

## CHAPTER 1

# THE COMPETITIVENESS POTENTIAL OF CENTRAL ASIA

by

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*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.*

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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).<sup>1</sup> The World Economic Forum (WEF) defines competitiveness as “the set of institutions, policies and factors that determine the level of productivity of a country”. Productivity is thus 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 WEF 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)<sup>2</sup>. Those include human capital development, access to finance for SMEs and investment policy and promotion.

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”<sup>3</sup> – 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%.<sup>4</sup> All the Central Asian economies (except Afghanistan) have strong basic education systems<sup>5</sup>. 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 7<sup>th</sup> in the world and Kazakhstan as 22<sup>nd</sup> 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.<sup>6</sup> 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 25.6 million tonnes of wheat in 2008 (4% of world wheat production).<sup>7</sup> 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.<sup>8</sup>

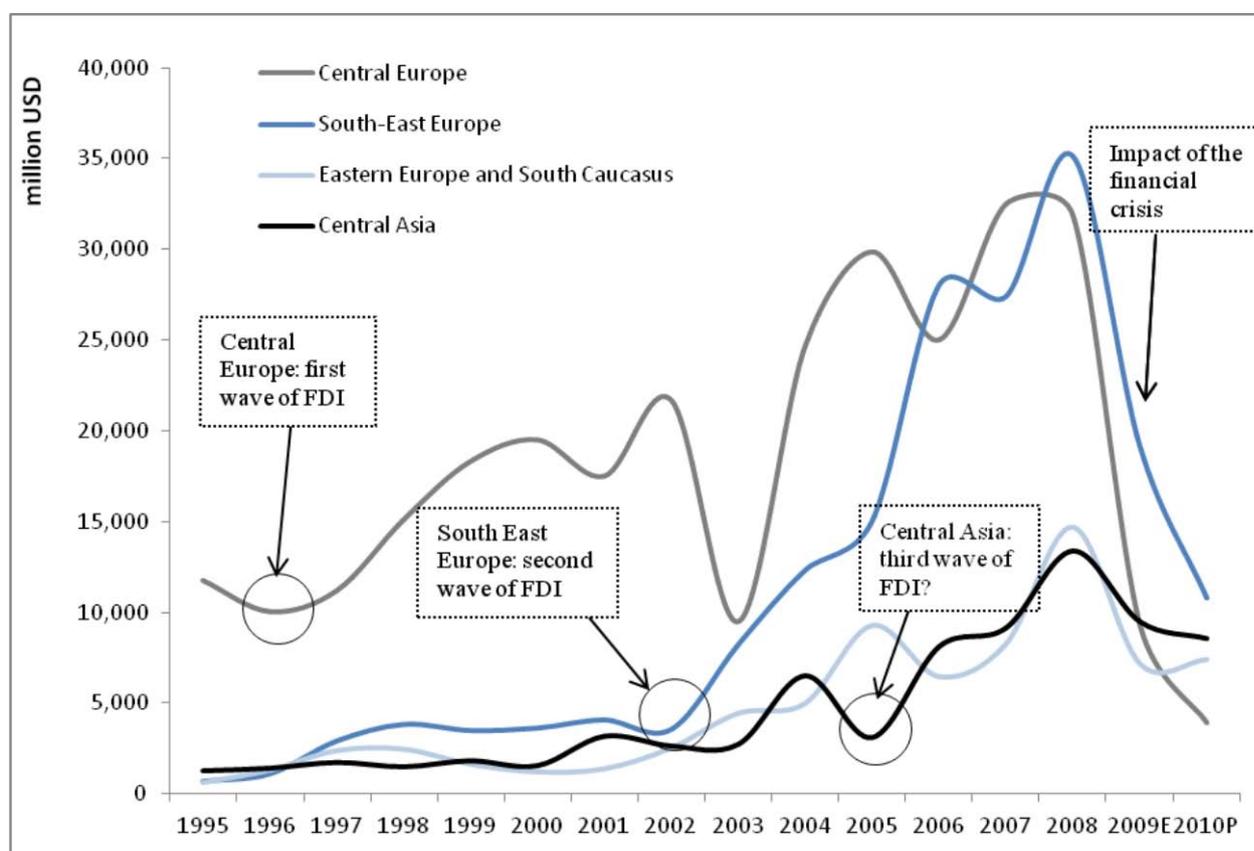
**Other commodities.** In Afghanistan, there are vast untapped mineral deposits, including iron, copper, cobalt, gold and lithium.<sup>9</sup> Kazakhstan has significant reserves of minerals, iron and steel. The Kyrgyz Republic exports large quantities of gold: the Kumtor goldmine is the 8<sup>th</sup> 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.<sup>10</sup>

