the credit market.

In Tajikistan, the general regulatory requirements for banks are satisfactory, but there are concerns over full autonomy of the regulatory body and whether these requirements are enforced in practice.¹⁶

Access, depth and liquidity of the stock market

Liquidity of stock markets also has a significant positive impact on capital accumulation, productivity growth and current and future rates of economic growth (Levine and Zervos, 1996). Levels of access and liquidity of the capital markets determine how available these markets are for private firms and whether the potential investors have exit strategies once they have invested. This is particularly important for SMEs which are perceived as bearing higher risks.

The stock markets in Central Asian economies do not represent a realistic source of funds for SMEs. Trading on the Kazakhstan Stock Exchange (KSE) is dominated by block trades, liquidity is low and the spreads are wide. Furthermore, local issuance of equity as a source of finance remains unattractive; as a result SMEs cannot access this type of funding.

In the Kyrgyz Republic, there are also limited improvements to facilitate access of SMEs to these markets. The existing laws establish general principles of investor

protection, aimed mainly at improving the investment climate and promoting local and foreign investment.

In Mongolia, despite a significant increase in stock market capitalisation, the market is not fully developed, operating only partially, during limited hours and with a low volume of trading. Access to financial resources through private equity is not a real possibility yet either; few international funders have started operations with a limited level of activity (EBRD, 2009). At present, this option does not represent a valid solution for funding SMEs. A commercial private equity sector is yet to be developed and to date few international private equity funds have shown interest in or launched operations in Mongolia.

Sophistication of financial instruments

The development of financial derivatives can enhance the confidence and participation of international investors and institutions in the local capital markets and hence increase the availability of financing. These instruments can also improve risk management and risk diversification.

In Mongolia, even after privatisation, the former state-owned monopoly continues to enjoy a disproportionately high market share. The life insurance market is nascent, and there is limited demand for health, cattle, crop and other forms of insurance. Long-term financing remains difficult to access throughout the country, and the leasing sector, which could be a valuable way of improving system efficiency, remains relatively underdeveloped.

The non-bank financial sector (such as private equity funds and insurance companies) is virtually non-existent in Turkmenistan, with only a public-owned insurance company operating in a monopoly regime following the revocation of licences of four private insurance companies in 2000 (EBRD, 2010b). Foreign entry into the insurance sector is allowed only through minority joint ventures. Leasing and non-bank consumer finance market segments exist, but remain fairly limited.

In Uzbekistan, at present, the securities market functions as the facilitator for the privatisation process and securities circulation, thus leaving space for further development as a source of equity funding for enterprises (UNDP, 2009). At the moment, SMEs do not find the stock market to be a viable solution for gaining access to finance.

The market for leasing services is developing rapidly in Uzbekistan. Between 2003 and 2007 leasing doubled as a percentage of GDP (IFC, 2009). Currently it is being developed as an alternative form of financing for private enterprises (UNDP, 2009). At the moment, it is mostly exploited for major deals (i.e. aircraft leasing). However, the passage of leasing legislation and the favourable tax treatment of leasing operations may make sector development easier and thus make it more accessible for SMEs.

Access to early-stage finance is a key component for SMEs, especially for the innovative and high-growth ones. To grow, such firms need equity finance, in particular at the early stages of development. Risk capital markets and business angels networks are directly linked to the financial and entrepreneurial environment. Therefore countries with a more developed financial market, like Kazakhstan and Mongolia, should consider developing risk capital markets and business angels networks as a further step to improve access to finance for SMEs. Microfinancing on the other hand is an instrument targeting mainly micro-enterprises and individual entrepreneurs and should be considered by countries where institutionalised financing is not easily accessible.

Availability of risk capital

Venture capital and equity funds can be an important source of long-term financing for SMEs in their early stage of development, before bank lending and capital markets can be used.

Venture capital financing is available only in Kazakhstan and is carried out with state support. By the end of 2009, 85 projects were financed by venture capital funds but only three projects were implemented. In 2007, the National Investment Fund initiated the creation of the Kazakhstan Association of Venture Capital and Direct Investments.

There are no venture capital funds in other countries. In the Kyrgyz Republic in 2008 the Ministry of Economic Regulation initiated a project on creating venture capital regulation, but the project was not implemented. In Tajikistan, the laws on venture capital are in the drafting stage.

Business angels network

Business angels are investors who engage in early-stage risk financing combined with entrepreneurial coaching to lower the risks.

The development of “business angels” networks is constrained by the lack of a culture of risk-taking. Despite several efforts to create such networks in Kazakhstan and Uzbekistan, they are not actively involved in financing or consulting SMEs. In Kazakhstan, the national network Business Angels of Kazakhstan was recently created but to date there have been few results.¹⁷

Micro-finance facilities

Micro-finance is an increasingly important and growing sector, targeting small-business owners who are unable to access more institutionalised sources of funding. In all Central Asian economies many international and domestic SME support programmes exist or are under construction. These programmes are mainly geared to debt financing and providing advice on financial, industrial, sales and marketing problems.

Special programmes, funded by the government or foreign donor institutions, have been developed to assist SME growth. At present, multilateral entities (including the European Bank for Reconstruction and Development, World Bank, International Finance Corporation, Asian Development Bank, Islamic Development Bank, USAID, UNDP) co-operate with domestic operators and are involved in co-financing investments in the infrastructure sector where opportunities for commercial financing are currently limited. Most of the programmes target the rural areas, where financing opportunities are limited.

In addition they provide consulting services to SMEs. In Kazakhstan the Small and Medium Enterprise Development Fund is also designed to tackle development of a microcredit enterprise network, development of a guarantee system to facilitate the extension of commercial bank loans to SMEs, development of leasing for SMEs, and provision of training. In Uzbekistan the institutions provide not only finance in the form of credit, equity, loan guarantee programmes and grants, but also technical assistance and macroeconomic and microeconomic analyses.

Despite the widespread activity of microfinancing, these institutions often have a limited geographical coverage.

Turkmenistan is pursuing its development objectives using state investments, rather than exploiting the micro- and SME potential, or the whole private sector.

Credit unions were established by law in 2002 and are relatively new players in Uzbekistan. They serve the needs of small borrowers who are passed over by the traditional commercial banks who find it too costly to service them. These institutions are now in the process of being licensed under new legislation (UNDP, 2009).

Guarantee schemes

Lending to SMEs may carry higher risks, which is often translated in high collateral requirements.¹⁸ However, many SMEs do not have enough assets to cover the collateral value and therefore are excluded from the lending market. Guarantee schemes are designed to reduce the default risk and decrease the collateral requirements for a loan and hence increase the access of SMEs to the lending market. It is important that guarantee schemes are not only available but operate in the most efficient way, which means that they should be private and function under certain regulations.

Credit guarantee schemes are schemes developed by governments, NGOs or private sector entities that provide guarantees to groups that do not have access to credit by covering a share of the default risk of the loan. In case of default, the lender recovers the value of the guarantee. Such schemes are an effective mechanism for risk transfer and diversification and can alleviate the high collateral requirements for SMEs. Export guarantee schemes, another type of guarantee scheme, are an effective tool for supporting exporting firms by covering part of the importer default risk.

The creation of a regulatory framework for mutual guarantee schemes should also be considered. One of the main advantages of mutual guarantee schemes is that they are private and managed by potential borrowers. They have expertise and knowledge of the business sectors covered by the fund, the region in which the mutual guarantee schemes is based and the market trends and production techniques of the enterprises whose loans are guaranteed by the fund. A 2008 World Bank study of 76 guarantee schemes across 46 developed and developing countries has shown that mutual guarantee schemes tend to be financially more sustainable due to the private ownership and involvement of their members (Klapper, Beck and Mendoza, 2008).

In order to insure the efficiency of the guarantee schemes, it is important to have a strong and transparent regulatory and supervisory system that would minimise the probability of moral hazard (Box 4.1).

In Kazakhstan, the banks provide credit and export guarantee schemes. A specialised institution, KazExportGarant, based on financial resources from international organisations, has also been set up to provide export guarantee schemes. So far, however, there are no mutual guarantee schemes.

Credit information services

The availability of credit information services shows whether the public enjoys the services of public and private credit registries. Credit registries are databases managed by a government agency or private organisations containing information on the credit status and history of borrowers. Credit history may itself be a type of collateral and is especially important for SMEs, which often do not have enough assets to back up a loan. They are designed to reduce the information risk in the financial sector.

Box 4.1. Guarantee Fund for Small Business (FOGAPE)

The Partial Credit Guarantee Fund (FOGAPE) in Chile is administrated by a governmental agency. In 2004, FOGAPE had a total equity of USD 52 million. The number of guaranteed loans had risen from 200 in 1998 to approximately 34 221 in 2004. In 2004, the total amount of loans covered by the guarantee fund was USD 472 million and the average coverage ratio was 65%. The maximum coverage ratio can go up to 80% for loan amounts below USD 90 000 and up to 50% for amounts above USD 90 000.^{*} The registration fee ranges from 1 to 2% depending on the borrower's default history.

The success of the Partial Credit Guarantee Fund is due to many factors, including:

- A strong regulatory and supervisory system.
- Transparency and fairness – for example, guarantees are allocated to financial institutions through a sealed bid auction.
- An intensive publicity and promotional campaign launched by the government to explain the utility of the programme. Additionally, training programmes were provided to commercial banks to acclimate them with FOGAPE and its policies and financial institutions were invited to participate in FOGAPE's committees.

Larraín and Quiroz (2006) investigated the impact of the fund. It appears that customers of FOGAPE are 14% more likely to obtain a loan than non-customers. The scheme appears to have contributed to an increase in the volume of credit by 40%; turnover in the companies benefiting from the fund increased by 6%. Nevertheless, it is important to note that the study only looked at loans made in larger cities. There are still some questions about the impact of FOGAPE in rural areas.

^{*} USD 90 000 is equal to UF 3 000 (unidad de Fomento); 1 UF is equal to USD 30.

Source: Larraín, C. and J. Quiroz (2006), *Estudio para el fondo de garantía de pequeños empresarios*, Banco del Estado (ed.), Mimeo, March; Llisterri, J., P. Rojas, V. Mañueco, A. López, T. García (2006), *Sistemas De Garantía De Crédito en América Latina*, Banco Interamericano de Desarrollo, Washington DC.

Most of the Central Asian economies have a public credit registry, but the information is available only to financial institutions. The creation of private credit history agencies should be encouraged. The Kyrgyz Republic, for example, has a private bureau for credit information, "Ishenim", which gives the information free once a year to any requesting person. The credit history includes both positive and negative information and is stored for more than two years.

Improving skills

Difficulty of access to finance and the subsequent gap is not only a supply-side problem but also reflects demand-side challenges. This often includes a lack of knowledge about financing options, lack of understanding of investors' and bankers' concerns and needs, which limit the financing possibilities of entrepreneurs. It is important that such financial education and entrepreneurial culture and training are cultivated and encouraged in order to improve the competitiveness of SMEs.

Financial literacy

Financial literacy is one of the main obstacles to the financing of SMEs in Central Asian economies. Financial literacy is the process of improving the knowledge about various financial products and services, becoming more aware of the opportunities and risks and understanding investors' concerns and needs.

In all the Central Asian economies, knowledge about the variety of financial products and their usefulness is limited due to limited coverage of the financial sector and lack of access to this type of information. Unfortunately, none of the countries conducted surveys to measure the extent to which local businesses possess financial knowledge.

In 2007-09, Kazakhstan had a programme for the improvement of investment culture and financial literacy. Within the framework of this programme, 17 information and education centres were opened across the country and a newspaper and website were created that would provide useful information on banks, insurance, pensions and other financial instruments and services.

Entrepreneurial training

For a healthy entrepreneurial environment, the countries of the region need to establish frameworks for the development of entrepreneurial skills. The more developed the entrepreneurial skills, the more confident will be the financing sector in the ability of entrepreneurs to successfully manage a business and hence to be able to repay their loans.

The programme “Business-Sovetnik” (business advisor) has been operating in Kazakhstan since 2009. It provides free-of-charge services of short-term training to that segment of the population with entrepreneurial initiatives, as well as the current entrepreneurs throughout the country.

Box 4.2. Islamic finance in Central Asia

Islamic finance refers to financial activities consistent with the principles of Islamic Law (Sharia). Its central principle is the prohibition of using money for the sole purpose of making money, as investments should create a benefit to the whole society. From this principle derive five pillars: the prohibition of payment or acceptance of interest (*Riba*) for lending money, the ban on speculation (*Masir*) and risky investments, the prohibition of investing in sectors that are inappropriate with respect to Islamic ethics, the sharing of both profits and losses deriving from investments, and the necessity to link every investment to tangible assets.

Sharia-compliant banks or financial institutions need to earn profits following different schemes, by providing services for fees and by sponsoring investments in which they enter a partnership with their clients who will then pay a salary or a rental fee in case of leasing agreements (*Ijara*).

Sharia-compliant financial services have a long tradition, and modern financial instruments based on these principles have been around for more than three decades, but they gained widespread attention only recently. Two main reasons can be detected: the first is the recent rising prosperity in the Gulf and South East Asian countries, where Islam is the majority religion. The second factor, even more recent, stems from the last financial crisis which drew growing attention to ethical issues and interest in alternatives to the global conventional banking system.

