

**Competitiveness and  
Private Sector Development**

# **EASTERN EUROPE AND SOUTH CAUCASUS**

**COMPETITIVENESS OUTLOOK**





# **Competitiveness and Private Sector Development: Eastern Europe and South Caucasus 2011**

COMPETITIVENESS OUTLOOK



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## Foreword

**E**astern Europe and Southern Caucasus (EESC) is one of the fastest-growing regions in the world. The six countries in the region are Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova and Ukraine. Like its neighbours to the east in Central Asia, these countries have been faced with the challenge of transitioning from centrally planned to market-based economies. In order to improve growth and development perspectives, the governments of Eastern Europe and South Caucasus have already enacted several waves of far-reaching economic reforms and strengthened ties to the European Union and its single market. These policies were rewarded with double-digit growth from 2002-2008 and a boom in FDI inflows to the region.

However, in spite of this growth, major challenges remain: the region's productivity levels remain significantly below the world average, hindering its competitiveness. Moreover, the 2009 crisis exposed policy weaknesses and structural fault lines that had been masked by the brisk economic expansion of the early 2000s. As a result, policy makers have realised the importance of improving the resilience of their economies. In Eastern Europe and South Caucasus, further reforms to boost productivity would enable countries to attain higher income levels and create jobs – both critical to stemming the ongoing brain drain. This would also help reduce income inequalities, which unfortunately remain widespread across the region. Since 2008, the OECD's Eastern Europe and South Caucasus Competitiveness Initiative has been working with the six countries of the region to support their reform efforts.

The Eastern Europe and South Caucasus Competitiveness Outlook is the latest in a series of OECD reports – along with the Central Asia Competitiveness Outlook and Development in Eastern Europe and the South Caucasus – to focus on competitiveness and development challenges in the wider Eurasia region. This report analyses the three policy areas which were identified by the countries of the region as key challenges to enhanced competitiveness: an educational system which does not adequately prepare workers for the job market, a lack of access to finance for entrepreneurs and a need for better-targeted investment policies and promotion to improve investor perception. The Outlook includes roadmaps for governments to implement reforms and a specific country case study for Ukraine.

This report examines competitiveness through two complementary analytical frameworks, one from the OECD and one from the World Economic Forum. The combination of these two approaches –underpinned by the active involvement of countries of the region – result in a fresh take on which reforms are needed to unlock the competitiveness potential of the Eastern Europe and South Caucasus region.

The OECD stands ready to continue its support for the region, so that it can achieve a successful transition process, higher growth, better jobs and better development perspectives. In a nutshell, “better policies for better lives”.



Angel Gurría  
OECD Secretary-General



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## *Acronyms and Abbreviations*

<b>ACBA</b>	Credit Agricole Bank of Armenia
<b>ACN</b>	Anti-corruption Network
<b>ADA</b>	Armenian Development Agency
<b>AZPROMO</b>	Azerbaijani Export and Investment Promotion Foundation
<b>BEEPS</b>	Business Environment and Enterprise Survey
<b>BIT</b>	bilateral investment treaty
<b>CAGR</b>	compound annual growth rate
<b>CEE</b>	Central and Eastern Europe
<b>CET</b>	continuing education and training
<b>CGAP</b>	Consultative Group to Assist the Poor
<b>CGCI-PME</b>	Caisse de garantie des crédits à l'investissement des petites et moyennes entreprises
<b>CIS</b>	Commonwealth of Independent States
<b>CRM</b>	client relationship management
<b>CSA</b>	credit and saving association
<b>DCA</b>	Development Credit Authority
<b>DerzhInvestytsii</b>	State Agency of Ukraine for Investments and Development
<b>DVV</b>	Deutsches Volkshochschul-Verband
<b>EBRD</b>	European Bank for Reconstruction and Development
<b>EESC</b>	Eastern Europe and the South Caucasus
<b>EHEA</b>	European Higher Education Area
<b>EIU</b>	Economic Intelligence Unit
<b>ENPI</b>	European Neighbourhood and Partnership Instrument
<b>ETF</b>	European Training Foundation
<b>EU</b>	European Union
<b>FDI</b>	foreign direct investment
<b>FGAR-PMU</b>	Fonds de garanties de crédits aux petites et moyennes entreprises
<b>FINCA</b>	Foundation for International Community Assistance
<b>FM</b>	Fundusz Mikro
<b>FMA</b>	Finanzmarktaufsicht
<b>FSU</b>	Former Soviet Union
<b>GCI</b>	Global Competitive Index

<b>GDP</b>	gross domestic product
<b>GNI</b>	gross national income
<b>GNIA</b>	Georgian National Investment Agency
<b>HDI</b>	Human Development Index
<b>HEI</b>	higher education institution
<b>HPI</b>	Human Poverty Index
<b>IAP</b>	Istanbul Action Plan
<b>ICSID</b>	International Centre for Settlement of Investment Disputes
<b>IEA</b>	International Education Association
<b>IFC</b>	International Finance Corporation
<b>IFI</b>	international financial institution
<b>IMF</b>	International Monetary Fund
<b>IPA</b>	investment promotion agency
<b>IPF</b>	investment promotion and facilitation
<b>IPR</b>	intellectual property rights
<b>ISCED</b>	International Standard Classification of Education
<b>IT</b>	information technology
<b>MFI</b>	monetary financial institution
<b>MIGA</b>	Multilateral Investment Guarantee Agency
<b>MNC</b>	multinational corporation
<b>MPI</b>	Multiple Poverty Index
<b>NARIC</b>	National Academic Recognition Information Centre
<b>NBFI</b>	non-bank financial institution
<b>NGO</b>	non-governmental organisation
<b>NILEX</b>	Nile Stock Exchange
<b>NORRIC</b>	Nordic National Recognition Information Centres
<b>NQF</b>	National Qualifications Framework
<b>OBG</b>	Oxford Business Group
<b>OSS</b>	one-stop shop
<b>PfCAF</b>	Policies for Competitiveness Assessment Framework
<b>PFI</b>	Policy Framework for Investment
<b>PIRLS</b>	Progress in International Reading Literacy Study
<b>PISA</b>	Programme for International Student Assessment
<b>SBA</b>	Stand-By Arrangement
<b>SIDA</b>	Swedish International Development Agency
<b>SME</b>	small and medium-sized enterprises
<b>SEE</b>	South East Europe
<b>SOTUGAR</b>	Société Tunisienne de Garantie (Tunisian Guarantee Company)
<b>SPF</b>	Sector Prioritisation Framework



<b>SSSU</b>	State Statistics Service of Ukraine
<b>TACIS</b>	Technical Assistance to the Commonwealth of Independent States
<b>Tempus</b>	The Trans-European mobility scheme for university studies
<b>TIMSS</b>	Trends in International Mathematics and Science Study
<b>TRIPS</b>	Trade-related Aspects of Intellectual Property Rights
<b>Ukr</b>	ZovnishInvest National Agency for Foreign Investment and Development of the Ukraine
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>UNDP</b>	United Nations Development Programme
<b>UNECE</b>	United Nations Economic Commission for Europe
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organisation
<b>USAID</b>	US Agency for International Development
<b>VAT</b>	value-added tax
<b>WBCSD</b>	World Business Council for Sustainable Development
<b>WCT</b>	WIPO Copyright Treaty
<b>WIPO</b>	World Intellectual Property Organisation



## Executive Summary

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### *The unexploited competitiveness potential of the EESC region*

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The Eastern Europe and Southern Caucasus (EESC) is one of the fastest-growing regions in the world. The six countries in the region are Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine. Following the post-Soviet transition and particularly between 2002 and 2008 it reached double-digit growth – a rapid expansion that was driven by high capital inflows, rising domestic consumption and expansionary fiscal and monetary policies. However, this expansion came to an abrupt end in late 2008 with the onset of the global financial crisis. The EESC economies have now embarked on a recovery, although expansion in 2011-15 is likely to be weaker than in the preceding period. The World Bank 2010-13 forecast expects real GDP growth to be lower than in other developing countries: between 2.9% and 5.7%.

To return to their previous growth rates, the EESC countries will have to raise their long-term economic growth potential by improving the overall competitiveness of their economies. To do so, they will need to address some important policy weaknesses and structural faultlines that were exposed by the crisis, but had been masked during the brisk economic expansion of the recent past. Thanks to their geopolitical context and their natural endowments, the EESC countries are well positioned to benefit from the rising global demand for food, energy, goods and services.

The EESC region has many advantages: it is well located to trade with neighbours both east and west on two vast continents. It has significant resources – ranging from the black soil in Ukraine that produces some of the best wheat in the world, to energy reserves in Azerbaijan, and the less fully explored resources of water. The area has great potential to seize new opportunities in food production, investment in land and moving up the value chain. However, in spite of recent growth, productivity (in terms of output per capita) for the region was still 77% below world average in absolute terms in 2008.

There is a need to improve the quantity and quality of foreign direct investment (FDI) in the EESC region. Between 2002 and 2008 the boom in FDI inflows was mainly produced by mergers and acquisitions and privatisations. Much FDI was directed at the extractive industries. Now that the first wave of privatisations is completed, a political strategy is required to attract investors to greenfield investments. A favourable investment environment and a business climate that encourages productive use of long-term investments can help support sustainable development.

The competitiveness of the six EESC countries has been analysed using the global Competitiveness Index (GCI) developed by the World Economic Forum. As a group, the

major competitive advantage of the EESC countries is their labour market efficiency. However, the GCI has pinpointed the poor quality of education, a business environment that is not sufficiently supportive of entrepreneurship, problems in access to finance and a need to stabilise the banking system as particular weaknesses that need to be addressed.

### **The private sector is under-developed in many of the countries**

The private sector is generally the part of the economy which is most flexible and receptive to market needs and hence vital for providing adequate employment and economic growth. Across the EESC region there is a need for a less restrictive regulatory environment with fewer obstacles to starting a business and, importantly, a need for greater efforts in the fight against corruption. A commitment to addressing corruption is exemplified by the participation by four of the six EESC countries in the Istanbul Action Plan. Tax payment processes are also marred by complex regulations and non-transparent procedures. This also affects trade across borders and rules governing subsidies. For example, the large number of state-owned enterprises in Belarus negatively affects the competitiveness potential of private sector firms in that country.

Developing the private sector also remains hampered by poor access to finance across the region. This has a particularly negative effect on small and medium sized enterprises (SMEs) which, as a result, tend to innovate less than larger companies (or compared with their peers in other regions) and cannot expand. The informal economy also remains significant. Although the informal economy dominates labour intensive sectors such as agriculture and construction, it has negative economic ramifications for the rest of the economy: state budgets suffer from unpaid taxes, and registered enterprises have additional burdens due to anti-competitive practices. It thus remains vital to create incentives for SMEs to move out of informality by making the business climate more conducive to their activities.

### **Education standards need to be improved and supported**

Although literacy rates are generally high across the region, education must be supported by improving overall quality. EESC countries have below-average educational outcomes for both PISA and TIMSS results. In 2007, EESC governments spent on average 14.1% of their state budgets on education, although only two of the countries allocated more public funds to education than the OECD average of 4.8% of GDP. Most educational institutions in the EESC region are overstaffed and underfunded; many qualified teachers have left the profession for the private sector, and teaching methods are based more on knowledge accumulation than on skills development. Those who obtain an education are often caught up in the brain drain from the region which has resulted in a chronic shortage of engineering and science specialists. The still-high poverty rates across the region (around 50% in the EESC; 20% in Ukraine) reduce opportunities for children to attend higher education and lead them into low-skilled jobs.

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#### *Policy priorities for the region*

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### **Human capital development**

Against a backdrop of dwindling productivity levels, and working with the OECD Eurasia Competitiveness programme, the governments of the region have identified three

policy areas particularly crucial to improving their competitiveness: human capital development, access to finance and investment policy and promotion. The OECD Secretariat's Policies for Competitiveness Assessment Framework, a self-assessment tool for both public and private sector representatives, assesses existing policy and reform against international best practice, gives guidance and creates a process to enhance the quality of policy development. The Policy Assessment Framework indicates that there is broad agreement across both governments and the private sector in the EESC that existing skills mismatches between educational outputs and labour requirements must be tackled. The assessment notes that there is no national strategy for the development of workforce skills that align job-market requirements with the curricula; there is no public-private consultation between educationalists and employers to help bridge the skills gap; vocational and job-related training is not aligned with labour market needs; and there is no national strategy for teacher recruitment and retention. This issue is addressed in Chapter 3 where specific policy recommendations are made to tackle some of these shortfalls. It is recommended that all the countries participate in international educational surveys, involve employers in decision making on higher education and VET, devote more resources to the less advantaged and excluded pupils and improve both the quality of teachers and teaching and the quality of business and management schools.

### **Access to finance**

Companies can only grow and expand if they have adequate access to finance. SMEs in particular suffer from high administrative costs attached to the small-scale lending of banks, the perception of the high risk associated with lending to small businesses, and the presence of asymmetric information. Furthermore, SMEs often lack the collateral to secure affordable loans, giving banks and financial institutions few incentives to provide them with credit. Start-ups with no suppliers or low working capital to sustain them are especially exposed to the lack of adequate funding. Improving access to funding for businesses, including SMEs, would have a beneficial impact on the economy as a whole. The OECD assessment identifies the need to improve the regulatory and legal framework, including a strengthening of creditor rights and ensuring central bank independence, as a key priority for the improvement of access to finance in general and SMEs in particular. Another priority is to reduce the asymmetry of information between SMEs and credit providers through the development of credit history bureaus and improving the standards of financial reporting of enterprises.

In the short term, microfinancing institutions are effective tools to expand credit to micro-enterprises and individual entrepreneurs. However, their dependence on external loans and grants should be reduced. Government policies should also focus on diversifying the sources of financing for SMEs to include other financial tools apart from bank credit, such as leasing, factoring, and, in case of high-growth potential firms, a specialised stock market for low-capitalised firms could be considered. Collateral requirements could be eased through extensive guarantee schemes; however, more needs to be done to refine credit analysis and project evaluation in order to avoid moral hazard. A better financial education and the development of entrepreneurial skills through adequate training can further facilitate access to finance for SMEs. Credit institutions are more willing to put up funds when the borrower displays the necessary skills and knowledge through submitting workable business plans.

## **Investment policy and promotion**

To unlock the full potential of foreign direct investment (FDI) as a source of improved competitiveness and economic growth, further policy reforms are needed to improve the existing investment framework. Key areas to address include better law enforcement mechanisms such as ensuring transparent and non-discriminatory legal proceedings, diversifying the sectors receiving FDI and expanding investment promotion and facilitation. Investment promotion activities should be integrated with ongoing investment policy reform and industrial policy objectives. They should also be developed so as to better support regional development. The OECD assessment indicated that legislation on FDI generally provides for national treatment in all EESC countries, although there are few coherent review mechanisms to benchmark the scope of restrictions relative to practices in other countries. There also is a need to further improve land titling and cadastre systems and to strengthen protection against expropriation.

Specific investment promotion activities are carried out in all countries of the region and facilitation services to investors are delivered through investment promotion agencies (IPAs). Knowing how to position a country strategically among its global and regional competitors to capitalise on foreign investor presence for the development of local SMEs is essential. An outcome of the assessment is that IPAs do not yet use FDI-SME linkage programmes actively to support the development of SMEs. Schemes that can specifically help SMEs to benefit from the presence of foreign investors can include mechanisms such as conducting strategic audits of SME capacity to participate in specific linkage programmes, defining a development plan, promotional campaigns and a database of SMEs for potential foreign investors. Making such linkages can lead to the creation of sustainable business networks, invaluable to both foreign investors and domestic companies alike.

## **Developing a public-private dialogue**

For effective policy making, the participation of stakeholders such as business intermediaries, employers, and civil society in the consultation process is crucial for improving the transparency and effectiveness of policies. The perception of the reform efforts being undertaken often differs among stakeholders; this is particularly marked between the private and public sectors. A large perception gap concerning the reform being pursued in investment policy and access to finance emphasises the need to strengthen public-private dialogue between government officials and foreign investors. This misalignment may be the result of a lack of communication, difficulties of implementation or bottlenecks in enforcement. The OECD Secretariat is working with the EESC countries to further develop this dialogue through policy working groups in these three key policy areas for competitiveness. The public sector is also encouraged to engage in more regular dialogue with other sectors and to adjust policies according to need. In two measures already carried out, the OECD assessment of the level of reform and the GCI are both perceived to be lower than OECD and non-OECD best practice. Thus, there is still room for improvement in both reform and its implementation.

To raise their competitiveness potential, the EESC countries must tap into their vast endowments and further build their capabilities in human capital, access to finance and investment policy and promotion. Education must provide the skills required by the market and must be defined by a joint policy dialogue; SMEs, essential for growth and job

creation, must have easier access to finance through improvement of the regulatory and legal framework affecting credit provision, a reduction of information asymmetry, and the development of sustainable micro-credit institutions; the overall investment climate must be enhanced by targeted investment policy and promotion reforms and must address the needs and requirements of the private investor, including areas such as national treatment, transparency and accountability. These three areas for greater competitiveness are assessed in this report which points to the policies that must be addressed as a priority, what is the most effective method of implementation and how public-private dialogue can be enhanced.

### **The case of Ukraine – an example of making reforms happen**

A programme to enhance the competitiveness of a number of economic sectors in Ukraine is currently being undertaken by the OECD. Between 2000 and 2008 Ukraine had one of the fastest growing economies in Europe, but the subsequent financial crisis caused it to seek financing from the IMF. Today, it is returning to positive growth but key challenges remain: a limited stock of FDI per capita as compared to its neighbours; an unfavourable business climate with export quotas, continuing problems with VAT refunds and government monopolies; a high level of external debt; inadequate implementation of laws; and seemingly no long-term strategy for investment policy and promotion. The case study in the report addresses problems with the newly-adopted Tax Code, the need for directed, sector-specific FDI with higher competitiveness potential and for a sector-specific investment and promotion strategy to optimise FDI. The case study specifically addresses the grain and dairy sectors, energy production based on biomass and the civil aircraft manufacturing sector. Policy recommendations for these selected sectors include differentiation of markets and investment, identifying sector-specific reforms, promoting sectors and implementing and monitoring reform.





## Chapter 1

# The Competitiveness Potential of Eastern Europe and South Caucasus\*

by

Fadi Farra, Ania Thiemann, Miia Niskanen And Marina Cernov

*Supported by strategic location, natural resources and policy reforms, the economic performance of Eastern Europe and South Caucasus has been improving during the last ten years, reaching high GDP and productivity growth rates. Nevertheless, much remains to be done to unlock the full potential of the region. This chapter highlights the challenges that the region is facing, including low productivity, undiversified trade, reliance on external financing and a difficult business environment. Apart from this, three key areas supporting competitiveness – human capital development, access to finance for small and medium enterprises (SMEs) and investment policy – need to be further addressed. Measures should be taken to improve the quality of education and bridge the skills gap in the labour market by improving the quality of vocational and continuing education and training systems, to improve the access to finance for SMEs by addressing the issue of asymmetric information and better credit information, and promote investments by reducing restrictions to national treatment. The chapter notes that these challenges should be tackled through enhanced public-private dialogue, with the active participation of the private sector in the policy process.*

\* The authors would like to thank Bill Tompson, Head of Regional and Rural Development Unit, Regional Development Policy Division, Directorate of Public Governance and Territorial Development, for his valuable comments on the chapter.

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 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 the centre of the concept of competitiveness.

In Eastern Europe and South Caucasus (EESC) labour productivity, defined as output per employee, surged over the last decade, consistently growing above the world average. This positive development in part reflects the broad-based economic reforms these countries implemented, like many other transition economies, after the end of the Soviet era, the endowments the region possesses and the re-allocation of labour resources.

While the six countries of the region differ in their levels of natural resources and policy frameworks, all would benefit from a new generation of reforms to fulfil their competitiveness potential. In this report, 12 pillars of competitiveness were assessed by the World Economic Forum based on its Global Competitiveness Index methodology. In addition, three distinct policy reform areas were assessed by the OECD based on the Policies for Competitiveness Assessment Framework (PfC). The three areas were human capital development, access to finance for SMEs, and investment policy and promotion.

A similar study was done by OECD and the World Economic Forum in January 2011 for Central Asia, which led to the publication of the Central Asia Competitiveness Outlook. This overview chapter focuses on the endowments, increased attractiveness and performance, as well as common challenges and opportunities, of the EESC region which includes the following six countries: Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine. Despite sharing some of the same historical background, the two regions also differ in several respects. For example, the EESC region is much closer to high-priced markets such as the European Union. In addition, the countries of the region have different economic structures and are less homogenous than those of Central Asia. Moreover, most of the countries in the region have already completed several waves of economic reform and are more closely integrated with the EU.

## **Introduction: The unexploited competitiveness potential of the EESC region**

After a difficult transition from a planned to a market economy in the 1990s, following the dissolution of the Soviet Union, the EESC region became one of the fastest-growing regions in the world during the first decade of the new century. Many of these newly independent states recorded double-digit growth over 2002-08 (IMF, *World Economic Outlook Database*, October 2010). Exports expanded rapidly (both by volume and value), on the back of strong international demand for commodities such as steel and oil which led to upward pressure on prices. Other factors driving the fast economic expansion in the region were high capital inflows, rising domestic consumption and expansionary fiscal and monetary policies (IMF/WEO, 2010; OECD, 2008; World Bank, 2010).

The expansion came to an abrupt end in late 2008, when the region as a whole was severely affected by the fallout from the global financial crisis. All the EESC countries – with the exception of Azerbaijan, which was cushioned by its expanding oil industry – experienced a sharp contraction in real GDP in 2009. Most of the six economies embarked on a recovery in 2010, but the crisis undermined the short-to-medium-term growth potential of many of the region's economies. Consequently, economic expansion in 2011-15 is likely to be considerably weaker than in the period preceding the crisis.

The World Bank's 2010-13 forecast from October 2010 sees real GDP growth of Emerging Europe and Central Asia, (a region which also includes the six EESC countries in the World Bank definition), to be lower in 2010-13 than that of Developing Asia, Latin America, Middle East and North Africa, and Africa.<sup>2</sup> The IMF forecast that average real GDP growth of the EESC countries for the same period would be between 2.9% and 5.7%. A more recent forecast from the Economist Intelligence Unit (EIU) envisages growth for 2011 in the countries of the EESC region to range between 3.3% and 6.0%.<sup>3</sup>

In order to return to the growth rates experienced prior to the financial crisis and the ensuing recession, the EESC countries will have to raise their long-term economic growth potential. This implies resolving important policy weaknesses and structural fault-lines that were exposed by the crisis in order to raise the competitiveness potential of these economies. Some of these structural weaknesses were already present in the fabric of the economy prior to the crisis, but they had been sheltered by the brisk economic expansion. This is the case for instance of the skills mismatches in the labour market, which were exacerbated and exposed by the lack of an adequate policy response to the sharp downturn. In some areas, the post-crisis world now calls for different policy responses in order to return to the path of sustainable growth.

Despite such weaknesses, the EESC countries as a group are well-positioned to find the road to recovery. With appropriate policies, the countries in this region should be able to benefit from and tap into the global demand for food, energy, goods and services; a demand that is expected to expand rapidly over the next ten years.

Much of the new growth in the EESC countries would have to come from the private sector, in general the more dynamic part of the economy. However, the development of an agile and thriving private sector in the EESC countries is still hampered by underdeveloped infrastructures, the presence of corruption, weak corporate governance, pervasive red tape, uncompetitive practices and the existence of a large informal sector. In order for the region to link its potential to global demand, it will have to adopt and implement new economic reforms to boost its competitiveness in the global market. In particular, three policy areas that are vital for competitiveness have been identified and form the nexus of the analysis of this report. They are:

- **Human capital development:** Empirical studies show that each additional year of educational attainment of 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). Enterprise founders with better skills tend to operate firms that have higher survival probabilities and grow faster. Better educated entrepreneurs are also more likely to innovate (Koellinger, 2008).
- **Access to finance for SMEs:** There is ample evidence that economic growth is strongly and positively related to a country's level of financial development (Levine and Renelt,

1992). In addition, access to finance is particularly important for SMEs which are one of the more dynamic elements of the economy and constitute a major source of knowledge, employment and economic growth. SMEs typically account for around two-thirds of employment. However, in emerging markets the development of SMEs tends to be hampered by their limited access to financing as a result of the comparatively high administrative costs of small-scale lending, the perception of high risk attributed to small enterprises, asymmetric information and their general lack of collateral.

- **Investment policy and promotion** has an important role in building long-term capabilities for innovation, technology and skills development that could support the overall competitiveness of a country (OECD, 2009; Kudina and Jakubiak, 2008). In many emerging market economies, including those of the EESC, investment inflows constitute a major source of external financing, bringing much needed capital to help build competitive industries. FDI can thus play a particularly crucial role in the development of the private sector in a context of considerable resource scarcity (OECD, 2010).

This chapter describes the EESC region's natural endowments, focusing on the labour force and natural resources (particularly agriculture and energy). It then explores the region's current economic performance and the existing challenges in the economic and competitiveness spheres. Weaknesses that currently prevent the region from reaching higher levels of competitiveness are analysed in three areas: human capital policies, access to finance for SMEs and investment policy and promotion.

## Endowments

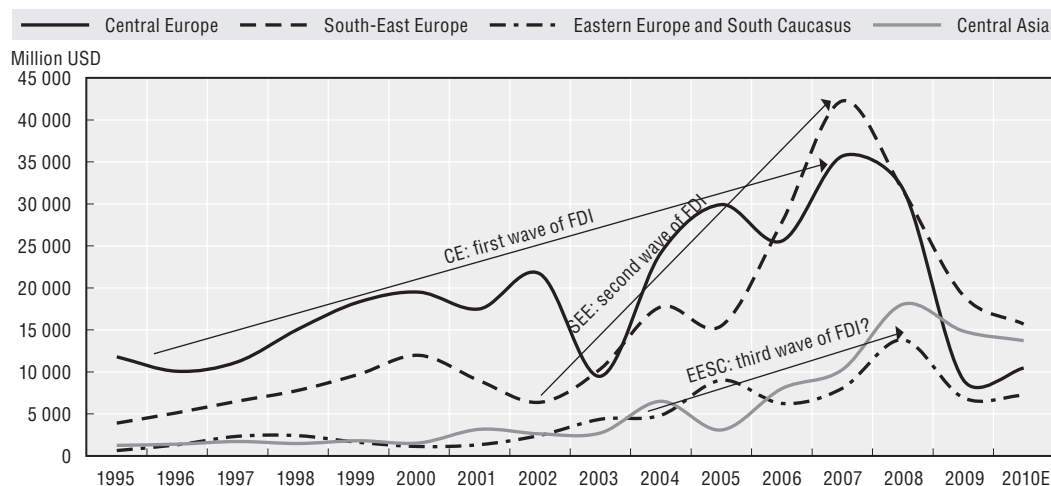
### *A strategically located region*

The EESC region is located at the crossroads of several continents, with close proximity to markets which total over 400 million people<sup>4</sup>, including Bulgaria, Romania, Hungary, Slovakia, Poland, Lithuania, Latvia, the Russian Federation, Kazakhstan, Turkmenistan, Iran and Turkey.

Furthermore, the European Union (EU) continues to look eastward, and now shares a border with Republic of Moldova and Ukraine. All of the EESC countries signed Partnership and Co-operation Agreements with the EU in the 1990s, and they are all currently negotiating Association Agreements which, over time, will bring them politically and economically closer to the EU (European Neighbourhood and Partnership Instrument Info Centre, 2010).<sup>5</sup> Thanks to these agreements which facilitate trade movements, the region has become highly attractive for foreign investors, whether EU-based or non-EU investors who wish to gain access to European markets. After the first investment wave, when FDI flows went mainly to Central Europe, and the second wave that targeted mainly South East Europe, the third wave is expected to flow into the EESC region (Figure 1.1).<sup>6</sup>

The region is also comparatively well connected with the rest of the world, and local infrastructures are being upgraded. Four of the countries – Armenia, Azerbaijan, Belarus and Republic of Moldova – are land-locked, but the other two EESC countries – Georgia and Ukraine – have access to the sea: the Ukrainian ports of Odessa and Sevastopol and the Georgian ports of Batumi and Poti Port provide access to the Black Sea. A network of railways and roads link the countries and surrounding markets. That said, roads are still in a poor state of repair and will need serious upgrading, resurfacing and expanding, whereas the railways are considered generally well-functioning (World Economic Forum, Global Competitiveness Index 2010/11). Even so, the highest ranking for the quality of

Figure 1.1. **Investment waves towards Eastern Europe and South Caucasus: net foreign direct investments, selected regions, 1995-2010**



Note: Net FDI for 2010 are estimated-. Central Asia region includes: Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan, Turkmenistan, and Uzbekistan. South East Europe includes: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, FYR Macedonia, Montenegro, Romania, and Serbia. Central Europe includes: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, and Slovenia.

Source: based on data EBRD; OECD analysis.

infrastructure is that of Georgia (ranked 62nd out of 139), and no country in the region scores above 65 for its roads (Republic of Moldova actually ranks 139th). The quality of railways on the other hand is ranked between 79 (Armenia) and 25 (Ukraine). In addition the region is relatively well served by a number of international airports.

The reason for these relatively poor rankings is that most of the existing infrastructure was built during Soviet times. Hence multiple projects are currently under way in order to better connect the region to international transport corridors. For example, Republic of Moldova, with help from the European Bank for Reconstruction and Development (EBRD), is modernising Chisinau airport.<sup>7</sup> The Asian Development Bank (ADB) has approved several projects for land and air transport in Armenia, Azerbaijan and Georgia. The World Bank has active land transport projects in all of the EESC countries.<sup>8</sup> The International Finance Corporation (IFC) is involved in the development of the Tbilisi airport in Georgia.<sup>9</sup> The EU supports the Transport Corridor Europe Caucasus Asia (TRACECA), an international transport system that aims at reviving the old Silk Road and linking Europe to Asia.<sup>10</sup> The EESC region is right in the middle of this corridor.

The region is also a hub for oil and gas pipelines, which adds to its strategic importance. The Druzhba oil pipeline delivers Russian oil to Europe, and several gas pipelines transit gas via Belarus, Ukraine and Republic of Moldova to Europe.<sup>11</sup> The Baku-Tbilisi-Ceyhan pipeline, inaugurated in 2005, transports Azerbaijan gas from Baku to the Turkish port of Ceyhan on the Mediterranean and passes through Georgia.

### **A region endowed with plenty of natural wealth**

The EESC region is considered to be well endowed with land and energy sources. Thanks to its large land masses, it has the potential to become a major food supplier for the world. In 2008, its total agricultural area accounted for 62 million hectares (FAOSTAT database). Most of the agricultural land in the region is concentrated in Ukraine (67%), by

far the largest of the EESC countries. It is also estimated that Ukraine has one-quarter of the world's black soil, which is considered highly fertile.<sup>12</sup> The proximity of the EESC countries to the Black Sea favours a generally mild climate. For example, in Ukraine it is possible to grow both winter and spring crops.<sup>13</sup>

Currently, 80% of the wheat coming from the EESC region is grown in Ukraine, making it the world's eighth largest wheat exporter in terms of value in 2008 (seventh largest by volume). By 2020, Ukraine is expected to provide 7.2% of world wheat exports and almost half of the EESC region's wheat exports (US Department of Agriculture, 2011).<sup>14</sup> For comparison the EU-27 countries are expected to export 13.7% of wheat exports by 2020. Ukraine is also the world's second largest barley exporter and largest sunflower oil exporter. Belarus is the world's sixth largest exporter of cranberries and the seventh-largest exporter of flax fibre and flax tow (FAOSTAT).

The region's energy reserves are concentrated in Azerbaijan and Ukraine. Azerbaijan possesses rich energy resources; its proven oil reserves were estimated at 7 billion barrels at the end of 2009 (0.5% of the world total),<sup>15</sup> and its proven gas reserves are estimated at 1.31 trillion cubic metres (0.7% of world reserves). In the period from 1997 to 2008 oil production in Azerbaijan quadrupled, but it is expected to start declining in 2014 (OECD/International Energy Agency, 2010). The year 2007 was a turning point for Azerbaijan's gas sector when the Shah Deniz natural gas and condensate field began operation, allowing Azerbaijan to go from being a net gas importer to a net gas exporter.

In Ukraine, coal represents over 95% of fossil fuel deposits. Its coal reserves (48% of which are anthracite and bituminous) are estimated at 34 billion tonnes, or 4.1% of the world total (Oxford Business Group, 2007). Currently, Ukraine is among the world's top ten coal extractors, but its potential is much greater, as productivity is approximately twelve times lower in Ukraine than in the US and Canada (OBG, 2007). Furthermore, as world coal production is expected to increase by 30% in the next 10-15 years (Energy Watch Group, 2007), Ukraine has a market to tap. Furthermore, there is still unexploited potential from shale gas. A recent study from the US Energy Information Administration estimates that Ukraine has 42 trillion cubic feet of technically recoverable shale gas reserves.<sup>16</sup>

The potential of the region's third natural resource, water, has been less explored. Armenia uses only 22% of its water resources (Haykazyan and Pretty, 2006), and investment in irrigation systems and drinking-water supply could increase the value-added of this natural resource. Armenia's geographical proximity to the Middle East could favour the production of bottled mineral water, provided investors were pulled in. According to the EBRD, both in Armenia and in Georgia the potential of hydropower is high, based on its mountain ranges and rivers.<sup>17</sup> In July 2010 the Georgian prime minister announced that within four to five years hydro-power-generated electricity would become Georgia's main export product.<sup>18</sup>

### **Above-average literacy rates**

The EESC region is home to over 75 million people of whom 37.5 million are active in the labour force (WB/WDI, 2009). Between 2002 and 2008, the size of the labour force increased most strongly in Azerbaijan (2.2% annual growth) and Armenia (0.9%). In Belarus and Ukraine the size of the work force remained almost unchanged, while in Georgia and Republic of Moldova it declined at annual rates of -0.5% and -2.4% respectively (World Bank, 2009). One of the reasons for the decline was the increase in the mortality rate which

reached or, in the case of Republic of Moldova, exceeded the birth rate; another reason was a net outflow of migrants.