## **Increased attractiveness and performance: FDI growth and enhanced productivity**

### *Foreign direct investment (FDI) flows into the region increased fivefold in the period 2003-2008*

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 2000-08 period from USD 1 565 million to USD 18 930 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.<sup>11</sup>

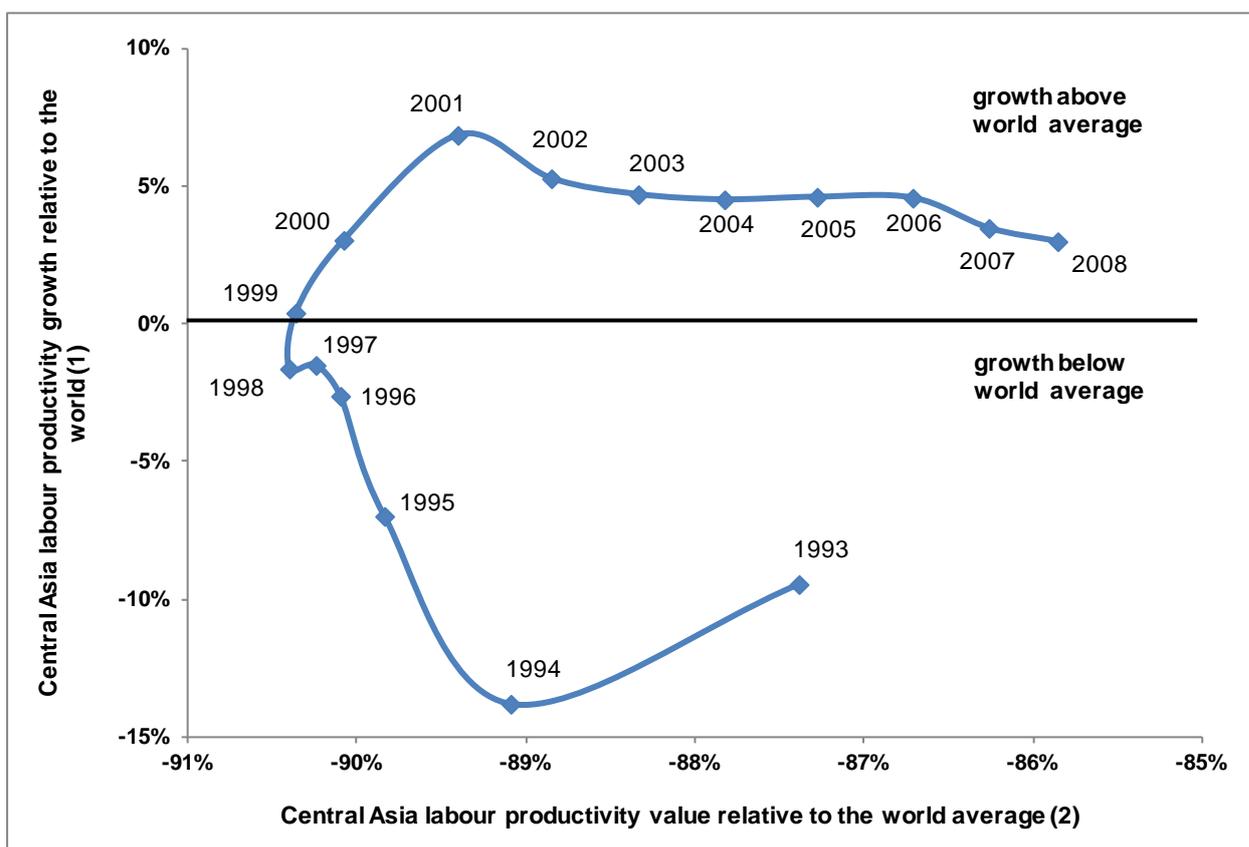
The energy-exporting countries, which possess sizable deposits of oil, gas and minerals, managed to attract significant inflows of capital in the 1990s and 2000s. Kazakhstan, in particular, attracted USD 14.5 billion in FDI in 2008, more than eight times its level of 2005.<sup>12</sup>

### *Labour productivity growth above world average over the past 10 years*

Having gained independence in 1991,<sup>13</sup> 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).<sup>14</sup> 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 30% between 1992 and 2000.<sup>15</sup> Figure 1.2 shows that since 2000, however, across the Central Asian economies GDP per employee has surged dramatically, from an average of USD 859 in 2000 to

USD 1 410 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 toward the services sector on the one hand, and toward agriculture on the other. For example, between 2000 and 2008 the services share of total employment in Mongolia increased from 37% to 44%.<sup>16</sup> 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,<sup>17</sup> 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).