Islamic finance entered the region right after the collapse of the Soviet Union, guided mainly by the Islamic Development Bank (IDB) which has been joined by every country but Mongolia¹ and is experiencing a growing demand. Islam is the majority religion in most of the countries, yet, as shown in Table 4.3 Islamic banks are only found in Kazakhstan. In fact, Islamic finance is most developed in Kazakhstan, as witnessed by the establishment of the third IDB regional office in Almaty,² which co-ordinates operations for the whole

Box 4.2. Islamic finance in Central Asia (cont.)

region. Kazakhstan is also presented as a best practice for introducing a working Islamic banking system in the region.

Table 4.3. Islamic banks in CA economies

	Main religion in the country	Nr. of Islamic banks	Bank Name
Afghanistan	Islam	0	
Kazakhstan	Islam	2	Lariba Bank Islamic Development Bank
The Kyrgyz Republic	Islam	0	
Mongolia	Buddhism	0	
Tajikistan	Islam	0	
Turkmenistan	Islam	0	
Uzbekistan	Islam	0	

Source: Directory of Islamic Banks, www.shariah-fortune.com; table developed by the authors.

The main problem in the expansion of Islamic banking is the lack of proper national regulations allowing the development of such a system. Nevertheless, countries such as Afghanistan and Kazakhstan are passing laws and seeing the rise of innovative financial instruments, and the Kyrgyz Republic has been running a pilot project since 2007 to explore the potential of Islamic finance and co-operation with the IDB. Despite the lack of dedicated banks, local and international banks are already offering Shariah-compliant products, looking at both national and international investors. While more sophisticated financial instruments such as *Sukuk* (bonds) are still not developed, the recent financial crisis and its effects on national bonds is steering governments and companies in this direction, with the hope of attracting Middle Eastern investors.

1. Afghanistan (1975); Kyrgyz Republic (1993); Turkmenistan (1994); Kazakhstan (1995); Tajikistan (1996); and Uzbekistan (2003).
2. The other two are in Saudi Arabia and Morocco.

Reforms through both direct and indirect interventions are needed

In order to improve access to finance for SMEs in the Central Asia region, policy makers should consider both direct and indirect interventions. Direct actions are based on intervention and financial support, while indirect actions are based on a portfolio of multiple activities aiming to create the right framework for the development of the financial system for SMEs. This includes:

- Increasing the quality of state intervention with both direct and indirect actions.
- Stimulating and protecting non-state ventures and initiatives.
- Combining multilateral intervention with local investment for greater effectiveness.
- Multiplying the exposure of best-in-class ideas and schemes.

The map of policy recommendations can be drawn by setting up a clear pattern of direct actions whose specific characteristics must be adapted for every country (or group of countries) considering their size, expected growth in GDP, and social and industrial profile, as well as other zone-specific variables that define SME development. In addition, indirect government intervention is addressed by providing a set of framework recommendations aimed at enabling a fairer environment for SME access to credit.

Direct interventions: Financial intermediaries, banks and specialised financial institutions may be the object of different decisions. For banks, it is possible to identify some options including the creation of a:

- state-owned bank that finances SMEs only;
- second-level state-owned bank devoted to refinancing local banks at a competitive level. The refinancing has to be subject to strict operating and governance rules;
- second-level state-owned bank devoted to incubating rural/co-operative banks (providing refinancing as in the previous case);
- state-owned holdings to invest in existing banks (for a more developed system) and/or in strategic industrial sectors.

The same schemes are also applicable for specialised financial intermediaries:

- Leasing intermediaries must be stimulated in countries because the role of fixed investment is significant. Fiscal benefits for new investments or for profits re-invested within the company would also reduce credit costs for enterprises and allow them to emerge from the informal sector.
- Consumer credit and microcredit intermediaries must be stimulated in countries with a strong rural presence. It is important to create small start-ups and to protect small initiatives from loan sharks. Especially in large countries, agreements between banks and post offices should be promoted in order to improve credit access for SMEs operating in remote rural areas.

For banks and specialised financial intermediaries, second-level entities must act not only as pure refinancers but also as “educators”, where education is based on the very proactive and relevant role of transferring banking culture and knowledge about banking management. Especially in rural and co-operative banks, incubation is first and foremost incubation of a managerial and banking culture.

While financial intermediaries provide debt and (sometimes) advice, investors provide equity. The policy makers should also ensure that all the schemes that aim to provide financing for SMEs should be accompanied by explicit exit strategies that should be made available to investors.

Credit guarantee agencies play an important role in SME development, too. An effective system for them is crucial for the whole economy, so that their role will sustain both SMEs and the banking system. The choice between mutual and profit systems is driven by the social and demographic structure of the specific country. However, in both cases, state intervention is crucial to creating second-level entities (or one national, second-level entity), to providing funds and managing risk, with credit agencies applying very strict schemes for operating and governance.

A last recommendation is devoted to financial markets. Developing financial markets for the sole support of SMEs is unrealistic. In countries where stock exchanges exist, however, reasonable schemes of public-private investment funds may be created in order to sustain demand (again, with the leverage scheme) and to explore linkages with major stock exchanges to create special clusters of foreign companies.

Indirect interventions: Some general suggestions may be interesting for countries in the region. Basic ideas for improving the country framework for SME development are: guarantee macroeconomic stability (in particular, inflation should be kept under control in order to stimulate long-term loans), improve competition and production diversification (supporting

the financial actors to avoid risk of over-concentration in their loan activities) and create an SME-first policy (addressing SME needs directly with tailored policies and considering their characteristics when drawing up laws and planning development programmes).

Indirect interventions by policy makers can be related to other issues: reducing information asymmetry by supporting the creation of private credit history agencies, increasing the average knowledge of the system and decreasing the burden of the public sector. The reduction of information asymmetry is particularly important for SME financing: public intermediary organisations such as chambers of commerce and national statistics bodies should be able to collect and provide all relevant information about SMEs and micro-companies. The adoption of solid and simplified accounting standards or financial check-ups should be encouraged through grants/vouchers to be used for training or consultancy.

Knowledge of the system may be stepped up by increasing the ability of bank officers to analyse and evaluate the potential of the SME and micro-companies sector and by improving financial literacy and entrepreneurial skills among entrepreneurs. Mechanisms include: public or private schools and foundations for professional training, qualified universities offering graduate and post-graduate courses on finance and business administration, publicly financed staff training programmes for finance officials and the attraction of highly skilled expatriate workers with relevant experience in private sector management and/or financial activities for SME development.

Decreasing the public sector burden is fundamental for these countries; given the low level of efficiency of the public sector and the high level of corruption, measures that decrease the burden of bureaucracy should be embraced. In particular, an alternate dispute resolution procedure should be promoted through the adoption of arbitration clauses within contracts with financial intermediaries and the establishment of arbitration and mediation chambers. Moreover, fiscal procedures could be simplified by dropping the quantity of different payments. Finally, a valuable solution may be the introduction of the right of SMEs to receive answers from the public sector within a stated maximum period of time.

Notes

1. With the help of the Milan Chamber of Commerce, a number of Italian and foreign entities operating in each CA country have been contacted by distributing a survey composed of 20 questions in order to qualitatively analyse the SMEs access to finance situation and policies already adopted. Uzbekistan, Mongolia and Kazakhstan replied to this questionnaire. The authors also would also like to thank the Italian Export Association COEXPORT, and the Italian Chamber of commerce in Uzbekistan for their precious support in this phase of the research. Without their effective support the collection of this data would not have been possible.
2. Quoted by surveys such as the *World Bank Enterprise Survey* and the *World Bank Ease of Doing Business* reports. However, the business climate differs by cluster of countries.
3. According to the *World Bank Ease of Doing Business* survey, Eastern Europe and Central Asia include: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Estonia, Georgia, Kazakhstan, Kosovo, the Kyrgyz Republic, Latvia, Lithuania, Macedonia, F.Y.R., Republic of Moldova, Montenegro, Romania, Russian Federation, Serbia, Tajikistan, Ukraine, Uzbekistan.
4. Transparency International.
5. Afghanistan, Mongolia and Turkmenistan are not part of this Anti-Corruption Network of Eastern Europe and Central Asia.
6. ADB Afghanistan Factsheet, as of 31 December 2009, www.adb.org/Documents/Fact_Sheets/AFG.pdf.
7. USAID Afghanistan, Program Highlights, July 2009; <http://afghanistan.usaid.gov/en/Article.773.aspx>.

8. *Ibid.*
9. EBRD (2009), *Commercial Laws of Mongolia, An Assessment*, by EBRD.
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16. EBRD, *Strategy for Tajikistan*, As approved by the Board of Directors, 26 January 2009.
17. www.tenstepca.kz/bak/bak.html.
18. High risk may also translate into a high interest rate. However, banks are reluctant to increase interest rates due to the so-called "adverse selection" phenomenon. As interest rates increase, safer borrowers are driven out of the lending pool while riskier borrowers remain. This leads to an increasingly riskier portfolio of loans. Therefore, banks prefer to keep interest rates low, thus preventing many SMEs that are willing to pay higher interest rates from obtaining funds (credit rationing).

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Chapter 5

Capturing More and Better Investments

by

Daniel Quadbeck and Anthony O'Sullivan

Foreign direct investment (FDI) flows are increasingly important as a source of finance for Central Asian economies. To unlock their full potential, a second generation of reforms is needed to improve the investment policy framework. Key areas to address are land reform, removing sector restrictions and enforcing intellectual property rights. Policy makers from Central Asia also need to focus on diversifying the sectors receiving FDI and building further investment promotion and facilitation capabilities. Investment promotion activities should be based on efficient use of resources, linking promotion efforts to investment zones and industrial policy objectives, as well as supporting regional development.

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The role of foreign direct investment in building long-term capabilities

A large body of research highlights the role of foreign direct investment (FDI) in building long-term capabilities that could support the overall competitiveness of a country through transfer of technology, processes and skills development (OECD, 2009b; Kudina and Jakubiak, 2008). Furthermore, for many emerging market economies, investment inflows constitute a major source of external financing, bringing much needed capital to build competitive industries. FDI can play a particularly crucial role in the development of the private sector in a context of considerable resource scarcity (OECD, 2010a).

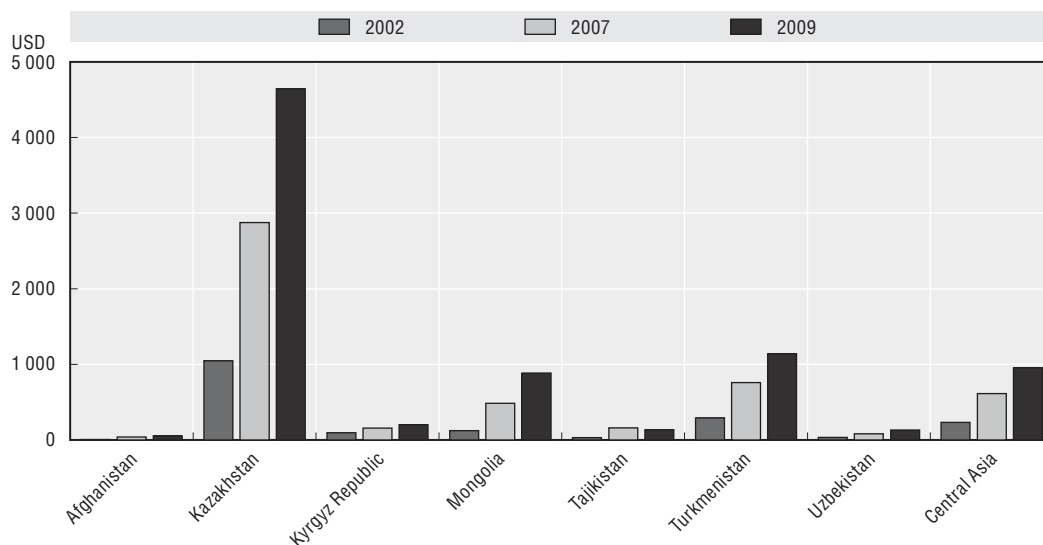
FDI in developing and transition economies can support the development and internationalisation of small and medium-sized enterprises (SME) through new technology and management know-how (Smallbone, 2006). Domestic firms can benefit from the presence of FDI via productivity spillovers generated by labour mobility (Kaufmann, 1997; Haaker, 1999). Exposure to international competition can encourage domestic firms to adopt advanced technologies and innovate in order to meet competitive pressures – the so-called “competition and demonstration effects” (Wang and Blomstrom, 1992; Corcos *et al.*, 2009). Lastly, forward and backward linkages between foreign and domestic firms constitute opportunities for positive spillovers (Rodriguez-Clare, 1996; Blomstrom and Kokko, 1997).

Combining openness to FDI with trade openness can increase the efficiency of local firms and further encourage economic growth through the exploitation of scale economies and by allowing firms to access better and lower cost capital equipment (Berg and Krueger, 2003). Joint ventures can be a particularly effective way to ensure that the benefits of FDI spread throughout the economy. The experiences of Korea, Egypt and China in promoting the development of new sectors – such as consumer electronics – through joint ventures with foreign companies can be very relevant for Central Asia.