One of the region's potentially strongest assets is its above-average rates of literacy: in all six countries the official adult (aged 15 and over) literacy rate exceeds 99% (OECD, 2008). In comparison with the wider Black Sea region, the EESC countries have a higher than average literacy rate. Enrolment in primary and secondary education is also quite high. Primary enrolment rates in the six countries range from 84% of the relevant age group in Armenia to 100% in Georgia. This is a vital fundamental building block for future economic growth and competitiveness.

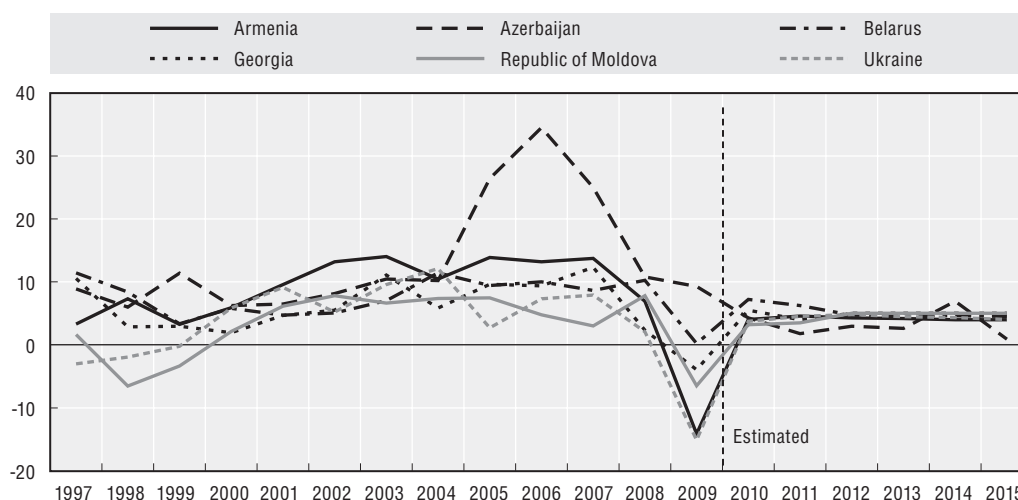
## Recent performance and challenges: Competitiveness needs to be enhanced

### *GDP growth recovers after the financial crisis but not to previous rates*

After the dissolution of the Soviet Union in 1991, all of the EESC countries experienced a severe economic downturn. According to World Bank data, annual average GDP growth over 1988-98 varied from -4.7% in Armenia (the strongest economic performance) to -14.4% in Georgia (the weakest); (World Bank, 2009). Many of the newly independent states faced negative double-digit growth in the early 1990s.

However, towards the mid-to-late 1990s the EESC economies experienced a strong economic recovery. In the period 1998-2008 real GDP grew on average by 7.9% a year across the region: 5.6% in Republic of Moldova, 6.9% in Ukraine and 7.7% in Belarus. In Armenia real GDP increased on average by 11.3% a year. The fastest growth rate was seen in Azerbaijan, where real GDP in the same period rose by 15.9% a year on average (World Bank, 2009). In terms of GDP growth per capita, the average annual growth varied from 7.3% in Republic of Moldova to 14.9% in Azerbaijan over 1998-2008 (World Bank, 2009). For the period 2011-2015, the IMF forecasts about 5% real GDP year-on-year growth on average.

Figure 1.2. **Real GDP growth 1997-2015**  
(annual percentage change)



Source: International Monetary Fund, World Development Outlook Database, October 2010; OECD analysis.

In most of the EESC countries, the strong economic expansion up until 2008 was driven by rising domestic demand, largely financed with loans and transfers from abroad,

and a facilitating fiscal policy. Azerbaijan was the only country which benefited from strongly positive and increasing net exports thanks to its booming oil and gas sector.

Growth continued until 2008, but in 2009, the effect of the global financial crisis had a strong impact on the EESC countries. With the exception of Azerbaijan, where the economy was sheltered by ongoing expansion in the oil sector (with real GDP growth of 9.3%), all other countries in the region experienced a downturn. In most countries, real GDP contracted (Armenia: 14.2%, Georgia: 3.9%, Republic of Moldova: 6.5% and Ukraine: 15.1%) (IMF/WEO, 2010), while Belarus stagnated, with real GDP registering positive growth of 0.24%. Even though the first half of 2010 saw a modest recovery, the overall 2010 growth estimates remain below pre-crisis rates (between 4% and 7.6% by country, according to EBRD, and with a weighted estimated average growth rate of 5.3% for the region). Although these growth rates would seem respectable in an international comparison, they remain well below the previous growth rates of most of the countries in the region. In addition, the crisis revealed a number of weaknesses and vulnerabilities in the very fabric of the EESC economies. It is clear that adequate policies need to be put in place in order to embed long-term sustainable growth and development.

### ***Low but fast-growing labour productivity***

A key indicator of a country's economic progress is productivity (WB, 2008). Labour productivity, based on gross output, is the most frequently used measure of productivity thanks to its simplicity and comparatively easy interpretation (OECD, 2002). It is computed as gross domestic product (GDP) divided by the number of people employed. However, it should be noted that this indicator encompasses the influence of a host of factors and is sensitive to GDP fluctuations, and therefore short-term movements in this indicator should be interpreted with caution.<sup>19</sup> Hence, labour productivity measured in this way is just an indicative measure for overall productivity levels.

Figure 1.3 depicts the labour productivity measured as GDP per employee, as well as labour productivity growth as GDP per employee growth, in the EESC region relative to the world, with GDP measured in constant 2000 USD, based on World Bank/World Development Indicators (WB/WDI) database data. Nearly all of the transition countries experienced an initial decline in productivity immediately following the dissolution of the Soviet Union. For the region as a whole, labour productivity decreased by more than 30% during 1993-97.

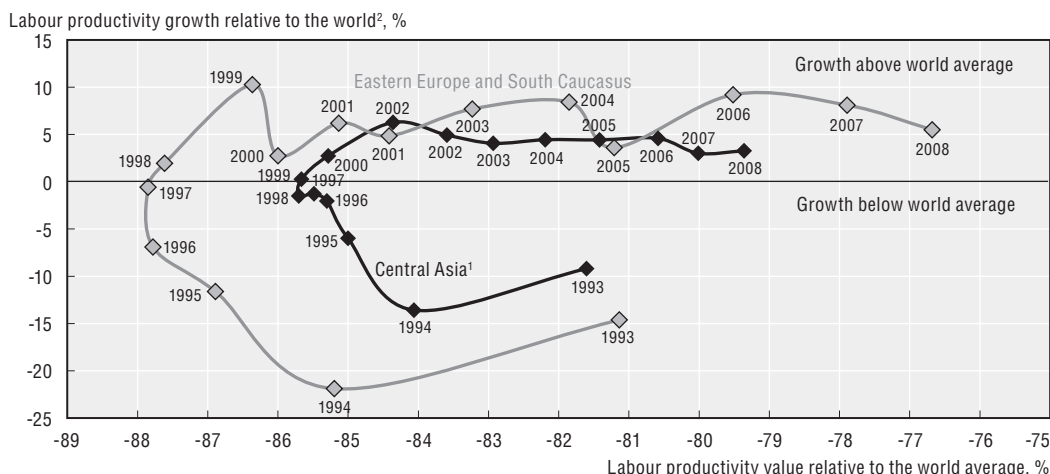
The decrease in productivity was mainly the result of the very long and difficult transition that followed the collapse of the Soviet Union. The disintegration of supply and marketing chains of the former Soviet Union countries, as well as the disruption of trade flows with the rest of the world, led to a situation where the newly independent states, including the EESC countries, had a large available labour force but no target markets (OECD, 2008). As a result, both output and productivity collapsed. In the agriculture sector, the main causes of decline in productivity were the disruptions associated with land reforms and farm restructuring, and a legacy of poor incentives and the previous absence of real budget constraints in state-driven activities (Swinen and Vrancken, 2009). Compared to the Central Asia, labour productivity in EESC has suffered a more severe decrease in the early transition years, one of the reasons being the earlier and the more drastic restructuring of the former central-planning system in most of the EESC countries.



In the following decade, productivity started rising markedly. Across the region overall productivity grew approximately 6.2 percentage points above the world average. The compound average growth rate (CAGR)<sup>20</sup> of GDP per employee between 1998 and 2008 was approximately 8%, compared to 1.4% globally.

Compared to the region of Central Asia, productivity growth has been far stronger in the EESC since 1998. This has led to a comparatively faster catch-up of the countries of the EESC. Looking at the official numbers, the level of labour productivity in EESC countries stood at 23% of the world average in 2008, up from 12% in 1998. The countries of Central Asia, however, had an average productivity level of just 21% of the world average in 2008, a very marginal improvement from 14% in 1998. However these numbers do not take into account the very large informal GDP in these regions as well as informal employment, which may distort the real situation. Nonetheless, there is still enormous potential for catching up, and this is why the growth rate in the region is comparably higher than in the rest of the world.

**Figure 1.3. Labour productivity  
(defined as GDP per employee in constant 2 000 USD)  
relative to the world**



Note: GDP per employee is calculated as GDP in constant 2 000 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 non-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.

Obviously, coming from a very low base, there was ample scope for productivity to increase rapidly, especially in view of the inadequacies of the planned economy that the EESC countries were leaving behind. A series of structural reforms in the 1990s helped the process along. According to the World Bank (2008), part of the increase in productivity occurred as a result of an increase in capacity utilisation, as firms started to use the excess capital and labour that had been idle during the early transition recession.<sup>21</sup> Part of the productivity increase was also due to structural changes, as resources were moved from the agricultural and manufacturing sectors to the more productive services sector. Across the EESC countries the share of agriculture in GDP declined sharply over 1998-2009. In Ukraine, for instance, the agricultural share declined from 14.3% in 1999 to 8.2% in 2008 (World Bank, 2009), but the trend was similar in all the other EESC countries.

The share of manufacturing (another remnant from the Soviet era) in GDP decreased in all the EESC countries except Georgia on the back of mass privatisations and efficiency drives. During the same period, the share of the services sector in GDP grew in Armenia, Georgia, Republic of Moldova and Ukraine, representing more than half of GDP in the latter three countries. In Belarus it stayed roughly the same, while in Azerbaijan its share declined, mainly as a result of expansion in the dominant oil and energy sector.

Even so, and despite the high growth of GDP per employee in the region, in 2008 overall productivity was still 77% below world average in absolute terms. Productivity remains lowest in the agricultural sector, as it still functions as a safety net and absorbs a large part of the labour force, especially seasonal labour and family labour. Industry, mining and transportation show the highest levels of productivity. It therefore appears that there is still a need to implement policies specifically targeted at increasing productivity.

### **External financing: Enhancing foreign direct investment flows**

Foreign direct investment (FDI) inflows into the region rose by a compound annual growth rate (CAGR) of 35% in the five-year period from USD 2.7 billion in 2003 to USD 16.5 billion in 2008 (UNCTAD database). On the back of the global financial crisis, however, FDI inflows declined by half in 2009, standing at USD 8.8 billion in total, or less than 1% in terms of the global share of FDI inflows. The distribution of FDI is unevenly split among the EESC countries. In 2009, more than half of FDI inflows went to Ukraine (54%). Belarus accounted for one-fifth of FDI (21%), while Armenia (9%), Azerbaijan (5%), Georgia (9%) and Republic of Moldova (1%) only received minor shares in terms of total figures (UNCTAD database).

**Table 1.1. FDI in the EESC region, 2009**

	FDI stock		FDI net Inflow			GDP growth
	USD billion	CAGR 2003-2009	USD million	% of GDP	% of domestic investments	%
Armenia	3.63	26.5%	777.5	8.9	27.8%	-14.2
Azerbaijan	9.04	0.8%	473.3	1.1	6.0%	9.3
Belarus	8.46	28.3%	1 884.4	3.8	10.4%	0.2
Georgia	7.55	32.5%	658.4	6.1	42.5%	-3.9
Republic of Moldova	2.60	24.0%	127.8	2.4	11.3%	-6.5
Ukraine	52.02	37.9%	4 816.0	4.2	22.7%	-15.1

Note: % of domestic investments is calculated as the share of FDI net inflow in gross fixed capital formation.

Source: UNCTAD, IMF/BOPS, IMF/WEO, EBRD, OECD estimates.

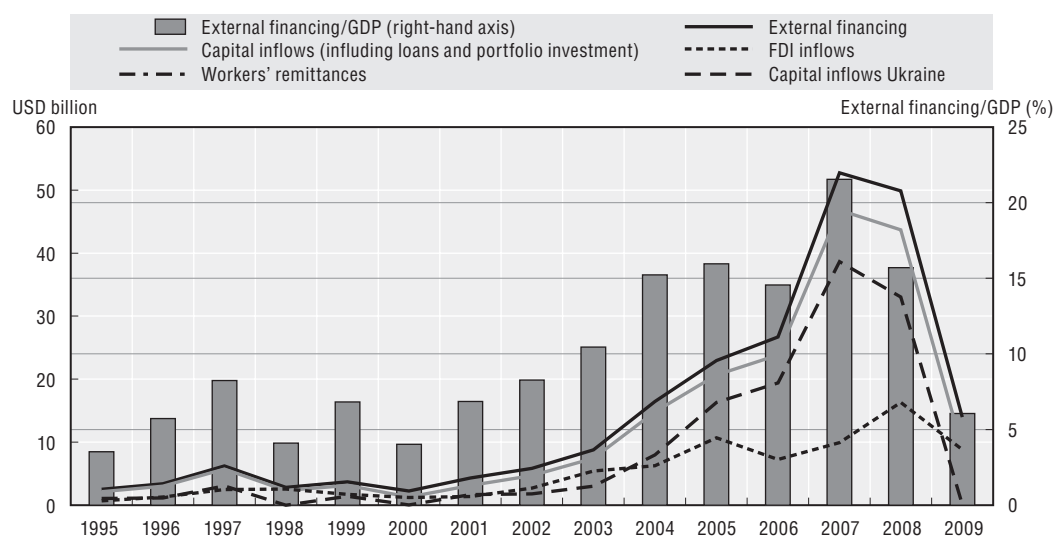
The boom in FDI inflows was mainly a result of mergers, acquisitions and privatisations. In the resource-rich countries, most FDI was directed towards the extractive industries, such as mining and hydrocarbons. Now that the main privatisation phase is largely completed, the challenge is to maintain FDI inflows by focusing clearly on the competitive advantages of the EESC countries. A clear political strategy is needed in order to attract investors to greenfield investments.

Given that investment inflows form an important part of external financing flows into EESC countries, further investment is critically needed to support continued economic development. With a favourable investment environment in place and a business climate that encourages the productive use of long-term investment, external financing can

support sustainable economic development through enhanced productivity and providing technological spillover effects. External financial flows were significantly reduced during the crisis. From a peak of almost 22% in 2007 and 16% in 2008, they dropped to just 6% of GDP in 2009.<sup>22</sup> They are estimated to have dropped further in 2010. While foreign capital inflows (including bank lending and portfolio investments) also constitute an important source of financing current-account deficits, foreign short-term capital can easily be withdrawn in times of crisis. FDI flows, on the other hand, are typically a more stable source of external financing and help to offset low levels of domestic saving. In 2009, FDI accounted for 56.8% of external financing across the EESC region.

All of the EESC economies, and mainly Ukraine, suffered from the withdrawal of portfolio investments and reduced bank lending. This had a significant impact on the region's external financing performance. External financial flows, including FDI, portfolio investments and other types of capital flows constitute an important source of financing of current-account deficits, and support the 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 if investors' confidence is lost.

Figure 1.4. **External financing in Eastern Europe and South Caucasus: 1995-2009**



Source: IMF Balance of Payment Statistics Database, World Bank; OECD analysis.

### Diversifying trading partners

Further diversification of trade is crucial to lowering the region's vulnerability to external shocks. The ban that the Russian Federation imposed on Moldovan and Georgian wine in 2006<sup>23</sup>, as well as other agricultural products, is an example of how the absence of trade diversification can leave a country exposed to the trade policies of a single trading partner.<sup>24</sup> Although some diversification in terms of trade has taken place, trade opportunities remain limited for most of the EESC countries.

The Russian Federation and, generally speaking, the Commonwealth of Independent States (CIS) remain the main trading partners for many of the EESC countries. For example, in 2009 the CIS countries accounted for about 40% of the overall trade of Ukraine. Russia is the main trading partner of Belarus, with a 54.5% share of imports and 30.4% of exports. It

is also Armenia's main import source (24.9%) and second-largest export destination (15.9%). The CIS is Republic of Moldova's main export destination (37.5%), and its main import source (over 40%). Azerbaijan exports mainly to the EU, the US and Turkey, and imports largely from the Russian Federation and Turkey. Georgia, however, trades mainly with its neighbours Azerbaijan, Turkey and Ukraine, and has decreased its trade with the Russian Federation to 1.6% (exports) and 6.7% (imports).<sup>25</sup>

The EESC countries (with the exception of Azerbaijan) are highly dependent on imported energy. Armenia imports all of its natural gas from the Russian Federation, and most of its petroleum products come from Georgia. Republic of Moldova and Georgia rely on imported oil and gas as well. Russia is the main gas supplier to Ukraine and Belarus.

A step towards improved integration into global trade is to join the World Trade Organisation (WTO). In 2000 Georgia became the first EESC country to join the WTO, followed by Republic of Moldova (2001), Armenia (2003) and Ukraine (2008). Azerbaijan and Belarus are WTO observers and continue to negotiate bilateral protocols with WTO member countries. The Association Agreements, which all of the EESC countries are currently negotiating with the EU (ENPI Info Centre, 2010), are also expected to provide more trade opportunities.

### ***The private sector requires further development***

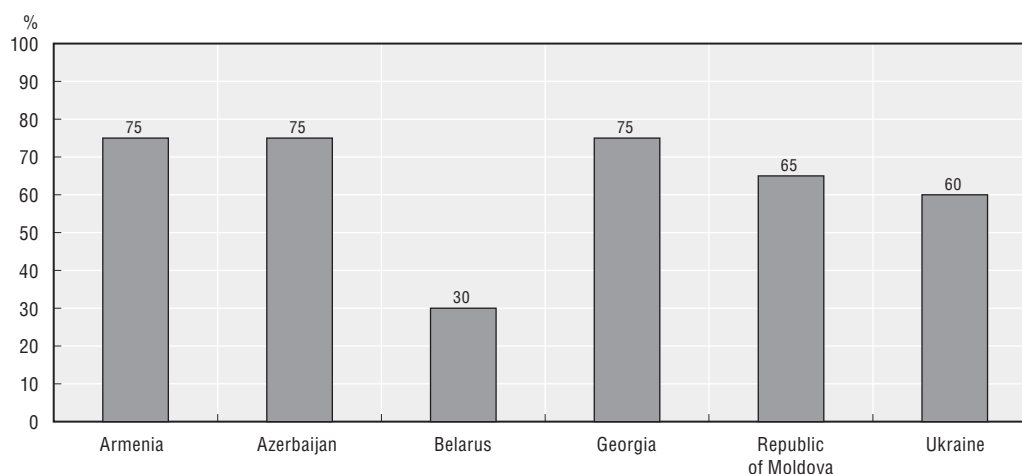
In recent years, the private sector has played an increasingly important role in the economic fabric of the EESC countries. A vibrant private sector is vital for providing adequate employment and economic growth. Furthermore, the private sector is more flexible and receptive to market needs, and therefore is more efficient.

With the exception of Belarus which remains heavily state-dominated, a series of large-scale privatisation campaigns have ushered in a new generation of private-sector actors. The private sector has expanded thanks to both the entry of new enterprises and growing employment in privatised incumbents. In 2009, the private sector's share of GDP was approximately 75% in Armenia, Azerbaijan and Georgia and 65% in Republic of Moldova and 60% in Ukraine (Figures 1.5). In Belarus however, the private sector represents only 30% of GDP. International organisations such as UNDP, World Bank, EBRD, USAID and the Swedish International Development Agency (SIDA) encourage and support the privatisation process in Belarus. For example, in February 2011 the World Bank Group started a programme to privatise state-owned enterprises and banks in Belarus.<sup>26</sup>

In 2008 the private sector in the region (excluding Belarus) accounted for 72% of total employment (UNECE statistical database). The private sector in Belarus accounted for 50% of employment, despite its significantly lower share in GDP.

Registration of new businesses has increased in all EESC countries, raising business entry rates (the number of new enterprises) to between 6.8% (Armenia) and 9.3% (Republic of Moldova) of total companies in 2007. While the change in macroeconomic factors is undoubtedly one of the main reasons for the increase in new businesses, there have also been concrete improvements in the business regulation environment.

Across the region, it took between three days (Georgia) and 27 days (Ukraine) to start a business in 2009 (regional average: 11.8) as opposed to between 19 days (Armenia) and 105 days (Azerbaijan) in 2003. Similarly, the average number of start-up procedures decreased over this period by almost half from 12.5 to 6.3 procedures (WB/WDI). Compared with the OECD average (13.3 days to start a business) it is now quicker to start a business in most

Figure 1.5. **Private sector share of the GDP in 2009**

Source: EBRD, Transition Report 2010; OECD analysis.

EESC countries and there is almost no difference in the number of procedures required (OECD average: 5.8 procedures). Accordingly, the cost has fallen significantly. At present, only in Republic of Moldova (7% of gross national income (GNI) per capita) and Ukraine (5.8% of GNI per capita) is it more costly to start a company, compared with the OECD average (5.1% of GNI per capita).

While these developments show that major improvements to business regulation have been made in recent years, significant challenges remain and further steps need to be taken to remove remaining policy barriers in the business operating environment. According to the World Bank Enterprise Survey (BEEPS) 2008-09, corruption remains one of the key obstacles in most of the EESC countries, identified by between 20% and 50% of firms as a major constraint.<sup>27</sup> All of the EESC countries are part of the OECD Anti-Corruption Action Plan in Eastern Europe and Central Asia, which aims to support its member countries in their fight against corruption by providing a regional forum for the promotion of anti-corruption activities, exchange of information, elaboration of best practices and donor co-ordination.<sup>28</sup> Four of the participating countries (Armenia, Azerbaijan, Georgia and Ukraine) have also committed to a specific, more far-reaching plan to fight corruption, known as the Istanbul Action Plan.<sup>29</sup>

Even though efforts have been made to reduce bureaucracy, the tax payment processes are still marred by obscure regulations and non-transparent procedures (Belarus, Republic of Moldova, Ukraine) as is trade across borders (Armenia, Republic of Moldova, Ukraine). Cumbersome procedures continue to impose heavy burdens on small and medium-sized enterprises (SMEs) and open the path to corruption (WB/WDI). Moreover, the state still interferes significantly into the business operational environment, undermining fair competition either through direct or indirect action. For example, the presence of a large number of state-owned enterprises in Belarus, which often benefit from state-directed lending or other types of direct and indirect state support, negatively affects the competitiveness potential of private-sector firms.<sup>30</sup> This is made worse by weak corporate governance, which often goes hand-in-hand with perceptions of corruption. Corporate governance is also a vital issue that needs to be addressed in the EESC region (OECD, 2007a).

Access to finance has also been reported as a major constraint across the region (reported by 23% to 39% of firms in BEEPS 2009), essentially as a result of unfair lending practices such as exorbitant interest rates or exaggerated collateral requirements (or both). Lack of financing is also one of the reasons why SMEs tend to innovate less than their larger peers. The situation has deteriorated since 2009 as domestic credit to SMEs has tightened due to the impact of the financial crisis.

Generally speaking, innovation rates in the private sector of the EESC countries are very low. In the Global Competitiveness Index 2010-11 of the World Economic Forum, the countries rank between 88th for Ukraine and 123rd for Republic of Moldova for innovation, with the exception of Azerbaijan (66th), mainly as a result of the highly technological oil and energy sector. Weak enforcement of anti-monopoly policies and intellectual property rights – factors which reduce fair competition – also remove firms' incentives to innovate. Moreover, a lack of adequate financing further reduces the opportunity to invest in research and development of new products and services.

In many countries across the region, the informal economy remains significant and was estimated at approximately half of GDP in 2007 (Schneider, 2010). The informal sector developed in reaction to excessive regulation, corruption and red tape. It is mostly found in labour-intensive sectors such as agriculture or construction. While providing an important source of livelihood across the region it has significant negative economic ramifications. State budgets suffer as foregone revenues from tax collection contribute to public deficits, and the sheer size of the informal sector imposes additional burdens on registered enterprises due to anti-competitive practices (OECD, 2008). Creating incentives for SMEs to move out of informality will reap additional benefits for the public and the private sectors.

### ***Need to improve education and support human capital development***

The general quality of education in the EESC region is lower than in the OECD. According to the OECD Programme for International Student Assessment (better known as PISA) 2006 results for Azerbaijan and the Trends in International Mathematics and Science Study (TIMSS) 2007 results for Armenia, Georgia and Republic of Moldova, the EESC countries have below-average educational outcomes.

In 2007, governments spent on average 14.1% of state budgets on education. Public expenditure on education as a percentage of GDP in 2007 was highest in Republic of Moldova (9.6%), followed by Ukraine (5.3%), Belarus (4.5%), Armenia (3%), Georgia (3.2%) and Azerbaijan (2.8%), making the average public expenditure of the EESC region 4.7% of GDP (IMF/WEO). Only two of the EESC countries allocated more public funds to education than the OECD average of 4.8%.

Most educational institutions are currently overstuffed and underfunded and insufficient public resources are being directed to the educational sector. Despite the fact that resources are close to OECD levels, these are only public funds. In OECD countries, private spending on education represents nearly 1% of GDP. Moreover, the use of funds in the EESC is not efficient. Consequently, the wages of teachers are low, around 70% of the average national salary<sup>31</sup>, creating room for corruption with teachers withholding part of the curriculum and instead offering fee-based courses to supplement classes (and as a requirement for students to obtain pass grades). The pupil-teacher ratio in primary education was 14.4 in 2008 (WB/WDI), below the OECD average of 16.3 (OECD, 2010a). However, the fact that the ratio is lower than in the OECD does not mean that the quality

of teaching is better. On the contrary, the quality of education has been negatively affected because the most qualified teachers have left the profession for better prospects in the private sector. In addition, teaching, even at tertiary level, is often based on knowledge accumulation (learning by rote) rather than on skills development. This has serious consequences for the quality of the labour force.

The transition to a market economy has been accompanied by a relentless brain drain of the skilled labour force, mainly as a result of low wages and a general lack of job prospects. This migration trend has continued since 2000. In Armenia, for example, more than 75% of migrants who left the country in 2005-06 had either secondary or secondary professional (vocational) education and almost 20% had a bachelors or a masters degree (Manasyan *et al.*, 2004). Migration continues to limit the stock of human capital even in recent years, despite recent growth in the private sector across most of the region. It continues to be driven by a lack of genuine job opportunities in the home country – pointing again to the mismatch of skills. The still-high poverty rates (around 50% in the EESC countries, 20% in Ukraine) reduce opportunities for children to attend school and lead them into low-skilled jobs. The brain drain has resulted in a chronic shortage of engineering and science specialists in the region (World Economic Forum, 2010).

## Policy priorities for the region

Although the current competitiveness performance has been improving in the EESC over the past decade, much remains to be done to unlock the potential of the region. This has been made more urgent by the aftermath of the global financial crisis and the world economic recession of 2009. The downturn has highlighted the weaknesses of the EESC economies and emphasised the need for them to focus on long-term strategies and policies that will help foster sustainability and increase competitiveness. Appropriate steps need to be taken to address existing structural inequalities and to seize new opportunities to boost growth, increase employment and value-added per worker, and develop strategies to diversify production and trade, strengthen the domestic private sector and avoid over-reliance on a few volatile export markets.

Working closely with the OECD Eurasia Competitiveness Programme, the governments of the region have identified three key policy areas that are crucial to the competitiveness of their countries:<sup>32</sup> human capital development, access to finance and investment policy and promotion.

In order to evaluate the current status of policy reform in these three areas in the EESC countries and to provide adequate policy recommendations, the OECD-Eurasia Competitiveness Programme has developed the Policies for Competitiveness (PfC) Assessment Framework. This is a self-assessment conducted by both public authorities and private sector representatives. In 2010 the PfC was undertaken in all countries of the region, except Belarus, which was not part of the Programme at the time of the survey. The assessment is described in more detail in Box 1.1.

The results of the PfC assessment framework indicate that there is scope for improvement in all three policy areas identified (human capital, access to finance and investment policy and promotion). Moreover, in each of these areas certain issues need to be addressed as a priority. These three policy areas are further analysed in Chapters 3, 4 and 5 of this report.

### Human Capital Development

A preliminary analysis of the survey responses reveals that there is a need for improvement in all three areas across the six EESC countries. The lack of inclusion of the private sector in the development of educational programmes, and the insufficient and inefficient usage of inputs (budget allocations, teaching staff), in addition to the poorly developed or non-existent continuing education and training (CET) systems, are key contributing factors to low labour productivity growth. This is despite the relatively high educational attainment of the workforce. The PfC Assessment indicates that there is broad agreement across both governments and the private sector that existing skills mismatches are a vital structural factor that needs to be tackled.

According to the PfC Assessment, none of the countries has put in place a national strategy for the development of work force skills that align job-market requirements with the curricula of the educational programme. Despite growing demand for education and the rising number of students, fewer graduates find jobs in their profession, indicating an inefficient use of resources directed to education. According to the survey results, regular and formalised public-private consultations between the government, educational institutions and employers which would help bridge the skills gap do not exist or are only present in the form of irregular ad-hoc consultations.

#### Box 1.1. Policies for Competitiveness Assessment Framework

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 related to the business environment;
- facilitate prioritisation of donor activities supporting economic development and growth.

The governments of the EESC countries have identified three major policy dimensions that need to be addressed in more detail: *human capital development*, *access to finance for SMEs and investment policy and promotion*. The assessment framework breaks down each of these policy dimensions into sub-dimensions (Table 1.2). Sub-dimensions are themes that are important to consider in separate blocks. Sub-dimensions 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 are 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 1.2. **Three policy areas covered  
by the Policies for Competitiveness Assessment framework**

Human capital development	Access to finance for SMEs	Investment policy and promotion
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 markets	
	Improving financial literacy (quality of demand)	

Vocational or job-related training is identified in the PfC Assessment framework as either non-existent or highly insufficient. Employees lack specific, technical skills and hence have to be trained in-house, imposing additional costs on employers. In this regard, both higher educational institutions and the VET/CET systems should be aligned with labour market needs.

Formulating and implementing a national strategy of teacher recruitment and retention is also a key requirement – a strategy that is not in place in any of the EESC countries. The quality of education has been negatively affected because the most qualified teachers leave the profession for better prospects in the private sector. Moreover, teaching staff in most of the public institutions have not been trained to teach to new international standards that promote skills development, rather than knowledge accumulation.

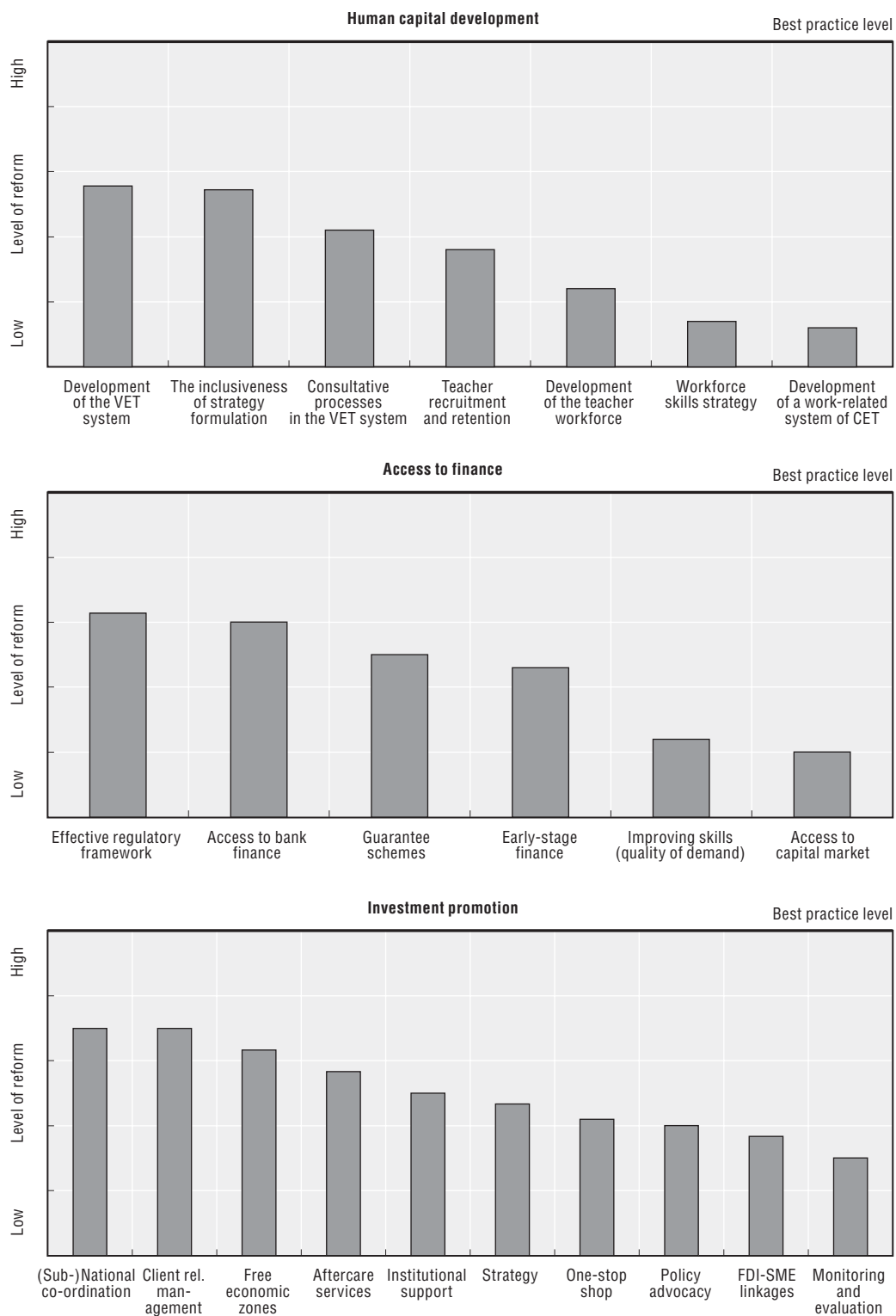
Given the long gestation period of investment in education, immediate measures should be taken to ensure the adequacy and relevance of the educational system for the labour market and future long-term skill-based growth. This issue is further explored in Chapter 3 of the publication which makes specific policy recommendations to tackle some of the shortfalls identified here.