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



Note: Central Asia includes all the countries of Central Asia as defined at the beginning of the chapter except Afghanistan; (1) GDP per employee growth minus world GDP per employee growth; (2) Deviation (%) GDP per employee with respect to world average. GDP is measured in constant 2000 USD.

Source: OECD analysis based on World Development Indicators database (World Bank).

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.

According to the World Economic Forum (WEF), the competitiveness of four Central Asian economies – Kazakhstan, the Kyrgyz Republic, Tajikistan and Mongolia – was analysed using the framework of the Global Competitiveness Index. The analysis shows that the four countries share similar features in terms of national competitiveness. Labour market flexibility is the main competitive advantage across the region, while most of the countries continue to struggle with underdeveloped financial markets, low levels of competition, inefficient infrastructures and fairly poor human capital development.

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

Many institutional and policy reforms for competitiveness have to be addressed. 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, 2007). 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 1.3A). 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%<sup>18</sup> - and collateral requirements – on average 131% for the region in 2008<sup>19</sup> – are further impeding firms' access to finance. For example, in the Country Risk Classification<sup>20</sup> which is coordinated 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.<sup>21</sup> 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 1.3B). 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.

### *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 19 percentage points above the world average (CAGR) in the period 1998-2008,<sup>22</sup> 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 2008 65% of Kazakhstan's total exports were petroleum and petroleum-related products. 29% of all Kyrgyz exports are gold. Copper accounts for 43% of Mongolia's total exports<sup>23</sup>. 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*

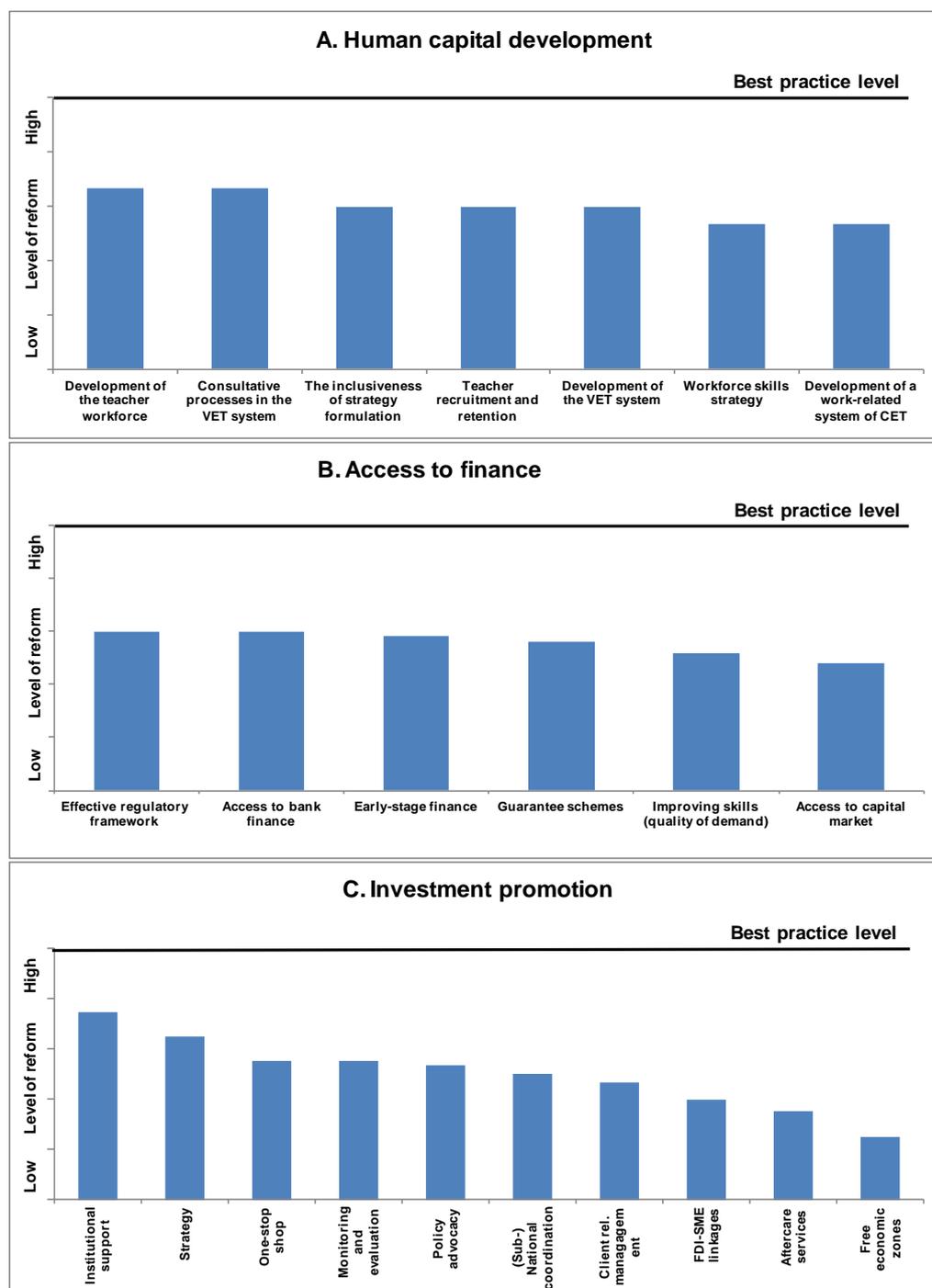
Findings of Chapter 3 suggest that to set effective goals for human capital improvement so as to increase competitiveness, Central Asian economies need to know where they stand, and in this respect all countries should ensure that in the future they collect internationally comparable data. To move forward, 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.<sup>24</sup> 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.