Evolution of FDI in Central Asia

Central Asia has experienced a dramatic increase in FDI and other foreign capital flows over the past six years. After a first and second wave of investment to Central Europe and South East Europe that started around 1990, Central Asia benefited from a third wave of investment. Since 2003, FDI flows have increased at a compound annual rate of 50% reaching almost USD 19 billion in 2008 before declining in 2009 by 20% as a result of the crisis. The region’s global share, however, still remains very low (0.5% of global stocks) and concentrated in one country (80% has been invested in Kazakhstan) (UNCTAD, 2010a). In 2009, 82% of FDI inflows went into Kazakhstan. Turkmenistan received 9% of FDI inflows, followed by Uzbekistan (5%), Mongolia (3%) and Afghanistan (1%). Less than 1% of inflows went to the Kyrgyz Republic and Tajikistan. Kazakhstan also holds by far the highest per capita stock of FDI (USD 4 646), compared to USD 953 per capita on average across the region (UNCTAD, 2010).¹

The lion’s share of FDI has been connected to investments in extractive industries such as mining and hydrocarbons, financial and business services related to the extractive

Figure 5.1. **FDI stock per capita in Central Asia: 2002, 2007 and 2009**

Source: OECD analysis based on data from IMF, UNCTADstat, 2010.

industry and real estate. In Kazakhstan; over 80% of total stocks by 2009 were invested in these sectors (15% in the extractive industry) while only 8.4% were held in manufacturing and wholesale/retail trade. Major investing countries are the US, including billion dollar investments by Chevron, ExxonMobil, and ConocoPhillips, as well as the Netherlands, including investments by Shell.

In Turkmenistan, specific data on foreign investment are not available but the increased presence of foreign oil companies and higher levels of oil and gas production suggest that most FDI inflows are directed towards the oil and gas sector. International investors and the government have concluded three onshore production sharing agreements (PSA) and five offshore PSAs.² In Mongolia, 77% of FDI stocks are within mining/oil/geological exploration services and related trade support services.³ It should be noted that major mining investments in Mongolia have not been recorded in official statistics as foreign but as domestic investments (including Canadian investment by Ivanhoe Mines Mongolia) due to an unfavourable clause for foreign investors in the current minerals law.⁴

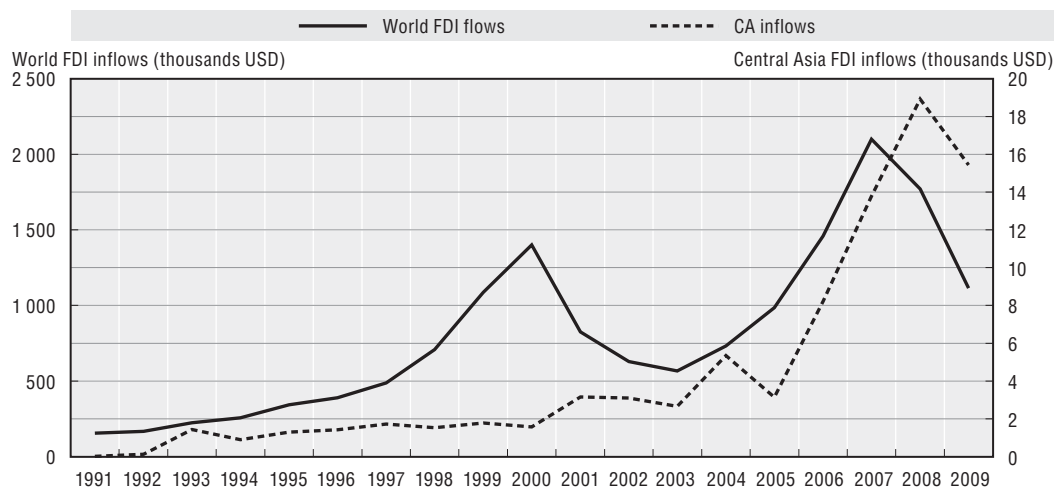
Resource-poor economies on the other hand, such as the Kyrgyz Republic and Tajikistan, attracted “market-seeking” investments rather than “resource-seeking” investments. According to a survey carried out by the CASE Center for Social and Economic Research (Kudina and Jakubiak, 2008), a large share of foreign companies in the Kyrgyz Republic entered the country to avoid import duties while being able to supply the domestic market. Accordingly, about 70% of products are destined for local markets and the export share of locally produced goods by foreign investors is rather low (between 17% and 30%). However, this low export share also indicates that export barriers are persistent, thus limiting the target market size and the potential attractiveness of both countries as an investment destination (Kudina and Jakubiak, 2008).

The global financial and economic crisis has had a major impact on global foreign investment flows. International investment activities declined by almost 50% between 2007 and 2009, after reaching an all-time high of over USD 2 trillion in 2007

(UNCTAD, 2010b). After two years of turmoil, global foreign investment flows should grow again in 2010 and reach an estimated USD 1.2 trillion in 2010, rise further to USD 1.3 to 1.5 trillion in 2011, and head towards USD 1.6 to 2 trillion in 2012 (UNCTAD, 2010).

Central Asian economies felt the impact of the global crisis through the credit crunch in 2009 as FDI and other capital flows to emerging markets started to dry up. Until then, FDI inflows into Central Asia had increased at a higher rate (50% compound annual growth, 2003-07) than world average (35% growth for the same period). In 2009, FDI inflows dropped by almost 20% (vs. a 35% decline globally) reaching USD 15.4 billion in total or about 1.5% in terms of global share (UNCTAD, 2010). In 2010, FDI inflows into Central Asian economies are expected (forecast) to increase slightly as confidence in a global recovery regains momentum (EBRD, 2010).

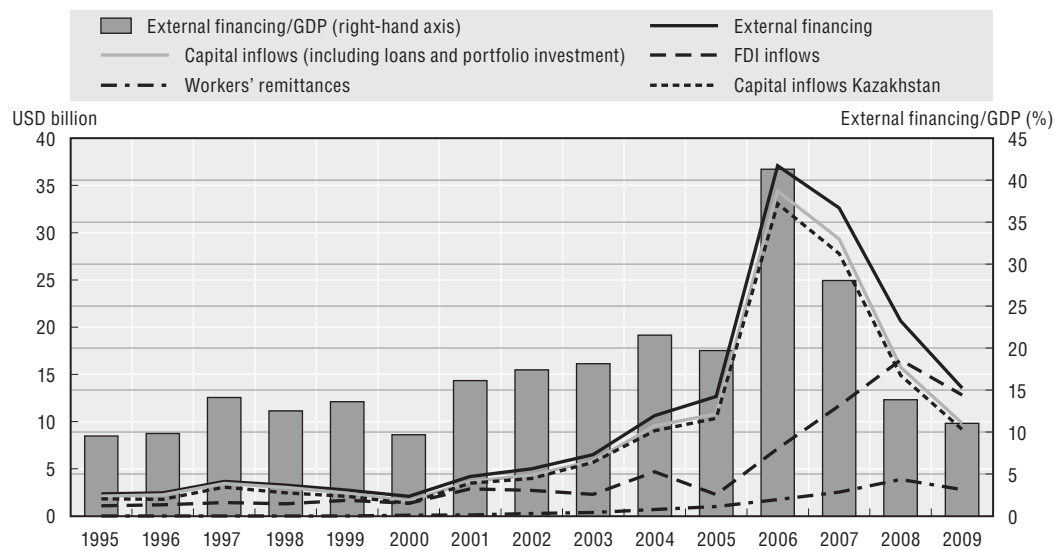
Figure 5.2. **FDI net inflows: World and Central Asia (in million USD)**



Source: OECD analysis based on data from UNCTADstat, 2010.

In addition to reduced FDI flows, Central Asian economies, and mainly Kazakhstan, suffered from the withdrawal of portfolio investments and reduced bank lending which had a significant impact on the region's external financing performance. External financial flows decreased from 42% of GDP in 2006 to only 11% of GDP in 2009 and are expected to further decrease in 2010.⁵ External financial flows including FDI, portfolio investments and other types of capital flows constitute an important source to finance current account deficits and support upgrading of productive capacities. The impact of the crisis shows that bank lending and portfolio investments can easily be withdrawn in times of crisis and loss of investors' confidence. FDI inflows, on the other hand, constitute a more stable source of external financing as real investments will less easily be withdrawn in times of crisis.

The rapid recovery of FDI in OECD countries is partly explained by the important role that governments have played in borrowing, lending and investing during the crisis. The main reason, however, for the revival of private investment was that most OECD and non-OECD governments were committed to avoiding protectionist measures – such as sectoral restrictions or freezing of capital flows. Governments have also shown that they are committed to improving the framework conditions for international investment flows, including further liberalisation of international capital flows and increased regulatory

Figure 5.3. **External financing in Central Asia: 1995-2009**

Source: OECD analysis based on IMF Balance of payment statistics, World Bank.

clarity providing for non-discriminatory treatment of foreign investors (OECD, 2010b; WTO, OECD and UNCTAD, 2010).

These findings are supported by the results of the 2010 Update of OECD's FDI Restrictiveness Index (FDI Index) which measures openness of investment regimes in OECD member economies as well as adherents to the Declaration on International Investment and Multinational Enterprises, Enhanced Engagement countries and other G20 countries. With overall improvements in both OECD member and non-member economies since 2006, the report finds that international investment restrictions have been significantly eased over the past four years (OECD, 2010c).⁶

Creating the right framework conditions by putting in place a sound and stable regulatory framework is only part of the answer. Promoting investments through targeted facilitation services aimed at closing the information gap and marketing a country's comparative advantages is becoming more important as global competition for attracting FDI becomes increasingly fierce. In 2009, OECD economies accounted for 80% of global FDI outflows (total USD 1.1 trillion) and 60% of FDI inflows (total USD 1.1 trillion) (OECD.Stat, 2010; UNCTAD.Stat, 2010).

To become more attractive as a destination for FDI, most countries worldwide have established investment promotion agencies (IPA) to provide support and facilitation services to potential investors. In order to contribute to national development objectives and sustainable economic development, however, a clear strategy to specifically attract quality investment is becoming more and more important (VCC and WAIPA, 2010, OECD, 2010a).

For Central Asia, reaching higher levels of FDI inflows will only be successful if new Greenfield investment opportunities⁷ arise to attract investments into higher value-added sectors. This would help increase the overall competitiveness of the region as quality FDI would provide the necessary capital inputs, transfer technology and create new jobs. Steps need to be taken to improve investment policy, identify and target specific sectors and investors, and promote new investment activity to achieve sustainable long-term improvements.

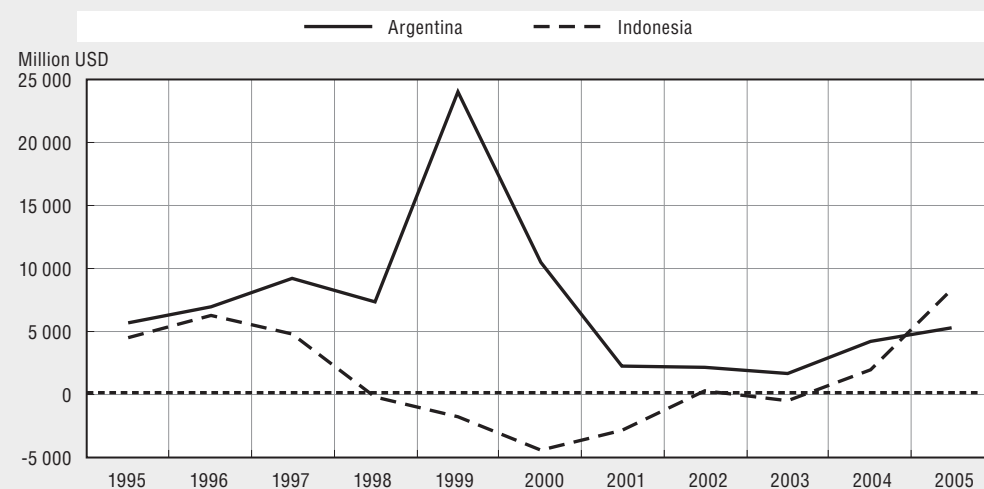
Box 5.1. Investment policy in times of economic crises and beyond: Argentina and Indonesia

Both Argentina and Indonesia experienced a sharp drop in FDI in the 1990s following an economic crisis. But while Indonesia managed to recover to previous FDI levels in a relatively short period of time this was not the case of Argentina which, to date, has still not fully recovered. This discrepancy in performance can largely be explained by different government policy responses. In Argentina, emergency measures such as freezing of bank-deposits (*corralito*), windfall taxes and compulsory exchanges of USD denominated bank accounts to pesos at official rate (*pesificación*) deterred foreign investors leading to a long-term withdrawal from the country (UNCTAD, 2002). Indonesia, on the other hand, actually further liberalised foreign investment restrictions in certain sectors such as banking and financial services. These measures helped restore investor confidence and allowed for a foreign take-over of two large private banks which supported recapitalisation of the banking sector speeding up recovery from the crisis (OECD, 2010d).

The experience of past economic crises suggests that policy makers should avoid imposing any further restrictions to investors and demonstrate commitment and openness to maintaining and developing open and transparent investment regimes. In countries which adopted this approach the long-term impact of a crisis was less severe and a return to former growth rates could be achieved more rapidly (OECD, 2009a). Crises can even sometimes be used as an opportunity to introduce better policies such as opening sectors previously closed to foreign investors to support recapitalisation of ailing firms.