### **Access to finance**

Adequate access to finance is needed if companies are to grow and expand. Respondents of the PfC surveys from both the public and private sectors identified early-stage finance and guarantee schemes as priority sectors for development, especially of SMEs. Indeed, due to the high administrative costs of small-scale lending, the perception of high risk attributed to SMEs, the presence of asymmetric information and moral hazard, in addition to small firms' general lack of collateral, banks and financial institutions have few incentives to provide credit to SMEs.

In the case of start-ups, the level of interest rates and collateral requirements are crucial factors since, unlike mature enterprises, they do not have the option to rely on working capital or on supplier financing. In the early stage of their development they lack the well-established links and partnerships with other businesses that more mature business have. Therefore, loans from commercial banks constitute their main source of external financing.

Empirical evidence shows that economic growth is strongly and positively related to the level of financial development (Levine and Renelt, 1992). Therefore, improving access to funding for businesses, including SMEs would have a beneficial impact on the economy as a whole. Across the region, access to finance has generally improved, but is still far from OECD standards. Government policies should focus on facilitating the financing of

Figure 1.6. **Policies for Competitiveness Assessment Framework for EESC across three dimensions**

Note: No survey data available for Belarus. "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: PfC Assessment Framework 2010 results (OECD).

businesses at different stages of development, in particular for young enterprises and start-ups.

Countries could benefit from focusing more on developing a solid regulatory framework that would facilitate access to finance, such as improving property registration and creation of private credit history bureaus. Furthermore, collateral requirements should be eased through the development of more extensive guarantee schemes and the improvement of financial literacy of the population. See Chapter 4: Access to Finance for SMEs for a more detailed analysis of the issue.

### ***Investment policy and promotion***

FDI flows are increasingly important as a source of finance for the EESC economies. To unlock the full potential of FDI as a source of economic growth, a second generation of reforms is needed to improve the investment environment, following the early transitional reforms of the mid-1990s. According to the PfC Assessment Framework, key areas to address to help attract new FDI include better law enforcement mechanisms such as ensuring transparent and non-discriminatory legal proceedings. Policy makers from the EESC also need to focus on diversifying the sectors receiving FDI and expanding their investment promotion and facilitation capabilities. Investment promotion activities should be better linked to investment policy reform and industrial policy objectives, as well as supporting regional development.

The results of the assessment indicate that overall standards of FDI policy reform are relatively high, although progress in implementing specific investment promotion activities and delivering facilitation services to investors is less advanced. Having the right framework conditions in place is an important first step, but knowing how to position a country strategically among its global and regional competitors to capitalise on foreign investor presence for local SME development will make a big difference.

One of the key outcomes of the assessment is that investment promotion agencies (IPA) do not yet use FDI-SME linkage programmes actively to 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 normally entails approaching local SMEs and conducting strategic audits to assess their capacity to participate in a specific linkage programme as well as defining a development plan, promotional campaigns and a database to generate interest by foreign enterprises. Experience suggests that making it easier to create linkages can lead to sustainable business networks, which are invaluable to both foreign investors and domestic companies.

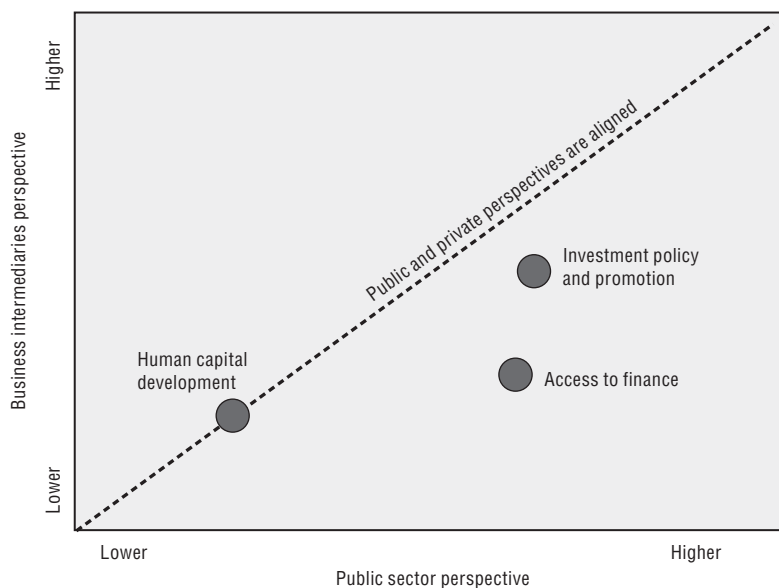
### **Developing a public-private dialogue**

For effective policy making, 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). Dialogue is important because the perception of the reform efforts being undertaken often differs across different stakeholders. This difference can be particularly marked between private and public sector representatives.

Based on the results of the PfC Assessment, the scores were divided according to the respondent: either public sector institution or a private sector representative.<sup>33</sup> The scores

were then averaged across the dimensions for each sector. Figure 1.7 shows the level of reform in the three key policy areas as perceived by the public sector and by the private sector. The dashed diagonal line highlights the space where the public and private sectors are aligned on the perception of the level of policy reform being implemented.

Figure 1.7. **Gap in perceived state of reform between the public and private sectors**



Note: Simple averages across the countries of the region; the sample excludes Republic of Moldova and Belarus.

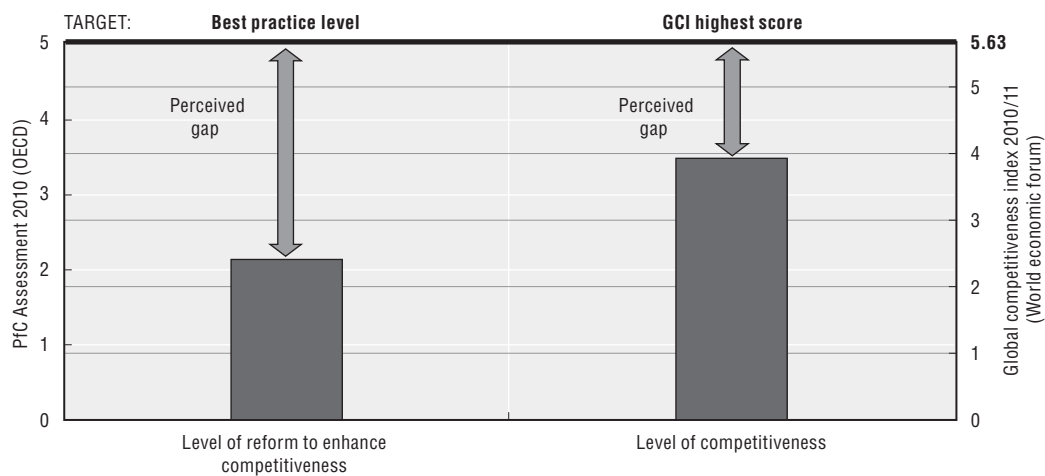
Source: PfC Assessment Framework 2010 results (OECD).

As shown in the graph, there is a strong perception gap in the reforms being pursued in the areas of investment policy and access to finance. There clearly is a need to strengthen the public-private dialogue between government officials and investors (both foreign and domestic) through regular consultations to assess and improve the host country's regulatory environment. It is important to note, however, that sometimes private sector representatives may not entirely reflect private sector views, especially if they are established and/or supported financially by the government. The misalignment may also reflect difficulties in implementing reforms throughout the region, as well as bottlenecks related to enforcement.

The OECD Secretariat is working with the countries of the region on further developing 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 those needs for private sector development.

## How to enhance competitiveness

Figure 1.8 shows the level of reform based on the PfC Assessment Framework responses averaged across countries and three policy areas. This is an indicative measure of the level of reform in three key areas as perceived by the different stakeholders of the economies of the region.

Figure 1.8. **Competitiveness perception gap in the EESC relative to OECD 2010**

Note: Level of reform is a simple average across all three policy areas across the countries of the region; the sample excludes Belarus.

Source: Level of reform to enhance competitiveness: PfC Assessment Framework 2010 results (OECD); Level of competitiveness – Global Competitiveness Report 2010-11 (World Economic Forum).

The second measure of the level of competitiveness, also shown in Figure 1.8, is based on the Global Competitiveness Index (GCI) of the World Economic Forum. Like PfC assessment it includes only five countries out of the six in the EESC region (Armenia, Azerbaijan, Georgia, Republic of Moldova and Ukraine). However it covers a broader range of areas than the PfC index, and therefore is not directly comparable to the PfC measure. The benchmark for both was best practice in both OECD and non-OECD countries.

According to both measures the PfC level of reform and the GCI are both perceived to be lower than OECD and non-OECD best practice. All the stakeholders thus recognise that there is still room for improvement both in terms of reform and in terms of implementation.

## Conclusion: Addressing fundamental structural issues to boost competitiveness

In order to fully leverage its competitiveness potential and raise overall productivity in the medium and long term, the EESC countries must tap into their vast endowments and further build capabilities in the areas of human capital, access to finance and investment policy and promotion. Education must provide the skills demanded by the market to meet industry needs. These needs have to be defined in a joint policy dialogue between policy makers and employers. SMEs, essential for growth and job creation, must be granted easier access to finance. To achieve this, capital market reforms must be enacted, including measures related to facilitating early-stage financing and guarantee schemes. Finally, the overall investment climate must be enhanced by targeted investment policy and promotion reforms. These must address the needs and requirements of the private investor, including areas such as national treatment, transparency and accountability.

This report is the result of a joint effort with the governments and economic actors of the EESC region to enhance the competitiveness of the EESC countries. Throughout the report, the authors ask the following questions:

- Which policies need to be addressed as a priority to enhance competitiveness?

- What is the most effective way to implement these policies and reforms?
- How can public-private sector dialogue be enhanced?

The following five chapters are an attempt to provide some useful answers and policy recommendations that will ultimately lead to competitiveness increasing across the six EESC countries.

## 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. World Banks classifies the countries differently compared to the OECD Eurasia Competitiveness Programme. The Europe and Central Asia includes the following countries: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Georgia, Kazakhstan, Kosovo, Kyrgyz Republic, Lithuania, FYR Macedonia, Republic of Moldova, Montenegro, Romania, Russian Federation, Serbia, Tajikistan, Turkey, Turkmenistan, Ukraine, and Uzbekistan. Developing Asia, Latin America, Middle East and North Africa, and Africa are also according to definitions given by World Bank at <http://data.worldbank.org/about/country-classifications/country-and-lending-groups>.
3. Economist Intelligence Unit, Armenia (November 2010), Azerbaijan (January 2011), Georgia (December 2010), Republic of Moldova (January 2011), Ukraine (January 2011).
4. The figures are based on UN estimates for 2015.
5. Belarus signed a Partnership and Co-operation Agreement in 1995, but the agreement was not ratified by the EU.
6. OECD “Initiative for South Caucasus and Ukraine, Enhancing Investment, Competitiveness and Private Sector Development in the South Caucasus and Ukraine” Working Group on Investment Climate Policy and Promotion, 3 July 2009, Bodrum, Turkey
7. See [www.ebrd.com](http://www.ebrd.com); [www.ebrd.com/pages/workingwithus/procurement/notices/project/110302a](http://www.ebrd.com/pages/workingwithus/procurement/notices/project/110302a)
8. See [www.worldbank.org](http://www.worldbank.org)
9. See [www.ifc.org](http://www.ifc.org); [www.ifc.org/ifcext/spiwebsite1.nsf/0/D1D053120A548EDA852576BA000E2859](http://www.ifc.org/ifcext/spiwebsite1.nsf/0/D1D053120A548EDA852576BA000E2859)
10. See [www.traceca-programme.eu](http://www.traceca-programme.eu)
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12. Ministry of Economy of Ukraine, [http://ukrexport.gov.ua/eng/about\\_ukraine/geo/?country=ukr](http://ukrexport.gov.ua/eng/about_ukraine/geo/?country=ukr)
13. [www.economy-ukraine.com.ua/?p=81](http://www.economy-ukraine.com.ua/?p=81)
14. According to the US Department of Agriculture, the FSU-12 countries, excluding the Russian Federation, are expected to provide more than one-sixth of world wheat exports by 2020. FSU-12 are the former Soviet Union countries and include Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.
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20. CAGR – Compound annual growth rate is as an imaginary number that describes the annualized gain of an investment if it grew at a steady rate.
21. World Bank (2008) deducts its conclusion from analysing the Total Factor Productivity.
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24. Russian Federation has been a major importer of wine from Republic of Moldova and Georgia.
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## Chapter 2

# Strengthening the Pillars of Competitiveness

by

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*The competitiveness of the countries of Eastern Europe and the South Caucasus (EESC) is analysed using the Global Competitiveness Index (GCI) of the World Economic Forum and the 12 pillars which determine the level of productivity of a country. Armenia, Azerbaijan, Georgia, Republic of Moldova and Ukraine are compared to both EU Accession 12 countries and transition countries. As a group, their major competitive advantage is labour market efficiency, while inefficient infrastructure and poor quality of education dominate as challenges. They also differ in their technological readiness, higher education and training, the quality of their infrastructure and the stability of their macroeconomic environment. Their business environment must be more supportive of entrepreneurship, new business, trade and foreign direct investment, as well as reducing the dominance of large firms in key markets. The reforms of their financial markets have taken a step backwards during the recession, with particular problems in access to finance for the business community and a need to stabilise the banking system.*

## Executive summary

The countries from Eastern Europe and the South Caucasus (EESC) have been affected by the economic downturn of 2008 and 2009 in different ways but now share a universal sense of urgency to apply competitiveness-enhancing reforms to ensure future growth. This chapter analyses the region's competitiveness using the World Economic Forum's Global Competitiveness Index (GCI) according to the 12 pillars of the GCI which determine the level of productivity of a country. These are: institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods markets efficiency, labour market efficiency, financial market development, technological readiness, market size, business sophistication and innovation. These categories are highly interrelated and tend to reinforce each other. However, each of these is not of equal importance to all countries and the different weightings depend on the level of development of a country. (See Annex A for the 12 pillars, their sub-divisions and weights). The GCI is calculated using data from major international organisations and the World Economic Forum's annual Executive Opinion Survey.

In an international comparison, the five EESC countries (Armenia, Azerbaijan, Georgia, Republic of Moldova and Ukraine) fall into the bottom half of the GCI rankings. The largest differences among the countries are in market size, infrastructure, macroeconomic environment and technological readiness, and the smallest differences are in health and primary education and goods markets efficiency. Although performing generally lower in their competitiveness than transitional economies, they all have a high level of labour market efficiency. Where they differ the most is in the macroeconomic environment, where Azerbaijan is the best performer, while Georgia and Ukraine lag behind. Ukraine outperforms the rest of the group in market size and higher education and training.

The five countries are particularly challenged by the quality of their education which should be geared towards the needs of the business sector. Their business environment must be more supportive of entrepreneurship, new business, trade and FDI, as well as reducing the dominance of large firms in key markets and the administrative burden of customs clearance. The reforms of their financial markets have taken a step backwards during the recession, with particular problems in access to finance for the business community and a need to stabilise the banking system. Georgia's competitiveness has seen the greatest improvement; Republic of Moldova and Azerbaijan have improved moderately; Armenia remains stable and only Ukraine's ranking has dropped over the past five years.

More specific movements within the rankings for each country are as follows:

**Armenia's** economy, with the competitive advantage of flexible and efficient labour markets, suffers from a lack of efficiency in the market for goods and services. Its financial markets are underdeveloped and it is not in a position to benefit from technological readiness. Its private institutions demonstrate ineffectual corporate boards, poor protection of minority shareholders' rights and unethical business practices. It should focus its efforts on continuing the reform of the public institutional environment,

specifically greater protection for all forms of property rights, improvement of the judiciary and a greater focus on transparency. The country's competitiveness would benefit from adapting technologies from abroad.

**Azerbaijan** was one of the fastest growing economies in the world before the crisis but has fallen back in its 2010-2011 GCI rankings. It maintains its advantages of flexible labour markets and a stable macroeconomic environment, but suffers from the inefficiency of its goods markets. It would benefit from further opening up to foreign competition and from removing barriers to foreign direct investment. There is a striking gap between the relatively high participation rates in education and its poor quality. Another important impediment is lack of access to capital and the lack of business confidence in the banking system. Its institutional framework, both public (lack of property rights and corruption – both in public administration and in the judiciary system) and private (protection of investors' rights) should be a priority to increase its competitiveness.

The recession highlighted **Georgia's** need to focus on reforming the business environment. As with the other countries of the EESC, its advantage is the flexibility of its labour markets, although it would benefit from greater meritocracy and higher female participation in the workplace. Although corruption is one of the least important impediments to doing business, institutional reforms should be continued, particularly greater protection of property rights, further reform of the judiciary and strengthening private institutions. Georgia's goods markets are comparatively efficient but it is crucial to strengthen domestic competition and develop anti-monopoly policy. Although Georgia outperforms the rest of the region in the development of its financial markets, it would benefit from better regulation of securities exchanges. At present, access to finance is seen as the biggest challenge to doing business in Georgia. Although its information technology (IT) sector could be an important source of productivity, there is little spillover into other sectors.

**Republic of Moldova**, the poorest among the EESC economies, remains dependent on the basic requirements components of the GCI such as institutions, infrastructure, macroeconomic environment and health and primary education. Prioritisation of its reforms is essential. Reform of public and private sector governance would benefit its business environment: strengthening property rights and reducing undue influence of the government and the judiciary. Republic of Moldova's infrastructure, fundamental to developing international trade, is the poorest among the five countries and stabilising its macroeconomic environment is another key challenge. Although it outperforms its peers at the same stage of development in its health and primary education indicators, these are counterbalanced by low enrolment in primary education and a high incidence of tuberculosis. It is crucial for Republic of Moldova to make primary school enrolment universal: it now stands at only 87.7%. Republic of Moldova's domestic market is small but its export markets remain untapped. It would benefit from greater openness to FDI, promoting competition and further liberalisation of trade. Access to finance is considered the second most important issue in the business community, and the business sector also expressed doubts as to the soundness of banks.

**Ukraine** is the only economy among the five analysed that has dropped in the GCI since 2005, due to a more negative assessment of its institutions and deteriorating macroeconomic stability. Its strengths are a large domestic market and close trade links with the CIS and the European Union and a well-educated population. High participation

at all levels of schooling is counteracted by the poor quality of education. Its institutional framework is inefficient and corrupt, with frequent paying of bribes, low public trust in politicians, inefficient government and weak protection of property rights. The country's macroeconomic challenges of the past years necessitated a stabilisation programme with the IMF in which Ukraine committed to restructuring and recapitalising its banks, reforming its energy sector and strengthening the financial system. Ukraine's financial sector is unable to provide capital to the business sector. Ukraine must focus on developing local capital markets, improving transparency and reducing the role of state financial institutions. It must also address inefficiencies in its markets for goods and services. The lack of domestic competition and domination of key markets by few enterprises makes entry of new businesses difficult. Trade and foreign investment must be facilitated by reducing the cost of importing and relaxing rules on FDI.

## Introduction

The countries of the Eastern Europe and the South Caucasus (EESC) region share a common history and their economies have many similar features, but they have evolved quite differently since their independence two decades ago. While Azerbaijan was among the fastest growing countries in the world in the past decade, Republic of Moldova remains one of Eastern Europe's poorest economies. As a result of their differences, the severe global economic downturn of 2008 and 2009 has affected the countries from the region to varying degrees. However, throughout the region the recession has created a universal sense of urgency with respect to competitiveness-enhancing reforms which must be undertaken in order to ensure that future growth is stable and sustainable.

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

## Methodology

The World Economic Forum defines competitiveness 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 potential rates of return that can be obtained by investments in an economy. Because the rates of return are drivers of growth rates, a more competitive economy is likely to grow faster, and be more prosperous in the medium to long term, than a less competitive one.

Since its introduction in 2005, the GCI has been used by the World Economic Forum in its assessments of competitiveness. The model, which was developed by Xavier Sala-i-Martin, Professor of Economics at Columbia University, and the World Economic Forum, is based on the premise that the determinants of competitiveness are numerous and interact with each other in a complex manner. The GCI attempts to capture these interactions through a weighted average of many different components, each of which reflects a specific aspect of competitiveness. These components are grouped into 12 categories (or pillars),<sup>1</sup> as follows:

- **Institutions** are crucial for competitiveness as they determine the legal and administrative framework within which individuals, firms and the government interact to create wealth. Well-functioning institutions include characteristics such as clearly

defined and enforced property rights, an efficient and transparent public administration, a fair and independent judiciary, the provision of physical security, and high corporate governance standards.

- **Infrastructure** is fundamental 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 telecoms for efficient communication.
- Stability in the **Macroeconomic environment** is important, as its absence makes it difficult for businesses to operate effectively. 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.
- **Health and primary education** are crucial elements, as a healthy workforce that has received at least a basic education is much better positioned to perform to its full potential.
- 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.
- 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.
- **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.
- 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.
- **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.
- **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.
- **Business sophistication** plays an important role for productivity. The presence of clusters of firms 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.
- As noted above, **Innovation** is crucial, as it can expand the technology frontier. Businesses in advanced economies can only sustain high wage levels through moving

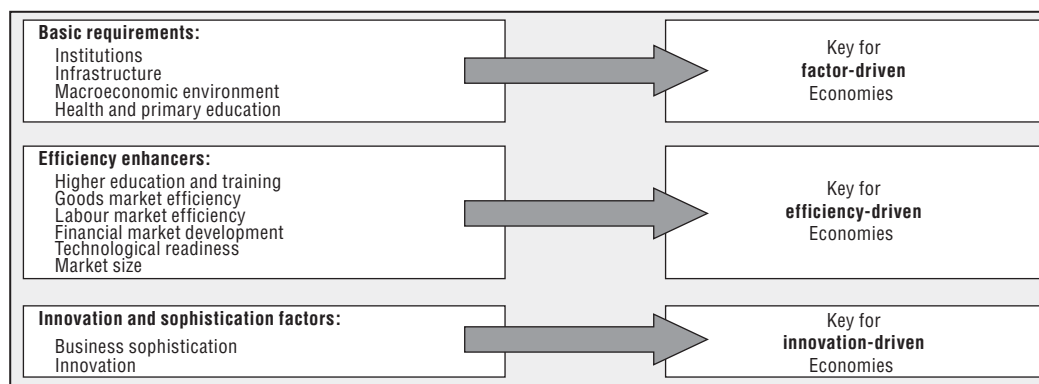
the technology frontier outwards. They must therefore develop cutting edge products or services and/or use unique processes.

Although taken into account separately in the GCI (see Annex A), 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 GCI also takes into account the fact that the different dimensions of competitiveness are not of equal importance to all countries. As a country advances in economic terms, its products and services must become increasingly sophisticated in order to sustain the rising productivity levels necessary to support a rising wage level. The GCI 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 their natural resource intensity.<sup>2</sup>

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 take on increasing importance for innovation-driven economies. Table 2.1 shows how countries in the EESC region are allocated into the three stages and provides details about the weighting scheme.

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



Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

The GCI is calculated using two distinct types of data. Approximately one third of the indicators are obtained mainly from major international organisations, such as the World Bank, the International Monetary Fund (IMF), UNESCO and other similar organisations. The remaining indicators are derived from the World Economic Forum's annual Executive Opinion Survey. By surveying business leaders, the survey provides an assessment of the qualitative aspects of competitiveness, as well as information on dimensions for which statistical sources are not available for all countries covered by GCI. Annex B lists the detailed sources of data used in the GCI.



Table 2.1. **Countries from Eastern Europe and the South Caucasus according to their stage of development**

	Eastern Europe and South Caucasus countries	Other countries in this stage	Important areas for competitiveness
<b>Stage 1 (factor-driven)</b> GDP per capita (US\$) < 2,000	Republic of Moldova		
<b>Transition from 1 to 2</b> 2,000 < GDP per capita (US\$) < 3,000	Armenia, Azerbaijan, Georgia, Ukraine	Brunei Darussalam, Indonesia, Islamic Rep. of Iran, Ukraine, Venezuela	Basic requirements (between 40% and 60%) and efficiency enhancers (between 35% and 50%)*
<b>Stage 2 (efficiency-driven)</b> 3,000 < GDP per capita (US\$) < 9,000		Argentina, Brazil, China, Malaysia, Mexico, Russian Federation, South Africa, Turkey	Basic requirements (40%) and efficiency enhancers (50%)
<b>Transition from 2 to 3</b> 9,000 < GDP per capita (US\$) < 17,000		Chile, Croatia, Poland, Trinidad and Tobago	Basic requirements (between 20% and 40%) and efficiency enhancers (50%) Innovation factors (10% to 30%)
<b>Stage 3 (innovation-driven)</b> GDP per capita (US\$) > 17,000		Germany, Israel, Rep. of Korea, Norway, Spain, United Kingdom, United States	Basic requirements (20%) and efficiency enhancers (50%) Innovation factors (30%)

Source: Global Competitiveness Report 2010-2011.

A number of countries from Eastern Europe and the South Caucasus (EESC) have been added to the sample of economies covered by the GCI over the past decade. For the purpose of this discussion, the Index now captures Armenia, Azerbaijan, Georgia, Republic of Moldova and Ukraine.

Table 2.2. **GCI results for EESC economies**

	Armenia		Georgia		Azerbaijan		Republic of Moldova		Ukraine		EESC	EU Accession 12	OECD	Transition economies
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Score	Score	Score	Score
Overall GCI 2010-2011	98	3.76	57	4.29	93	3.86	94	3.86	89	3.90	3.93	4.36	4.88	4.07
1st pillar: Institutions	97	3.50	71	3.86	69	3.87	102	3.43	134	2.96	3.52	4.10	4.87	3.68
2nd pillar: Infrastructure	90	3.46	76	3.69	73	3.75	97	3.18	68	3.83	3.58	4.35	5.23	3.76
3rd pillar: Macroeconomic environment	99	4.23	13	5.62	130	3.26	90	4.31	132	3.20	4.12	4.83	4.92	4.53
4th pillar: Health and primary education	93	5.37	83	5.50	73	5.64	84	5.50	67	5.70	5.54	6.08	6.29	5.76
5th pillar: Higher education and training	91	3.66	77	3.96	90	3.74	78	3.95	46	4.61	3.98	4.84	5.20	4.29
6th pillar: Goods market efficiency	113	3.72	93	3.92	64	4.18	104	3.83	129	3.53	3.83	4.38	4.74	4.00
7th pillar: Labour market efficiency	47	4.61	25	4.82	31	4.75	68	4.41	54	4.54	4.63	4.53	4.69	4.47
8th pillar: Financial market development	110	3.60	71	4.12	108	3.62	103	3.68	119	3.31	3.67	4.38	4.60	3.86
9th pillar: Technological readiness	108	2.96	70	3.55	98	3.14	89	3.28	83	3.37	3.26	4.37	4.95	3.71
10th pillar: Market size	116	2.50	76	3.46	107	2.80	121	2.40	38	4.53	3.14	3.66	4.76	3.47
11th pillar: Business sophistication	109	3.33	72	3.84	111	3.29	113	3.28	100	3.48	3.44	4.09	4.87	3.63
12th pillar: Innovation	116	2.63	61	3.16	125	2.51	129	2.49	63	3.11	2.78	3.37	4.33	2.99

Note: Transition economies include Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, FYR Macedonia, Georgia, Hungary, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Republic of Moldova, Mongolia, Montenegro, Poland, Romania, Russia, Serbia, Slovak Republic, Slovenia, Tajikistan, Turkey, and Ukraine. EU Accession 12 are Bulgaria, Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovak Republic and Slovenia.

Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

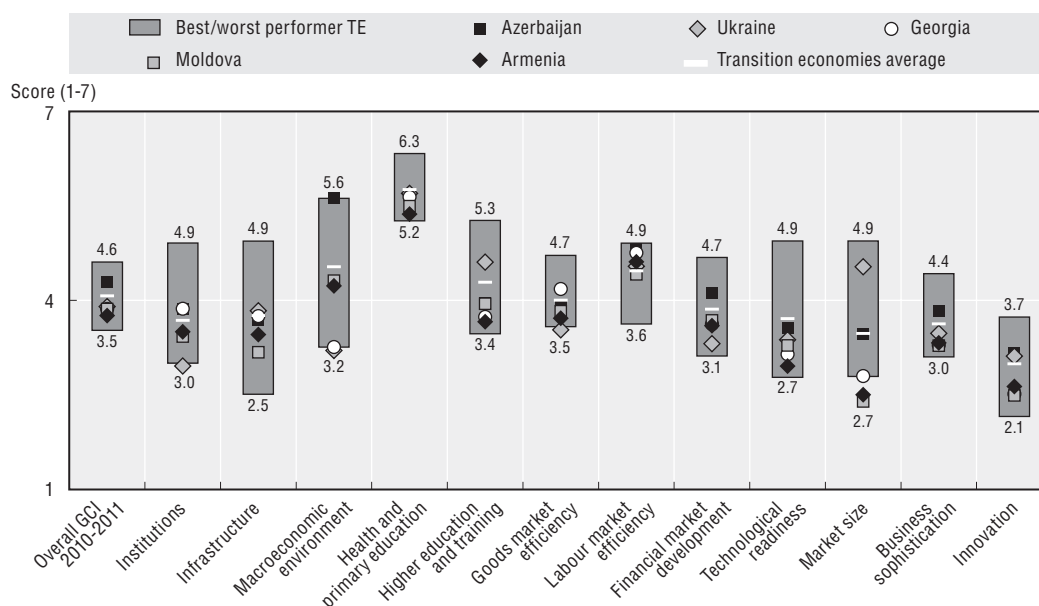
## Competitiveness performance of the EESC region: An international comparison

Table 2.1 presents the rankings for the five economies from the EESC region covered by the GCI, as well as the regional average. A number of comparators are also shown to place

the EESC regional performance in context. These include the averages of transition economies, the countries that most recently acceded to the European Union and the OECD member states.<sup>3</sup> With the exception of Azerbaijan, all EESC countries fall into the bottom half of the GCI rankings, out of 139 economies. Azerbaijan, the best performing country in the region, ranks 57th, followed by Ukraine ranked 89th, Georgia 93rd, and Republic of Moldova 94th. The regional ranking closes with Armenia in 98th place.

Comparing the performance of the region to the group of transition economies provides further insights. As Figure 2.2 shows, transition economies are a fairly diverse group in terms of competitiveness. The length of the floating bars indicates the difference between the best and the poorest performer among this group of countries within the different categories of the GCI. The white bar indicates the average of the group, while the other symbols stand for each of the five EESC countries under review. Among the 12 pillars, the largest differences among these five countries are to be found in their market size, infrastructure, macroeconomic environment and technological readiness; the smallest differences are observed with respect to health and primary education and goods markets efficiency. On most pillars, the EESC countries generally perform below the average of transition economies with a few exceptions, most notably with regard to labour market efficiency, where their performance is slightly higher. As Figure 2.2 shows, the countries share many common features in terms of competitiveness. On most pillars, they cluster together. Exceptions include the macroeconomic environment pillar, where Azerbaijan is the best performer among the transition economies, while Georgia and Ukraine lag behind. Other outliers are the market size and higher education and training pillars where Ukraine outperforms the rest of the group.