**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).

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.<sup>25</sup> 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).

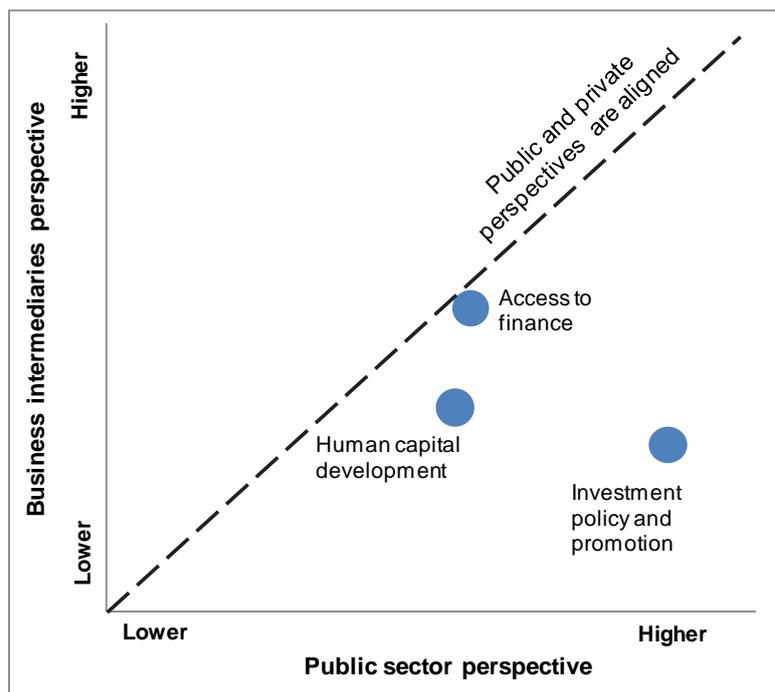
In order to sustain competitiveness reforms and make progress, three mutually-reinforcing pillars should be addressed by the Government of Kazakhstan: addressing sector-specific policy barriers, developing human capital and supporting investment policy, promotion and innovation. This type of sector-specific 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, 2007). Figure 1.4, based on the PfC<sup>26</sup> 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.

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.