Figure 5.4. **Argentina and Indonesia, net FDI inflows 1995-2005**

In million USD

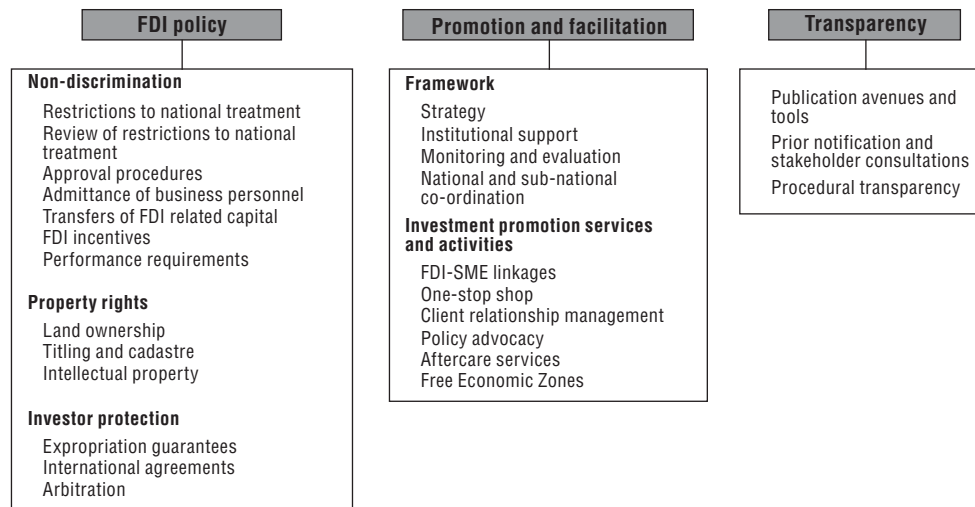


Source: OECD analysis based on data from UNCTAD.Stat, 2010.

OECD Policies for Competitiveness (Pfc) Assessment Framework on investment policy and promotion in Central Asia

To further support these efforts by providing targeted policy recommendations in a coherent approach, the OECD has developed an in-depth evaluation framework for investment policy and promotion. This framework provides comprehensive coverage of critical investment policy issues and promotion activities and helps governments to

Figure 5.5. **Investment climate policy and promotion:
Policies for Competitiveness (PfC) Assessment Framework (OECD)**



Source: PfC Assessment Framework 2010 (OECD).

evaluate in a cogent format achievements made in terms of investment policy reform and define priorities going forward.

The investment policy and promotion evaluation framework expands on the OECD's Policy Framework for Investment (PFI)⁸ and is divided into three components: i) foreign direct investment (FDI) policy; ii) investment promotion and facilitation; and iii) transparency. Each component contains a fixed number of policy indicators related to non-discrimination, property rights, investor protection, framework conditions for investment promotion, services provided to investors and transparency.

1. Foreign Direct Investment (FDI) policy covers three themes, the first being the principle of non-discrimination. Non-discrimination concerns the notion of "national treatment" which provides that a government treat investments controlled by nationals or residents of another country no less favourably than domestic investors in like situations. The second theme covers property rights. Foreign investors need to be confident that their ownership of, or right to use, property is legally recognised and protected. The third theme covers investor protection. Investor protection provides foreign investors with a means to resolve disputes and prevent *ad hoc* and discriminatory actions by the host government. It includes the possibility to resort to international courts in case disputes which cannot be resolved effectively through local courts.
2. Investment Promotion and Facilitation (IPF): This component covers two broad themes. The first is the overall IPF framework which examines the guiding strategy underpinning IPF activities, the institution implementing the strategy (such as the investment promotion agency), and the monitoring and evaluation mechanisms in place to gauge progress. The second theme examines the specific investment promotion services and activities being implemented to attract and retain foreign investment. These activities include forging linkages between foreign investors and local enterprises, implementing customer relationship management processes and fine-tuning one-stop-shop assistance for foreign investors in their pre-establishment phases among others.

3. Transparency: Transparency remains one of the top concerns of investors worldwide (OECD, 2003a). In 2003, the OECD adopted a Framework for Investment Policy Transparency to assist OECD and non-OECD governments to address this concern. The indicators in this component assess the progress that governments have made in: codifying and publishing primary and subordinate laws and their public availability; prior notification and consultation efforts with interested parties and stakeholders regarding reforms to investment policies; and, procedural transparency involving administration and application of investment laws and regulations.

Assessment results for Central Asia: Land reform, investment restrictions and investment promotion capabilities are key areas to address⁹

Overall, while some advances have been made, Central Asian economies still need to improve both their investment policy frameworks and investment promotion capabilities.

The need to reform the foreign direct investment (FDI) policy framework further

The declared policy of most Central Asian economies is to attract FDI as an important source of external financing and to support investments as a tool to spur technological innovation and economic growth. In general, the policy framework for FDI is governed by investment laws that were introduced in the early 1990s.

The following section provides a country-specific overview of non-discriminatory treatment provisions and property rights regulations across Central Asian economies.

Ensuring non-discriminative treatment of foreign investors and alleviating sector restrictions

Equal treatment of foreign and domestic investors is an important pre-condition for creating a favourable investment environment. Policies that derogate from national treatment regulations, such as sector restrictions, constitute a disincentive for foreign investors. While governments have the sovereign right to regulate and restrict foreign investments, the transparency and predictability of these procedures sends an important message to potential investors about the overall attractiveness of the investment environment. Decisions should be based on a set of clear and transparent criteria and not be fully left to the discretion of the approval authority. Moreover, a foreign investor which has been denied entry should have a right of appeal. The OECD's FDI Regulatory Restrictiveness Index cautions that obligatory screening and other discriminatory approval procedures may limit inward FDI flows (OECD, 2006a).

In general, foreign and domestic investors are treated equally in Central Asia by law. Legislation affecting foreign investment typically provides for guarantees against expropriation, transparent government procurement and specific regulations establishing incentive regimes in priority sectors as well as free transfer of capital (except Turkmenistan and Uzbekistan which still exert tight state control over capital flows and restrict repatriation of revenues from foreign investments through limited currency convertibility). However, while only a few restrictions to national treatment exist, mainly including matters related to national security, inconsistent implementation and contradictory provisions remain a significant threat to business operations.

Box 5.2. What constitutes non-discriminatory treatment of foreign investors?

The OECD considers a policy environment as non-discriminative if a government incorporated the principle of national treatment in its main investment acts as well as in primary and secondary legislation and if this principle is applied accordingly by legal practice. “National treatment” is defined as the commitment of a government to treat investments controlled by the nationals or residents of another country no less favourably than domestic investments in like circumstances. Any exceptions that might exist which define the scope of national treatment should be transparent and defined in the law. Typical exceptions or restrictions include: general exceptions (*e.g.*, protection of national security); subject-specific exceptions (*e.g.*, intellectual property, taxation provisions in bilateral tax treaties); and country-specific exceptions (*e.g.*, specific industries, such as financial services and transportation).

a) **FDI legislation and sector-specific restrictions for FDI.** While FDI legislation for most Central Asian economies supports the principle of national treatment, there are still a number of approval and ownership restrictions at the sectoral level.

In Afghanistan, FDI legislation is governed by the 2005 Law on Private Investment of Afghanistan which provides for non-discriminative treatment of foreign investors. However, investments in non-banking financial activities, insurance activities, natural resources and infrastructure as well as production and sale of weapons and explosives are restricted and subject to approval by the High Commission on Investment which includes the Ministries of Commerce, Agriculture, Finance and Foreign Affairs, the central bank and the Afghanistan Investment Support Agency (AISA).¹⁰

In Kazakhstan, key legislation includes the 2003 Law “On Investments”, the 2003 Customs Code, the 2007 Law “On Government Procurement” and the 2008 Tax Code. By law, foreign investors are not excluded from any sectors. However, foreign ownership restrictions apply in sectors such as media outlets (20%) and telecommunications, new oil exploration and production (49% ceiling).¹¹ Restrictions for investments in banks and insurance companies have partially been removed.¹² In general, foreign investment is screened by the government which can be slow and non-transparent.

The Kyrgyz Republic provides national treatment for foreign investors according to the Law “On Investments” with latest amendments in July 2006. The country is relatively open to foreign investment and has a liberal investment regime on paper. There are no outright sector-specific restrictions; however, rules and regulations are not always clear and can be applied in a non-transparent and arbitrary manner. Foreign investors need to register with the Ministry of Justice and must obtain a work permit and undergo other licensing and approval procedures.

In Mongolia, foreign investment legislation is governed by the Foreign Investment Law of Mongolia which provides for non-discriminative treatment and investor protection. Investments in strategic mineral deposits and activities involving petroleum extraction are subject to approval by Parliament, according to the 2006 Minerals Law of Mongolia. In other sectors, there is no screening of investments and foreigners may own 100% of any registered business.

In Tajikistan, the 1996 Law on Foreign Investment (amended in 1999) is the main document governing foreign investor activities. All private investment is screened and requires

government approval which can be burdensome as a potential investor has to consult with all potentially concerned government agencies that have the right to object. Even though there are no outright sector restrictions, this procedure is lengthy and prone to corruption.¹³

In Turkmenistan, foreign investment is regulated by the Law on Foreign Investment (amended in 2008) and the Law on Investments (amended in 1993) which restrict foreign investments to a few sectors and strategic investment projects. Both foreign and domestic investors depend on personal contacts in government to avoid major constraints.¹⁴ Foreign investment activities are also affected by the Law on Business Activities (2008), the Tax Code and the Civil Code (2000), and the 2008 Petroleum Law for investments in the oil and gas sector.

In Uzbekistan, key legislation includes the Law “On Foreign Investments”, “On Guarantees of the Freedom of Entrepreneurial Activity”, and “On Production Sharing Agreements”. Numerous sectors are not open for private investment or are subject to limited ownership restrictions and minimum capital requirements. Small-scale investors are in most cases not eligible to participate in strategic investments as set forth by the government.

Box 5.3. The OECD approach to investment policy reform

The OECD has long been active in identifying appropriate framework conditions to unlock the full potential of the contribution of international investment to global economic development. Both voluntary principles as well as legally binding instruments have been developed to which OECD member countries need to adhere, thereby committing themselves to keeping open and transparent investment regimes. Implementation of these principles and instruments is regularly assessed with the support of in-depth peer review mechanisms built on policy dialogue and exchange of best practices.

Instruments such as the OECD Declaration on International Investment and Multinational Enterprises form a policy commitment to create a conducive investment environment based on non-discriminatory principles – among them national treatment* regulations – and by encouraging observance of voluntary rules as outlined, among others, in the OECD Guidelines for Multinational Enterprises. Further instruments such as the OECD Code of Liberalisation of Capital Movements and the Code of Liberalisation of Current Invisible Operations stipulate progressive, non-discriminatory liberalisation of capital movements and the right of their establishment and current invisible transactions.

* National treatment requires according the foreign investor treatment no less favourable than that which the host state accords its own investors.

Central Asian governments should consider establishing systematic review mechanisms to benchmark the scope of restrictions to national treatment relative to practices in other countries. Ideally, this process should also seek inputs and observations of national and international investors and other relevant stakeholders.

b) FDI incentives for investments in priority sectors and performance requirements.

Tax incentives can be used to encourage certain policy priorities, such as innovation, employment or export generation (OECD, 2003b).¹⁵ To encourage investment in priority sectors most Central Asian economies grant additional privileges and incentives to foreign investors such as income tax preferences and customs duties exemptions. However, privileges and incentives are often linked to performance requirements or other

conditions, such as local employment requirements, which can expose foreign investors to arbitrary application of laws and regulations. A policy to boost local employment should rather focus on providing the right skills and qualifications to the local workforce and provide specialized experts in competition to foreign personnel.¹⁶

In Kazakhstan, the incentive regime reflects the country's efforts to diversify its sources of foreign direct investment by channelling investments into priority sectors such as agriculture, construction, metallurgy, chemistry, pharmaceuticals, oil refining, oil and gas infrastructure, transport and information communication, power, machinery, tourism and space activity. According to Article 13 of the 2003 Law "On Investments", public authorities can grant investment tax preferences, exemption from customs duties and state in-kind grants. However, tax preferences (2008 Tax Code) are typically linked to performance requirements such as local content requirements, providing training for local personnel and contributing to regional infrastructure development. As another measure aimed at boosting local employment, the government is limiting the issuance of work permits to foreigners through expensive and cumbersome procedures. There have been reports that government failure to fulfil contractual obligations regarding payments has exposed investors to government charges of non-performance which can result in the withdrawal of a business license.¹⁷

The Kyrgyz Republic is compliant with WTO Trade Related Investment Measures (TRIMs) obligations which prohibit the use of trade-related investment measures, such as local content requirements that are inconsistent with GATT 1994 provisions.¹⁸ There are no specific performance requirements; however, investors may need to lay out effects on employment and estimates for anticipated tax payments. Special investment incentives, such as tax and duty exemptions and simplified customs procedures are granted in one of the country's four Free Economic Zones.

In Mongolia, tax reductions of 10% are granted for investments in priority sectors; however, procedures for obtaining incentives are unclear and time-consuming. As in most other Central Asian economies, tax incentives have not undergone a cost-benefit analysis and do not contain sunset clauses. Specific performance requirements exist mainly for petroleum and mining exploration which sets exploration targets per exploration block issued by the Petroleum Authority of Mongolia (PAM) to companies active in the oil and minerals sector. Failure to comply with the previous year's performance commitment might result in fines, suspension or revocation of exploration rights.¹⁹

In Tajikistan, a special incentive regime granting between two and five years of income tax exemption depending on the size of the investment has been introduced for large-scale investors in a joint venture with a foreign capital share of at least 30%.²⁰ The government does not impose any formal performance requirements but encourages the use of local content.²¹

Turkmenistan has no general regulations concerning tax incentives except for investments in construction and installation of tourist facilities in the Awaza Tourist Zone (ATZ). Foreign investors can negotiate other incentives with the government on a case-by-case basis. Investors in oil and gas exploration need to conclude Production Sharing Agreements (PSA) for which specific regulations apply. The government imposes a number of requirements which are not linked to specific incentives, such as local employment requirements and restrictions on foreign-business personnel. Moreover, the ability to transfer investment-related capital, including repatriating earnings and

liquidated capital, has been restricted and the government aims at promoting investors who do not have foreign capital requirements.²²

Similarly, Uzbekistan still exerts tight state control over the economy and restricts repatriation of foreign capital and imposes local employment requirements on foreign investors. Tax exemptions and other benefits may be granted to foreign investors who have registered with the Ministry of Justice and who invest in priority sectors (production of computer components, textiles, construction materials, dairy products) or bring specific investments that support the country's national development objectives (e.g. export-orientation and import-substitution). Income generated from such privileges needs to be reinvested and cannot be repatriated.²³

In general, Central Asian governments could consider relying less on tax exemptions, and rather providing regulatory incentives through more transparent and streamlined administrative procedures. Moreover, governments should reduce imposing specific requirements for foreign investors in areas such as approval procedures, admittance of foreign business personnel in support of FDI, transfer of FDI-related capital, FDI incentives and performance requirements for foreign business operations which limits a firm's ability to operate in another country (OECD, 2008). Entry regulation can include screening and approval procedures either with respect to all investments or by specific sector.