Figure 2.2. **Performance of EESC countries in comparison with transition economies**

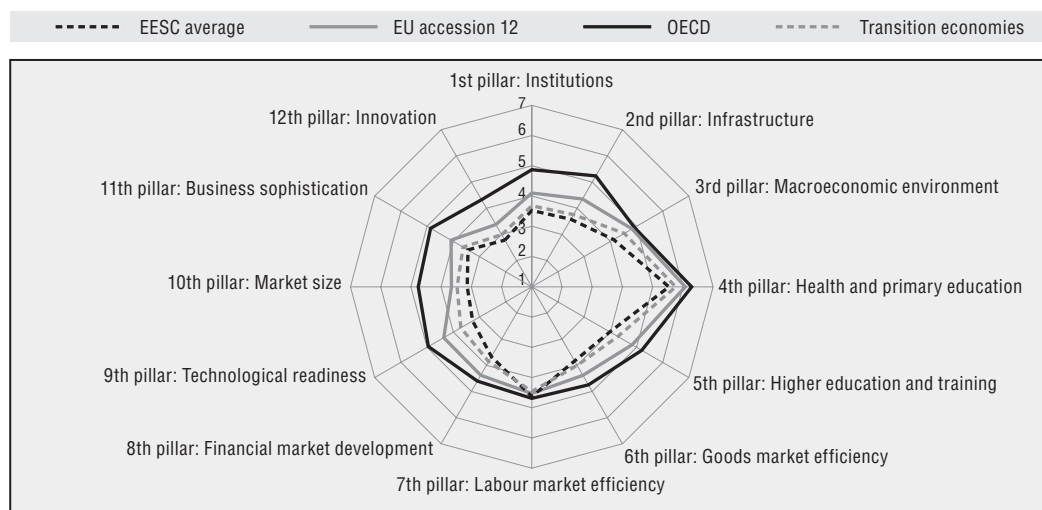


Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

## Institutions

The relatively poor positioning of most countries from the region reflects the many challenges they face in terms of policies to enhance competitiveness, although the region also demonstrates a few competitive strengths. Figure 2.3 compares the EESC average across the 12 pillars of the GCI to the average of OECD countries, the EU Accession 12 and the transition economies. It shows that EESC countries have fairly efficient labour markets in comparison with the three group averages. However, the region lags behind the EU Accession 12 across almost all categories, with most pronounced differences observed with respect to technological readiness, higher education and training and the development of financial markets. The EESC countries also lag behind with respect to the quality of their infrastructure and the stability of their macroeconomic environment, although to a lesser extent. Increasing competitiveness will require countries from the region to address a number of challenges, as follows:

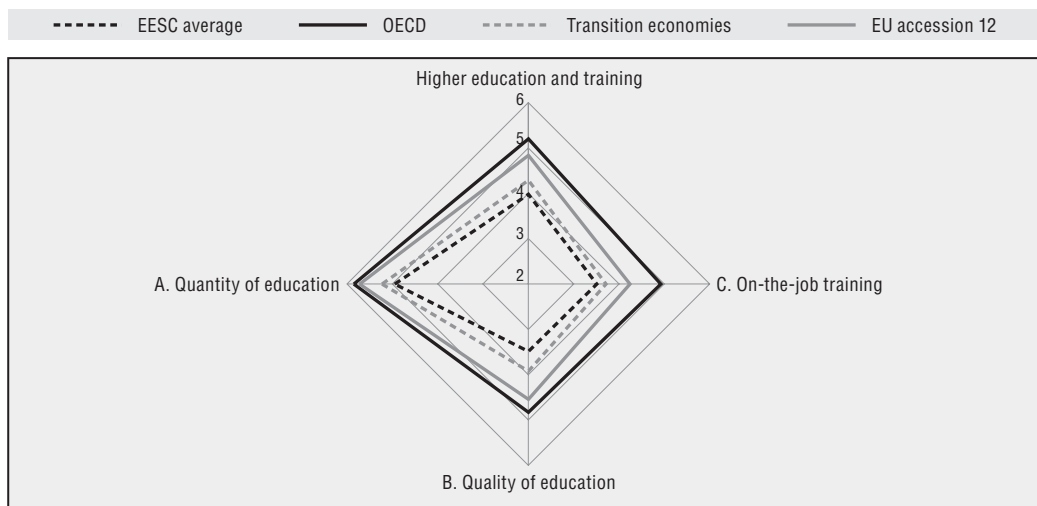
Figure 2.3. **EESC region performance across the 12 pillars of the GCI**



Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

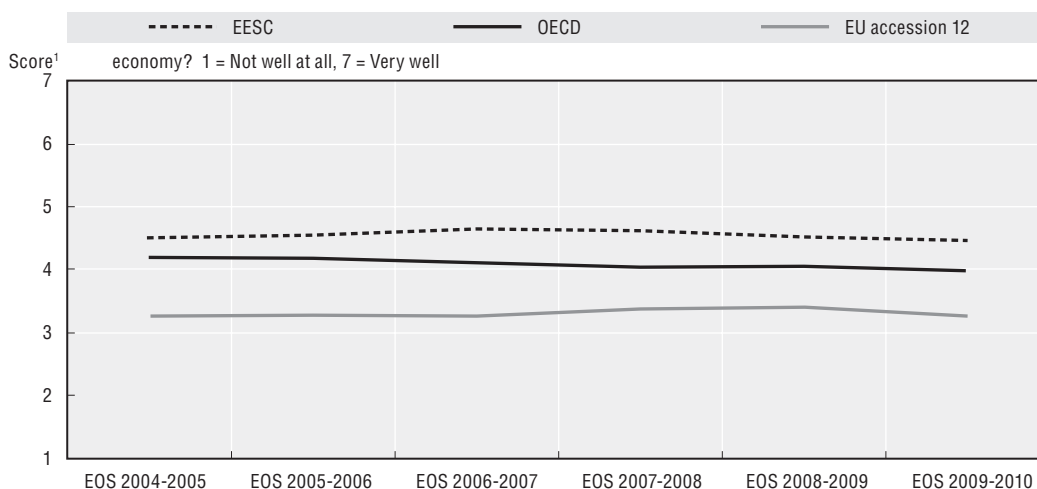
- Virtually all countries in the region boast high participation rates in **education** at the secondary and tertiary levels and solid participation rates at the primary level, as captured by the measure of quantity of education in the GCI (see Figure 2.4). However, for the high participation rate to translate into economic growth, countries will have to raise the quality of education and gear it more strongly towards the needs of the business sector and to further invest in on-the-job training. What is even more worrying is that in recent years, the quality of education in the region has not converged towards OECD levels, as shown in Figure 2.5.
- The poor **efficiency of markets for goods and services** has a significant bearing on productivity levels in the region. From their Soviet past, these countries inherited highly concentrated industrial structures that were specialised in specific sectors. Effective competition policy and a business environment that is supportive of entrepreneurship, entry of new businesses, trade and foreign direct investment are all key to reaping the benefits of more intense competition. As shown in Figure 2.6, according to domestic business leaders, the most important challenges for increasing the efficiency of markets

Figure 2.4. **Performance of the EESC region on the Higher education and training pillar of the GCI**



Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

Figure 2.5. **Quality of the educational system in the EESC region between 2005 and 2010**



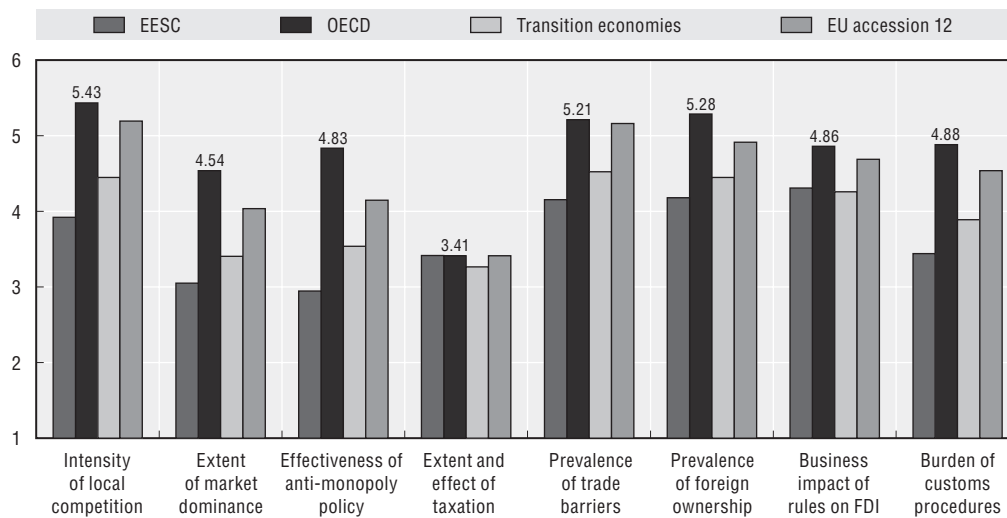
Note: 7 always corresponds to the best possible score; for more information about the Survey and aggregation methods please consult The Global Competitiveness Report 2009-2010.

Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

for goods and services are to reduce the dominance of large firms in key markets, to make anti-monopoly mechanisms more efficient at safeguarding healthy competition and to reduce the administrative burden associated with customs clearance.

- The recent global financial crisis revealed a number of weaknesses in the banking systems in several countries in the region. The crisis and its aftermath have also undone some of the progress achieved with respect to **financial markets** and banking reform. Figure 2.8 shows how the perception of the solvency of banks has evolved in the region over the past five years. After improvements from 2005 to 2008, the past two years have seen a drop in their assessment to a level below that of 2005. The same pattern can be

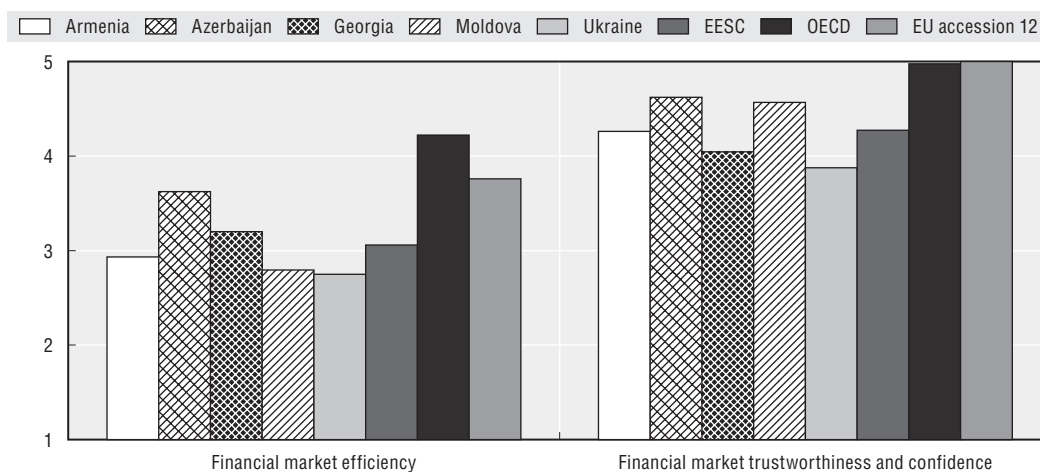
Figure 2.6. **Performance of EESC economies on selected indicators from the Goods markets efficiency pillar of the GCI**



Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

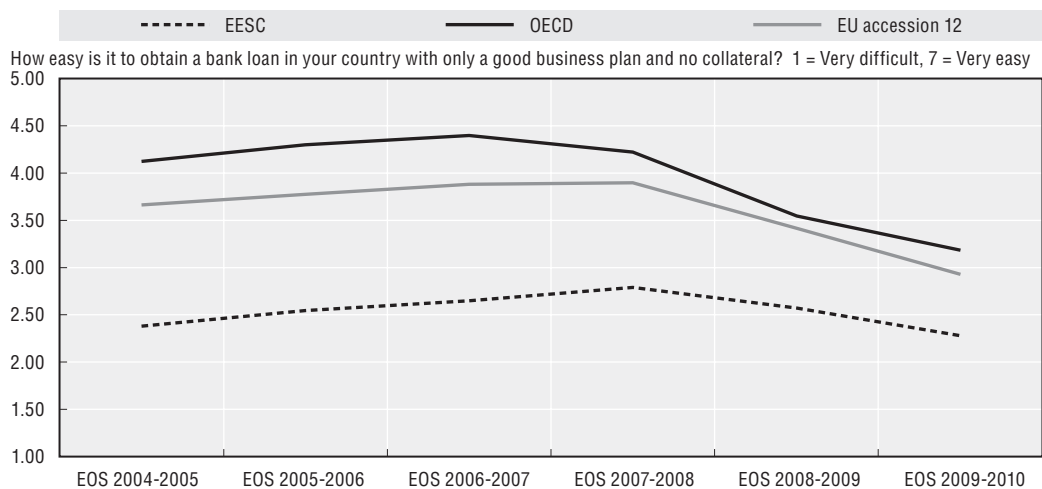
observed for the ease of access to loans, shown in Figure 9, which also dropped significantly over the past two years. Further reforms will be important across the region to facilitate access to finance for the business community and, to a somewhat lesser extent, to stabilise the banking system (see Figure 2.7).

Figure 2.7. **Performance of EESC countries on selected indicators from the Financial markets development pillar**



Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

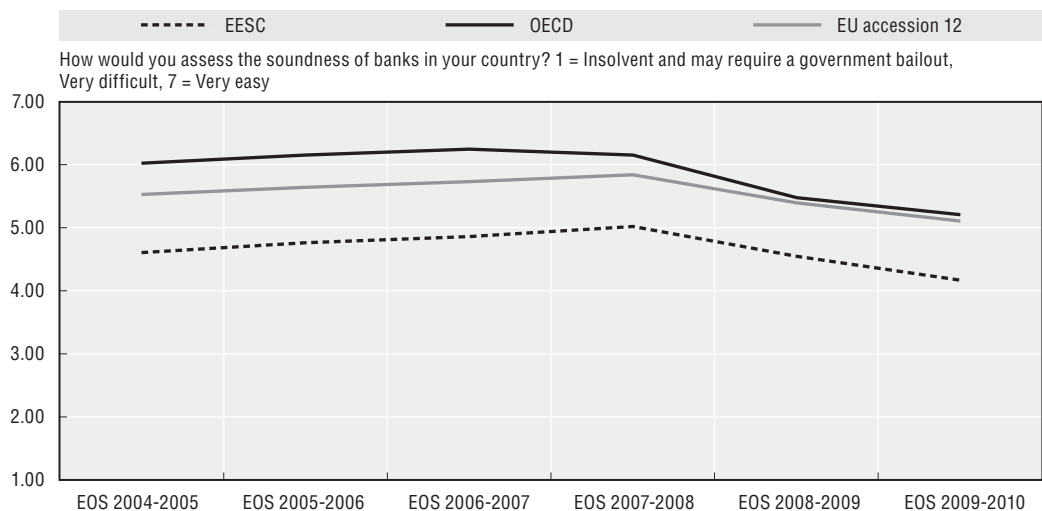
All five countries assessed here have made efforts to improve their competitiveness over the past years, albeit to varying degrees. Have these efforts been translated into relative improvements in rankings? An improvement would mean that a country has reformed more quickly than other economies covered in the GCI sample. Figure 2.10 provides an indication of how the decile ranking for the five countries has evolved since 2005.<sup>4</sup> Georgia's competitiveness has seen the greatest improvement over this period,

Figure 2.8. **Ease of access to loans in the EESC region between 2005 and 2010**

Note: 7 always corresponds to the best possible score; for more information about the survey and aggregation methods please consult The Global Competitiveness Report 2009-2010.

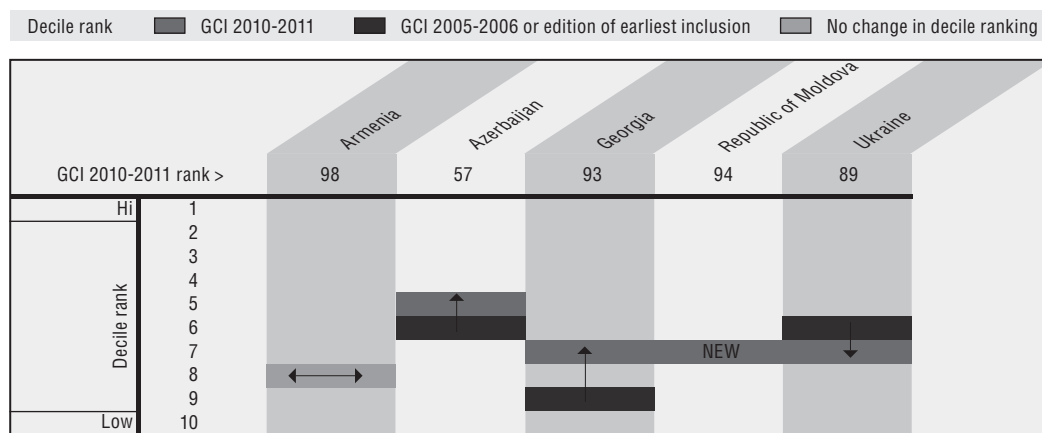
Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

moving up by two deciles (from 9th to 7th). Republic of Moldova and Azerbaijan improve by one decile (from 8th to 7th and 6th to 5th respectively), while Armenia remained stable in the 8th decile. Ukraine is the only country that has dropped in the rankings over this period, mainly due to the significant effects of the recent financial crisis on the country's economy, which was more dependent on international financial flows and foreign demand than other countries in the region.

Figure 2.9. **Soundness of banks in the EESC region between 2005 and 2010**

Note: 7 always corresponds to the best possible score; for more information about the survey and aggregation methods please consult The Global Competitiveness Report 2009-2010.

Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

Figure 2.10. **Performance of EESC economies between 2005 and 2010**

Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

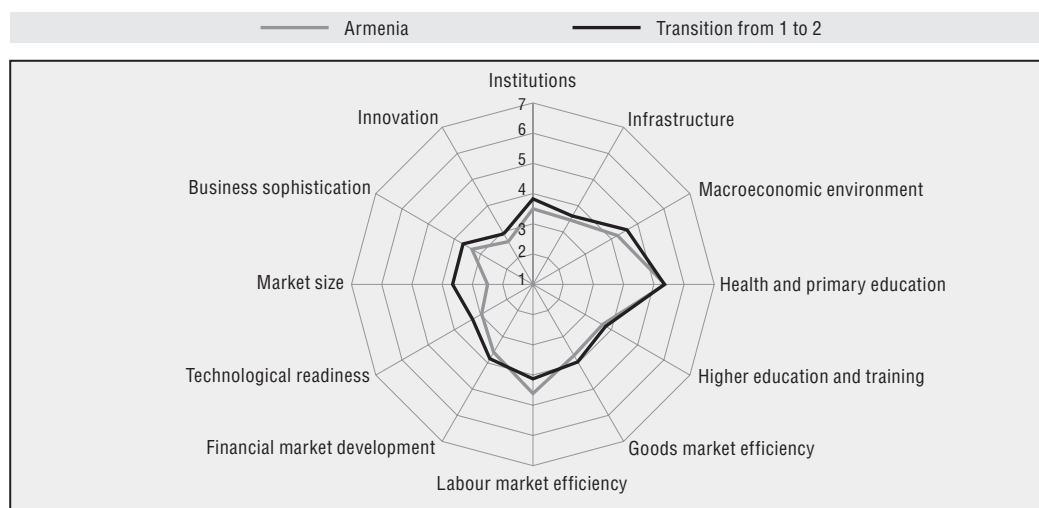
## Country-level competitiveness

### Armenia

Following a surge of growth for most of the past decade when Armenia registered double-digit annual economic growth on average, the country was severely hit by the 2008-09 economic crisis. According to the International Monetary Fund (IMF), the economy contracted by 14.4% in 2009 (IMF, 2010a). The deep recession revealed the vulnerability of Armenia's growth model and its dependency on commodities and remittances. The country did not seize the opportunity provided by its high growth years to introduce structural reforms, which could have made the growth path more sustainable. Indeed, throughout the period Armenia remained in the 8th decile of the GCI sample, while other countries in the region were improving their competitiveness scores.

Armenia, which has a GDP per capita of USD 2 614,<sup>5</sup> is ranked 98th out of the 139 economies covered by the GCI, with consistent performance across all the pillars of the GCI as shown in Figure 2.11. As in many countries in the region, Armenia's most important competitive advantage, its flexible and efficient labour markets (ranked 47th), is counterbalanced by several competitive disadvantages, most notably inefficient markets for goods and services (in which the GCI ranks it as 113th), underdeveloped financial institutions (110th) and insufficient technological readiness (108th).

The efficiency of the labour markets stems in the first place from flexible labour regulations (ranked 27th) that allow for unconstrained fluctuation of labour and which provide entrepreneurs with some leeway to determine wages (63rd). The relative ease of dismissing workers reduces the barriers to hiring, as it allows entrepreneurs to adjust their pool of resources to their current needs at a fairly low cost. Yet the positive assessment of labour market flexibility is somewhat counterbalanced by a comparatively inefficient use of talent, a category in which Armenia ranks 72nd. Two elements within this category receive particularly poor assessment and should be addressed – management positions within firms are mainly filled through networks of friends and relatives rather than driven by professional qualifications (117th) and the country also suffers from considerable brain drain (97th). Overall, however, flexible labour markets remain the country's key competitive advantage.

Figure 2.11. **Armenia's performance in comparison with its peer group**

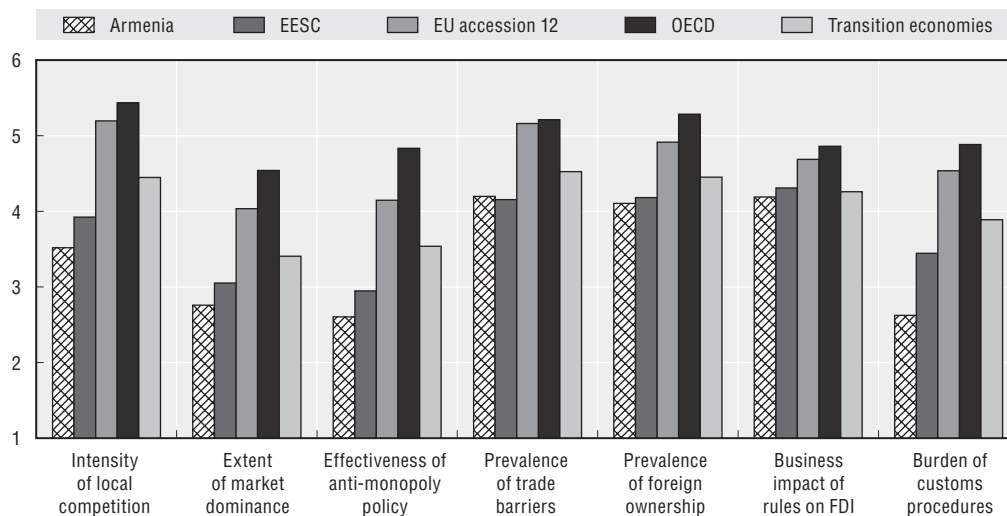
Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

While Armenia's labour markets represent the country's relative strength, in other areas the country achieves less encouraging results. A key challenge lies in Armenia's lack of efficiency in the market for goods and services. Although the country has followed a privatisation and liberalisation programme since independence in the early 1990s, its economy is dominated by a few corporate groups. This is particularly the case for key sectors which remain sheltered from the global economy. The Goods markets efficiency pillar reflects this situation. Local competition is practically nonexistent (ranked 136th in the sample out of 139 countries), and the survey respondents expressed concern about markets being dominated by very few companies (133rd). They also have little trust in the ability of anti-monopoly policy to address the issue in an efficient way. This is reflected in its low 138th ranking. On many of the survey indicators that contribute to this pillar, Armenia achieves results below the average of the EESC region and lags significantly behind not only the EU Accession 12 and the OECD, but also the transition economies. Figure 2.12 shows the selected variables from this pillar in comparison with relevant country groupings. The data show that on most survey-based indicators of market efficiency, Armenia lags behind the EESC regional average, although the country's performance is in line with the region on indicators measuring barriers to trade and FDI as well as the actual prevalence of FDI. The sizeable gap between Armenia and the 12 countries that most recently joined the European Union underlines the positive results of the reforms during the accession process on the market efficiency of these countries; by now they have attained levels close to the OECD average.

Underdeveloped financial markets constitute Armenia's second most important competitiveness challenge. The country ranks 110th on this pillar (Pillar 8) and achieves poor results related to the two major components, the efficiency of financial markets (115th) as well as trustworthiness and confidence in financial markets (92nd). The main factor impacting the latter category is the poor regulation of securities exchanges, ranked 121st and assessed at 3.2 on a scale of 1 to 7 by the business community. (This is somewhat counterbalanced by the protection of legal rights, ranked 60th). By the same token, the financial markets are deemed inefficient because of difficulties of access to the different



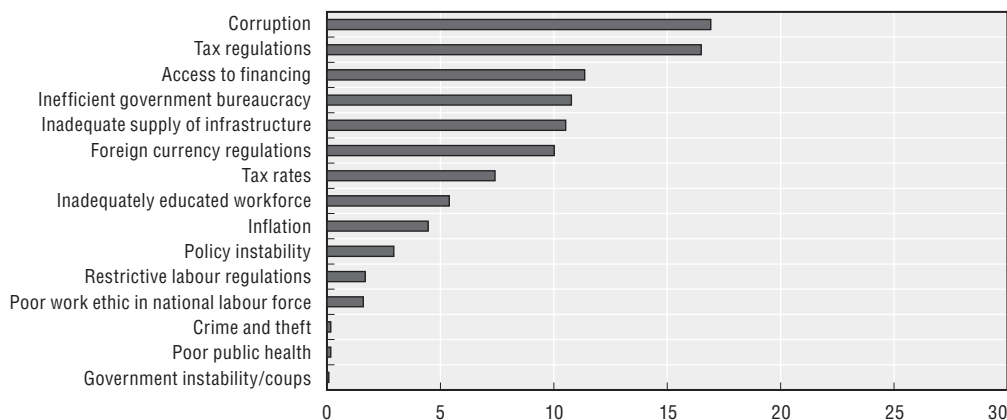
Figure 2.12. **Armenia's performance on selected indicators from the Goods markets efficiency pillar of the GCI**



Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

forms of finance, including loans (124th), venture capital (131st) and equity (131st). This bottleneck in access to finance was aggravated by the financial crisis. In 2010, local business leaders considered access to finance to be the third most important obstacle to doing business (see Figure 2.13).

Figure 2.13. **Most problematic factors for doing business in Armenia**



Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

A third area with significant room for improvement is technological readiness where Armenia ranks 108th. Given the country's stage of development, this could become a key driver of productivity gains. It is important to note that productivity gains from technology do not require the technology to be produced at home. By international standards, Armenia trails other countries in terms of adoption of the latest technologies by business (121st), as well as in the availability of latest technologies within the country (127th). At the same time, some new technologies are not used to their full potential. Internet use remains low (111th), as does broadband penetration (108th). On a more positive note, FDI appears to

play an increasingly important role in bringing technology into the country. Armenia ranks 79th on the related indicator, up from 92nd in 2008.

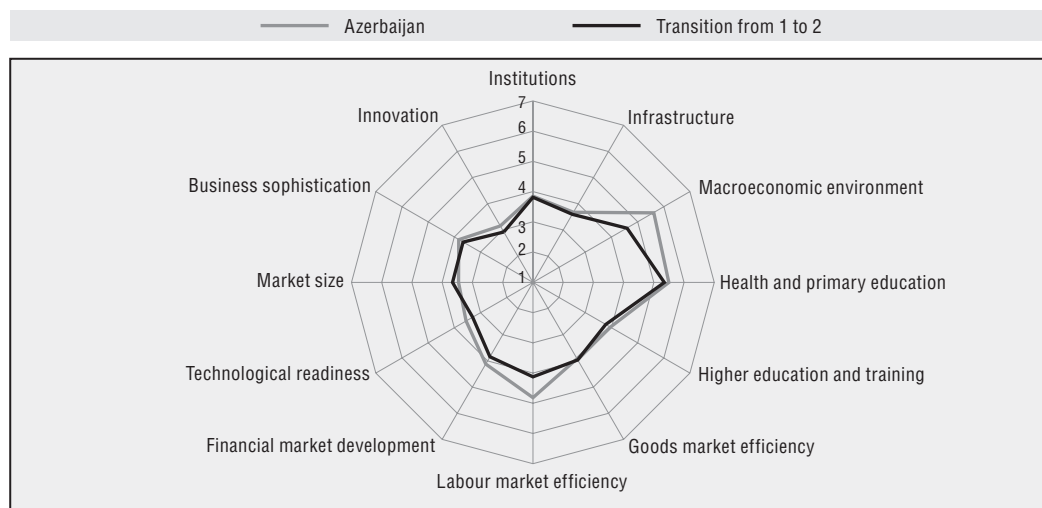
Finally, Armenia's performance in the Institutions pillar is relatively poor at 97th ranking, reflecting challenges related to private institutions (120th) and, to a somewhat lesser extent, also to public institutions (89th). In the area of private institutions, the business environment suffers from ineffectual corporate boards (130th), poor protection of minority shareholders' rights (131st) and unethical business practices (118th) – all significantly below the standards found in other countries of the region. Armenia will also have to focus its efforts on continuing reform of the institutional environment. Presently, property rights are insufficiently protected, for both intellectual (107th) and physical and financial property (98th). The judiciary is inefficient in solving disputes between businesses (104th) and in challenging government regulations (103rd) and is subject to undue influence (118th). Last but not least, a stronger focus on transparency would greatly benefit Armenia, which is burdened by irregular payments and bribes (104th). Business executives name corruption as the most problematic factor for doing business (see Figure 2.13). On a more positive note, the country is relatively safe (60th) and terrorism and crime and violence have little impact on business (ranked 32nd and 31st, respectively).

Armenia will have to step up its reform efforts to move up in the competitiveness rankings. High impact can be expected from adapting technologies from abroad as well as further institutional reforms, which would not only improve the business environment but would also lead to spillover effects by strengthening the country's capacity to implement economic policies in other areas.

### **Azerbaijan**

As the only country in the region with significant hydrocarbon resources, Azerbaijan benefitted greatly from the increase in energy prices which preceded the onset of the financial crisis. In the five years prior to 2009 Azerbaijan was one of the fastest growing economies in the world, reaching real GDP growth rates of over 20% and the highest per capita GDP among the five countries (USD 4 798 in 2009).<sup>6</sup> High energy prices brought investment into the country's hydrocarbon sector and the ensuing GDP growth created a window of opportunity for structural reform. However, the government took only partial advantage of this opportunity, and many challenges related to transition into the market economy remain to be addressed. Key sectors of the economy, such as banking, oil and gas and electricity are still dominated by the state and the economy is over-reliant on hydrocarbons. Azerbaijan has been reviewed by the Global Competitiveness Index since 2005-06. Since then, it has moved up from the 6th to the 5th decile of the sample. The highest position Azerbaijan has achieved was 51st in 2009, before it fell back by six places to 57th in the 2010 report.

A number of competitive strengths contribute to this fairly good ranking in regional comparison, as shown in Figure 2.14. As in other countries in the region, Azerbaijan has flexible labour markets (ranked 25th) which were further reformed in recent years. The process of hiring and firing workers was considerably simplified and is reflected in the good 11th positioning on the related survey-based indicator.<sup>7</sup> There is still ample room for improvement in the efficiency of using talent, in particular as the business sector appears to rely predominantly on personal networks to fill management positions, rather than on meritocracy (ranked 103rd), and because brain drain is fairly high (ranked 94th).

Figure 2.14. **Azerbaijan's performance in comparison with its peer group**

Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

Despite the slowdown following the financial crisis, the country has maintained a highly stable macroeconomic environment – its other major competitive advantage. Between 2008 and 2010, Azerbaijan moved from 45th to 13th place on the related pillar of the GCI. Windfall oil revenues contributed to maintaining macroeconomic stability during the financial crisis. With an overall budget surplus of 9.4% in 2009, low government debt (9.9% of GDP in 2009) and low inflation (1.47% in 2009) the country appears to have weathered the most difficult period of the global slowdown very well, although the crisis highlighted the need for diversification away from oil and the need to tackle a number of other structural challenges. These are highlighted by the pillars of the GCI.

Among the 12 pillars of the GCI, the efficiency of goods markets stands out for its poor ranking – in 93rd place. The low level of competition contributes to this result (108th) and reflects both the stifled competition in the domestic market and barriers to trade and investment, which prevent the country from taking advantage of the efficiency gains resulting from foreign competition. The low level of domestic competition, assessed as one of the lowest in the entire GCI sample (134th out of 139 countries) is a major hindrance in the country's aim to diversify the economy away from the oil sector and could be addressed through the privatisation of key sectors. At the same time, anti-monopoly policy should be strengthened to generate a more competitive environment. Business leaders assess this policy as insufficient – in 129th place. In recent years, the country has made great strides in improving the business environment and has reduced the time and number of procedures necessary to start a business. As part of the stimulus package of 2009, tax rates have been cut in half, although according to business leaders, taxation policies remain distortive.

Given the small size of the country, further opening up to foreign competition will have a highly beneficial effect on domestic markets. The foreign competition element is assessed at 118th with trade barriers particularly prevalent and tariffs of 6.9% (placing the country in 82nd position). Further non-tariff barriers to trade persist, particularly in those areas related to burdensome customs procedures, where the country ranks 108th. The World Economic Forum's Global Enabling Trade Index, which assesses the ease of moving

goods across borders, ranks Azerbaijan in 77th position. In their responses to the survey Azerbaijani business leaders confirm this by pointing to the need for improvement in addressing barriers to foreign direct investment (FDI) in the country (ranked 82nd). This would certainly boost the proportion of foreign ownership (93rd). The government is committed to its accession to the World Trade Organisation; this will certainly contribute to liberalising trade and investment policies and will lead to an overhaul of the customs regime and its related procedures.

One of the major challenges the country faces is the poor quality of its education. Azerbaijan ranks 71st on the Higher education and training pillar of the GCI and 82nd on the Primary education sub-pillar. The data show a striking gap between the fairly high participation rates in education (ranked 70th for quantity of education) and the fairly poor overall quality of education as assessed by the business community (ranked 102nd). Business leaders consider that the educational system is not suited to a competitive economy (104th), while the quality of maths and science education as well as the quality of management schools are assessed as poor (101st and 124th, respectively). Improving the quality of education will be important for the country's ability to diversify the economy, in particular given that many people presently seek to work abroad.

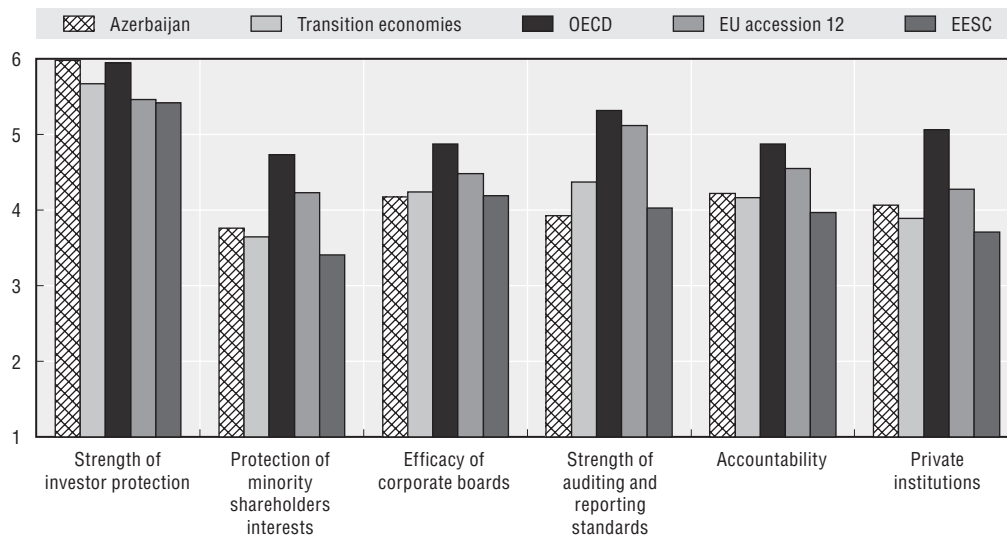
Azerbaijan's financial markets were not strongly affected by the financial crisis, despite the fact that some liquidity support had to be injected by the central bank. In the GCI, the country ranks 71st on the Financial market development pillar. This is by far the best positioning among the countries in the region. However, overall, the sector appears to only partly meet the financing needs of the business sector. Financial services are not readily available (ranked 102nd) and financing through the local equity markets is difficult (79th). At the same time, the country obtains fairly good marks on the availability of venture capital (48th) and access to loans has become somewhat easier over the past year, moving it from 77th to 66th place. Nevertheless, access to capital remains the second most important impediment to doing business in Azerbaijan (see Figure 2.16). Despite a number of recent measures aimed at strengthening the stability of the banking sector,<sup>8</sup> the country's business leaders do not have full confidence in their banks. The country achieves a value of 4.38 on a scale of 1 to 7 on the related survey indicator.