**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).

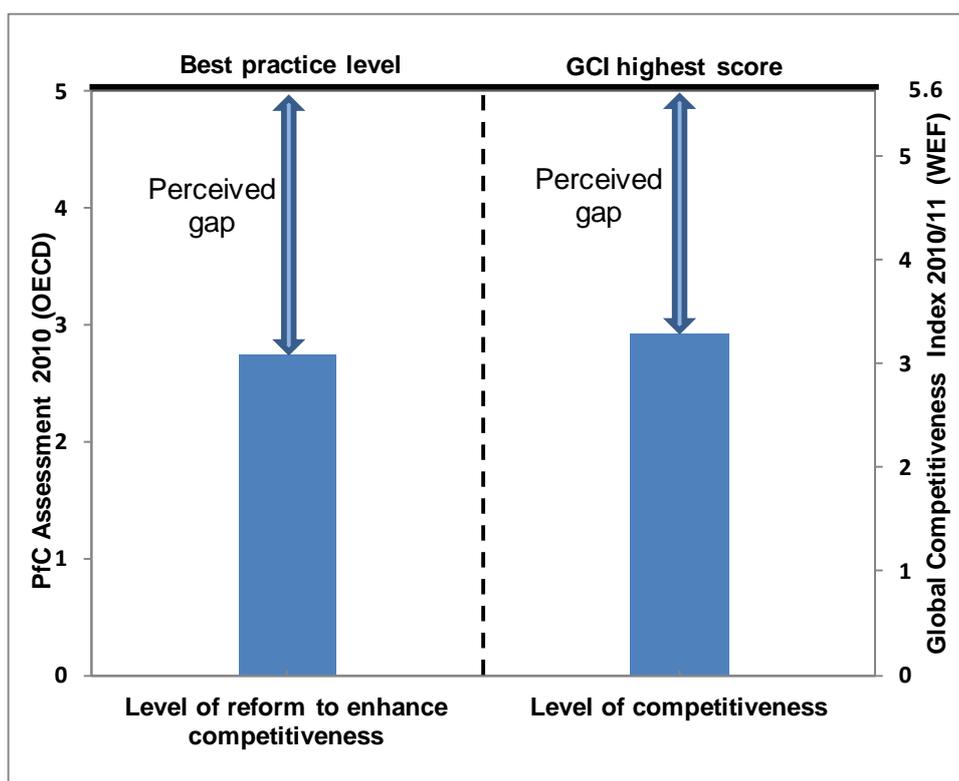
The misalignment on the perceived level of reform between private and public sector representatives may be the result of a lack of communication between the regulators and the business representatives, and their different perception about the success of reform in the country. It may also reflect difficulties 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 2010<sup>27</sup>



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, Jacques, Chapter 3. European Industrial Policy, Bianchi, Labory, International Handbook on Industrial Policy, 2006).
- 2 The Policies for Competitiveness Assessment Framework is a tool developed by the OECD Secretariat, based on the Policy Framework for Investment instrument (OECD, 2006), which aims to assess, monitor and analyse the business environment in the countries of the Eurasia region. Through a series of surveys and Working Groups, the government, private sector representatives and 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, provide guidance for policy reform and development, create a process that enhances the quality of policy development relating to the business environment, and 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: skills development, access to finance and investment policy and promotion for SME growth. Best practices from both OECD and non-OECD countries have been used as a benchmark.
- 3 Central Asia Regional Economic Cooperation 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).
- 4 World Bank, World Development Indicators database.
- 5 Basic education includes primary and lower secondary education.
- 6 IEA OECD Analysis, British Petroleum Statistical Review 2010.
- 7 Food and Agriculture Organisation Statistics: FAOStat.
- 8 Before the start of the civil war in 1992, Tajikistan was a substantial exporter of cotton.
- 9 New York Times, published: June 13, 2010; <http://www.nytimes.com/2010/06/14/world/asia/14minerals.html>
- 10 Before the civil war in 1992, Tajikistan was an exporter of aluminium, the country’s main exporter being the Talco aluminium smelter.
- 11 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 (16 th), Tajikistan=3.223 (17 th), Kazakhstan=2.73 (23rd), The Kyrgyz Republic=1.79 (55 th), Uzbekistan=0.374 (124 th).
- 12 UNCTADstat database.
- 13 Except Afghanistan and Mongolia.

- 14 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.
- 15 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.
- 16 World Bank, World Development Indicators Database.
- 17 Agriculture value-added per worker (constant 2000 USD): World Bank, World Development Indicators Database.
- 18 Kyrgyz Republic, Mongolia, Tajikistan - IMF, World Development Outlook 2009.
- 19 World Bank Enterprise Survey 2008/2009, does not include Turkmenistan
- 20 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,); [http://www.oecd.org/document/49/0,2340,en\\_2649\\_34171\\_1901105\\_1\\_1\\_1\\_1.00.html](http://www.oecd.org/document/49/0,2340,en_2649_34171_1901105_1_1_1_1.00.html)
- 21 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).
- 22 UNCTADstat database.
- 23 UNComtrade database.
- 24 Policies for Competitiveness Assessment Framework 2010.
- 25 Agency of Statistics of the Republic of Kazakhstan.
- 26 The PfC survey was completed by four out of seven countries of the Central Asian region.
- 27 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). For better comparability, the index includes only the indicators describing the three policy areas: investment policy and promotion, access to finance and human capital development. The index has been rescaled for the 0-5 range, where 5 represents the OECD average. The GDP per employee growth rate is based on data of GDP in constant 2000 USD from World Bank World Development Indicators.

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