Securing property rights and protecting investors against expropriation

Secure, verifiable and transferable rights including land registers and cadastre information to agricultural and other types of land and forms of property give an incentive for investors and entrepreneurs to shift into the formal economy. A similar logic applies to intellectual property rights which give businesses an incentive to invest in research and development.

Box 5.4. The issue of property rights

Property rights regulation covers both land ownership, including titling and cadastre systems, and intellectual property rights protection. Investors need to be confident that their ownership of, or right to use, property is legally recognised and protected. The assessment furthermore expands on areas of investor protection such as regulations on expropriation including compensation as well as investor-state dispute settlement mechanisms as agreed upon in Bilateral investment treaties (BITs) or by being a signatory party of the New York Convention on Recognition and Enforcement of Arbitral Awards (1958) and of the Washington Convention on the Settlement of Disputes between States and Nationals of Other States (ICSID) (1965).

Across Central Asia land ownership is restricted and titling and cadastre systems are underdeveloped. Property rights protection, including better enforcement of intellectual property rights, remains a key area to address.

a) Land ownership is restricted. Land ownership regulation remains one of the key areas to address across Central Asia. Since 1991, major land reform initiatives have been undertaken which include privatisation of state-owned land and shifting from collective to individual farming. Nevertheless, farm restructuring has not yet led to significant changes

in operational structures or upgrading of productive capacities (Deshpande, 2006). Legal frameworks for agricultural land tenure still need to be improved and restrictions on foreign land ownership and registration need to be levied to further attract much needed investments in the rural sector.

Across the region, Central Asian governments restrict foreign land ownership but permit long-term lease. To own (arable) land, foreign companies usually need to agree on a joint venture with a domestic company. For most business needs, long-term leases are suitable if the right to use a certain type of land and other forms of property are legally recognised and protected.²⁴ This requires adequate titling legislation and a cadastre system to ensure that land purchased or rented is not subject to claims for restitution.

In Afghanistan, foreign-controlled companies can lease land up to 90 years (agricultural land up to 50 years), however, land titling remains a huge problem and courts are overburdened in settling disputes as a result of conflicting titles. This does not mainly affect foreign investors but it limits the country's economic prospects of making efficient use of mainly pasture land as a valuable resource. Confusion over land titling also hampers access to finance because land can often not be used as collateral to obtain loans.

In Kazakhstan, the maximum period for long-term land lease is 49 years; however, agricultural land may only be leased by foreigners for up to 10 years (2003 Land Code). State-owned real estate centres register all property and lease rights. Only Kazakh citizens may own land except in public areas, main railways, public roads, forests and specially protected natural territories.

In the Kyrgyz Republic, foreigners are not allowed to own land but may lease property for up to 99 years which suits business needs in most cases.²⁵

In Mongolia, foreign investors are permitted to lease land for up to 60 years which can be extended for another 40 years. Foreigners are not allowed to own real estate but leases are available for up to 90 years.

In Tajikistan, all land belongs to the state but foreign investors can acquire land-use rights for up to 50 years. There are no other legal limitations on foreign ownership but investors reported significant difficulties in dealing with government inspectors.²⁶

In Turkmenistan, there is no legislation for private ownership of land which increases the risk that government may force investors to vacate their land in an arbitrary manner.²⁷

In Uzbekistan, land is still mainly owned by the state with limited ownership rights for private investors. Foreigners are not allowed to own but may lease land.²⁸

b) Property rights and investor protection remains weak. Protection related to expropriation and compensation remains relatively weak across the region. Non-transparent and arbitrary legal proceedings represent the biggest pitfall for foreign investors seeking a court decision on conflicting titles or compensation for expropriation.

In Afghanistan, the state has the right to expropriate assets on a non-discriminatory basis for the public good and against compensation. Property rights protection is low due to incomplete and inconsistent titling legislation and a lack of property registers. Commercial courts lack the capacity to resolve disputed land titles.²⁹

In Kazakhstan, protection related to expropriation and compensation has been weakened with the introduction of the 2003 Investment Law which is unclear as several provisions concerning compensation and capital expatriation guarantees have been

removed. The law narrows the definition of investment disputes and lacks mechanisms for access to international arbitration by giving precedence to dispute settlement via national judicial processes.³⁰ In addition, legislative changes have been introduced with amendments to the “Law on the Subsurface and Subsurface Use” which regulates investments in extractive industries. Its new version allows the government to terminate existing contracts in oil production and exploration that deem to threaten Kazakhstan’s economic security or national interests. These changes have weakened regulations with regards to investor protection and are regarded by the international investor community with suspicion.³¹

The Kyrgyz Republic is improving property rights protection but the judicial system remains weak and lacks independence. In one reported case, government officials assisted in the seizure of foreign investment property in 2006 and another investor faced attempts by a state-owned company to seize assets. While foreign investors have the right to compensation, there have been disputes as to whether these compensations have been calculated at real market value.³²

In Mongolia, the judicial system does not deliver full property right protection as judges generally do not respect provisions agreed upon in private contracts. Investors reported being faced with rulings that lack experience in standard practices regarding land, leases, buildings and mortgages.³³

Tajikistan improved investor protection in 2009 and 2010 through amendments to the Joint Stock Company Law requiring greater corporate disclosure in company annual reports (World Bank, 2010). However, legal proceedings remain burdensome and are non-transparent.³⁴

In Turkmenistan, investors do not have the right to own or lease land. Property can be confiscated through a simple court decision³⁵ and the government has a bad reputation for arbitrarily expropriating property of local businesses.³⁶

In Uzbekistan, property can be seized for violation of legislation, breach or non-fulfilment of contractual obligations, as well as for arbitrary reasons such as re-evaluation of assets and site or development programmes. There are some known cases in which the government has expropriated property of joint ventures at lower than market value and paid compensation only in local currency.³⁷

As domestic legislation for investor protection remains weak across Central Asia, international regimes for arbitration play an important role in dispute settlement. Most Central Asian economies have ratified both the ICSID and the New York Convention. While the Kyrgyz Republic did sign the ICSID convention in 1995, it has not been ratified until today. Tajikistan has not signed either the ICSID or the New York Convention; Turkmenistan has not yet signed the New York Convention. However, all countries of the region are signatories to the CIS Convention on the Protection of Investor Rights which aims at harmonising the legal framework for investment activities in the CIS.³⁸

To better protect investors, all economies of the region concluded Bilateral investment treaties (BITs) with partner countries to define foreign investment relationships and to protect investors against expropriation and nationalisation. Furthermore, investor-state dispute settlement mechanisms contained in most BITs provide rights to foreign investors to seek redress for damages arising out of alleged breaches by host governments of investment-related obligations (OECD, 2006b). So far, Afghanistan has concluded two BITs (with Germany and Turkey), Kazakhstan has concluded 39 BITs, the Kyrgyz Republic 22, Mongolia 33, Tajikistan 20, Turkmenistan 17 and Uzbekistan 33.³⁹

Investor protection also concerns the need for better mechanisms to enforce intellectual property rights. Even though legislation on intellectual property rights exists in all countries of the region, law enforcement mechanisms are weak. Pirated copies of optical media are easily available as well as counterfeit copies of registered trademarks.

Kazakhstan in particular has achieved substantial progress through ratification of the World Intellectual Property Organization (WIPO) Copyright Treaty in 2004 and amendments to the Civil and Criminal Codes in 2005. Domestic legislation now largely matches international requirements established by the WTO TRIPS agreement and the Berne Convention. Nevertheless, according to the Heritage Foundation 2010 Index of Economic Freedom, piracy of copyrighted products is widespread, and enforcement of intellectual property rights is weak.⁴⁰

Afghanistan has recently introduced an intellectual property law and is a signatory to WIPO since 2005 but has not yet signed the WIPO Copyright Treaty. The Kyrgyz Republic and Mongolia joined the Treaty in 2002, Tajikistan in 2009. In all three countries, law enforcement for violations of intellectual property rights is weak and almost all optical media sold is counterfeit. Uzbekistan and Turkmenistan have not yet signed the WIPO Copyright Treaty and pirated DVDs/CDs and pirated copies of trademarked material are widely available.⁴¹

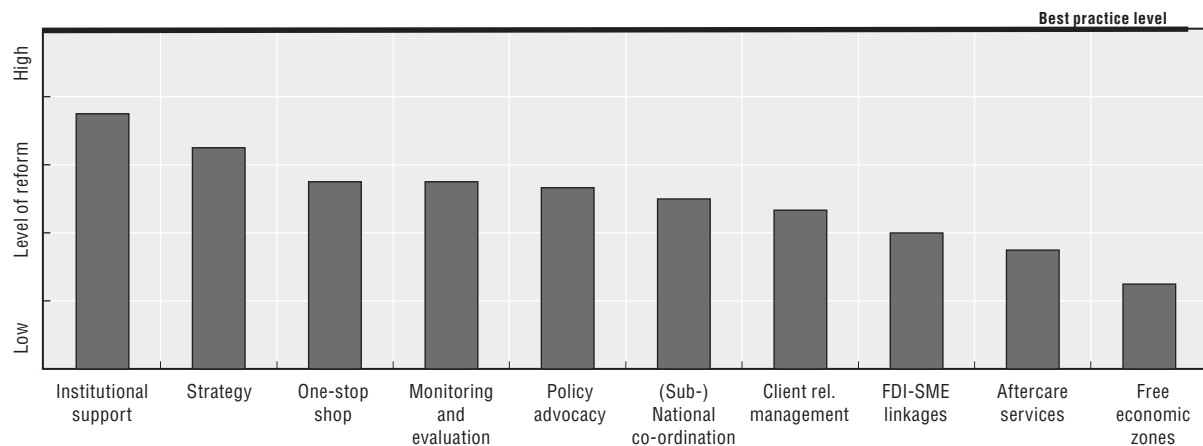
Better policies and law enforcement mechanisms securing intellectual property rights protection mechanisms are required to give foreign and domestic businesses an incentive to further invest in research and development, fostering the creation of innovative products and processes.⁴²

The need to further develop investment promotion and facilitation capabilities

Investment promotion and facilitation (IPF) evaluates two broad themes. The first is the overall IPF framework which examines the guiding strategy underpinning IPF activities, the institution implementing the strategy (such as the investment promotion agency) and the monitoring and evaluation mechanisms in place to gauge progress. The second theme examines the specific investment promotion services and activities being implemented to attract and retain foreign investment. These activities include forging linkages between foreign investors and local SMEs, implementing customer relationship management processes and fine-tuning one-stop-shop assistance for foreign investors in their pre-establishment phases among others.

Providing the right framework conditions

Central Asian economies (except the Kyrgyz Republic, Tajikistan and Turkmenistan) have established investment promotion agencies (IPAs) which provide information to investors as well as support and facilitation services. Most agencies claim to act as “one-stop shops” for investors providing assistance in setting up a business, supporting project implementation, performing a liaison role between the investor and the government and providing information on investment opportunities in the country as well as on investment related regulations and laws. All agencies operate as implementing bodies on behalf of the government but are not in a position to drive investment policy reform. Moreover, too often what is missing is a targeted strategy that contains a clear vision for the country’s development and explains where and how to compete.

Figure 5.6. **Perceived level of investment promotion reform**

Note: “Best practice” represents the benchmark used in the PFC surveys which corresponds to the OECD and non-OECD best practice. High represents a level of reform that meets best practice, low – lack of reform.

Source: PjC Assessment Framework 2010 Results (OECD).

In Afghanistan, the Afghanistan Investment Support Agency (AISA) has been developed as a pro-active institution in promoting and attracting investment to Afghanistan. AISA facilitates issuing licenses required to invest; it conducts investment promotion campaigns and matchmaking’ events; it continuously analyses private sector development issues; engages in policy advocacy lobbying for improvements in the investment policy framework; and it offers individual client-support services in the pre- and post-investment phase.⁴³

In Kazakhstan, the Kazakh National Export and Investment Agency (KazNex) has been set up in 2006 to support Kazakh exporters in selling their goods abroad. Since 2010, the agency is also responsible for attracting foreign direct investments to Kazakhstan with the objective of supporting economic diversification away from natural resources and primary products. KazNex is supporting investors in overcoming administrative burdens in setting up a company while also trying to develop external markets for domestically produced goods thus making it also more attractive as an investment destination.⁴⁴

In Mongolia, the Foreign Investment and Foreign Trade Agency (FIFTA) has been promoting Mongolia as a foreign investment destination since 1996. It offers a number of services to foreign investors including investment registration and business development services. Its one-stop shop has the authority to approve all regulatory and procedural requirements necessary to establish a foreign enterprise but investors will still have to register at other public administrations to obtain operating licenses. FIFTA is currently developing a new framework for offering aftercare services which will help to increase the value-added it can bring to foreign investors.⁴⁵

In Uzbekistan, the Agency for Information Support and Foreign Investment Promotion (Uzinfoinvest) has been set up under the Ministry of Foreign Economic Relations, Investments and Trade in 2007. It offers information support and facilitation services to foreign investors interested in one of the government’s strategic investment projects. One of the key priorities is to promote large-scale investments into the Navoi Free Industrial Economic Zone which the government plans to develop into a transcontinental intermodal hub for technology industries based on air-transport connections realised through the

Box 5.5. Draft Guidelines to further develop investment promotion capabilities

Draft Guidelines for Investment Promotion in Central Asia have been developed as a result of the second meeting of the Working Group on Investment Climate Policy and Promotion of the OECD Central Asia Initiative. This Working Group convened on 17 June 2010 in Paris, France to exchange experience and best practices on developing coherent investment promotion strategies, looking specifically at organisation design for investment promotion activities and links with investment zones.