Finally, a number of shortcomings in the institutional framework in Azerbaijan continue to weaken the country's competitiveness. These weaknesses are likely to undermine its ability to diversify the economy in the future and reach a sustainable growth path. The overall ranking of 71 on this indicator masks a number of individual strengths and weaknesses. Government regulation, ranked 32nd, appears to be rather efficient when placed in an international comparison. Equally satisfactory results, in particular within a regional comparison, are achieved with respect to protection from crime and violence (46th) and the strength of investor protection (20th). At the same time, some basic features of the market economy appear to be inadequate. Property rights are insufficiently protected (90th), irregular payments and bribes are frequent (101st) and the judiciary is subject to undue influence (87th) and lacks efficiency in settling business disputes (94th). It is worth noting that business leaders view corruption as by far the most problematic factor for doing business in Azerbaijan (see Figure 2.16).

As in many countries in the region, Azerbaijan's private institutions are not on a par with international best practice. Figure 2.15 shows selected indicators for this related sub-pillar. While investors' rights are well protected according to data from the World Bank,

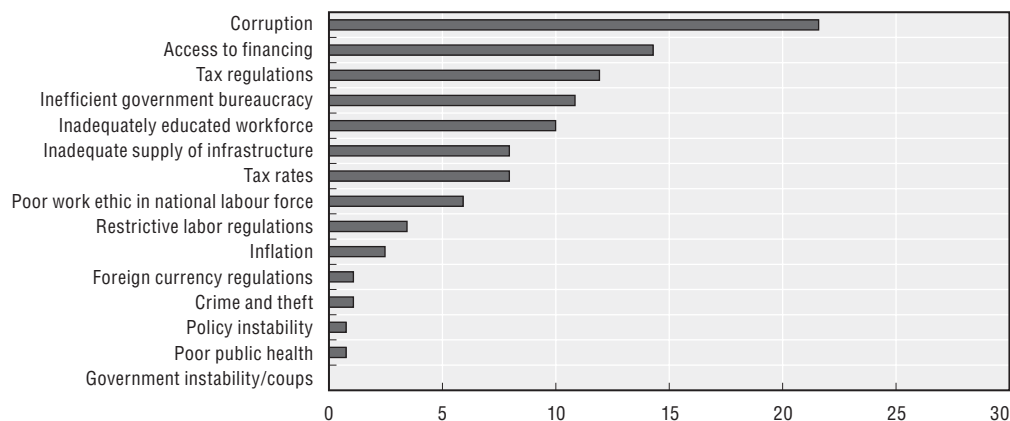
the protection of minority shareholders' interests lags behind standards in the OECD and the EU Accession 12 countries by a significant margin. Auditing and reporting standards are below the norms applied in transition economies and the EESC region on average and its corporate boards lag behind EU and OECD standards in fulfilling their role effectively.

Figure 2.15. **Azerbaijan's performance on the Private institutions pillar**



Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

Figure 2.16. **Most problematic factors for doing business in Azerbaijan**



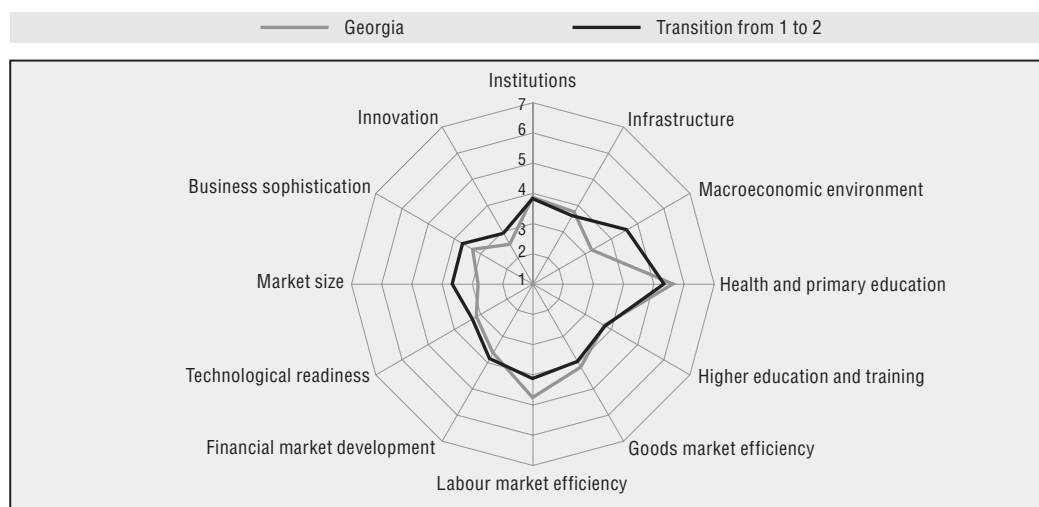
Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

Strengthening private institutions should be among the country's priorities for moving forward, as it will contribute to more rapid business growth and economic stability. Given the country's abundant resources, Azerbaijan should use the related revenues to support the development of strong non-oil related industries – by creating a conducive business environment, fostering competition and allowing for more foreign participation.

## Georgia

Georgia's geopolitical context and the global financial crisis hit the country particularly hard in 2008 and 2009, leading to reduced investment, especially from abroad. The ensuing recession highlighted the need for the administration to focus on the structural elements of the economy, building on the successes already achieved in reforming the business environment. The GCI highlights some of the competitive strengths and weaknesses of the country and helps identify a number of challenges that will need to be addressed in going forward. Figure 2.17 shows Georgia's results in comparison to its peers at the same stage of development.

Figure 2.17. **Georgia's performance in comparison with its peer group**

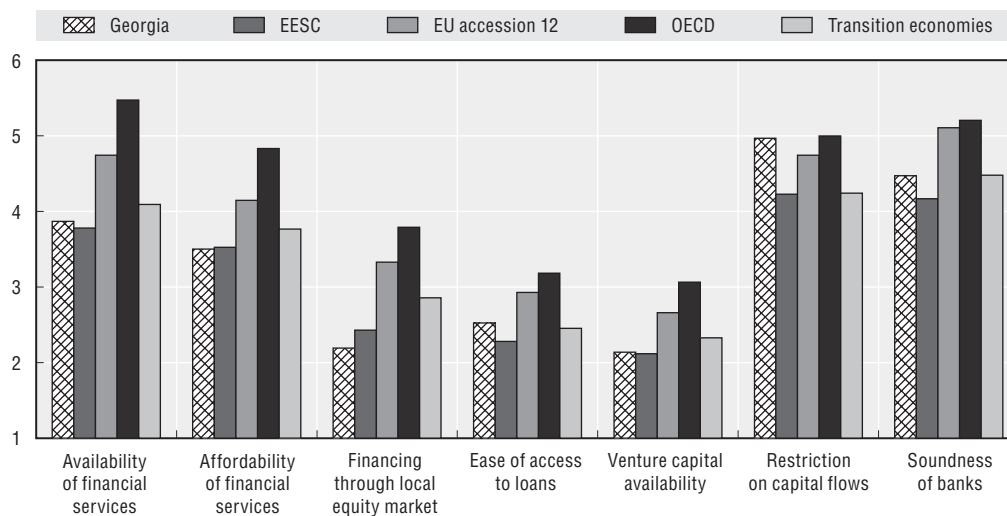


Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

Georgia, which is a lower income economy with a GDP per capita of USD 2 450 ranks 93rd in the most recent GCI, having moved up from the 9th to the 7th decile since 2005.<sup>9</sup> This has been mainly due to improvements in the institutional framework, better infrastructure and more widespread primary education. All these improvements have counterbalanced the deterioration in the macroeconomic environment over the same period. Georgia's commitment to reforming the business environment and key aspects of public sector governance is one of the country's key competitive strengths. In particular, the country stands out positively in regional comparison, where it outperforms all its peers by a significant margin (see Figure 2.18). Regulation is not burdensome to the business community (ranked 4th), irregular payments are less frequent than in most countries (42nd), policymaking is transparent (33rd) and government is spending funds comparatively efficiently (52nd). Indeed, business leaders believe that corruption is among the least important impediments to doing business in the country (see Figure 2.19). Furthermore, despite geopolitical conflict, police services can be relied upon to protect business activity, and crime and violence do not impose excessive costs on business (ranking it 41st and obtaining a value of 5.46 on a scale of 1 to 7). Yet institutional reforms should be continued in order to attain the levels of efficiency found in OECD economies and countries that have recently joined the European Union. In particular, property rights require greater protection, for physical and financial (120th) as well as intellectual assets (97th). Further reform of the

judiciary is necessary, given that the country is ranked a low 104th in terms of judicial independence and only 89th for its efficiency in legally settling business disputes. At the same time, private institutions, although fairly strong by regional standards, would benefit from strengthening the role of corporate boards (109th) as well as providing stronger protection of minority shareholder interests (122nd). Finally, the business community considers policy instability as the second most problematic factor in doing business.

Figure 2.18. **Georgia's performance on selected survey indicators from the Financial markets development pillar**



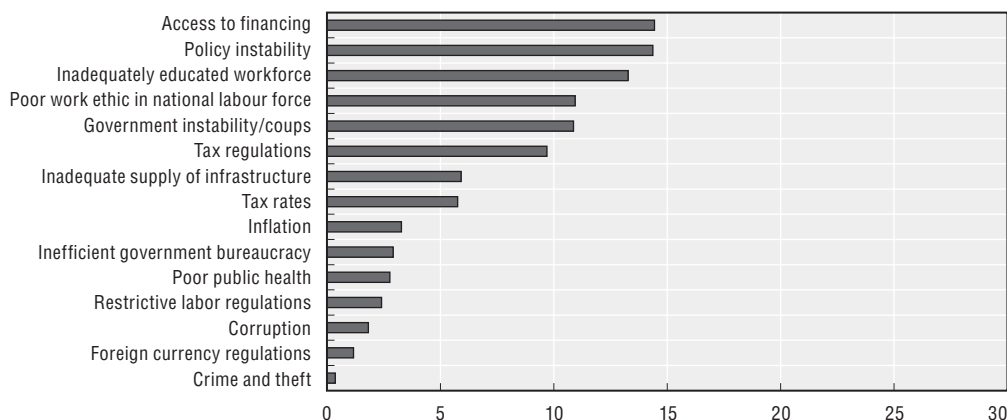
Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

As in many countries in the region, the flexibility of labour markets is a distinctive competitive advantage for Georgia, which ranks 31st on the related pillar. Hiring and firing practices have been simplified significantly and redundancy costs reduced so that Georgia places among the best in the world on these indicators (9th and 6th). In addition, wages can be determined fairly flexibly and taxation does not provide negative incentives for employment or investment. However, talent could be used more efficiently by promoting meritocracy in the workplace (88th) and higher female participation (81st). Related measures would also help reduce the exodus of talent from the country (104th).

By regional standards, Georgia's goods markets are comparatively efficient, ranked 64th in the overall sample and ahead of other EESC economies by a wide margin. Low administrative barriers to entrepreneurship (6th on procedures and 3rd on time required to start a business), low taxes (7th) and a taxation regime that does not create major distortions in decisions on investment and labour allocation (24th) all contribute to a business-friendly environment. In addition, Georgia is open to foreign markets and investment with low tariffs – 0.67% on average<sup>10</sup> – well-run customs services (39th)<sup>11</sup>, and rules and regulations that are relatively conducive to FDI (44th). In moving forward, although the country has made great progress in privatisation, it will be crucial to further strengthen domestic competition (124th) and anti-monopoly policy, which is assessed as extremely ineffective in promoting competition (135th). According to business leaders, access to finance is the biggest challenge for doing business in Georgia (see Figure 2.19). This is also reflected in the country's low ranking on the Financial market development pillar of the GCI – 108th. Both the efficiency of financial markets in providing businesses

with finance (103rd) and the trustworthiness of the banking system have been weakened by the financial crisis (106th). As a result the country dropped by 13 positions in comparison to its previous assessment in this pillar. However, for many of the indicators that contribute to this pillar, Georgia still outperforms the rest of the region. Access to loans is less difficult than in the region on average, although financing through the local equity market (125th), and by means of venture capital (109th) remains constrained. Better regulation of securities exchanges (124th) could contribute to making equity finance more accessible and attractive and to narrowing the gap with respect to OECD economies.

Figure 2.19. **Most problematic factors for doing business in Georgia**



Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

Georgia's growing information technology (IT) sector could provide an important source of productivity. Broadband subscriptions and Internet use are rising, moving up from 81st to 77th and 99th and 73rd place according to the two most recent years of data.<sup>12</sup> At the same time, the spillover effects into other sectors appear to be limited, as business leaders consider that firms do not have sufficient capacity to absorb the latest technologies (125th) and that these technologies are not sufficiently accessible within the country (98th). FDI inflows could be leveraged towards this end, but currently FDI as a transmitter of IT is not sufficiently harnessed. This is reflected in the 92nd ranking on the indicator measuring technology transfer through FDI. Further development of the IT sector in Georgia, as well as the country's ability to absorb new technologies in the future, will depend on improvements in the quality of education, which is ranked a low 104th overall.

Any future structural reform must take into account the country's difficult fiscal situation. This has been one of the major economic policy challenges in Georgia in recent years. At present, the country ranks 130th overall with a budget deficit of 9.4% of GDP in 2009 and a low national savings rate of 12.3%.

### **Republic of Moldova**

With a GDP per capita of USD 1 503 (IMF, 2010a), Republic of Moldova is the poorest among the EESC economies and the only one of the five still in the most basic, factor-driven stage of development. In terms of economic policy, the country's competitiveness remains dependent on the basic requirements components of the GCI, i.e. institutions, infrastructure, macroeconomic environment and health and primary education. To a somewhat lesser degree, Republic of Moldova's competitiveness also continues to rely on

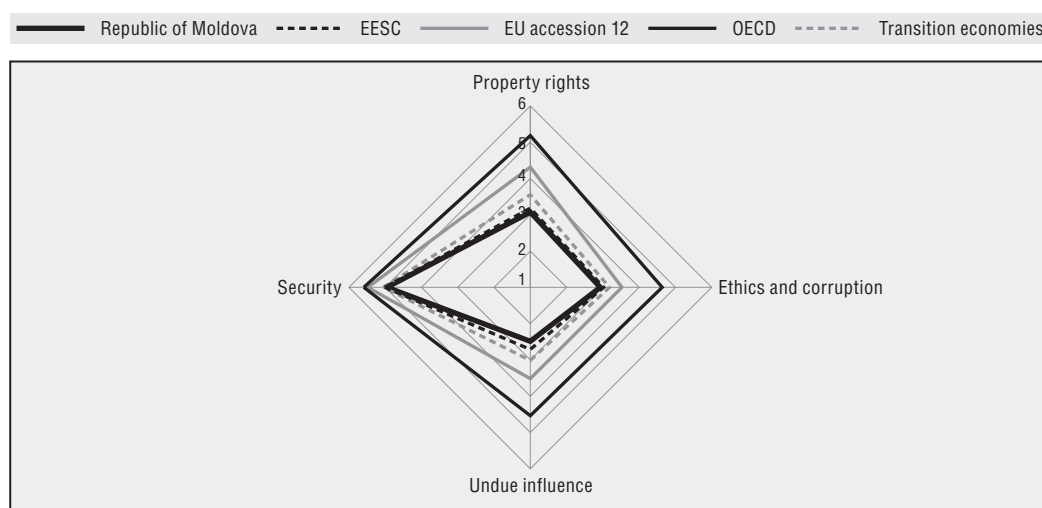


efficiency enhancers. From these observations, it is possible to highlight some basic priorities for raising the competitiveness of Republic of Moldova.

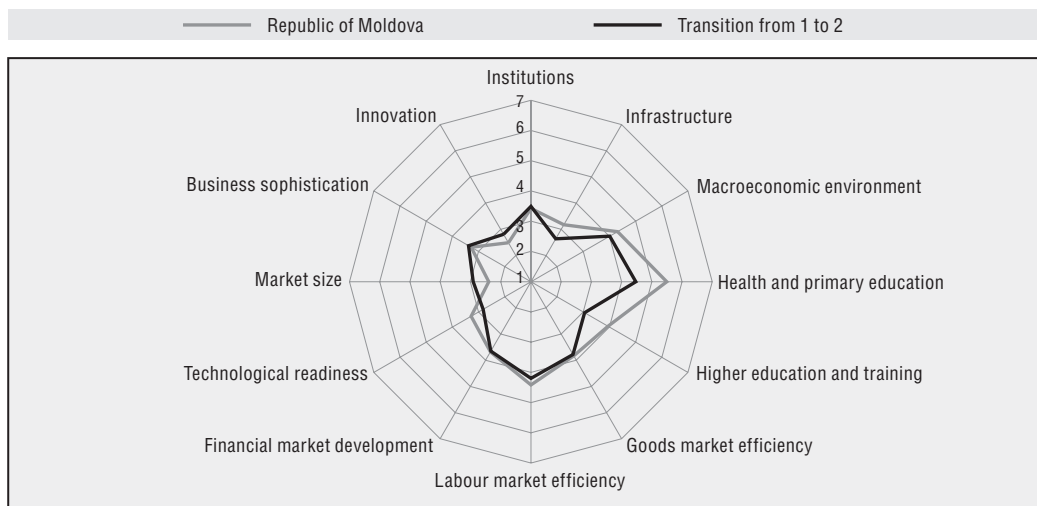
The country's low 94th position in the World Economic Forum rankings points to significant room for improvement across the vast majority of categories assessed by the GCI and indicating that the prioritisation of reforms will be important in moving forward. Table 2.2 at the beginning of this chapter shows the rankings for the basic requirements component for Republic of Moldova, which receive the highest weight in the overall GCI score.

The institutional framework is at the core of any market economy and its reform often poses significant challenges for transition countries. This is also the case in Republic of Moldova, which ranks 102nd on the Institutions pillar of the GCI. This low ranking reflects a number of challenges that must be addressed for Republic of Moldova to improve its competitiveness. Reform of public and private sector governance would benefit the country's business environment, both directly and through spillover effects; insufficient institutional capacity can reduce the effects of policies and reforms in other areas. As Figure 2.20 shows, the country's performance in all major categories of the public institutions assessment is slightly below the EESC average. In particular, Republic of Moldova must strengthen property rights for intellectual as well as physical and financial assets (102nd) and take measures to reduce undue influence on government decisions (94th) and the judiciary (130th). In both policy areas, Republic of Moldova trails behind all comparator groups at a sizeable distance from OECD standards. Indeed, when asked about the most problematic factors for doing business, Moldovan business leaders mentioned policy instability, corruption and inefficient government bureaucracy among the top factors (see Figure 2.22). Private institutions, which are also assessed in this pillar, are equally in need of reform. In addition to weak auditing and reporting standards (96th) and insufficient protection of minority shareholder interests (111th), protection of investors is insufficient (93rd). On a more positive note, physical security is moderately good in the country, with a score of 4.95 on a scale of 1 to 7; it is ranked 76th overall.

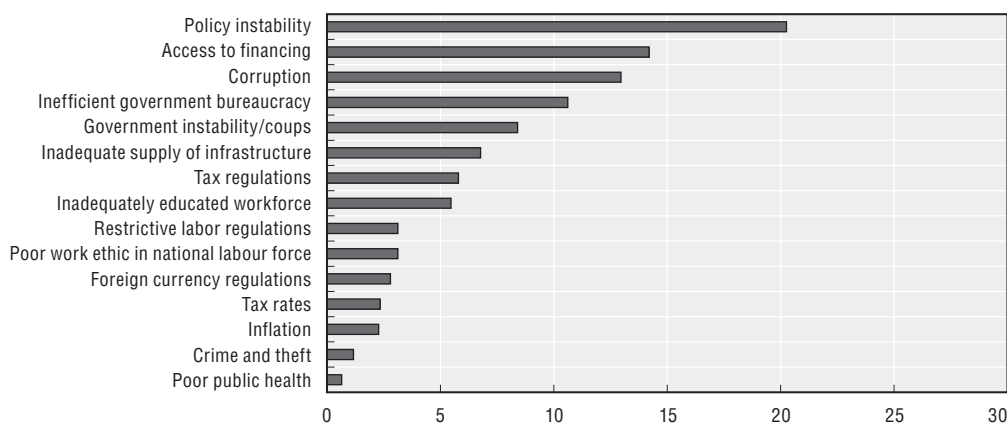
Figure 2.20. **Republic of Moldova's performance on the categories of the Public institutions sub-pillar**



Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

Figure 2.21. **Republic of Moldova's performance in comparison with its peer group**

Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

Figure 2.22. **Most problematic factors for doing business in Republic of Moldova**

Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

Republic of Moldova occupies the 97th position in the GCI in terms of its infrastructure. The transport infrastructure network (assessed at 130th) needs upgrading and expansion. With the exception of railroads (ranked 67th,) the quality of facilities across all modes of transport is among the poorest in the entire sample. In particular, Republic of Moldova ranks 139th for the quality of its roads, 124th for access to ports and 109th for its air transport infrastructure. Upgrading infrastructure is fundamental for developing international trade, thereby contributing to higher levels of efficiency. Electricity and telephone facilities receive somewhat better assessments, with, for example, the country's high level of fixed-line telephone penetration placing it in a good 40th position overall.

Stabilising the country's macroeconomic environment remains a key challenge. Republic of Moldova is in 90th position on the related pillar. A relatively high budget deficit of 6.8% (in 2009) and a savings rate of just above 15% call for measures aimed at fiscal consolidation and promoting domestic savings. According to the IMF, the country is

committed to fiscal consolidation, in particular as the low country credit rating (27.10 out of 100) significantly raises the cost of financing budget deficits.<sup>13</sup>

Republic of Moldova is ranked 84th on the Health and primary education pillar and outperforms its peers from the same stage of development on this indicator (see Figure 2.21). More detailed analysis of the data shows that the fair quality of primary education (72nd), manageable levels of HIV infection (77th) and moderate infant mortality (68th) are counterbalanced by significant challenges such as low enrolment in primary education (107th) and high incidence of tuberculosis (102nd). It is crucial for Republic of Moldova to make primary school enrolment fully universal. Presently, approximately 13% of children in the relevant age group are not enrolled in school.

While Republic of Moldova's basic requirements must be addressed as a priority, many of the pillars related to enhancing its efficiency point to additional competitive strengths and challenges. Above all, Republic of Moldova's domestic market is small and does not provide the opportunity for economies of scale. At the same time, its potential for expanding export markets remains largely untapped, despite far-reaching agreements with the European Union and the Commonwealth of Independent States (CIS), and the country's geographical proximity to these markets (122nd place on the Foreign market size sub-pillar). Many of the competitiveness-enhancing reforms outlined in this chapter can support Republic of Moldova's efforts to expand exports.

To enhance competitiveness, greater efficiency of goods markets will be necessary. In the latest rankings, Republic of Moldova is positioned 104th on this related pillar. The key issues to be addressed are greater openness to FDI by creating rules and regulations that are more conducive to investment (its present ranking is 100th), promoting competition (now at 101st position) and putting into place a more effective anti-monopoly policy (currently 119th), but also further liberalisation of trade (which now stands at 86th position). The business community also views the existing customs procedures as highly burdensome (118th). These obstacles have been simplified by putting into place a one-stop-shop for customs clearance.

The recent financial crisis has exposed the vulnerability of the Moldovan financial sector. The country ranks poorly in the efficiency of its financial markets, a category that assesses the extent to which the financial sector provides reasonably priced finance to the business community. At the same time, among the most problematic factors for doing business – access to finance – features as the second most important issue (see Figure 2.22). Difficulties in obtaining finance apply to loans (119th), but also to other forms of finance such as venture capital (127th), or the local equity market (124th). The survey also reveals some persistent doubts as to the soundness of banks (106th position).

Republic of Moldova faces numerous challenges related to competitiveness, particularly those related to its institutional framework, infrastructure, goods markets efficiency and its financial sector. Addressing these issues will help the country to increase exports and make its growth performance more sustainable.

## **Ukraine**

Over the past few years, Ukraine has presented a mixed picture of economic growth. Real GDP grew by almost 8% in 2007, then slowed to 2.1% in 2008, and then contracted by 15% in 2009 before recovering somewhat in 2010 to an estimated 3.7% (IMF, 2010a). Following the contraction GDP per capita reached 2 568 USD in 2009 (IMF, 2010a). As in other

countries of the region, this steep contraction exposed many structural challenges related to competitiveness, with the country's rank tumbling from 72nd in 2008 to 89th in 2010. Taking a longer view, Ukraine is the only economy among those under review that has dropped from the 6th to the 7th decile in the GCI since 2005. This slide in performance can be attributed to a worsening assessment of its institutions, and its deteriorating macroeconomic stability.

Despite this rather disappointing trend in recent years, the Ukrainian economy has many strengths to build on in developing its competitiveness strategy. Above all, Ukraine benefits from a large domestic market which allows for economies of scale and makes the country more attractive to foreign investors. Ukraine also maintains close trade links both with the CIS and the European Union thanks to, among other factors, its geographical proximity to these markets. As a result, Ukraine is ranked 38th in the related pillar and performs well with respect to both the domestic and foreign dimensions of its market size.

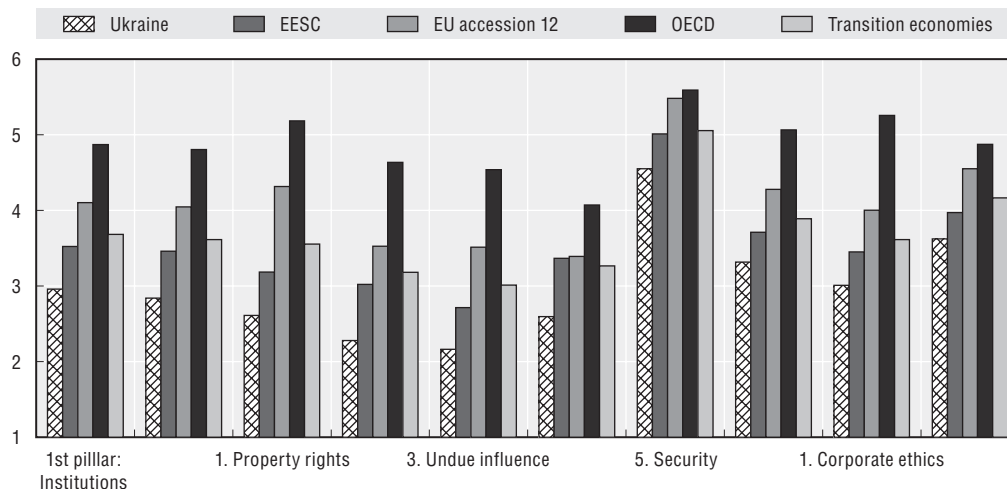
Another key strength of Ukrainian competitiveness is its fairly well educated population. The country outperforms the other economies of the EESC region by a wide margin, ranking 46th in this area, above the Russian Federation and Romania, for example. Participation in higher education (quantity), as measured by enrolment rates is high and places Ukraine in an excellent 13th position. This indicator reflects the country's relatively high tertiary and secondary enrolments of 79.5% and 94.5%, respectively. Despite these high participation rates, the assessment is poorer with respect to the quality of education. The educational system is not fully attuned to the needs of the business community (56th position) and the quality of management education is far from international best practice (ranked 108th), although maths and science education is satisfactory (ranked 42nd). The important dimension of on-the-job training, which contributes to maintaining flexibility within the workforce, is neglected by Ukrainian businesses, thus ranking the country in 109th position.

As in other countries in the region, a major competitive advantage is Ukraine's fairly efficient labour market (ranked 54th). Hiring and firing procedures are fairly simple (ranked 18th) and the cost of redundancy is limited (21st), making it more attractive for firms to hire new workers. At the same time wages can be set fairly flexibly by business (ranked 54th). The country also benefits from a high level of female participation in the labour force and enjoys a close link between pay and productivity, contributing to the efficient use of its talent. Despite the clear strengths of Ukrainian labour markets, some challenges remain. Many of the best and brightest Ukrainians tend to emigrate (115th) and the absence of meritocratic structures in the business sector gives it a rank of 122nd for its reliance on professional management.

To benefit from the country's clear strengths, its most important competitiveness-related challenges must be addressed. Above all, this includes a thorough overhaul of the institutional framework, which remains inefficient, riddled by corruption and subject to capture by vested interests. Ukraine ranks 134th in this pillar. Out of the 139 countries assessed, only Chad, Bolivia, Paraguay and Venezuela display even weaker institutions. Figure 2.23 shows the key indicators in the Institutions pillar. Ukraine lags behind the EESC average by a significant margin on all these indicators. The key issues for Ukraine are the existence of undue influence, which affects the judiciary (134th) as well as decisions of government officials (127th), ethics and corruption, which reflects frequent payment of bribes across all sectors and levels of government bureaucracy (127th) and low public trust

in politicians (122nd). As Figure 2.23 shows, Ukraine's institutional framework also suffers from an inefficient government (137th) as well as weak protection for intellectual and physical property rights (132nd).

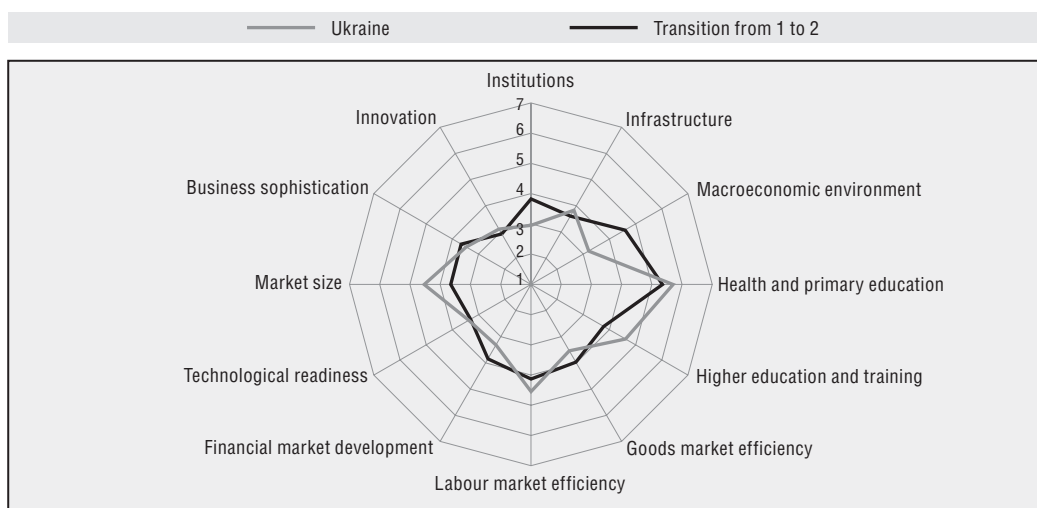
Figure 2.23. **Ukraine's performance on the key categories of the Institutions pillar**



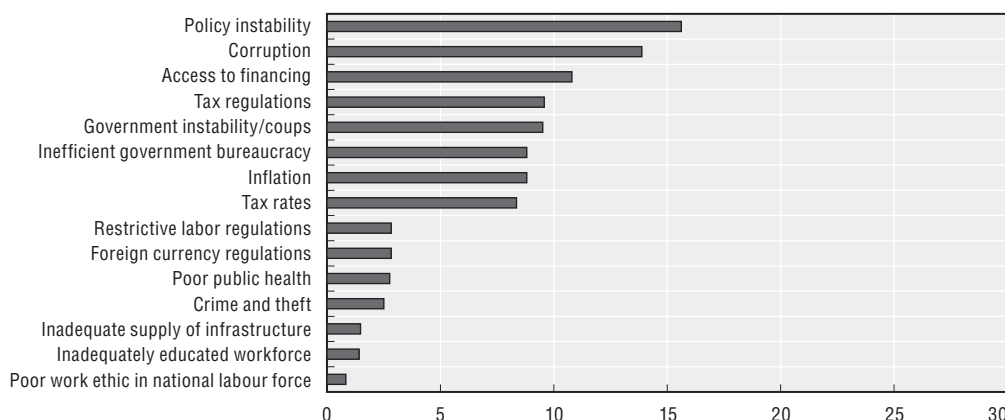
Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

Since the financial crisis, Ukraine has been facing a degree of macroeconomic instability. The drop in revenues led to a high budget deficit, which in 2009 reached 11.4% of GDP (134th rank) and public debt rose from about 20% of GDP in 2008 to 31.3% in 2009. The adverse effects of the financial crisis on the economy pushed Ukraine to agree a stabilisation programme with the IMF. Under this agreement, Ukraine has committed itself to fiscal consolidation, a free-floating exchange rate and restructuring and recapitalisation of its banks. The Stand-by Arrangements (SBA) of 2008 and 2010 with the IMF– aimed at putting fiscal policies on a more sustainable footing, reforming the energy sector and strengthening the financial system – will anchor Ukrainian fiscal policy and make economic policy somewhat more predictable (IMF, 2008. Roudet, 2010). Currently, the country's business leaders consider policy instability to be the most important impediment to doing business (see Figure 2.25). For the coming years expenditures will remain constrained and a reform of the public sector to heighten efficiency should be envisaged. Despite the consolidation measures following the crisis, Ukrainian business leaders consider government spending highly wasteful, rating it at 2.15 on a scale of 1 to 7, which corresponds to the 131st position in the GCI sample.

The financial crisis also brought to light the poor state of the Ukrainian financial sector. The SBA with the IMF forced Ukraine to start an intensive restructuring process. In the GCI, the assessment of its financial market development dropped from 85th position in 2008 to 119th in 2010. Over this period, the assessments of both the ability of financial markets to provide capital to the business sector (efficiency) and trustworthiness and confidence have dropped significantly, from 94th to 123rd position and from 77th to 115th position, respectively. According to the GCI, the most important factor hampering further development of financial markets in Ukraine is the lack of confidence in the solvency of the banking system. Indeed, the ratio of non-performing loans has been growing over the past

Figure 2.24. **Ukraine's performance in comparison with its peer group**

Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

Figure 2.25. **Most problematic factors for doing business in Ukraine**

Source: Global Competitiveness Report 2010-2011 (World Economic Forum).

years and may lead to further bank defaults.<sup>14</sup> At the same time, the financial sector does not fulfil its role as a financial intermediary efficiently. Access to loans remains difficult (130th), as does financing through the local equity market (120th) and venture capital (121st). It is therefore crucial that Ukraine continue to reform both the banking system and the financial sector. The Independent International Experts Commission on Ukraine suggests that the country should focus on developing local capital markets, improving transparency of the banking sector and reducing the role of state financial institutions.<sup>15</sup>

Ukraine's last major challenge is to address inefficiencies related to the country's markets for goods and services. On the related pillar, the country ranks 129th overall and below all other economies of the EESC region. This sub-pillar reveals the presence of significant weaknesses, particularly those related to a lack of domestic competition, where Ukraine ranks 133rd. The poor survey assessment of this component by the business community reflects the weakness of local competition (118th) and the fact that key markets within the economy continue to be dominated by very few enterprises (128th). At

the same time, the World Economic Forum survey indicates that Ukraine's anti-monopoly policy is considered inefficient in maintaining a healthy level of competition and the system of taxation has an adverse effect on incentives to work and invest. In addition, burdensome administrative procedures make the entry of new businesses more difficult, thereby cementing the dominant position of existing businesses. The country's recent accession to the WTO has led to some liberalisation of trade policies, such as tariffs (40th), but a number of barriers to trade remain in place. Efforts to facilitate trade could reduce the cost of importing. For example, customs procedures are considered overly burdensome by the business community (131st). Further opening up the country to foreign ownership by relaxing rules and regulations on FDI (128th) would not only benefit competition in the country, but would also contribute to technological readiness and the transfer of knowledge of management techniques.

In sum, a continuation of the reforms initiated during the financial crisis would put the country on a more sustainable growth path. According to the GCI results, an overhaul of the country's institutional framework, the creation of a more stable macroeconomic environment, and reform of the financial sector and competitive environment are key priorities.

## Conclusion

This chapter has analysed the performance of five countries from Eastern Europe and the South Caucasus in terms of their national competitiveness using the framework of the Global Competitiveness Index: Armenia, Azerbaijan, Georgia, Republic of Moldova and Ukraine.

The analysis finds that to a large extent the five 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 infrastructure and fairly poor quality of education. Over the past five years, Azerbaijan, Georgia and Republic of Moldova have made some improvements with regard to their relative competitiveness, while Armenia remained stable and Ukraine saw a decline compared to its regional peers and past performance.

The results of the GCI provide a useful insight into the key challenges to enhancing competitiveness across the region. Specifically, it points to some of the policy areas that can be targeted and the rankings within its pillars and sub-divisions provide clear directives as to the strengths that can be enhanced and weaknesses that need to be addressed. The GCI can provide a basis for public-private dialogue on how barriers to competitiveness can be overcome. The recent recession has created a sense of urgency to put economic development on a sounder and more sustainable footing and increase competitiveness across the region.

## Notes

1. For a more detailed discussion of the 12 pillars and their contributions to competitiveness, see Sala-i-Martin *et al.* 2010. Annex A 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 details on the country groupings, see note under Table 2.

4. A decile rankings analysis accounts for the changing sample size of the GCI, which between 2005 and 2010 increased from 114 to 139.
5. GDP data for 2009 (IMF, 2010a).
6. IMF, 2010a.
7. Although procedures have been simplified, the redundancy cost remains somewhat higher in international comparison, ranked 40th.
8. See EBRD (2010) for more details.
9. GDP data for 2009 (IMF, 2010a).
10. Weighted by imports.
11. This assessment is based on the country survey.
12. The data captured in the index are subject to a one-year lag; these rankings are based on 2008 and 2009 data.
13. For further details about recent developments in macroeconomic policy, see IMF (2010c).
14. Independent International Experts Commission, 2010.
15. The International Commission of Independent Experts was initiated by Anders Åslund and Oleksandr Paskhaver, who were its co-chairmen. It was established in September 2009 with the aim of drafting an action programme for Ukraine following the presidential elections. Members include prominent international and Ukrainian academics, policymakers, and lawyers. The work of the Commission has been financed by the Swedish and Netherlands Ministries for Foreign Affairs, with additional support from the United Nations Development Programme. The International Centre for Policy Studies in Kiev, Ukraine has acted as its secretariat.

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## ANNEX 2.A

## Computation and Structure of the Global Competitiveness Index 2010-2011

This annex presents the structure of the Global Competitiveness Index 2010–2011 (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. 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.<sup>b</sup> 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 2010-2011* 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.

Variables that are followed by the designation “1/2” enter the GCI in two different pillars; to avoid double counting, we assign a half-weight to each instance.<sup>d</sup>

**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 Cooperation 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 management1/2
  - 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:

$$category_i = \frac{\sum_{k=1}^K indicators_k}{K}$$

- 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:

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

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:

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

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

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

- 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.

## ANNEX 2.B

### *Technical notes and sources for data used in the Global Competitiveness Index 2010-2011*

#### **Basic Indicators**

##### **0.02 Population**

Total population in millions | 2009

Source: United Nations Population Fund, State of World Population 2009; national sources

##### **0.03 GDP per capita**

Gross domestic product per capita in current US dollars | 2009

Source: International Monetary Fund, World Economic Outlook Database (April 2010); national sources

##### **0.04 GDP as a share of world GDP**

Gross domestic product based on purchasing power parity as a percentage of world GDP | 2009

Source: International Monetary Fund, World Economic Outlook Database (April 2010); national sources

#### **Pillar I: Institutions**

##### **1.01 Property rights**

How would you rate the protection of property rights, including financial assets, in your country? [1 = very weak; 7 = very strong] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

##### **1.02 Intellectual property protection**

How would you rate intellectual property protection, including anti-counterfeiting measures, in your country? [1 = very weak; 7 = very strong] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

##### **1.03 Diversion of public funds**

In your country, how common is diversion of public funds to companies, individuals, or groups due to corruption? [1 = very common; 7 = never occurs] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey



## 1.04 Public trust of politicians

How would you rate the level of public trust in the ethical standards of politicians in your country? [1 = very low; 7 = very high] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.05 Irregular payments and bribes

This indicator represents the average score across the five components of the following Executive Opinion Survey question: In your country, how common is it for firms to make undocumented extra payments or bribes connected with a) imports and exports; b) public utilities; c) annual tax payments; d) awarding of public contracts and licenses; e) obtaining favorable judicial decisions. The answer to each question ranges from 1 (very common) to 7 (never occurs). | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.06 Judicial independence

To what extent is the judiciary in your country independent from influences of members of government, citizens or firms? [1 = heavily influenced; 7 = entirely independent] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.07 Favoritism in decisions of government officials

To what extent do government officials in your country show favoritism to well-connected firms and individuals when deciding upon policies and contracts? [1 = always show favoritism; 7 = never show favoritism] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.08 Wastefulness of government spending

How would you rate the composition of public spending in your country? [1 = extremely wasteful; 7 = highly efficient in providing necessary goods and services] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.09 Burden of government regulation

How burdensome is it for businesses in your country to comply with governmental administrative requirements (e.g., permits, regulations, reporting)? [1 = extremely burdensome; 7 = not burdensome at all] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.10 Efficiency of legal framework in settling disputes

How efficient is the legal framework in your country for private businesses in settling disputes? [1 = extremely inefficient; 7 = highly efficient] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.11 Efficiency of legal framework in challenging regulations

How efficient is the legal framework in your country for private businesses in challenging the legality of government actions and/or regulations? [1 = extremely inefficient; 7 = highly efficient] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

## 1.12 Transparency of government policymaking

How easy is it for businesses in your country to obtain information about changes in government policies and regulations affecting their activities? [1 = impossible; 7 = extremely easy] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 1.13 Business costs of terrorism

To what extent does the threat of terrorism impose costs on businesses in your country?

[1 = significant costs; 7 = no costs] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 1.14 Business costs of crime and violence

To what extent does the incidence of crime and violence impose costs on businesses in your country? [1 = significant costs; 7 = no costs] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 1.15 Organized crime

To what extent does organized crime (mafia-oriented racketeering, extortion) impose costs on businesses in your country? [1 = significant costs; 7 = no costs] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 1.16 Reliability of police services

To what extent can police services be relied upon to enforce law and order in your country? [1 = cannot be relied upon at all; 7 = can always be relied upon] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 1.17 Ethical behavior of firms

How would you compare the corporate ethics (ethical behavior in interactions with public officials, politicians, and other enterprises) of firms in your country with those of other countries in the world? [1 = among the worst in the world; 7 = among the best in the world] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 1.18 Strength of auditing and reporting standards

In your country, how would you assess financial auditing and reporting standards regarding company financial performance? [1 = extremely weak; 7 = extremely strong] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 1.19 Efficacy of corporate boards

How would you characterize corporate governance by investors and boards of directors in your country? [1 = management has little accountability to investors and boards; 7 = investors and boards exert strong supervision of management decisions] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 1.20 Protection of minority shareholders' interests

In your country, to what extent are the interests of minority shareholders protected by the legal system? [1 = not protected at all; 7 = fully protected] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 1.21 Strength of investor protection

Strength of Investor Protection Index on a 0–10 (best) scale | 2009

Source: The World Bank, Doing Business 2010

### **Pillar II: Infrastructure**

#### **2.01 Quality of overall infrastructure**

How would you assess general infrastructure (*e.g.*, transport, telephony, and energy) in your country? [1 = extremely underdeveloped; 7 = extensive and efficient by international standards] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 2.02 Quality of roads

How would you assess roads in your country? [1 = extremely underdeveloped; 7 = extensive and efficient by international standards] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 2.03 Quality of railroad infrastructure

How would you assess the railroad system in your country? [1 = extremely underdeveloped; 7 = extensive and efficient by international standards] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 2.04 Quality of port infrastructure

How would you assess port facilities in your country? [1 = extremely underdeveloped; 7 = well developed and efficient by international standards] For landlocked countries, the question is as follows: How accessible are port facilities? [1 = extremely inaccessible; 7 = extremely accessible] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 2.05 Quality of air transport infrastructure

How would you assess passenger air transport infrastructure in your country? [1 = extremely underdeveloped; 7 = extensive and efficient by international standards] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 2.06 Available airline seat kilometers

Scheduled available airline seat kilometers per week originating in country (in millions) | January 2010 and July 2010 average

Source: International Air Transport Association, SRS Analyser; national sources

#### 2.07 Quality of electricity supply

How would you assess the quality of the electricity supply in your country (lack of interruptions and lack of voltage fluctuations)? [1 = insufficient and suffers frequent interruptions; 7 = sufficient and reliable] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

2.08 Fixed telephone lines

Number of active fixed telephone lines per 100 population | 2009

Source: International Telecommunication Union, World Telecommunication/ICT Indicators 2010 (June 2010 edition); national sources

2.09 Mobile telephone subscriptions

Number of mobile cellular telephone subscriptions per 100 population | 2009

Source: International Telecommunication Union, World Telecommunication/ICT Indicators 2010 (June 2010 edition); national sources

**Pillar III: Macroeconomic environment**

**3.01 Government budget balance**

Government budget balance as a percentage of GDP | 2009

Source: African Development Bank; European Bank for Reconstruction and Development; Inter-American Development Bank; International Monetary Fund; Organisation for Economic Co-operation and Development; Economist Intelligence Unit, Country Data Database (July 2010); national sources

3.02 National savings rate

National savings rate as a percentage of GDP | 2009

Source: Economist Intelligence Unit, Country Data Database (June/July 2010); International Monetary Fund; The World Bank Group, World Databank (July 2010); national sources

3.03 Inflation

Annual percent change in consumer price index (year average) | 2009

Source: International Monetary Fund, World Economic Outlook Database (April 2010); national sources Note: Economies are ranked in ascending order for presentation purposes only. See Appendix of Chapter 1 for details about the treatment of deflationary countries in the Global Competitiveness Index.

3.04 Interest rate spread

Average interest rate spread between typical lending and deposit rates | 2009

Source: Economist Intelligence Unit, CountryData Database (July 2010); International Monetary Fund, International Financial Statistics (July 2010); national sources

3.05 Government debt

General government gross debt as a percentage of GDP | 2009

Source: African Development Bank; African Development Bank and OECD Development Centre, Africa Economic Outlook (retrieved July 6, 2010); European Bank for Reconstruction and Development; International Monetary Fund; Economist Intelligence Unit, CountryData Database (July 2010); national sources

3.06 Country credit rating

Expert assessment of the probability of sovereign debt default on a 0–100 (lowest probability) scale | September 2009

Source: © Institutional Investor, 2010. No further copying or transmission of this material is allowed without the express permission of Institutional Investor (publisher@institutionalinvestor.com).

## **Pillar IV: Health and primary education**

### **4.01 Business impact of malaria**

How serious an impact do you consider malaria will have on your company in the next five years (e.g., death, disability, medical and funeral expenses, productivity and absenteeism, recruitment and training expenses, revenues)? [1 = a serious impact; 7 = no impact at all] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

### **4.02 Malaria incidence**

Number of malaria cases per 100,000 population | 2006

Source: World Health Organisation, World Malaria Report 2008 ; national sources

### **4.03 Business impact of tuberculosis**

How serious an impact do you consider tuberculosis will have on your company in the next five years (e.g., death, disability, medical and funeral expenses, productivity and absenteeism, recruitment and training expenses, revenues)? [1 = a serious impact; 7 = no impact at all] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

### **4.04 Tuberculosis incidence**

Number of tuberculosis cases per 100,000 population | 2008

Source: The World Bank, Data Catalog (retrieved July 27, 2010)

### **4.05 Business impact of HIV/AIDS**

How serious an impact do you consider HIV/AIDS will have on your company in the next five years (e.g., death, disability, medical and funeral expenses, productivity and absenteeism, recruitment and training expenses, revenues)? [1 = a serious impact; 7 = no impact at all] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

### **4.06 HIV prevalence**

HIV prevalence as a percentage of adults aged 15–49 years | 2007

Source: UNAIDS/World Health Organisation, 2008 Report on the Global AIDS Epidemic ; United Nations Development Programme, Human Development Report 2007/2008; national sources

### **4.07 Infant mortality**

Infant (children aged 0–12 months) mortality per 1,000 live births | 2008

Source: The World Bank, Data Catalog (retrieved June 23, 2010); national source

### **4.08 Life expectancy**

Life expectancy at birth (years) | 2008

Source: The World Bank, Data Catalog (retrieved July 27, 2010); national source

### **4.09 Quality of primary education**

How would you assess the quality of primary schools in your country? [1 = poor; 7 = excellent – among the best in the world] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 4.10 Primary education enrollment rate

Net primary education enrollment rate | 2008

Source: UNESCO Institute for Statistics (retrieved July 16, 2010); The World Bank, EdStats query (retrieved July 16, 2010); national sources

### **Pillar V: Higher education and training**

#### **5.01 Secondary education enrollment rate**

Gross secondary education enrollment rate | 2008

Source: UNESCO Institute for Statistics (retrieved July 16, 2010); national sources

#### 5.02 Tertiary education enrollment rate

Gross tertiary education enrollment rate | 2008

Source: UNESCO Institute for Statistics (retrieved July 16, 2010); national sources

#### 5.03 Quality of the educational system

How well does the educational system in your country meet the needs of a competitive economy? [1 = not well at all; 7 = very well] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 5.04 Quality of math and science education

How would you assess the quality of math and science education in your country's schools? [1 = poor; 7 = excellent – among the best in the world] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 5.05 Quality of management schools

How would you assess the quality of management or business schools in your country?

[1 = poor; 7 = excellent – among the best in the world] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 5.06 Internet access in schools

How would you rate the level of access to the Internet in schools in your country?

[1 = very limited; 7 = extensive] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 5.07 Local availability of specialized research and training services

In your country, to what extent are high-quality, specialized training services available? [1 = not available; 7 = widely available] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 5.08 Extent of staff training

To what extent do companies in your country invest in training and employee development? [1 = hardly at all; 7 = to a great extent] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**Pillar VI: Goods market efficiency****6.01 Intensity of local competition**

How would you assess the intensity of competition in the local markets in your country?

[1 = limited in most industries; 7 = intense in most industries] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**6.02 Extent of market dominance**

How would you characterize corporate activity in your country? [1 = dominated by a few business groups; 7 = spread among many firms] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**6.03 Effectiveness of anti-monopoly policy**

To what extent does anti-monopoly policy promote competition in your country? [1 = does not promote competition; 7 = effectively promotes competition] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**6.04 Extent and effect of taxation**

What impact does the level of taxes in your country have on incentives to work or invest?

[1 = significantly limits incentives to work or invest; 7 = has no impact on incentives to work or invest] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**6.05 Total tax rate**

This variable is a combination of profit tax (% of profits), labor tax and contribution (% of profits), and other taxes (% of profits) | 2009

Source: The World Bank, Doing Business 2010

**6.06 Number of procedures required to start a business**

Number of procedures required to start a business | 2009

Source: The World Bank, Doing Business 2010

**6.07 Time required to start a business**

Number of days required to start a business | 2009

Source: The World Bank, Doing Business 2010

**6.08 Agricultural policy costs**

How would you assess the agricultural policy in your country? [1 = excessively burdensome for the economy; 7 = balances the interests of taxpayers, consumers, and producers] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**6.09 Prevalence of trade barriers**

In your country, to what extent do tariff and non-tariff barriers limit the ability of imported goods to compete in the domestic market? [1 = strongly limit; 7 = do not limit] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**6.10 Trade tariffs**

Trade-weighted average tariff rate | 2009

Source: International Trade Centre

**6.11 Prevalence of foreign ownership**

How prevalent is foreign ownership of companies in your country? [1 = very rare; 7 = highly prevalent] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**6.12 Business impact of rules on FDI**

To what extent do rules governing foreign direct investment (FDI) encourage or discourage it? [1 = strongly discourage fdi; 7 = strongly encourage fdi] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**6.13 Burden of customs procedures**

How would you rate the level of efficiency of customs procedures (related to the entry and exit of merchandise) in your country? [1 = extremely inefficient; 7 = extremely efficient] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**6.14 Degree of customer orientation**

How well do companies in your country treat customers? [1 = generally treat their customers badly; 7 = are highly responsive to customers and customer retention] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**6.15 Buyer sophistication**

In your country, how do buyers make purchasing decisions? [1 = based solely on the lowest price; 7 = based on a sophisticated analysis of performance attributes] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**Pillar VII: Labor market efficiency****7.01 Cooperation in labor-employer relations**

How would you characterize labor-employer relations in your country? [1 = generally confrontational; 7 = generally cooperative] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**7.02 Flexibility of wage determination**

How are wages generally set in your country? [1 = by a centralized bargaining process; 7 = up to each individual company] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**7.03 Rigidity of employment**

Rigidity of Employment Index on a 0–100 (worst) scale | 2009

Source: The World Bank, Doing Business 2010

**7.04 Hiring and firing practices**



How would you characterize the hiring and firing of workers in your country?  
[1 = impeded by regulations; 7 = flexibly determined by employers] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 7.05 Redundancy costs

Redundancy costs in weeks of salary | 2009

Source: The World Bank, Doing Business 2010

#### 7.06 Pay and productivity

To what extent is pay in your country related to productivity? [1 = not related to worker productivity; 7 = strongly related to worker productivity] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 7.07 Reliance on professional management

In your country, who holds senior management positions? [1 = usually relatives or friends without regard to merit; 7 = mostly professional managers chosen for merit and qualifications] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 7.08 Brain drain

Does your country retain and attract talented people? [1 = no, the best and brightest normally leave to pursue opportunities in other countries; 7 = yes, there are many opportunities for talented people within the country] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 7.09 Female participation in labor force

Female-to-male participation ratio in the labor force | 2008

Source: International Labour Organisation, KIILM Net (retrieved June 28, 2010)

### **Pillar VIII: Financial market development**

#### **8.01 Availability of financial services**

To what extent does competition among providers of financial services in your country ensure the provision of financial services at affordable prices? [1 = not at all; 7 = extremely well] | 2010

Source: World Economic Forum, Executive Opinion Survey

#### 8.02 Affordability of financial services

To what extent does competition among providers of financial services in your country ensure the provision of financial services at affordable prices? [1 = not at all; 7 = extremely well] | 2010

Source: World Economic Forum, Executive Opinion Survey

#### 8.03 Financing through local equity market

How easy is it to raise money by issuing shares on the stock market in your country? [1 = very difficult; 7 = very easy] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

#### 8.04 Ease of access to loans

How easy is it to obtain a bank loan in your country with only a good business plan and no collateral? [1 = very difficult; 7 = very easy] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

8.05 Venture capital availability

In your country, how easy is it for entrepreneurs with innovative but risky projects to find venture capital? [1 = very difficult; 7 = very easy] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

8.06 Restriction on capital flows

How restrictive are regulations in your country related to international capital flows? [1 = highly restrictive; 7 = not restrictive at all] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

8.07 Soundness of banks

How would you assess the soundness of banks in your country? [1 = insolvent and may require a government bailout; 7 = generally healthy with sound balance sheets] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

8.08 Regulation of securities exchanges

How would you assess the regulation and supervision of securities exchanges in your country? [1 = ineffective; 7 = effective] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

8.09 Legal rights index

Degree of legal protection of borrowers and lenders' rights on a 0-10 (best) scale | 2009

Source: The World Bank, Doing Business 2010

**Pillar IX: Technological readiness**

**9.01 Availability of latest technologies**

To what extent are the latest technologies available in your country? [1 = not available; 7 = widely available] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

9.02 Firm-level technology absorption

To what extent do businesses in your country absorb new technology? [1 = not at all; 7 = aggressively absorb] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

9.03 FDI and technology transfer

To what extent does foreign direct investment (FDI) bring new technology into your country? [1 = not at all; 7 = fdi is a key source of new technology] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

9.04 Internet users

Number of estimated Internet users per 100 population | 2009

Source: International Telecommunication Union, World Telecommunication/ICT Indicators (June 2010 edition); The World Bank, Data Catalog (retrieved July 19, 2010); national sources

#### 9.05 Broadband Internet subscriptions

Number of fixed broadband Internet subscriptions per 100 population | 2009

Source: International Telecommunication Union, World Telecommunication/ICT Indicators (June 2010 edition)

#### 9.06 Internet bandwidth

International Internet bandwidth (Mb/s) per 10,000 population | 2007

Source: International Telecommunication Union, World Telecommunication/ICT Indicators (June 2010 edition); national sources

### **Pillar X: Market size**

#### **10.01 Domestic market size index**

Sum of gross domestic product plus value of imports of goods and services, minus value of exports of goods and services, normalized on a 1–7 (best) scale | 2009

Source: Authors' calculation. For more details please refer to Appendix A in Chapter 1.1 of this Report

#### 10.02 Foreign market size index

Value of exports of goods and services, normalized on a 1–7 (best) scale | 2009

Source: Authors' calculation. For more details please refer to Appendix A in Chapter 1.1 of this Report

#### 10.03 GDP (PPP)

Gross domestic product valued at purchasing power parity in billions of international dollars | 2009

Source: International Monetary Fund, World Economic Outlook Database (April 2010); national sources

#### 10.04 Imports as a percentage of GDP

Imports of goods and services as a percentage of gross domestic product | 2009

Source: Economist Intelligence Unit, CountryData Database (retrieved July 1, 2010); The World Bank, Data Catalog (retrieved July 13, 2010); national sources

#### 10.05 Exports as a percentage of GDP

Exports of goods and services as a percentage of gross domestic product | 2009

Source: Economist Intelligence Unit, CountryData Database (retrieved July 1, 2010); The World Bank, Data Catalog (retrieved July 14, 2010); national sources

### **Pillar XI: Business sophistication**

#### **11.01 Local supplier quantity**

How numerous are local suppliers in your country? [1 = largely non-existent; 7 = very numerous] | 2009–10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**11.02 Local supplier quality**

How would you assess the quality of local suppliers in your country? [1 = very poor; 7 = very good] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**11.03 State of cluster development**

In your country's economy, how prevalent are well-developed and deep clusters? [1 = non-existent; 7 = widespread in many fields] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**11.04 Nature of competitive advantage**

What is the nature of competitive advantage of your country's companies in international markets based upon? [1 = low-cost or natural resources; 7 = unique products and processes] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**11.05 Value chain breadth**

In your country, do exporting companies have a narrow or broad presence in the value chain? [1 = narrow, primarily involved in individual steps of the value chain (e.g., resource extraction or production); 7 = broad, present across the entire value chain (i.e., do not only produce but also perform product design, marketing sales, logistics, and after-sales services)] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**11.06 Control of international distribution**

To what extent are international distribution and marketing from your country owned and controlled by domestic companies? [1 = not at all, they take place through foreign companies; 7 = extensively, they are primarily owned and controlled by domestic companies] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**11.07 Production process sophistication**

In your country, how sophisticated are production processes? [1 = not at all – labor-intensive methods or previous generations of process technology prevail; 7 = highly – the world's best and most efficient process technology prevails] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**11.08 Extent of marketing**

In your country, to what extent do companies use sophisticated marketing tools and techniques? [1 = very little; 7 = extensively] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**11.09 Willingness to delegate authority**

In your country, how do you assess the willingness to delegate authority to subordinates? [1 = low – top management controls all important decisions; 7 = high – authority is mostly delegated to business unit heads and other lower-level managers] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**Pillar XII: Innovation****12.01 Capacity for innovation**

In your country, how do companies obtain technology? [1 = exclusively from licensing or imitating foreign companies; 7 = by conducting formal research and pioneering their own new products and processes] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**12.02 Quality of scientific research institutions**

How would you assess the quality of scientific research institutions in your country? [1 = very poor; 7 = the best in their field internationally] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**12.03 Company spending on R&D**

To what extent do companies in your country spend on R&D? [1 = do not spend on R&D; 7 = spend heavily on R&D] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**12.04 University-industry collaboration in R&D**

To what extent do business and universities collaborate on research and development (R&D) in your country? [1 = do not collaborate at all; 7 = collaborate extensively] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**12.05 Government procurement of advanced technology products**

Do government procurement decisions foster technological innovation in your country? [1 = no, not at all; 7 = yes, extremely effectively] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**12.06 Availability of scientists and engineers**

To what extent are scientists and engineers available in your country? [1 = not at all; 7 = widely available] | 2009-10 weighted average

Source: World Economic Forum, Executive Opinion Survey

**12.07 Utility patents per million population**

Number of utility patents (i.e., patents for invention) granted in 2009, per million population | 2009

Source: The United States Patent and Trademark Office



## Chapter 3

# Developing Human Capital

by

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*Human capital is a vital element for the competitiveness of any country and amongst the most important areas of investment for economic and social development. The legacy of Soviet education has left the countries of Eastern Europe and the South Caucasus (EESC) with very good performance on education indicators such as enrolment and literacy rates, girls' participation, progress to higher levels of education and pupil-teacher ratios. Yet on a number of other indicators, especially those related to spending, quality and relevance of education, the EESC countries fail to approach the international benchmarks, and thus to mobilise the full competitiveness potential of their people and economies. Despite, sometimes, considerable budgetary efforts, spending per student is low and is stagnating or declining in many countries. Judging by international surveys, the quality of school education in the EESC countries ranges from average, through significantly below average, to very low. Tertiary enrolment rates in Azerbaijan, Georgia and Republic of Moldova are below the level needed to compete effectively with OECD countries, and vocational education and training (VET) in all of the EESC countries is in urgent need of reform.*

*This chapter analyses available evidence on education expenditure in the EESC region and on inputs into and outcomes of initial and post-secondary education, including higher education and VET. It recommends that all the countries: participate in international surveys to test the effectiveness, quality and relevance of their education by international standards; involve employers in decision-making related to higher education and VET to better serve the needs of their labour markets; devote more resources to the less advantaged pupils currently excluded from the best education; improve the quality of teachers and teaching; and improve the quality of their business and management schools.*

## Executive summary

Human capital is related to economic development in various ways: each extra year of education attainment of the population raises productivity by at least 5%; better-educated entrepreneurs operate firms that grow faster; the supply of university graduates affects a country's potential for absorbing, developing and disseminating advanced technology; better-educated employees earn more; and literacy scores 1% higher than the international average convert into productivity levels 2.5% higher than those of other countries.

The Eastern Europe and South Caucasus (EESC) countries (with the exception of Republic of Moldova) are considered "high development" countries, have a high literacy rate and high enrolment in primary and secondary education. Republic of Moldova and Ukraine spend above the OECD average on education and Ukraine is well-placed in the 2010 World Economic Forum GCI rankings. However, all EESC countries spend very little on education per student, the quality of education ranges from average to poor, and PISA-related studies show that several problems remain: an unwillingness to change, prioritising the gifted, outdated curricula and teaching methods, and badly paid and little esteemed teachers. Tertiary education in three countries is below the level required to compete effectively with OECD countries, their VET systems contribute very little to the economy and its provision falls short of labour market needs. Across all EESC countries, employer involvement is very limited.

The EESC countries must build on existing opportunities: school enrolment is quite high and emphasis should now be on quality – all six should participate in OECD's PISA study. Countries with low tertiary enrolment levels (Azerbaijan, Georgia and Republic of Moldova) should establish more places and ensure equitable access to tertiary institutions. The VET system requires detailed delivery plans with greater involvement of national and local employers.

This chapter assesses the strengths and weaknesses of EESC countries, identifies opportunities and makes recommendations to improve their human capital and boost their competitive prospects. In addition to budget allocation, it is important to consider whether spending on education is efficient and well targeted. This includes the extent of education-related needs and what public spending is buying as education inputs and outputs. Education needs depend on the size of the youth population and its likelihood to grow or shrink. For example, Ukraine has the largest population but the smallest share of youth, whereas Azerbaijan has the greatest number in need of education. The mismatch between demographics and education spending could indicate that the resources provided are insufficient or that the education system is inefficient.

Spending on inputs includes the years of primary and secondary schooling that are provided, the percentages of school-age cohort enrolled and the progression rates from primary to secondary education. Although enrolment rates vary for EESC countries, 98% of students move on to secondary school. All countries are investing in teachers, although



they could improve the efficiency and effectiveness of their education systems with fewer but better teachers.

Outcomes can be measured by literacy rates (which are impressive in all EESC countries) and the quality of education. The EESC countries share a variety of disadvantages, among them top-down authoritarian governance in the education system, an outdated curriculum and no effective monitoring. A study of Azerbaijan by UNICEF shows a fall in student achievement with little access to education for minorities, inadequacy of educational resources with vacant science teaching positions and the highest real absenteeism rate in the EESC region. Schools are not involved in budget allocations for either supplies or infrastructure and a low percentage of children attend pre-school. Azerbaijan's biggest problem is the quality of its teachers who are undervalued and not supported.

International comparisons (for all EESC countries except Belarus) include PISA scales and TIMSS and PIRLS comparisons. Taken together they suggest that the quality of primary schooling is lowest in Georgia and might be better in Armenia than in Ukraine. World Economic Forum (Forum) GCI rankings ranged from Ukraine in 49th position to Armenia in 88th place followed by the Republic of Moldova, Georgia and Azerbaijan. Belarus was not ranked.

To compete globally, the EESC countries need to approach or match OECD average tertiary entry and completion rates and show a comparable level of sub-tertiary vocational education and training. Ukraine and Belarus devote the highest percentage of their education budgets to tertiary education. Georgia's position is weakening and Azerbaijan, Georgia and Republic of Moldova are failing to meet the needs of both their populations and their future economies.

Differing definitions and classifications within the education systems of the EESC countries make it difficult to construct a complete picture of VET. In general, the VET systems in the EESC countries lack standards, cannot supply the growing demand and are unable to meet modern requirements. Little is done to ensure that the VET institutions cover all territories and respond to all occupation needs. Inadequate financing, deteriorating infrastructures and ineffective mechanisms for building social partnerships all contribute to the lack of credibility of VET systems. Importantly, the countries must improve their systems for monitoring labour market developments and anticipating future skills requirements and must consult with industry and potential employers. Azerbaijan's weak labour market linkages and lack of streamlined pathways to higher education are significant barriers; Georgia's VET providers' network is insufficient to cope with demand and Ukraine has no system of regular consultations with employers on VET.<sup>1</sup>

Other important indicators are the proportion of youth in employment rates and the number of unemployed with different levels of education. Although in Belarus and Ukraine tertiary education significantly reduces the likelihood of being unemployed, all five countries have very high percentages of unemployed with post-secondary non-tertiary education, with particularly high figures in Belarus and Ukraine (compared to the OECD average of 1.6%). At the other end of the scale, only Belarus has a significant percentage (10.7%) of unemployed whose education ended at or below primary level. People with only secondary level education account for 73% of the unemployed in Azerbaijan, 60.7% in Ukraine, 53.9% in Armenia, 48.9% in Belarus and 37% in Georgia.

To enhance their competitiveness, all EESC countries must improve the availability of post-secondary education and training opportunities for school-leavers. Other human development indicators, such as brain drain, female participation, staff training, technology absorption and worker-employer cooperation, have also been added to the mix. Female participation is highest in Republic of Moldova, and Azerbaijan emerges with the best ranking overall for these indicators.

The following recommendations are extended to all EESC countries:

- participation in PISA
- relinquish central control and involve employers in national and local decision making concerning tertiary education and VET
- put as much effort into educating those selected out as those selected in and remove all discriminating barriers
- improve the status, remuneration, initial training and continuous professional development of teachers
- meet the full requirements of the Bologna Process
- prioritise the renewal and improvement of VET systems

For individual countries, specific recommendations were made as follows:

- **Azerbaijan** must improve school and teacher quality, provide more tertiary places with more equitable access, improve the output of scientists and engineers and boost the quantity and quality of VET
- **Georgia** must boost the numbers of places in both tertiary education and VET, improve school quality and produce more scientists and engineers
- **Belarus** should participate in the next PISA and World Economic Forum GCI and sign up to the Bologna Process, improve its tertiary education and decentralise and modernise its VET and school systems
- **Republic of Moldova** and **Armenia** should improve the quality of their education, ensure equal access and improve the quality and quantity of their VET; they should boost the numbers of their scientists and engineers. **Republic of Moldova**, specifically, should reverse the recent decline in its tertiary enrolment rate.
- **Ukraine** should increase the number of places in its post-secondary VET.