All delegates agreed that investment promotion activities need to be based on a strategy outlining where to compete and how to compete making efficient use of scarce resources. The organisation design should support the objective of reducing information gaps between decisions made in the corporate world and what public authorities can do about it. To be sufficiently targeted, investment promotion efforts should be linked to investment zones and industrial policy objectives and support regional development.

I. Strategy

Establish government policy on where to compete and how to compete and set out the vision for the role and contribution of foreign direct investment to the national economic development framework.

1. Take an integrated approach to FDI attractiveness that focuses both on sector competitiveness and geographic diversification of FDI to attract quality investment and achieve industrial and competitiveness policy objectives at national and regional levels.
2. Develop longer-term capabilities through FDI-led competitiveness focusing on quality investment that supports innovation and employment creation.
3. Implement policy reforms by analysing and removing policy barriers along the value chain based on investor “activities” per sector.
4. Prioritise policy reform based on cost, impact and timing for implementation and introduce and enact legislation, where necessary, on FDI policy, treatment of FDI, new institutions and other policy areas that have an impact on FDI.
5. Analyse demand from a foreign-investor perspective and present a country’s comparative advantages by sector including an outline of potential target markets.
6. Address policy reforms at the country and sector level and ensure consistency with other government policies (e.g. legal and administrative procedures, labour regulations) to avoid conflicting laws and regulations.
7. Link investment promotion to regional development and ensure coherence of investment promotion efforts at the national and sub-national level.
8. Promote also country-wide policy reform horizontally across policy dimensions to create an overall attractive investment environment.

II. Organisation design

Understand the factors driving an investment decision and address information gaps through support services on a global level, a country level and a sub-national level.

9. Link investment promotion efforts to policy makers’ priorities through a supervisory board. To be competitive in global markets, investment promotion needs to be driven and overseen by the highest political authorities and involve relevant stakeholders across ministries.

Box 5.5. Draft Guidelines to further develop investment promotion capabilities (cont.)

10. Implement investment promotion at the global level (leverage the network of embassies abroad to raise global awareness and to provide first information), at the country level (ensuring policy coherence and providing economic intelligence) and at the sub-national level (preparing site visits, one-stop shop services, linkage programmes and aftercare services).
11. Develop a demand-driven organisation structure that provides targeted support and facilitation services by sector to small- and middle-scale investors.
12. Establish dedicated project teams including staff from ministries, investment agencies and municipal authorities to support large-scale investment projects.
13. When setting up an investment promotion agency, appoint a high-calibre chief executive who has the vision, experience and management skills to build and lead a successful organisation.
14. Ensure that staff is provided with continuous training and skills development (e.g. business strategies, marketing techniques, sectoral knowledge, presentation skills, client servicing, project evaluation).
15. Use senior political figures and government officials, existing foreign investors and the overseas expatriate community as “ambassadors”.
16. Organise and conduct well-planned country visits by potential investors, ensuring the provision of all relevant information and advice necessary to assess the country’s attractiveness as an investment location.

III. Linking investment promotion to zone programmes

Ensure that foreign investment policy has a regional dimension, i.e. that appropriate steps are taken to ensure that as many regions as possible benefit from FDI (e.g. through cluster/zone development).

1. Link investment promotion to industrial policy to provide targeted support for the development of specific segments and geographies to diversify FDI.
2. Establish local investment promotion branches to facilitate registration procedures/ issue licenses and provide after care services on the ground.
3. Based on the target sectors identified, develop “centres of excellence” which will attract investors by making available infrastructure that will give the country or region an advantage when competing internationally for investment.
4. Provide the right incentives to streamline administrative procedures and rely less on tax incentives. Modern zones should compete on the basis of an attractive regulatory environment.
5. Involve private companies in zone development and outsource non-core functions and services.
6. Set up an independent zone authority with sufficient autonomy over staffing, budgets, spending and policy making.
7. Encourage linkages between foreign businesses and local companies to maximise “spill-over” effects supporting economic development.

Support programmes linking foreign investors and the higher education sector in the development of new technologies, associated start-up companies and technology clusters based on shared exploitation of academic, human and capital resources.

airport of Navoi city. All investment projects are screened by Uzinfoinvest and the Ministry and decisions are not taken based on a transparent process.⁴⁶

Investment promotion agencies in Tajikistan and in the Kyrgyz Republic are only in the inception phase but both governments are committed to developing investment promotion capabilities and offering better investor facilitation services in the near future. Turkmenistan does not have an investment promotion agency but is becoming increasingly important as an investment destination, attracting more than USD 1 billion of FDI in 2010 (UNCTAD, 2010). The government is committed to attracting further FDI in support of economic diversification; however, there are no clear indications at this stage as to how this commitment will be implemented from an investment promotion perspective.

Overall, the results of the assessment show that investment promotion activities across Central Asia are not yet targeted enough to add true value for foreign investors and there are no clear links towards improving a country's competitiveness through policy advocacy and investment policy reform. IPAs in most Central Asian economies focus mainly on marketing activities and providing investor support services. However, to be efficient, IPAs should rather create clear links with industrial and competitiveness policies to strengthen a country's global competitiveness by moving forward with the investment reform agenda. Successful investment promotion and facilitation programmes need to be based on a coherent strategy which contains: i) a vision for the country based on national development objectives; ii) a precise definition of where to compete including in which specific sectors, geographic locations, customer types, etc.; and iii) a roadmap of how to compete and offering appropriate services and continuous improvements to the business environment.⁴⁷

Most OECD economies take an integrated approach to developing an investment promotion strategy which is focused on sector competitiveness and regional development. By doing so, investment promotion can serve as a tool to foster sector and geographic diversification of FDI. This can be achieved by looking at how to develop longer-term capabilities through targeted and sector-specific FDI-led policy reforms. In order to succeed in global competition, it is essential to take a demand-driven approach and build on a country's comparative advantages by sector while also analysing global interest, awareness and current investment trends. Improving a sector's competitiveness requires a thorough identification of policy barriers and constant adjustments in the policy environment based on investor and SME requirements, as well as specifically seeking to attract "quality" investments supporting the transfer of skills, innovation and technological spillovers.

Offering value-added investment promotion services and activities

Some of the key questions to address when providing investment promotion services and activities are how to be most efficient with few available resources and how to address the information gap to facilitate an investment decision. Moreover, investment promotion needs to be clearly linked with a country's policy reform agenda and national development objectives. The OECD assessment shows that, too often, investment promotion in Central Asia is addressed by only setting up an investment promotion agency (IPA) to provide marketing material rather than offering true investor support services. The key objective of investment promotion is more about addressing information gaps through multiple networks which include a wide variety of stakeholders. Central Asian IPAs need to better grasp how different stakeholders at the global, country and sub-nationals level can support investment promotion efforts.

To be more effective, Central Asian governments should also consider expanding client-relationship management and aftercare services. Investment promotion does not stop when a positive decision has been taken. At this stage, providing on-going political and economic data support through up-to-date databases and other kinds of aftercare services are essential tasks for an IPA. Aftercare services can range from assisting foreign investors with administrative procedures (such as obtaining building permits and licenses) to more advanced services such as identifying local suppliers. The assessment shows that Central Asian authorities are not sufficiently active in retaining their existing foreign investors. A satisfied investor will not only consider expanding activities but will also act as a marketing advocate abroad.

Box 5.6. How to address the information gap

Considering the information flow and gap-life cycle, the type of information and/or services provided depends heavily on the different stages a potential investor passes through before making a final decision. A proper analysis of an investor's decision path needs to focus on the potential barriers he or she will face and how an IPA can help overcome these barriers. When investors in a potential target sector have no awareness of a certain country or region, both mass-marketing and being included in surveys and sourcing books can be an effective tool. However, it is even better if local embassies can be mobilised to actively reach out to potential investors to establish the first contact and provide basic information on the destination. Once a recipient country starts to become interesting as an investment destination in a specific sector, further country-, sector- and company-specific material, including success stories, will help raise awareness even further. At this point, meetings with policy makers (and a high-level authority depending on the value of the potential investment) can also facilitate the decision to further investigate opportunities through research and analysis, including conducting feasibility studies and site visits.

To assist foreign investors in overcoming regulatory hurdles when establishing or expanding activities, an IPA may designate a single point of contact or a one-stop shop (OSS). Investors will only see an added-value in an IPA if it has the ability to provide foreign investors with nearly all the approvals and clearances required. While the assessment shows that Central Asian IPAs help navigate investors through licensing and approval procedures across the various ministries concerned, none of the agencies provide true OSS services. A streamlined administrative process and support in registration is essential to establishing efficient procedures. This can only be achieved if an IPA has been granted the necessary authority through a supervisory board which co-ordinates and aligns activities across ministries at the cabinet of ministers level. Ideally, such a board would include representatives from the private sector and operate under the direct supervision of the president or prime minister.

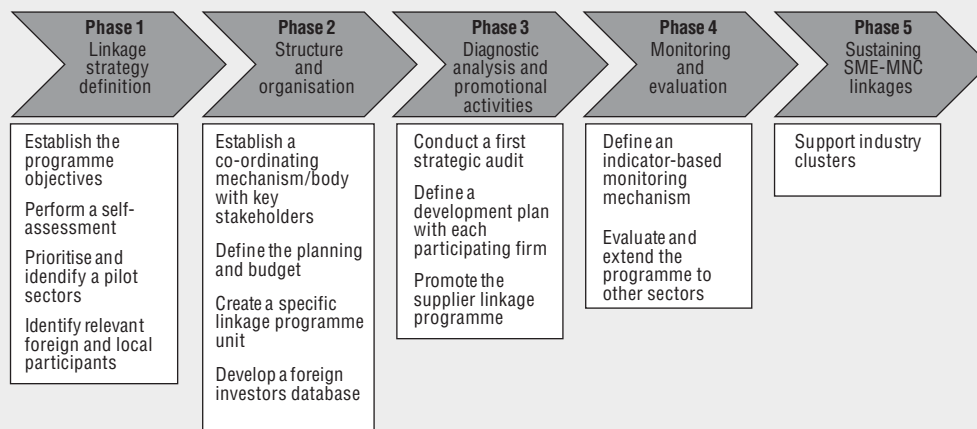
Another key outcome of the assessment shows that IPAs in Central Asia do not yet use FDI-SME linkage programmes to actively support the development of small and medium-sized enterprises. Schemes that specifically help SMEs benefit from the presence of foreign investors can be introduced at a relatively low cost while showing quick results and long-term benefits. Such a mechanism would normally entail approaching local SMEs and conducting strategic audits to assess their capacity for participating in a specific

Box 5.7. FDI-SME Linkage programmes

The globalisation of value chains and the transformation of industrial structures present an opportunity for small and medium-sized enterprises (SME) to internationalise and participate in global production processes. Economic globalisation increasingly involves foreign direct investment (FDI) by multinational corporations (MNCs) whose importance is linked to their strength in providing equity financing as well as a range of knowledge-based assets, such as management skills and intellectual property (OECD, 2007). The key question to be addressed by policy makers in emerging markets is how to mobilise FDI to support transfers of know-how and technology from MNCs to local SMEs, *e.g.* by developing the right policy environment to support business linkages formation (OECD, 2009b).

Business linkages can take a number of forms ranging from backward and forward linkages to linkages with competitors and technology partners leading to positive spillover effects – for example by creating a stimulus for innovation or by providing training for local personnel. Evidence is strongest regarding backward linkages with local suppliers who are well-positioned to receive support in the form of technical assistance and trainings which help ensure quality standards and upgrade productive capacities (OECD, 2002). Promoting the integration of SMEs into the global economy mainly requires policies facilitating SME trade and investment linkages through capacity-building of SMEs, appropriate legal framework conditions and specific mechanisms supporting SMEs in taking advantage of new market opportunities (Smallbone, 2006).

Figure 5.7. The five-stage approach



Source: OECD (2009b).

The OECD Private Sector Development Division developed a five-stage approach based on the experiences and best practices found in OECD and non-OECD countries. Phase one defines the strategy of the programme by setting its objectives and establishing a process to identify the best suited participants, *i.e.* potential local suppliers and foreign enterprises. Phase two proposes an internal organisation structure for the linkage programme. Phase three describes the diagnostic and promotional activities that essentially launch the programme. Phase four outlines the mechanisms which will assist in monitoring the results of the programme. Lastly, phase five examines how linkages facilitated by the programme might be sustained in the long-run (OECD, 2009b).

linkage programme as well as defining a development plan, promotional campaigns and a database to generate interest among foreign enterprises. Experience suggests that the facilitation of creating linkages can lead to sustainable business networks which are invaluable to both foreign investors and domestic companies (OECD, 2004).