### The importance of developing human capital

Human capital is a term commonly referring to the combined skills, knowledge and aptitudes of workers. Research shows 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 of 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

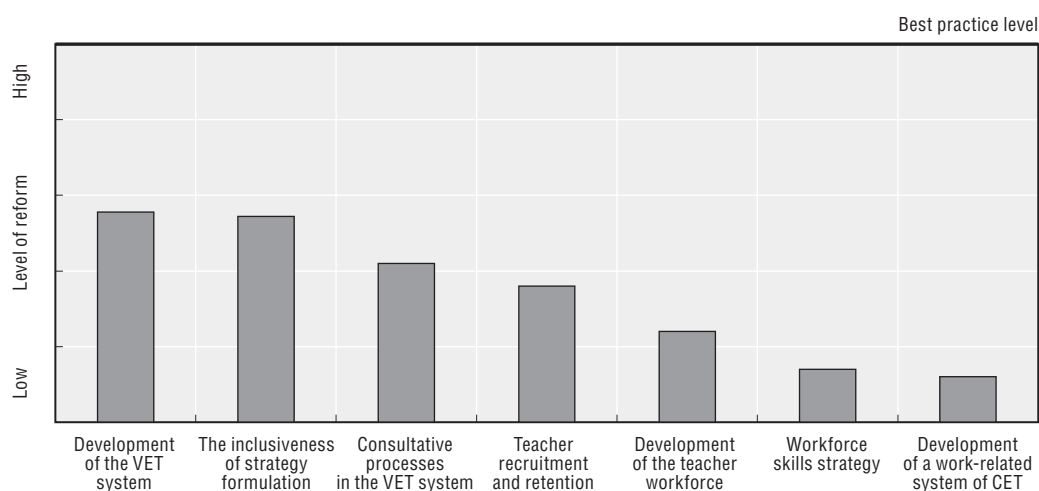
Programme for International Student Assessment (PISA), can result in surprisingly high gains in terms of gross domestic product (GDP) as measured by OECD (OECD, 2010f).<sup>2</sup>

- 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).

### Human capital development in Eastern Europe and South Caucasus: Summary of Findings

The evidence presented here shows that in many of the six countries there are considerable opportunities to improve human capital development and competitiveness potential.

Figure 3.1. **PfC Assessment Framework results: human capital development**



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

### Competitiveness strengths

The countries of Eastern Europe and the South Caucasus (EESC) are all regarded as “high development” countries by the UNDP, with the exception of Republic of Moldova which is a “medium development” country. They all have reasonable basic standards of living, health and education and very little acute poverty, although in some of them education resources are stretched by the high proportion of young people in the population.

All the EESC countries have high literacy rates: 98% or more in the adult population and 99% or more in the young population, for both men and women. All countries also have high female participation in the workforce. In the World Economic Forum's Global Competitiveness Index (GCI) 2010-11, Republic of Moldova ranked 4th in the world on this indicator, Ukraine was 32nd, Azerbaijan 37th and Armenia 41st. Georgia ranked 81st out of 139 countries surveyed (World Economic Forum, 2010). The rate of female participation in Belarus would have put it around 20th, had it featured in the GCI.

Enrolment in primary and secondary education is also quite high. Primary enrolment rates in the six countries range from 84% of the relevant age group in Armenia to 100% in Georgia, but in all the countries at least 98% of both boys and girls progress to secondary school. Secondary enrolment rates range from 80% of the relevant age group in Republic of Moldova to 98% in Azerbaijan.

Two countries – Republic of Moldova and Ukraine – spend above the OECD average on education as a percentage of GDP. Ukraine, Republic of Moldova and Armenia devote an above OECD average share of public spending to education, and Ukraine exceeds the OECD average for the percentage it devotes to tertiary education. Nevertheless, expenditure per student in USD PPP is well below the OECD average in the six countries, in spite of the fact that they all invest quite heavily in teachers and have low pupil-teacher ratios by OECD standards, particularly in secondary schools.

Ukraine and Belarus both have tertiary enrolment rates of over 75%, and a satisfactory percentage of scientists and engineers among their graduates. All the countries except Belarus signed up to the Bologna Process in 2005, and are making their higher education systems compatible with those of over 40 other signatory countries in and around Europe: Georgia and Armenia are closest to achieving this.

Ukraine is well placed in the 2010 Forum GCI ranking (compared to its overall rank) on all key indicators of education quality, research and innovation. On the indicator “education system quality” it ranks highest of the former Soviet Union countries. When Ukraine's GCI Executive Survey respondents were asked to indicate which of 15 specified factors were the most problematic for doing business, they ranked “inadequately educated workforce” in 14th position, with only 1.4% including it in their five most important factors. Just two of the 139 countries participating in the GCI – Argentina and Kenya – ranked this factor as low in importance and had percentages of less than 1.4%.

### **Competitiveness weaknesses**

All the EESC countries spend very little on education per student (in USD PPP) compared to OECD member countries, and lately education seems to have become a lower priority for some. Total public spending on education (USD PPP) in both Belarus and Ukraine was far lower in 2009 than it had been in 2006. The percentage of public spending devoted to education decreased by half between 2005 and 2009 in Azerbaijan and in Georgia has never regained its 2006 levels (see Figures 3.2 to 3.7 below).

By world standards, judging by the performance of students from five of the countries (excluding Belarus) in international comparisons, the quality of school education in the EESC countries ranges from average (Armenia in TIMSS 2007 maths and science, Ukraine in TIMSS 2007 science, Republic of Moldova in PIRLS 2006) through significantly below average (Georgia in TIMSS 2007 and PIRLS 2006), to very low (Azerbaijan's 15-year-olds in PISA 2006 and 2009).

PISA-related studies have shown that Azerbaijan's schools have many problems from which the other EESC countries are unlikely to be immune, given their common Soviet legacy. They include: unwillingness among school leaders and educators to change and improve due to decades of top-down governance with little freedom for individual schools; a system that advantages gifted or talented children and those from better-off families, while disadvantaging the rest (informal selection), where students are grouped into classes according to academic ability and the more able receive a better education (this may start in primary school); an outdated curriculum not adapted to the new demands of a developing society and which overemphasises polytechnic training at the expense of the humanities, thus disadvantaging females; over-reliance on rote learning and memorisation and inadequate attention to problem-solving and creative-thinking skills; little or no effective monitoring of learning; and – probably the worst problem – a teaching profession which is badly paid, little esteemed and attracts only those who cannot get better jobs and who, once they enter the profession, are neither trained nor encouraged to adopt best modern teaching practices.

Tertiary enrolment rates in Azerbaijan, Georgia and the Republic of Moldova are below the level needed to compete effectively with OECD countries. Azerbaijan's rate has been very low for the last 10 years, at 15-16%; access to places is inequitable and upper secondary schooling is blighted by absenteeism as students are privately tutored usually with little hope of winning a coveted place. Georgia's entry rate fell from 46% in 2005 to 26% in 2009 as the system was purged of low-quality, mainly private providers. This may have been necessary but new better-quality institutions have not been set up to replace them. Republic of Moldova's entry rate peaked in 2007 (41%) and then gradually declined to 38% in 2009.

An effective vocational education and training (VET) sector can make a major contribution to a country's competitiveness. Sadly, in most EESC countries the VET system is contributing little or very little. It seems to consist of institutions that governments and employers have forgotten, trying to meet yesterday's labour market needs with the teachers, tools and infrastructure of the day before yesterday. All countries have legislation and strategies for VET improvement but the strategies are in many cases not being implemented, often for lack of funding or delivery mechanisms. Post-secondary VET provision falls short of labour market needs and student demand in terms of quantity (especially in Georgia, Ukraine and Azerbaijan, less so in Belarus), quality and relevance.<sup>3</sup> There is a lack of occupational standards, agreed by employers, on which to base VET courses. Buildings are dilapidated, management of the system is often over-centralised and, where provider networks have not been rationalised, many institutions are teaching the wrong things in the wrong places. But, as with secondary schooling, the most acute problem is that of poorly paid, under-trained teachers and poor quality teaching, using outdated methods and equipment.

At all education and training stages, including VET, employer involvement is very limited. Business representatives may be asked to join national councils or participate in consultations to develop strategies, but are rarely given any role in their implementation. EESC governments are increasingly seeking new funding sources for education and training improvements, but look more to international donors than to their own private sectors. The only evidence of meaningful private sector involvement is the presence of some private tertiary institutions in Georgia, and a few directors of VET colleges in several countries who, on their own initiative, work with employers to identify labour market

needs, define and monitor standards, develop syllabuses and help graduates into the labour market. Continuing education and training (CET), or lifelong learning, is recognised as a concept in several countries but none has made it a reality.

### **Opportunities to develop human capital**

In order to realise their competitiveness potential, all the EESC countries may wish 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.

School enrolment rates are already quite high in the EESC countries, though some could do more to improve access for minority and rural students. However, there is scope for all of them to improve the quality of their school education, especially for less able children. Various international comparisons of student performance in which these five EESC countries have taken part indicate that overall student achievement ranges from around, to considerably below, world averages. So that all six countries (including Belarus) know exactly where they stand and can access expert advice on ways of improving national performance in the key areas of reading, maths and science, it is recommended that in future all six countries participate in OECD's PISA study.

Countries whose tertiary enrolment is below internationally competitive levels – particularly Azerbaijan and Georgia but also Republic of Moldova – need to establish more places in high-quality public or private tertiary institutions. Countries whose tertiary systems currently produce too few scientists and engineers should look at ways of increasing the number of graduates. To ensure that all provision, existing and new, meets the economic needs of the country and its businesses, potential employers or their representatives should be routinely involved in national and local decision-making on the subjects and specialisms to be offered, course content and end-of-course standards. It is also important to ensure equitable access to tertiary opportunities, in fact as well as in law. This includes providing financial support to less well-off students.

The VET systems of all countries need extensive improvement if they are to become internationally competitive and meet the need for modern, effective, job-relevant training delivered on up-to-date equipment by inspirational teachers familiar with modern teaching techniques. Given the legacy of neglect, this is likely to require major new investment. All countries will need detailed delivery plans. It will be critically important to involve national and local employers in all decisions at all stages. The recently-launched European Training Foundation (ETF) project *Lifelong Learning in Eastern Europe*,<sup>4</sup> in which all six countries are participating, should provide a useful framework.

## **Human capital development in Eastern Europe and South Caucasus: An assessment**

This chapter assesses the state of human capital development in the economies of Eastern Europe and South Caucasus. It will consider in greater depth how well the EESC countries have developed their human capital to ensure enough high-quality, relevant education and training to meet the needs of their people and their labour markets. It notes the strengths that exist and the challenges and weaknesses that remain to be addressed. For the EESC countries, individually and collectively, the chapter considers in turn: overall human development indicators; spending on education; inputs to and outcomes of initial education; input to and outcomes of post-secondary education (tertiary and non-tertiary,

including vocational and CET); and other information on human capital development outcomes. The chapter concludes by identifying opportunities and making recommendations to help the countries of the region improve their human capital and so boost their competitiveness prospects.

### **General human development indicators in Eastern Europe and South Caucasus**

Table 3.1 sets out some general indicators of economic and human development for the six countries covered in this report. These indicators are:

- GDP and GDP per capita, current prices, 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 income per capita in USD PPP). The latest UNDP HDI report, published in 2010, ranked 169 countries on the basis of 2008 data (UNDP, 2010). HDI rankings from UNDP 2009, based on 2007 data, are also shown.
- UNDP Multiple Poverty Index (MPI) ratings. Like the Human Poverty Index (HPI), used until 2009, the MPI identifies deprivations across the same three dimensions as the HDI, but in a more sophisticated and multi-dimensional way. The MPI of a country or region is the product of the proportion of poor people and the number and intensity of deprivations that poor households face. But whereas the HPI produces country rankings as well as ratings, the MPI just produces ratings; and many countries – particularly but not only “very high development” countries – have no rating. The best rating a country can get is 0.000 (i.e. no poverty by this definition).

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

	GDP (USD PPP)	GDP per capita (USD PPP)	HDI Rank (of 169) in UNDP HDI 2010	HDI Rank (of 182) in UNDP HDI 2009	Multiple Poverty Index (MPI)
Armenia	16.28	4 982.6	76	84	0.008
Azerbaijan	85.65	9 540.4	67	86	0.021
Belarus	120.87	12 750.3	61	68	0.000
Georgia	20.85	4 753.6	74	89	0.003
Republic of Moldova	10.13	2 838.6	99	117	0.008
Ukraine	289.33	6 330.2	69	85	0.008
<b>Total - region</b>	<b>543.10</b>	<b>6 865.9</b>	n.a.	n.a.	n.a.
<b>Total - CIS countries</b>	<b>2 987.03</b>	<b>6 447.3</b>	n.a.	n.a.	n.a.
<b>Total - EU 27</b>	<b>15 283.6</b>	<b>30 651</b>	n.a.	n.a.	n.a.

Note: EU 27 data for 2008.

Source: Cols 1-2, International Monetary Fund, World Economic Outlook Database, 2010 and OECD Stat Database, 2010; Cols 3-5, UNDP HDI 2010 and 2009 (based on 2008 and 2007 data respectively).

The countries in the sample differ in their relative economic strength and GDP composition. Azerbaijan, Belarus and Ukraine are resource-rich economies, with levels of per capita GDP around or well above the average in Commonwealth of Independent States (CIS) countries of USD 6 447 (PPP) and with solid budget revenues from the export of commodities. Republic of Moldova, Armenia and Georgia are relatively small economies relying (mainly) on services, agriculture and to a large extent remittances. In 2009 remittances accounted for 7.1% of GDP in Georgia, 9% of GDP in Armenia, and over 23% of GDP in Republic of Moldova. The per capita GDP of Belarus, the wealthiest EESC country in

terms of income per head, is 4.5 times higher than that of Republic of Moldova, the weakest economy in the sample.

According to the IMF World Economic Outlook database, between 2004 and 2008, the economies of all six countries grew by 43% on average, but GDP growth has slowed down significantly since 2007 in all countries except Republic of Moldova and Belarus. The economic crisis of 2009 affected them all, albeit with varying intensity, and government expenditure as a share of GDP declined or stagnated in all<sup>5</sup> but Republic of Moldova and Azerbaijan.

The UN indicators (HDI and HPI) suggest that the populations of these six countries enjoy reasonable basic standards of living, health and education. UNDP 2010 classified all the countries as “high development”, except Republic of Moldova which was classified as “medium development”. Since HDI UNDP 2009 (UNDP, 2009), which classified only Belarus as “high development”, all the countries had improved their HDI rankings: Belarus by 7 places, Armenia 8 places, Georgia 15 and Ukraine 17 places (both overtaking Armenia), Republic of Moldova 18 places and Azerbaijan 19 places (both overtaking Armenia and Ukraine). The EESC countries generally have significantly higher UNDP 2010 HDI rankings than the seven Central Asian (CA) countries considered in a new OECD report<sup>6</sup>, even though the CA countries have also improved their rankings: these now range from 66 (Kazakhstan) to 155 (Afghanistan). The MPI ratings of the six EESC countries confirm that acute poverty is not an issue in any of them. Belarus has no measurable poverty and the other countries very little. Even the least well-rated, Azerbaijan, does better on this indicator than EU and OECD member country Estonia (UNDP, 2010).

### **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 shows the relevant indicators for the latest year available.

Public spending on education as a proportion of a country's GDP is twice the OECD average in Republic of Moldova, higher than the OECD average in Ukraine, not far less in Belarus and significantly less in Armenia, Azerbaijan and Georgia. The EESC countries spend larger proportions of their public funds and per capita GDP on education than OECD members. Yet, due to low average levels of income, spending per student in absolute terms (USD PPP) hardly reaches 1/20th of the OECD average, even after adjusting for differences in purchasing power. Armenia and Georgia spend least. The percentage of the education budget devoted to post-secondary education is highest in Ukraine and Belarus, though only Ukraine exceeds the OECD average for the percentage devoted to tertiary education; Armenia, Georgia and Azerbaijan are well below the average (Table 3.2).

Over the past few years the economically weaker countries in the group sustained (Armenia) or even increased (Georgia, Republic of Moldova) the share of public funding earmarked for education. This is a commendable effort considering the slow-down in growth and the associated fiscal constraints. This might be an expression of the priority attached to education or it might be a sign of inefficiencies and budget rigidity due to costly items such as wages, maintenance of infrastructure, etc. Despite a high proportion of public resources invested, spending per student in these three countries is the lowest in the EESC region. In all of them relatively large young populations of compulsory school age put additional pressure on the budget.



Table 3.2. **Public spending on education at all levels except pre-school, 2009**

	Notes	As % of GDP	As % of all public spending	Spending per student (% of GDP per capita)	Spending per student (USD PPP)	Spending: tertiary (% of total education spending)	Spending: post-secondary, non-tertiary (% of total education spending)
		(1)	(2)	(3)	(4)	(5)	(6)
Armenia	1	3	15	9.8	488.3	13.8	m
Azerbaijan	2	2.8	9.1	25.2	2404.2	11.3	5.2
Belarus	3	4.5	8.9	49.9	6362.4	20.1	7.5
Georgia	4	4.2	8.6	14.1	670.3	11.6	1.9
Republic of Moldova		9.6	21	34.2	970.8	18.1	0.4
Ukraine	5	5.3	20.2	24.4	1544.6	28.8	6.0
Regional average	6	4.7	13.7	26.3	1650.5	17.3	4.2
CIS average	7	4.7	18.3	14.1	909.1	15.8	4.1
OECD average	8	4.8	13.3	24.5	32 364	25.2	m

Note: 1. Data for column 5 from 2010. All other data from 2007; 2. Data in column 6 for 2008; 3. Data in column 4 for 2007; 4. Data in columns 1 and 2 is from GEOSTAT and Georgian State Budget, 2009, respectively; calculations for columns 3 and 6 are based on data from IMF, WEO and UIS 2010; Data in columns 5 and 6 for 2008; 5. Data from 2007; 6. Figure in column 6 excludes Armenia; 7. Data in column 3 is average for 2003-2006. Data in cols 5-6 excl. Turkmenistan and Uzbekistan, in col. 6 excl. Russia and Armenia. Data for Russia used for column 5 from 2006, for Armenia and Georgia from 2008; Data for Republic of Moldova and Georgia used in column 6 from 2008. All other data from 2007; 8. Including public subsidies to households attributable for educational institutions, and direct expenditure on educational institutions from international sources.

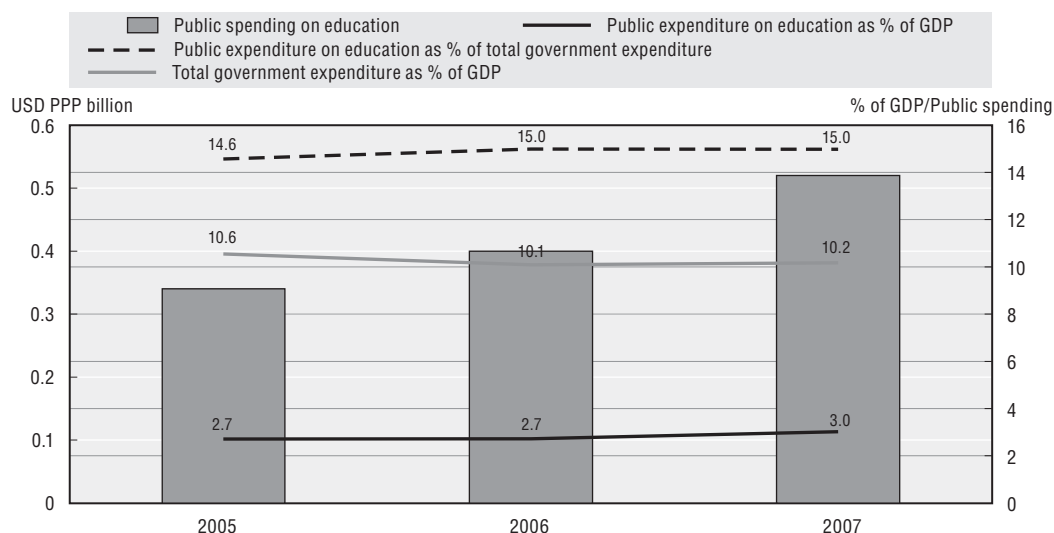
Source: International Monetary Fund, World Economic Outlook Database, 2010; UNDP HDI 2010; UNESCO Institute for Statistics 2010; OECD Education at a Glance 2010; World Bank WDI Database 2010; National Statistics Office of Georgia; State Budget of Georgia, 2009.

The figures below illustrate spending patterns in these countries in some detail, and show how spending on education has changed in each EESC country in response to changes in economic fortunes.

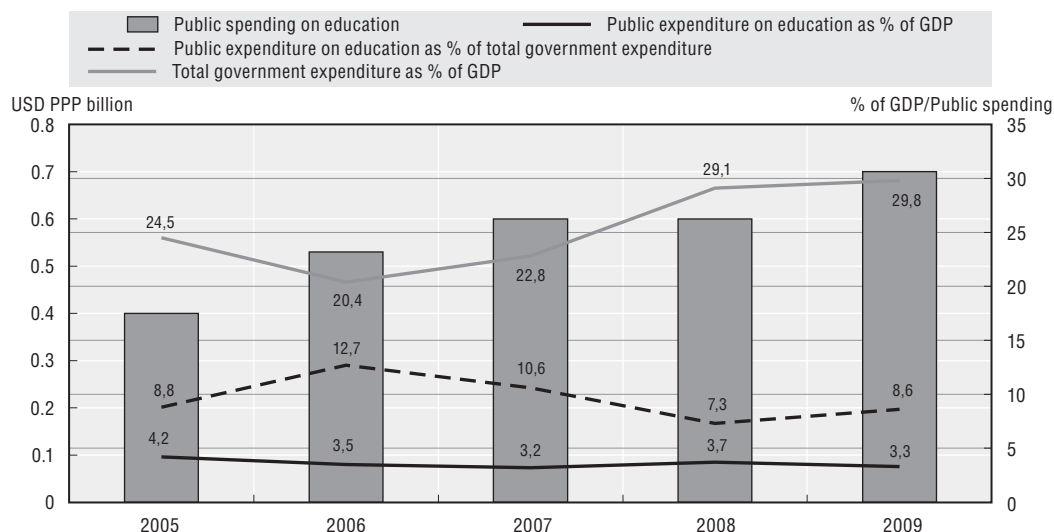
In Armenia spending on education as a share of GDP is low by international standards. Figure 3.2 shows that in the three years to 2007 (the latest year for which all the figures are available) public spending on education rose significantly in absolute terms. However, because the economy was also growing by over 13% per annum, education spending rose hardly at all as a percentage of GDP and was stagnating as a percentage of total public spending. The resources invested in the system are spread thin among a comparatively large portion of the population (20%) of compulsory school age, which translates into the lowest per capita spending on education in the EESC region (USD 488 PPP, or just 1.5% of the OECD average). With such levels of spending, much-needed education reforms in Armenia may depend heavily on external support.

The GDP of Georgia rose by 9.4% in 2006, 12.3% in 2007 and by 2.3% in 2008, before falling by 3.8% in 2009 (GEOSTAT). Budget allocations for the sector remained conservative throughout that period. Between 2005 and 2006, spending on education increased in absolute terms (despite cuts in public spending), but between 2007 and 2008 it remained at the same level despite a growing economy and increases in government spending that reached 29.8% of GDP in 2009, driven by spending on defence. Despite all this, spending per student is well below the regional and CIS average.

In Republic of Moldova (Figure 3.4) the best years for GDP growth were 2005 and 2008; in both years growth was between 7.5% and 8%. The intervening years saw lower growth, and in 2009 GDP fell by nearly 6.5%. Yet throughout the 2005-09 period as a whole, the proportion of public funds spent on education rose every year to levels above the OECD

Figure 3.2. **Education spending as percentage of GDP and of public spending in Armenia 2005-07**

Source: OECD, based on data from UNESCO UIS 2010.

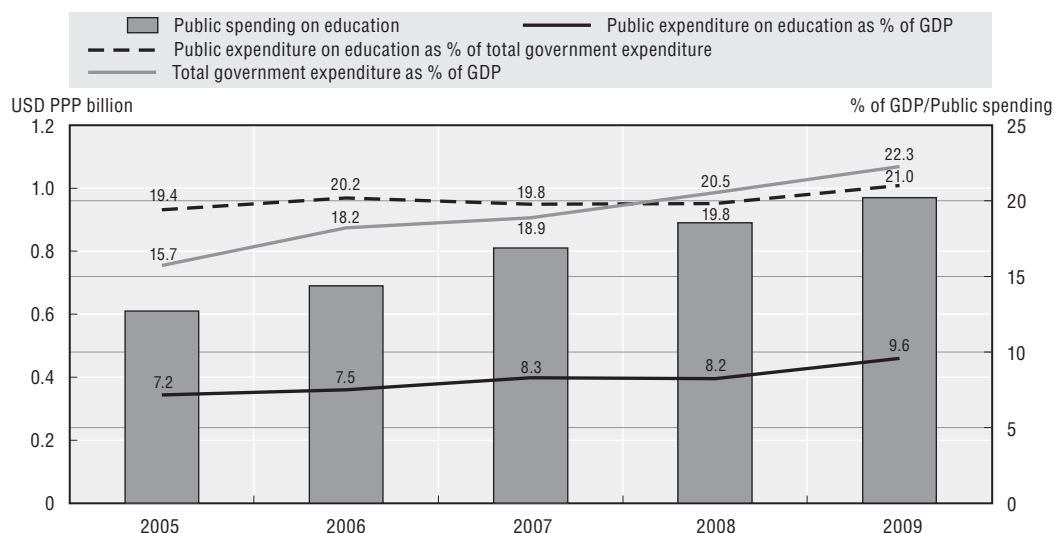
Figure 3.3. **Education spending as percentage of GDP and of public spending in Georgia 2005-09**

Source: OECD, based on data from GEOSTAT, national sources.

average, with spending per student higher than the average for the CIS region. Maintaining this relatively high level of investment is very costly; in 2009 it amounted to an extraordinary 9.6% of GDP. Political support for such a high level of fiscal commitment, if maintained, will, more than elsewhere, depend on the quality that education delivers for the money invested.

In the resource-rich group of countries (Azerbaijan, Belarus and Ukraine), trends and levels of spending on education over the same period were somewhat different. While in all three countries (except in Azerbaijan in 2009) the share of GDP spent on education declined, stunning rates of GDP growth (97% in Azerbaijan in the period 2004-08, 40% in

Figure 3.4. **Education spending as percentage of GDP and of public spending in Republic of Moldova 2005-09**



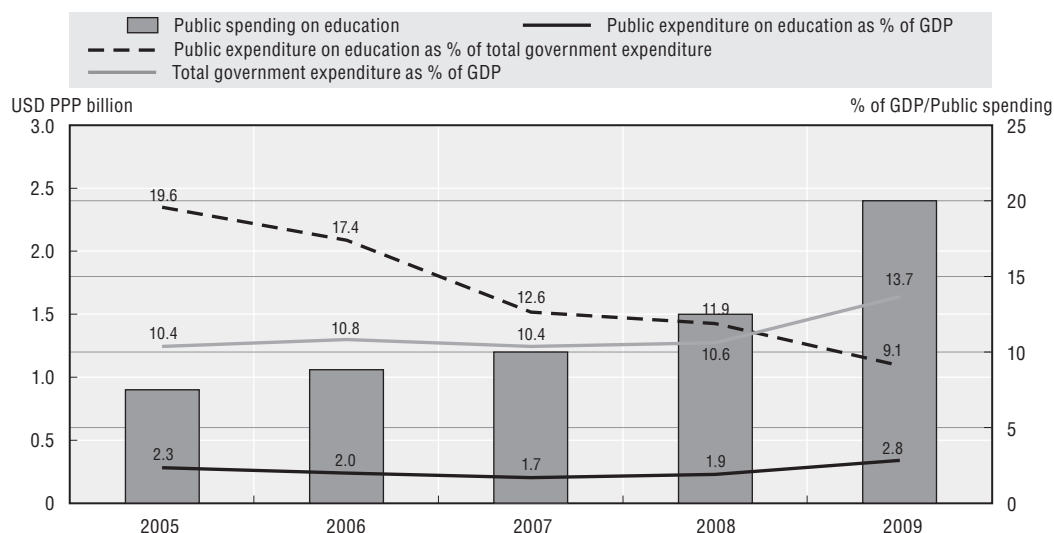
Source: OECD, based on data from UNESCO UIS 2010.

Belarus and 20% in Ukraine) allowed for a considerable increase in education expenditure in absolute terms.

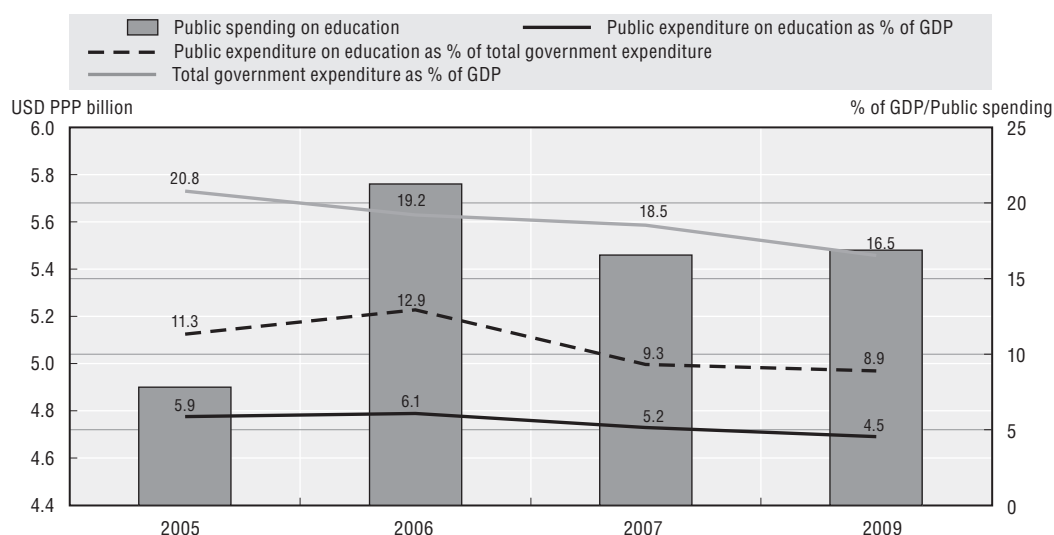
If budget allocations are an indicator of the relative priority of different policy areas, education seems to be becoming much less important in Azerbaijan. In a country with breathtaking GDP growth rates (26%, 34%, 25%, 11% and 9% from 2005 to 2009) and the largest school-age population in the EESC sample (24%), the share of public spending on education fell every year – from 20% in 2005 to less than half that in 2009. In 2009, Azerbaijan spent the smallest proportion of its national wealth on education of all the EESC countries (2.8% of GDP). This modest percentage is disguised by very high budget revenues, which translate into the second highest level of per student expenditure in absolute terms in the EESC region, after Belarus.

In Belarus (Figure 3.6) education spending as a percentage of GDP – 6.1% in 2006 – had dropped to 4.5% by 2009. As a percentage of total public spending, spending on education peaked at nearly 13% in 2006. Had this level been maintained until 2009, Belarus would have been nearer the OECD average of 13.3%; instead, it dropped back to under 9%, the second lowest of any EESC country. Despite clear downward trends since 2006, because the percentage of the population aged 0-14 is relatively low (15%) and public spending is quite high (typical for a system with central planning), in 2009 the level of expenditure per student still equalled half of per capita GDP. In absolute terms this is three times more than the per-student investment of Azerbaijan, the second highest ranked in the EESC group (see Table 3.2 above, column 4).

For Ukraine (Figure 3.7), as for Armenia, the most recent complete information is from 2007. In the 2005-07 period shown, annual GDP growth was regular but not startling – 2.7% in 2005, 7.3% in 2006, 7.9% in 2007. Subsequently, GDP grew just 2% in 2008, and fell by some 15% in 2009. In absolute terms, education spending grew in 2006 and fell back in 2007; as a percentage of GDP it rose almost imperceptibly in 2006, only to fall back in 2007. However, education spending as a percentage of total public spending rose throughout the period

Figure 3.5. **Education spending as percentage of GDP and of public spending in Azerbaijan, 2005-09**

Source: OECD, based on data from UNESCO UIS 2010.

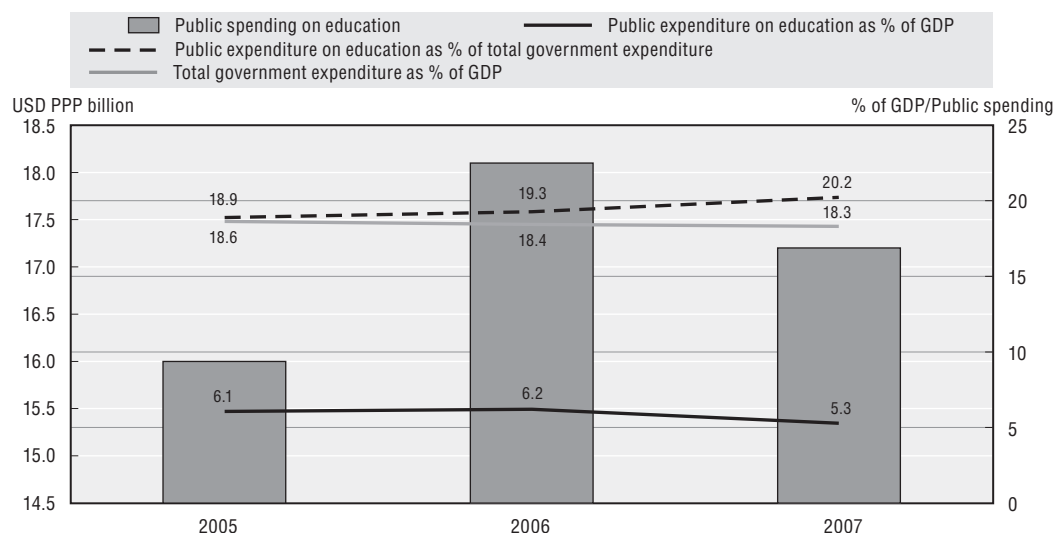
Figure 3.6. **Education spending as percentage of GDP and of public spending in Belarus, 2005-09**

Source: Source: OECD, based on data from UNESCO UIS 2010.

illustrated. On both indicators, Ukraine ranks second after Republic of Moldova among the EESC countries.

- In addition to considering the size of budget allocations, it is important to consider whether the spending on education in the EESC countries is efficient and well-targeted and whether the countries are getting value from their spending. Spending more on education does not automatically lead to a better quality of education. To assess the efficiency of spending it is necessary to consider:
- the extent of education-related needs in each country;

Figure 3.7. **Education spending as percentage of GDP and of public spending in Ukraine, 2005-07**



Source: OECD, based on data from UNESCO UIS 2010.