To promote local networks of companies and to streamline regulatory procedures, many Central Asian governments consider linking investment promotion with investment zone programmes. Evidence suggests that such programmes can be effective if they focus on providing regulatory and administrative incentives, including one-stop-shop services and innovative development policy incentives (R&D, skills development, SMEs and regional development). This type of support would be much more relevant than a strong reliance on tax incentives on which most Central Asian zone programmes are trying to compete today.

Box 5.8. How to link investment promotion efforts to investment zones

Clusters and/or economic zones are often used as a tool to promote investment at the sub-national level. Economic zones typically manage to provide streamlined administrative procedures and support services according to investor requirements when there are close links with municipal authorities and support from a governmental free-zone authority. Traditional economic zones are ring-fenced enclaves that enjoy special regulatory, incentive and institutional frameworks that are different from the rest of the economy. Typical zones include: traditional free zones (export-oriented, often only including distribution facilities), special economic zones (targeting both foreign and domestic markets, covering all industrial and service sectors), and investment zones (promoting linkages with the local economy, targeting specific sectors or economic activities).

Modern economic zones help promote private sector investment and typically support the creation of employment. Furthermore, they are often used as a testing ground for new policy frameworks serving as a good alternative to economy-wide policy reform. To achieve a country's development objectives, zone programmes need to be in line with the national development plan and create a business climate that attracts local, regional and foreign investment. Globally, economic zone programmes move towards the development of special economic zones administered by an independent regulatory body and mainly developed as a private sector-driven initiative.

Moreover, zone programmes should only be implemented on the basis of a thorough cost-benefit analysis as public expenditures (salaries, infrastructure development, subsidies, foregone taxes and duties, etc.) will often outweigh the economic benefits of zone programmes, especially if it turns out that there is less demand among foreign investors than expected. When establishing zone programmes, governments should note that zone programmes are only second-best solutions to economic development because of the way they create distortions through "positive discrimination". Zones should not be used as a substitute for a country's larger trade and investment efforts but rather should be considered a complementary tool.

Conclusion

Across Central Asia, governments have realized that attracting more and better foreign direct investment is crucial for upgrading technological capacities and supporting economic growth. Most countries have undertaken a first round of policy reform by

introducing investment laws that contain the notion of national treatment and provide rules and regulations for investor guarantees. However, much remains to be done to build better policy frameworks to encourage foreign investors to bring quality investments to Central Asia that support employment generation and economic diversification.

The assessment indicates that Central Asian countries continue to restrict foreign investment in some sectors, *e.g.* by applying foreign ownership restrictions. To attract investments in strategic sectors or investments supporting national development objectives (employment generation, export promotion) all countries (except Afghanistan) offer different types of FDI incentives, mostly tax exemptions. These incentives are often linked to performance requirements (Kazakhstan) or other specific conditions, such as local employment requirements (Kazakhstan, Turkmenistan, Uzbekistan) or restrictions on repatriation of profits (Turkmenistan, Uzbekistan). Different conditions typically apply in oil and gas exploration for which investors need to enter Production Sharing Agreements (PSAs). Central Asian governments should consider relying less on tax exemptions but providing more streamlined administrative procedures as an incentive to invest.

As another key outcome, the assessment shows that investor protection against expropriation and enforcement of intellectual property rights remains weak across the region, mainly due to a lack of proper land titling as well as non-transparent and arbitrary legal proceedings. Foreign investors seeking a court decision on conflicting titles or compensation for expropriation often face difficulties as contracts or other proof of land ownership are not properly recognised by courts. Most countries are signatories to the ICSID Convention (except the Kyrgyz Republic and Tajikistan) which opens access to international dispute settlement mechanisms. A better level for investor protection is also realised through several bilateral investment treaties (BITs) which normally include clauses for international dispute settlement.

On investment promotion, most Central Asian countries are in the process of establishing investment promotion agencies (IPAs) even though the Kyrgyz Republic, Tajikistan and Turkmenistan still do not have one to date. Wherever available, IPAs in Central Asia provide information to investors as well as support and facilitation services, however, investment promotion efforts overall are not yet targeted enough and do not bring added value to potential investors. Central Asian governments should mainly improve one-stop shop services and strengthen the policy advocacy role of IPAs to better link investment promotion efforts to investment policy reform. Moreover, governments should consider introducing FDI-SME linkage programmes to upgrade local economic capacity through the presence of foreign investors.

Notes

1. Population data from IMF, *World Economic Outlook Database*, October 2010.
2. *Doing Business in Turkmenistan: 2010*, “A Country Commercial Guide for US Companies”, Chapter 6.
3. National Statistics Commission of Mongolia.
4. *Doing Business in Mongolia: 2009*, “A Country Commercial Guide for US Companies”, Chapter 6.
5. IMF *Balance of Payments Statistics* (BOPS).
6. The FDI Index measures a country’s restrictiveness of FDI policies covering 22 sectors and looking at four types of measures: equity restrictions, screening and approval requirements, restrictions on foreign key personnel, and other operational restrictions (*e.g.* limits on land purchase or on repatriation of profits and capital).

7. The investment in a manufacturing, office, or other physical company-related structure or group of structures in an area where no previous facilities exist. The name comes from the idea of building a facility literally on a “green” field, such as farmland or a forest.
8. On 11 May 2006, the OECD Council adopted and declassified the final report by the Investment Committee on the Policy Framework for Investment (PFI). It was then endorsed during the OECD Ministerial meeting on 23-24 May 2006.
9. The results are based on assessments conducted as part of two Policy Working Group meetings on Investment Policy and Promotion in Central Asia which convened on 17 September 2009 in Astana, Kazakhstan, and 17 June 2010 in Paris, France. Further data have been collected through assessments conducted with policy makers and private sector representatives in Central Asia.
10. New Investment Law of Afghanistan, 6 December 2005. See www.aisa.org.af/files/laws/english/New-Investment-Law.pdf for an unofficial translation.
11. 2003 Law of the Republic of Kazakhstan “On Investments”.
12. *Doing Business in Kazakhstan: 2010*, Country Commercial Guide.
13. *Doing Business in Tajikistan: 2009*, Country Commercial Guide.
14. www.heritage.org.
15. The OECD Checklist for Foreign Direct Investment Incentive Policies defines FDI incentives as “Measures designed to influence the size, location or industry of an FDI investment project by affecting its relative cost or by altering the risks attached to it through inducements that are not available to comparable domestic investors”. FDI incentives can take the form of fiscal incentives (e.g. reduced direct corporate tax), financial incentives (e.g. infrastructure or job training subsidies) and regulatory incentives (e.g., relaxation of environmental, social and labour standards).
16. The OECD’s FDI Regulatory Restrictiveness Index identifies restrictions to entry of business personnel as a factor discouraging inward FDI flows.
17. *Doing Business in Kazakhstan: 2010*, Country Commercial Guide.
18. *Doing Business in the Kyrgyz Republic: 2009*, Country Commercial Guide.
19. *Doing Business in Mongolia: 2010*, Country Commercial Guide.
20. Two years if the foreign capital share is between USD 100 000 and USD 500 000; three years between USD 500 000 and USD 2 million; five years above USD 5 million.
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Chapter 6

Kazakhstan: A Case Study on Diversification and Sector Competitiveness

Based on the OECD “Kazakhstan Sector Competitiveness Strategy” report

Kazakhstan’s strong economic performance has been driven largely by its natural resources sector. The oil and gas sectors alone attract three quarters of foreign investment inflows. However, Kazakhstan’s non-energy sectors with their competitive advantages could be potential new sources for growth. This chapter is based on the OECD Kazakhstan Sector Competitiveness Strategy report pre-published in November 2010. It provides an assessment and strategy to help Kazakhstan enhance the competitiveness of several non-energy sectors, with a focus on agribusiness. Some of its conclusions could be applicable to other economies of the region.

This report was pre-published in November 2010. It is the result of an 18-months project conducted by the OECD Eurasia Competitiveness Programme with the Republic of Kazakhstan in order to enhance sector competitiveness and help diversify sources of foreign direct investments. The report was led and written by Fadi Farra, Antonio Somma, Economist, DAF/ PSD; Claire Burgio, Gregory Lecomte, Policy Analyst, DAF/ PSD; Piret Hein, Consultant; and Andrzej Kwiecinski, Senior Agriculture Policy Analyst, OECD Trade and Agriculture Directorate.

The case of Kazakhstan

The Republic of Kazakhstan is the world's largest land-locked country, with a territory of 2 725 thousand square kilometres – larger than Western Europe. Since the country declared its independence in December 1991, it has emerged as a key economy in Central Asia. Since 2000, per capita income doubled,¹ the unemployment rate has been halved, and close to USD 30 billion of foreign exchange reserves have been accumulated by the National Bank of Kazakhstan (NBK) and the National Fund. From 2000 to 2008, the economy of the Republic of Kazakhstan (real GDP) grew at an average annual rate of over 9%, among the ten highest rates in the world. Despite a drop in 2009, real GDP was growing at 8% year-on-year, as recorded in the first quarter of 2010. However, despite this strong economic performance, several challenges have emerged.

- **Economic diversification.** The economy is narrowly based, with economic activity and investment concentrated in the hydrocarbon and mining sectors (oil and fuel products account for 65% of the country's exports). The 2008-09 financial crisis, which led to falling demand for crude oil, highlighted the need to accelerate the diversification of the production base beyond these sectors.
- **Competitiveness of non-oil exports.** Challenges include significant delays in time required to export and import, major skill gaps in the service sectors and limited technical standards. Kazakhstan ranked second to last out of 183 countries in the World Bank's 2010 Doing Business survey on the ease of trade across borders.
- **Income inequalities.** The overall poverty rate remains relatively high (16-17%) and exceeds 25% in some rural areas, although GDP per capita is estimated to have risen by 75% since 2000.² According to a recent World Bank assessment, the Republic of Kazakhstan has the widest regional economic disparities among Eastern European and Central Asian countries. Real gross regional product (GRP) per capita in Kazakhstan is large and rising.³
- **Impact of the financial crisis.** While the Kazakhstan economy was experiencing rapid growth, leading Kazakhstan banks borrowed heavily from abroad, building external debt amounting to roughly 44% of GDP. Repayments have forced banks to reduce loan activity and limit clients. The decline in credit growth may exert a sustained drag on the country's macroeconomic performance.

A number of initiatives have been adopted by the government in order to address these structural challenges, often with some success. For instance, the government initiated the modernisation of the banking sector, trade liberalisation, the adoption of an inflation target policy and the reduction of the external debt. New laws and regulations to improve the business environment were introduced – for instance, easing the tax burden on companies by lowering the social tax for 2008 and the corporate income tax for 2009 from 30% to 10%. Business start-up was made easier by simplifying documentation requirements and abolishing the need to register at the local tax office. Overall, on the back

of such reforms, Kazakhstan improved its global ranking in the World Bank's Doing Business survey, moving from 80th position in 2008 to 63rd in 2010.

Regional development programmes have also been put in place to pursue such objectives as reducing regional discrepancies in living standards and stimulating economic development of the *oblasts*⁴. In 2009, for instance, the government developed a national Regional Development Strategy, working alongside the European Commission and the World Bank to examine ways to make Kazakhstan's regional development programmes operational and effective.

To address the challenge of diversification, a number of development agencies and research centres have been established, as well as technology and science parks, to support the diversification of higher value-added industries. In the same vein, in 2005 the government approved a cluster project to design and develop clusters in tourism, textiles, agriculture and processed foods, minerals, and oil and gas. More recently, the president decided that one of the five key directions and strategic targets for the next ten years should be the accelerated diversification of the economy (January 2010 annual message to the people of Kazakhstan). Key diversification priorities will be achieved within the work frame of the "Government program of the forced industrial innovative development of the country for 2010-14".

The issue of diversification thus remains very much at the forefront of Kazakhstan's growth agenda. In 2009, 70% of all foreign direct investment (FDI) inflows into Kazakhstan went to the energy extraction and related geological services sectors – approximately twice the share of the mid-1990s.

The diversification imperative

Diversification efforts can be challenging for an economy like Kazakhstan's for several reasons, among them the so-called "Dutch disease". Abundant natural resources may indeed lead to the appreciation of the country's real exchange rate, thereby making manufactured goods less competitive than those of other nations, and so increasing imports and decreasing exports (a process of de-industrialising would then ensue). While some resource-rich economies (*e.g.* Norway, Botswana, and Malaysia) have successfully tackled diversification challenges, these cases are rare. Best-practice policy reforms included the building of strong core capabilities and the appropriate use of energy revenues. Recent studies on economic diversification in resource-abundant economies highlight the deleterious impact of poor capabilities and institutional quality (Tsalik, 2003; Bulte, Damania and Deacon, 2005). A system whereby extractive resources flow through the government may be prone to corruption. To help break the "curse", governments are encouraged to make plans to employ their current resource wealth for the benefit of future generations. Foreign investors can encourage democratic reforms such as the creation of institutions which create checks and balances on spending decisions, and a free press to promote accountability (Tsalik, 2003).

Governments typically have a number of instruments at their disposal to promote economic diversification, including exchange rate policy, targeted government spending, subsidies, tariff policies, and foreign direct investment. Real exchange rate policy can play an important role in the development of industries producing internationally tradable goods, effectively acting as an "across-the-board" subsidy. By increasing the profitability of tradable activities, a competitive real exchange rate targets the development of tradable

sectors (Rodrik, 2005). Targeted government spending, *e.g.* via research and development activities, technological assistance and subsidies, may also constitute effective tools for the promotion of sectors of the economy. Some examples of this are the fishing and forestry sectors in Chile, which benefited from the technological and R&D support of Fundación Chile, a public-private entity, and the preferential tariff policies applied under the North American Free Trade Agreement (NAFTA), which helped foster the growth of the motor vehicle sector in Mexico (Rodrik, 2005).

FDI can play an important role in building longer-term capabilities and in diversifying the economy when coupled with policies designed to facilitate the transfer of knowledge and technology between firms. Given the right conditions, FDI can help initiate new industries, particularly for exporting. However, there is a general consensus that the quality rather than the quantity of FDI is what really matters. This relates to export orientation, the level of technology and marketing knowledge. Moreover, some economists caution against the possible negative effects of FDI, notably a so-called “neoliberal race to the bottom” whereby governments competing for FDI outbid each other through lower taxation and higher incentive packages (Hayes, 2003; Basinger and Hallerberg, 2004).

The role of FDI in building long-term capabilities

A large body of research highlights the role of FDI in building long-term capabilities that could support the overall competitiveness of a country. Domestic firms benefit from the presence of FDI via systematic, positive productivity spillovers. For instance, one important channel of spillovers is technology transfer through labour mobility (Kaufmann, 1997; Haaker, 1999). Domestic firms are also motivated to adopt advanced technologies in order to meet competitive pressures – the so-called “competition and demonstration effects” (Wang and Blomstrom, 1992). Lastly, forward and backward linkages between foreign and domestic firms constitute opportunities for positive spillovers (Rodriguez-Clare, 1996; Blomstrom and Kokko, 1997). China’s exploitation of FDI to promote the development of domestic sectors of the economy, such as personal computers or mobile phones, is an example of how this can succeed. Where China differed from other countries was in its requirement for transnational corporations wishing to invest in the country to do so through joint ventures rather than wholly-owned entities. Joint ventures facilitate the transfer of technology and capacity-building between firms. In Latin America for instance, the “wholly-owned” format may be a less effective way to promote sectoral development in the host country.

Between 2004 and 2009, FDI inflows were growing in Kazakhstan at almost 25% a year, reaching USD 12.6 billion in 2009. FDI in the energy sector has been growing steadily since the early 1990s. Approximately 75% of total FDI inflows into the country go to the oil and natural gas sector, including a wide range of activities supplying the sector, such as transport, services, infrastructure, equipment and engineering. In 2009, OECD countries accounted for about 70% of total FDI inflows into Kazakhstan with strong investment from the United States, the United Kingdom, Italy, France and the Netherlands (traditional headquarters of leading oil companies).

FDI plays an essential role in addressing external financing challenges. In 2009, Kazakhstan’s overall reliance on external financing represented 8.2% of GDP, with FDI accounting for over 140% of the total amount and thus offsetting high capital outflows in bank lending.

The study presented in this chapter builds on the basic idea that strengthening and diversifying FDI in Kazakhstan is one of the key factors in enhancing competitiveness in the country.

Enhancing the competitiveness of non-energy sectors

For Kazakhstan to enhance the competitiveness of non-energy sectors and attract foreign investment in these sectors, it must overcome two hurdles.

First, OECD countries, which account for over two-thirds of total FDI inflows in Kazakhstan, have experienced a sharp decline in outward FDI since the onset of the economic crisis in late 2008.

Second, in 2009 OECD countries still captured close to 68% of global FDI inflows. Kazakhstan sectors are thus competing with high-growth emerging economies such as Russia, India and China to capture a share of the remaining 32% of global FDI inflows.

Kazakhstan can rely on several clear competitive advantages to meet this challenge: its cost of labour in services is half that of Poland or Hungary – countries that are attracting a new wave of investment – and slightly lower than that of Russia. In agriculture, the country can rely on ample grassland to breed cattle and vast arable land for crop production. Currently, up to 3.5 million hectares of reserve arable land is unused, representing about 15% of the country's total arable land. Low production costs (e.g. half those of France for wheat, and approximately 60% of those of Ukraine and Russia) put it in a good position to compete on the international market.

In order to determine which strategy could best use these advantages to enhance competitiveness and diversify sources of FDI for Kazakhstan, the study described in this chapter explored three questions:

- Which non-energy sectors of the economy would be most likely to benefit from FDI in order to enhance productivity and competitiveness in Kazakhstan?
- How could investment and competitiveness in those specific sectors be increased?
- How could competitiveness be sustained through longer-term structural reforms, policy dialogue and monitoring?

In this study, the OECD adopted a demand- and FDI-driven approach with a focus on removing policy barriers in key priority sectors, as well as promoting FDI-led capabilities.

Recommendations on how to move up the value chain in targeted sectors

Several initial priority sectors for foreign direct investment were singled out for Kazakhstan: the agribusiness value chain, including the wheat, beef and dairy sectors, the agrochemicals sector and the logistics sector for agribusiness, and the information technology (IT) and business services sector. These sectors were selected on the basis of market attractiveness (which incorporates the competitive advantage and potential growth of a sector in a country, and FDI attractiveness) and country benefits, for example through the transfer of skills and technology and higher employment.

In these sectors, Kazakhstan can rely on several sources of competitive advantage.

- In the wheat sector, for example, Kazakhstan has a large land area (24.5 million hectares of arable land, representing the 14th largest arable land area of the world); very favourable natural conditions for growing grain that produce high-quality hard spring wheat; low production costs compared to its regional competitors; and a freight cost

advantage to North Africa, Europe and the Middle East. For example, it is two to three times cheaper to transport wheat from Kazakhstan to Egypt than from other major grain exporters like Australia, the European Union (EU) and the United States. The transformation from a central-command to a market-oriented economy had a short-term adverse impact on Kazakhstan's grain sector in the 1990s, with production levels and yields being drastically curtailed. Kazakhstan's increase in production since then has been quite remarkable, yet some room for improvement remains. Kazakhstan has considerable scope for improving the productivity of the land, targeting Middle East and North Africa (MENA) markets for wheat, and moving up the value chain by producing starch and gluten on a larger scale. The extent to which productivity can be increased and currently unused land transformed into arable land are important questions.

- In the beef sector, the country benefits from extensive pastures (estimated at 189 million hectares), relatively low production costs (57% of France's beef production costs), low processing costs and access to premium markets, particularly Russia. Livestock production has been a key economic activity in Kazakhstan for centuries and continues to provide a major source of employment, food and income for the rural population. Kazakhstan should focus on re-invigorating this sector by promoting investment that would increase the quality of feed and increase the cattle inventory, and upgrade the standards of beef products (especially sanitary and quality standards) to bring them in line with international requirements. It should also target markets like Russia.
- In the dairy sector, farms enjoy a low-cost production structure (63% of France's production costs), favourable sector development trends and an opportunity to move up the value chain into value-added dairy products in the medium to longer term. However, some quantity and quality issues need to be addressed. Access to finance schemes (particularly supply-chain financing), producer organisations and extension services are very promising means of promoting investment in the sector by increasing the quality of feed or the milk animal inventory, upgrading the standards of milk products, etc. In the longer run, the country should position itself as a producer of higher value-added dairy products, such as milk powder. Based on import trends, Kazakhstan should focus its exports on the markets of Central Asia and the Middle East.
- The Government of Kazakhstan should adopt a clear investment promotion strategy aimed at attracting FDI into food processing and modern retail for the agribusiness value chain as a whole. Addressing the requirements of food processing companies and modern retailers regarding the availability, quality and safety of beef-based, wheat-based and dairy products would help spur the development of the entire supply chain. The productivity improvement observed in China and India based on the development of modern retail could be replicated. For instance, wheat processors will be challenged to procure high quality wheat to process into flour, starch and gluten for the production of bread and pasta sold in modern retail outlets such as supermarkets. At the same time, contracts with large food-processing or retail companies can ease the financial constraints on local farmers through supply chain financing mechanisms.
- In the chemicals for agribusiness sector, Kazakhstan is fortunate in having existing production capabilities, locally available raw materials (including large phosphate rock deposits estimated at between 4 and 15 billion tonnes) and significant reserves of natural gas and sulphur. It also has access to affordable imported ammonia and inexpensive local and regional transport to meet fast-growing domestic and regional

demand. Nevertheless, the sector faces a number of challenges, notably the use of basic and outdated technologies, low levels of investment, high transport costs outside the region and low-quality products. In order to boost the competitiveness of the sector, the government should focus on attracting foreign technologies and know-how to improve the quality and cost competitiveness of domestic products. A sector-specific investment promotion and facilitation strategy directed at global fertiliser producers could raise awareness among foreign companies about investment opportunities in the country, generating inflow of FDI and introducing modern, low-cost production technologies. Access to long-term financing for large-scale projects in the chemical sector, as well as improving access to finance for the farming sector, is also essential for the improvement and competitiveness of the fertiliser sector in Kazakhstan.

- Kazakhstan is well positioned to become the Information Technology (IT) and business services sector platform for Central Asia, given its stable political and macroeconomic systems, relatively low labour costs (two times less expensive than Central Europe) and strong skills base. The IT and business services sector is still in an embryonic phase but there is a rapidly growing potential nurtured by local demand, in particular from government institutions and foreign and local investors present in Kazakhstan. The IT market in Kazakhstan grew at an annual average rate of 12% from 2005 to 2008. However, the country needs to address the gaps in human capital: limited human capital capabilities were quoted by the private sector in Kazakhstan as the key element hindering the sector's development. Although the public and private sectors have embarked on several initiatives aiming at human capital improvement, this challenge can best be approached through a public-private dialogue. The government should create a working group of members made up of the private and public sectors to tackle the mismatch between skills demand and supply. Linkage programmes may help attract investors and clients, and encourage knowledge transfer mechanisms.

Sustaining reforms through public-private dialogue, human capital and more effective investment policy and promotion

Sustaining reform and removing policy barriers to encourage competitiveness are critical in the long run. This means that in the future, the focus of support needs to be on developing dedicated and stable capabilities, institutions, mechanisms and processes that will empower Kazakhstan to move the process of enhancing competitiveness forward. In addition to tackling broader economic or monetary policy reforms, this support could be based on three mutually-reinforcing pillars:

- **Implementation of sector-specific policy reforms and related institutional development that establish a systematic approach to removing policy barriers to investment and trade in key sectors.** The expected outcome is the enabling of targeted sectors to compete more effectively at the global level. To address this objective, the Government of Kazakhstan should create policy working groups, for example for agribusiness.
- **Human capital development as an essential factor to establishing the mechanisms required to match the supply of skills to market demand and enhance overall skills in Kazakhstan.** Specific objectives include reducing skills gaps, allowing more flexible hiring by firms, and ensuring the relevance of human capital policy through effective institutionalised and consultative mechanisms. To address this issue, it is recommended that a public-private working group for human capital enhancement be established,

with an initial focus on IT. Linkage programmes should be considered when implementing the recommendations of this report and as part of the working group.

- **Supporting investment policy, promotion and innovation to stimulate projects through partnerships between local and international firms, and universities and civil society, fostered by a systematic regional approach.** Specific objectives would include improving the level of competitiveness by focusing research and development efforts, enhancing knowledge transfer and developing policies to organise and deliver government services more efficiently.

Governance mechanisms to attract FDI at regional and national levels would provide an organisational framework for delivering government services that are better tailored to industry demand. The creation of a single Kazakhstan investment promotion agency supported by a network of stakeholders within and outside the country would be part of this exercise. This should be supported by the implementation of an OECD Investment Policy Review for eventual adherence of the Republic of Kazakhstan to the OECD Declaration for International Investments and Multinational Enterprises. To this end, the OECD Secretariat recommends the creation of a Working Group on Investment Policy and Promotion.

Notes

1. GDP per capita in purchasing power parity constant 2005 international dollar exceeded 10 500 at the end of 2009.
2. European Commission: EU's Relations with Kazakhstan – Overview: http://ec.europa.eu/comm/external_relations/kazakhstan/intro/index/htm. Note: Poverty line as per the OECD and European Union definition: 60% of national median-equivalised household income.
3. "Poverty and Regional Development in Eastern Europe and Central Asia", March 2007, *Europe and Central Asia Chief Economist's Regional Working Paper Series*, Vol. 2, No. 1.
4. Administrative division.

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Competitiveness and Private Sector Development

CENTRAL ASIA

COMPETITIVENESS OUTLOOK

With a total population of 92 million people, near universal literacy and abundant energy resources, Central Asia is an attractive destination for investment and trade. The region is strategically located at the crossroads of Europe and Asia, and surrounded by some of the world's fastest-growing economies such as Russia, India and China, who are increasingly investing in the region. From 2000 to 2009, foreign direct investment flows into Central Asia increased almost ninefold, while the region's gross domestic product grew on average by 8.2% annually.

While Central Asia is endowed with many natural and human resources that could drive its economies to even higher levels of competitiveness, the poor quality of the region's business environment remains a major obstacle. Key areas for improvement include reinforcing legal and economic institutions; prioritizing the development of the small and medium-sized enterprise (SME) sector; and building the capacity of business intermediary organisations.

This *Central Asia Competitiveness Outlook* examines the key policies that would increase competitiveness in Central Asia and reduce dependence on the natural resource sector, namely through developing human capital, improving access to finance, and capturing more and better investment opportunities. It was carried out in collaboration with the World Economic Forum under the aegis of the OECD Central Asia Initiative, a regional programme that contributes to economic growth and competitiveness in Afghanistan, Kazakhstan, the Kyrgyz Republic, Mongolia, Tajikistan, Turkmenistan, and Uzbekistan. The Initiative is part of the wider OECD Eurasia Competitiveness Programme.

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