- what public spending is buying as education inputs; and
- what public spending is buying in terms of outcomes.

## Initial education: Inputs and outcomes

### Education-related needs

Needs for initial education at primary and secondary school depend to a large extent on the size of a country's young population, and whether this is likely to grow or shrink. 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. As this table shows, Ukraine's population of 46 million is considerably larger than the populations of all the other countries combined, but it has the smallest share of youth under the age of 14 of them all.

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

Notes		Population (million) 2009	Population 0-14 (%)	Birthrate (per 1000) 2008
		(1)	(2)	(3)
	1	3.08	20	15
		8.78	24	18
		9.66	15	11
		4.26	17	12
	2	3.6	17	12
		46	14	11

Source: World Bank WDI Database, 2010.

In spite of their different sizes, the population of most of these six countries are shrinking and ageing due to low birth rates, increasing mortality and emigration. Belarus, Georgia, Republic of Moldova and Ukraine have similar birth rates to those of most of the

developed countries of Western Europe and North America, and similar percentages of young people in their populations. Though some – Republic of Moldova, for example<sup>7</sup> – are very concerned about having a live birthrate below the replacement rate, one consolation is that they do not need to invest more (in PPP terms) in education than the average OECD member country to achieve competitive standards of education for all their young people. Armenia is at the upper end of the OECD spectrum with the percentage of its young population comparable to that of the US, New Zealand and Ireland. Azerbaijan has the greatest numbers needing education: the percentage of its young population is similar to that of South American countries with higher birthrates such as Chile (23%), Argentina (25%) and Brazil (26%) (World Bank WDI database, 2010).

In most of these countries there is an obvious mismatch between levels of spending and the share of the population aged 0-14. Belarus invests most in terms of per student expenditure, although it has the second lowest share of youth population in the EESC sample. Armenia spends least per student of all EESC countries, and has the second highest proportion of youth. Azerbaijan invests the lowest share of national wealth in education, but has the highest share of youth below the age of 14 in the region. Ukraine spends 20.3 % of its budget on education (the second highest share of all six countries) and devotes 5.3% of its GDP to the sector, but it has the lowest proportion of young population. Republic of Moldova spends 9.6% of its GDP on education, but the youth share of the population is the same as in Georgia, which spends only 4.2%.

The mismatch between demographics and education spending could be an indication that in some of the countries, such as Armenia and Azerbaijan, the resources provided for education are insufficient to address the needs of a large school-age population, while in others, such as Republic of Moldova and Belarus, the education system is not efficient.

### **What public spending on initial education is buying: Inputs**

Table 3.4 gives some relevant indicators: the number of years of primary and secondary schooling each country provides; the percentages of the school-age cohort enrolled in primary and secondary education; and progression rates from primary to secondary education.

In Azerbaijan, Belarus, Georgia and Ukraine, children start school at the age of six (at the age of five in case of Georgia), receive 11 years of schooling and leave school at or after the age of 17. In Republic of Moldova, children also receive 11 years of schooling but start and end primary school a year later, leaving secondary school at age 18. Armenia – the country which spends least on education in USD (PPP) and as a percentage of GDP per capita – offers just 10 years of schooling: children start school at age seven, as in Republic of Moldova, but transfer to secondary school at 10 and leave at 17 as in the other four countries.

It is worrying to see primary completion rates significantly below 100% – unless the explanation lies in birth-rate fluctuations. Table 3.4 shows quite low completion rates for both Republic of Moldova and Belarus: though for Belarus the figures shown here (the latest WDI figures with a male/female breakdown) are for 2007 and the position may have improved since then. For 2008 the WDI shows Belarus total completion rates as 96%.

Column 4 in Table 3.4 shows some primary completion rates of over 100% – in Azerbaijan for both sexes and in Georgia (to a lesser extent) for boys only. This indicates that class numbers in the last grade have been swelled by older-than-typical pupils who at an earlier stage have been made to repeat years before they were permitted to move up to

Table 3.4. **Primary and secondary years of schooling, enrolment and completion rates, 2009**

	Notes	Primary (P), secondary (S) and total (T) years of schooling	P to S transfer age	Net enrolment rate (%) primary	Primary completion rate (% of age group) total (male/female)	Progression to secondary school (%) male/female	Net enrolment rate (%) secondary
		(1)	(2)	(3)	(4)	(5)	(6)
Armenia	1	P3 S7 <b>T10</b>	10	84.1	98 (M 96, F 100)	M 100, F 98	87.2
Azerbaijan	2	P4 S7 <b>T11</b>	10	96	121 (M 123, F 119)	M 100, F 98	98.3
Belarus	3	P4 S7 <b>T11</b>	10	94.4	92 (M 93, F 92)	M 100, F 100	86.8
Georgia	4	P4 S7 <b>T11</b>	10	99.6	100 (M 103, F 97)	M 99, F 100	80.8
Republic of Moldova		P4 S7 <b>T11</b>	11	87.7	91 (M 92, F 90)	M 99, F 98	79.6
Ukraine	5	P4 S7 <b>T11</b>	10	88.6	99 (M 98, F 99)	M 100, F 100	84.9

Notes: All data in columns 1 and 2 is from 2010. Net enrolment rates and primary completion rates are calculated as percentages of the total number of children in a given school-age group (i. e. primary, secondary) enrolled in or completing the corresponding level of education.

1. Data in columns 4-5 from 2007

2. Data in columns 3-6 from 2008

3. Data in column 3 from 2008, in columns 4 and 6 from 2007, in column 5 from 2006

4. Data in columns 4 from 2008, in columns 5-6 from 2007

5. Data in column 4 from 2008, column 5 from 2007.

Source: World Bank WDI Database 2010 for Cols 4 and 5; otherwise UNESCO-UIS 2010.

the next grade. This happens in many countries of the world but is inefficient. It de-motivates under-achievers, often causing them to drop out before completion. Better teaching and more individualised help could put them back on track and prevent the waste of resources from the public purse which otherwise must fund their extra years in school.

Despite the interesting variances shown in column 4 (primary completion rate as % of age group) and column 6 (net secondary enrolment rate), column 5 (progression to secondary school) suggests that in all the countries, at least 98% of primary school pupils of both sexes move on to secondary school sooner or later. In Belarus and Ukraine, 100% of both sexes do so. Hopefully, all the countries were able to maintain this competitive level of participation in 2009 and 2010, throughout the global recession and economic shocks.

Table 3.5. **Primary and secondary pupil-teacher ratios**

	Notes	Pupil-teacher ratio primary (2008)	Pupil-teacher ratio secondary (2007)
		(1)	(2)
Armenia	1	19	7
Azerbaijan		11	8
Belarus	2	15	8
Georgia		9	8
Republic of Moldova		16	11
Ukraine		16	11
<b>OECD average (2008)</b>		<b>16.4</b>	<b>13.7</b>

1. Data in column 1 from 2007. 2. Data in column 1 from 2010.

Source: UNESCO UIS 2010; OECD average from Education at a Glance 2010.

Pupil-teacher ratios provide another indication of what public spending on education is buying. Low pupil-teacher ratios indicate that national public spending is buying more inputs to education. All the countries are investing quite heavily in teachers, compared to

OECD averages. In primary education, Armenia's pupil-teacher ratio is the highest, but it is not much above the OECD average: Georgia and Azerbaijan are well below that. In secondary education all the countries are below the OECD average, Armenia's ratio being the lowest.

However, it is questionable whether pupil-teacher ratios in the EESC countries need to be as low as they are. Having a low pupil-teacher ratio does not guarantee good quality and standards of education. Korea, the best-performing OECD country in PISA 2009 and in 2008 had pupil-teacher ratios of 24:1 in primary and 18:1 in secondary education in 2008 (OECD, 2010a). Many former Soviet Union countries have low pupil-teacher ratios less from policy choice than from historical accident and inertia – for example because rural populations have moved into the cities while rural teachers have remained in the country teaching smaller and smaller classes. It might well be, as OECD suggested in its recent review of Kyrgyz Republic, that these countries could improve the efficiency and effectiveness of their education systems by having fewer but better teachers.

### **What public spending on initial education is buying: Outcomes**

One key outcome of education is literacy rates. These are very important to national competitiveness: as already mentioned, research suggests that a country capable of attaining literacy scores 1% higher than the international average might expect to achieve levels of labour productivity 2.5% higher than the international average. The literacy rates of the adult populations (aged 15+) in the six countries, and their young adult populations (aged 15-24) who emerged most recently from education, are shown in Table 3.6. Adult and youth literacy rates are impressive in all the EESC countries. Republic of Moldova does least well, with an adult literacy rate of 98.3%, but its youth literacy rate is now up to 99.5%. Also, Republic of Moldova's female youth literacy rate is higher than the male rate, redressing the disadvantage of females in the adult population. Azerbaijan had achieved 100% youth literacy by 2007.

**Table 3.6. Literacy rates, 2008**

Notes	Literacy rate adult population (15+)			Youth literacy rate (15-24)		
	(1)			(2)		
	M	F	M + F	M + F	M	F
Armenia	99.7	99.4	99.5	99.8	99.7	99.8
Azerbaijan	99.8	99.2	99.5	100	100	100
Belarus	99.8	99.7	99.7	99.8	99.7	99.8
Georgia	99.8	99.7	99.7	99.8	99.8	99.9
Republic of Moldova	99	97.8	98.3	99.5	99.3	99.7
Ukraine	99.8	99.6	99.7	99.8	99.7	99.8

1. Data from 2007

Source: UNESCO UIS 2010.

Another key outcome of compulsory education is the number and percentage of young people going on to tertiary or other post-secondary education or training. This is considered in the next section. However, where enrolment rates are low, this does not necessarily mean that the school system has failed. Well-qualified young people who could benefit may not be enrolling because there are too few places and/or barriers to access. Even where enrolment rates are high, it must be established that those enrolling in post-secondary



training have the preparation to complete it successfully. A vital outcome to obtain from education spending, therefore, is good quality education for all pupils.

### **The quality of school education**

As national definitions of high-quality schooling vary, the best way to judge the quality of schooling in different countries is through international comparisons of student performance. Three established surveys do this: OECD's Programme for International Student Assessment (PISA); the International Education Association's (IEA's) study of Trends in Mathematics and Science Study (TIMSS); and the IEA's Progress in International Reading Literacy Study (PIRLS). Azerbaijan participated in PISA in 2009 and 2006, Armenia, Georgia and Ukraine in TIMSS in 2007, Georgia and Republic of Moldova in PIRLS in 2006. Belarus is the only EESC country for which we have no internationally comparable evidence on student performance.

Table 3.7 shows Azerbaijan's results in PISA 2009, OECD's three-yearly study of the comparative performance of 15-year-olds in secondary school, with some comparisons.

**Table 3.7. Average point scores of students from Azerbaijan in PISA, 2009**

	On Reading scale	On Mathematics scale	On Science scale
<b>Azerbaijan</b>	<b>362</b>	<b>431</b>	<b>373</b>
<i>Kyrgyz Republic (lowest scorer)</i>	314	331	330
<i>Kazakhstan</i>	390	405	400
<i>Russian Federation</i>	459	468	478
<b>OECD average</b>	<b>494</b>	<b>496</b>	<b>501</b>
<i>Shanghai-China (highest scorer)</i>	556	600	575

Source: Programme for International Student Assessment (PISA 2009) report.

The main subject focus of PISA 2009 was reading. On the overall reading scale Azerbaijan's score of 362 was the second-lowest of the 65 countries participating. A 39 score point difference is considered to equal one year's progress; therefore Azerbaijan's 15-year-olds are more than three years behind the average OECD country in reading and nearly five years behind the highest scorer, Shanghai-China. On the reading sub-scales, the country's students scored higher (373 on average) for their ability to integrate and interpret what they were reading; lower for reflecting on and evaluating what they had read (335) and for reading non-continuous texts (351); and about the same (361 or 362) for accessing and retrieving information and for reading continuous texts. PISA results also show the level of proficiency reached by each country's students. Students who do not attain the PISA baseline proficiency Level 2 in reading lack the essential skills needed to participate effectively and productively in society. At the other end of the performance range, countries can gain competitive advantage in the knowledge economy by educating their students to handle complex reading tasks at Levels 5 and 6. More than 70% of Azerbaijan's students had a reading proficiency level below Level 2; virtually none reached Level 5 or 6. On the overall reading scale, where girls out-scored boys in all PISA countries, the difference in Azerbaijan was the fourth-lowest in the survey: just over 20 points against an OECD average of 39 points.

On the PISA mathematics scale, the average score of 431 achieved by Azerbaijani students was higher than the scores of 20 other survey countries, including Kazakhstan. However, OECD emphasises that small point differences do not necessarily indicate

significant differences in performance. Even in mathematics, Azerbaijan's 15-year-olds are some 20 months behind the OECD average. However, more than 50% achieved at least Level 2 proficiency in maths, the baseline level at which students can use basic mathematical algorithms, formulae, procedures or conventions and can reason mathematically; a few reached Levels 5 and 6. Boys outperform girls in maths by an average of 12 points in OECD member countries, but in Azerbaijan, the lead for boys is slightly less.

On the PISA science scale, the average score of 373 for Azerbaijani students was the third-lowest of the 65 PISA countries. Below it on average scores were Peru and Kyrgyz Republic, although Peru actually had fewer students below, and more above, the baseline Level 2. At Level 2 students have enough scientific knowledge to provide possible explanations in familiar contexts or draw conclusions based on simple investigations. This level was reached by around 30% of Azerbaijani students; virtually none reached Levels 5 or 6. Across OECD countries, on average, girls and boys performed the same in science; in Azerbaijan, the girls performed slightly better (OECD, 2010d).

These PISA results suggest that Azerbaijan will need to work very hard to bring the quality of secondary schooling up to a level which will enable its students to compete effectively in the global economy. OECD's PISA 2009 report analyses a number of contextual factors which may affect student performance and help each country achieve the desired level of excellence with equity. Azerbaijan's school system is already more equitable than most: in only four of the countries surveyed did the socio-economic background of students make less of a difference to their reading performance. There was no significant difference between the average reading performance of students in country villages and those in towns and cities, unless they lived in the capital, Baku, (as nearly one in four of Azerbaijan's people do). Students in the capital appear to be about a year ahead of those living anywhere else.<sup>8</sup> Whereas in most OECD countries there is quite a strong association between reading performance and whether or not the student enjoys reading, in Azerbaijan this association is weak. Schools with relatively disadvantaged students have the benefit of fewer students per teacher (though this could just be, as suggested earlier, because of failure to re-allocate teachers no longer needed in rural areas) but also the disadvantage of fewer graduates among their full-time teachers, compared with schools with relatively advantaged students.

The PISA 2009 report also notes that reading scores tend to be lower in countries where students repeat grades more often (as is the case in Azerbaijan, Kyrgyz Republic and the Russian Federation); and in countries where schools have less autonomy over the curriculum and assessment of student performance (both are true of schools in Azerbaijan and Kazakhstan). Conversely, students perform better in those countries that invest more in education and pay teachers more, relative to national income, rather than investing in smaller classes (Azerbaijan, Kazakhstan, Kyrgyz Republic and the Russian Federation are all identified as having low spending on education and low teacher salaries combined with unnecessarily small classes).

It is discouraging to note that Azerbaijan did no better in PISA 2009 than in PISA 2006. In 2006, the country ranked just above Kyrgyz Republic, the lowest scorer in both reading and science. Azerbaijan's mean reading score was nine points lower in 2006 than in 2009, but the mean science score was nine points higher. OECD did not publish a math score for Azerbaijan in 2006 because of "problems with the data", though the Ministry of Education in Azerbaijan stated on its website that the country had arrived fourth in the math ranking overall.

UNICEF published a most interesting comparative analysis of the 2006 PISA results of students in Central and Eastern European (CEE) and Commonwealth of Independent States (CIS) countries, including Azerbaijan (UNICEF, 2009). The key findings – summarised in Box 3.1 below – highlight a number of school performance issues likely to apply at least in part to other EESC countries too, given their common Soviet legacy.

**Box 3.1. School quality issues in Azerbaijan – an EESC case study from PISA results**

Compared to OECD countries, schools in the nine Central and Eastern European countries (CEE) and the eight countries of the Commonwealth of Independent States (CIS) participating in the study\* tended to have the following characteristics:

- Decades of top-down authoritarian governance with little freedom given to individual schools, create considerable inertia and an unwillingness among educators to obtain new skills.
  - Laws which guarantee equal access for all children to quality education, combined with a system that advantages children who are gifted or talented or from families that are better off socially and economically. “Elite schools”, often in country capitals like Baku, provide much better education but require parents to pay additional (often hidden) attendance fees and tend to be far from the districts where low-income families live. Azerbaijan, for example, has concentrated its limited government funding on “magnet” schools for gifted students, leaving the needs of most schools, especially the rural ones, to the discretion of the community or foreign donors. The advantaged children may do well in Olympiads but the disadvantaged (who are more numerous) drag down average PISA scores.
  - Formal and/or informal selection. In Azerbaijan, formal selection of students in schools occurs at or after age 15, but informal selection starts as early as primary school when schools begin differentiating students into classes according to their academic ability. The “better” students typically get higher quality education.
  - An outdated curriculum, not transformed to meet the new demands of a developing society. The old Soviet approach to content development overemphasised polytechnic training at the expense of the humanities (which also places females at a relative disadvantage), relied too heavily on rote learning and memorisation and gave inadequate attention to problem-solving and creative thinking skills.
  - Little or no effective monitoring of learning.
- Azerbaijan differed from other CEE/CIS countries in the study in:
- Having seen a fall in student achievement since Soviet times (this is also true of Bulgaria, Romania, the Russian Federation and Kyrgyz Republic).
  - Having a worse record (except Bulgaria and Romania) for providing access to education for children of minorities such as the Roma and refugee children.
  - As many as three quarters of school principals in the region expressed concern that the shortage or inadequacy of educational resources hindered their capacity to provide instruction (also true of the Russian Federation and Montenegro);
  - More vacant science teaching positions (13%, exceeded only by Kyrgyz Republic);

### Box 3.1. School quality issues in Azerbaijan – an EESC case study from PISA results (cont.)

- Probably the highest real absenteeism rate for 15-year-olds in the region, exceeding Kyrgyz Republic's 22%. Absentees often go unrecorded in Azerbaijan where schools fear sanctions from local and educational authorities. Rural schools have problems with children involved in farm work, while in urban schools over 80% per cent of children are not attending school because they are engaged in private tutoring instead. Because passing the national exam is the only way to enter higher education, which requires private tutoring, students who do this are never reported as missing from school;
- A lack of school involvement in budget allocations and in the choice of textbooks;
- A lack of funding for heating and school maintenance and new textbooks – in remote regions, some mathematics and science textbooks are more than 40 years old;
- The second-lowest percentage of children attending preschool (13% in 2006, 17% in 2009).

However, the UNICEF report points to the quality of teachers as probably Azerbaijan's biggest problem, quoting a McKinsey report that "the quality of an education system cannot exceed the quality of its teachers."<sup>\*</sup> In Azerbaijan, 10% of the total teacher population left the profession in the four years between 2003 and 2006, and there are still teacher shortages of at least 10% today. As in all the CEE/CIS countries, teaching in Azerbaijan is considered to be an unattractive job, often attracting only those who are not able to secure more respected jobs in the professions. Teacher-training institutions accept almost everyone who applies and teachers are among the lowest paid professions, particularly in Kyrgyz Republic and Azerbaijan where they earn less than USD 100 per month. Once teachers enter the profession, they are not trained or encouraged to use any modern teaching techniques such as small group work or active and interactive learning and projects. They give no priority to helping children who lag behind their peers academically or have special needs. Secondary school teachers in Azerbaijan prefer to devote all their efforts to private tutoring preparing students for university entry.

\* The study focused on nine countries with a UNICEF programme of cooperation in education: Azerbaijan, Bulgaria, Croatia, Kyrgyz Republic, Montenegro, Romania, Russian Federation, Serbia and Turkey. For comparison, it also presented results from the eight countries that joined the EU in 2004:– the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

\* Barber, M. and N. Mourshed, 2007. How the world's best-performing school systems come out on top. McKinsey & Company. Retrieved 23 October 2008 from [www.mckinsey.com/client-service/social-sector/resources/pdf/Worlds\\_School\\_systems\\_final.pdf](http://www.mckinsey.com/client-service/social-sector/resources/pdf/Worlds_School_systems_final.pdf).

Source : OECD, PISA

Four other EESC countries have participated in international student performance comparisons carried out by the IEA. Armenia, Georgia and Ukraine took part in the study of Trends in Mathematics and Science (**TIMSS**), which takes place every four years. In the TIMSS, countries can compare the performance of their students in the 4th grade (10-year-olds) or 8th grade (14-year-olds) or both – Armenia, Georgia and Ukraine chose both. And in 2006, Georgia and Republic of Moldova took part in the Progress in International Reading Literacy Study (**PIRLS**), a study for 4th grade students (10-year-olds) which takes place every five years. Table 3.8 shows the results of both IEA surveys.

In **TIMSS 2007**, Armenian students achieved the best average scores in both the 4th grade and the 8th grade rankings, for both maths and science. They equalled or almost equalled the TIMSS scale average in maths and approached the average in science, coming within 100 points of the highest-scoring country. Ukrainian students did next best, coming

**Table 3.8. Average point scores of students from Armenia, Georgia and Ukraine in TIMSS, 2007; students from Georgia and Republic of Moldova in PIRLS, 2006**

	TIMSS 2007				PIRLS 2006	
	4th grade reading (placing out of 45 countries)	4th grade maths (placing out of 36 countries)	4th grade science (placing out of 36 countries)	8th grade maths (placing out of 48 countries)	8th grade science (placing out of 48 countries)	
<b>Armenia</b>	500 (20th)	484 (24th)	499 (13th)	488 (17th)		
<b>Georgia</b>	438 (27th)	418 (28th)	410 (33rd)	421 (37th)	<b>Georgia</b>	471 (37th)
<b>Ukraine</b>	469 (26th)	474 (26th)	462 (25th)	485 (19th)	<b>Republic of Moldova</b>	500 (33 rd)
<b>TIMSS scale average</b>	500	500	500	500	<b>PIRLS scale average</b>	500
<i>Lowest scorer</i>	224 (Yemen)	197 (Yemen)	307 (Qatar)	303 (Qatar)	<i>Lowest scorer</i>	302 (South Africa)
<i>Highest scorer</i>	607 (Hong Kong)	587 (Singapore)	598 (Chinese Taipei)	567 (Singapore)	<i>Highest scorer</i>	565 (Russian Federation)

Sources: TIMSS 2007 reports on International Student Achievement in Maths and Science, PIRLS 2006 report on International Student Achievement in Reading.

within 31-37 points of Armenian students in maths and within 3-10 points of Armenian students in science; in science the differences between the average scores of the two countries were not statistically significant. Georgian students did least well, though their average scores were within 31-64 points of those of Ukraine students and within 62-89 points of those in Armenia. In the 4th grade (primary school) survey, all the EESC countries were in the bottom half of the table of countries; in the 8th grade (secondary school) survey, Georgia was still in the bottom half and Armenia was in the top half. Ukraine was in the top half for science and in the middle for maths. Between 2003 and 2007, Armenia, the only country of the three to have participated in TIMSS more than once, had boosted its average 4th grade maths scores by 44 points and its 8th grade maths scores by 21 points. Their average science scores had improved even more – by 48 and 27 points respectively.

The TIMSS survey also differentiates between results obtained by girls and by boys. In 4th-grade maths, girls scored the same as boys in Ukraine, 3 points more in Armenia and a statistically significant 9 points more in Georgia. In 8th-grade maths, girls were 4 points ahead in Armenia and Georgia, 5 points ahead in Ukraine. In 4th-grade science, girls were 2 points ahead of boys in Ukraine, 10 points ahead in Georgia and 17 in Armenia (the latter two differences being significant). In 8th-grade science, boys were 2 points ahead in Ukraine, but in the other two countries girls still led, by 8 points in Armenia and a significant 22 points in Georgia.

The TIMSS survey also looks at how many of a country's students reach "international benchmarks" – a low benchmark (400 points), an intermediate benchmark (475 points) and high and advanced benchmarks (550 and 625 points). For the three EESC countries the numbers reaching each benchmark are more or less predictable from their average scores. Exceptionally, in science higher proportions of the 4th and 8th graders in Ukraine achieve at least the low benchmark than in Armenia. In the 4th grade, 52% of students in both countries achieve at least the intermediate benchmark, but in the 8th grade 58% of Ukrainian students reach the intermediate level compared to Armenia's 55%. Armenia has larger proportions reaching the high and advanced benchmarks (IAE, 2007).

In **PIRLS 2006**, Republic of Moldova achieved average points, ranking above France, Belgium and Norway. Georgia came 29 points and 4 places lower than the average, although the Georgian pupils participating were on average 10 months younger than the Moldovan pupils (Mullis et al., 2007).

Can the results of the three different student performance comparisons be combined to arrive at a school quality ranking for these five participating EESC countries? It would be unwise to try to compare the PISA 2009 placing of Azerbaijan's 15-year-olds to the TIMSS 2007 placings of 14-year-olds in other countries – let alone their 10 year-olds – because the two surveys differ in the skills and aptitudes they test. Broadly speaking, TIMSS is more about testing knowledge and PISA is more about testing ability to master concepts and to apply knowledge. The same country can perform very differently in the two surveys, as demonstrated by Kazakhstan, whose 10-year-old primary school pupils did very well in TIMSS 2007 (5th in maths and 11th in science, out of 36 countries) but whose 15-year-old secondary pupils had relatively low scores in PISA 2009 (53rd in maths, 58th in science, 59th in reading, out of 65 countries). Also, the TIMSS survey took place two years earlier, when – economically and contextually – a number of things were different. The PIRLS results are even less comparable to PISA results, being only for 10-year-olds and from a test taking place three years earlier. It is more legitimate to compare country performance in TIMSS 2007 and PIRLS 2006, for students in the 4th grade. These surveys taken together suggest that, of Armenia, Georgia, Republic of Moldova and Ukraine, the quality of primary schooling is lowest in Georgia, and might be better in Armenia than Ukraine.

Another perspective on school quality comes from the World Economic Forum (Forum) Global Competitiveness Index (GCI) 2010. As mentioned in earlier chapters, the GCI ranks countries on the fundamentals underpinning economic growth and development. Competitiveness ranking is based on 12 “pillars of competitiveness”. Pillar IV is health and primary education, Pillar V is higher education and training.

Table 3.9 ranks the five participating EESC countries in three aspects of school quality. These school quality rankings are based on the responses of executives surveyed in each country. They were asked the following questions: “How would you assess the quality of primary schools in your country?”, “How well does the educational system in your country meet the needs of a competitive economy?” and “How would you assess the quality of maths and science education in your country's schools?” This is, of course, a more subjective basis for assessing quality than student performance comparisons, and will vary depending on whether the executives in each country have high or low expectations. For example, in the latest PISA and TIMSS surveys Qatari students performed among the worst and Hong Kong students among the best: yet to all three questions Qatari executives responded so positively as to place them 4th or 5th in the Forum GCI rankings, whereas the responses from Hong Kong executives produced rankings of 12th for maths and science education and 25th for the other two quality aspects. If, however, for the purposes of discussion, it is assumed that executives in the five EESC countries responded on a broadly consistent basis, the GCI school quality rankings allow comparison between them.

Ukraine ranked highest on all three quality measures, and every individual ranking was higher than its overall ranking. For the quality of primary education, Ukraine ranked 49th and was followed by Republic of Moldova (72nd), Armenia, Georgia and Azerbaijan. For the quality of maths and science education, Ukraine (42nd) was followed by Armenia and Republic of Moldova at 74th and 75th, with Azerbaijan and Georgia some way below. On the most important measure, overall quality of the education system, Ukraine in 56th place was followed at some distance by Republic of Moldova (96th), Azerbaijan, Armenia and Georgia. For the overall quality of their education systems Armenia, Azerbaijan and

Table 3.9. **Selected World Economic Forum GCI education rankings 2010**

	Armenia	Azerbaijan	Georgia	Republic of Moldova	Ukraine
	(1)	(2)	(3)	(4)	(5)
<i>Overall rank (of 139)</i>	<b>98</b>	<b>57</b>	<b>93</b>	<b>94</b>	<b>89</b>
<i>Stage of development</i>	1/2	1/2	1/2	1	1/2
<i>Education quality ranks</i>					
Quality of primary education	88	109	105	72	49
Quality of education system	115	104	119	96	56
Quality of maths + science education	74	101	104	75	42

Source: World Economic Forum (2010).

Georgia are all ranked significantly below their general rank: in Azerbaijan's case the difference is nearly 50 places.

It should be noted that when answering the questions about the overall quality of their education systems and the quality of maths and science education, Executive Survey respondents in the EESC countries may well have been thinking not only about general upper secondary education but also vocational upper secondary education and post-secondary education, including tertiary education and VET. This is discussed in the next section.

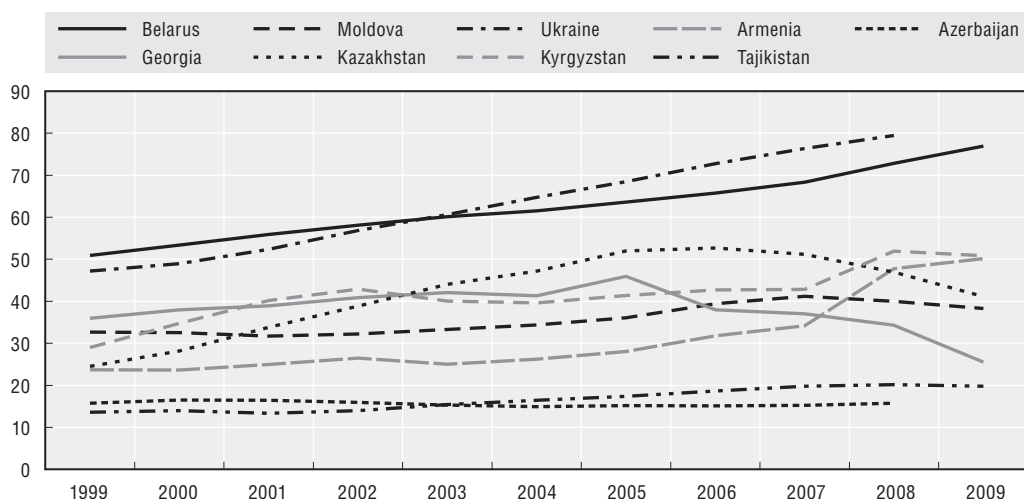
Belarus did not participate in the Forum GCI rankings, but if it had, survey-based results might not have been entirely comparable with those from the other five countries. Given that Belarus still runs an old Soviet-style economy in which all aspects of the labour market are regulated by the state and private business is virtually non-existent,<sup>9</sup> it is unclear how Belarus executives would answer such questions as "How well does the educational system in your country meet the needs of a competitive economy?"

### **Post-secondary education: Inputs and outcomes**

The quantity and quality of post-secondary education is important to national competitiveness because, as noted earlier: a) 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; b) 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; and c) 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. To compete in the global economy with OECD member countries, in terms of numbers educated at least to first degree level, the EESC countries need to approach or match OECD average tertiary entry and completion rates. To compete with OECD countries in terms of other high-level skills required by modern economies, the EESC countries need to show a comparable level of sub-tertiary vocational education and training.

### **Tertiary education: enrolment and graduation**

Figure 3.8 shows the gross enrolment ratio in tertiary education (total enrolment in tertiary education, regardless of age, as a percentage of the population at the official age for first year university entry) in the EESC countries, for the years 1999-2009, or 2008. Figures

Figure 3.8. **Gross enrolment in tertiary education, EESC and CA countries, 1999-2009**

Source: OECD, based on data from UNESCO UIS 2010.

for 2009 in Ukraine and Azerbaijan are unavailable. For comparison, three of the seven Central Asian (CA) countries covered in OECD's previous regional competitiveness review are also shown. Table 3.10 shows numbers enrolled in tertiary education, and gross

Table 3.10. **Gross enrolment and completion rates in tertiary education, 2009**

	Notes	1st year tertiary (5A) enrolments (1)	Number of students in tertiary education per 100 000 inhabitants	Gross enrolment rate in tertiary education (levels 5 and 6)	Gross completion rate - first degree, tertiary education (level 5A)	Completion rate as % of enrolment rate
		(1)	(2)	(3)	(4)	(5)
Armenia		30 361	5 026	50.1%	41.7%	83%
Azerbaijan	2	35 726	2 065	15.8%	15.2%	96%
Belarus	3	106 185	6 059	77.0%	40.6%	53%
Georgia		21 141	2 211	25.5%	42.1%	165%
Republic of Moldova	4	29 021	3 788	38.3%	32.0%	84%
Ukraine	5	593 116	6 152	79.4%	25.7%	32%

Notes: Level 5A is the international classification used for first degrees of an academic nature involving 3+ years of study. Shorter tertiary courses of a more vocational or practical nature are classified as Level 5B. Level 6 is the classification used for advanced research degrees, such as PhDs.

Gross enrolment rate is the total enrolment in a specific level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education in a given school-year.

Gross completion rate is the total number of students completing (or graduating from) the final year of a given level, regardless of age, expressed as a percentage of the population of the official graduation age for that level.

1. Full and part time, public and private. Calculations based on a 4-year undergraduate course duration

2. Data in columns 2 and 4 for 2008.

3. Data in column 4 for 2008.

4. Data in column 4 based on estimations.

5. Data for 2008. Data in column 4 based on estimations.

Source: UNESCO UIS 2010 and OECD calculations.

enrolment and completion rates for each country in the EESC region in 2009 (or the latest available year). Table 3.11 shows how the numbers have changed for EESC countries from 2006 to 2009 in tertiary and other post-secondary education or training.



Table 3.11. **Gross enrolment and completion rates in tertiary education, 2009**

Notes	2006	2007 (% change)	2008 (% change)	2009 (% change)
	(1)	(2)	(3)	(4)
<b>Armenia</b>				
– tertiary	97.8	105.8 (8.2 %)	116.6 (10.2%)	121.4 (4.1%)
– post-secondary	30.8	30.9 (0.3%)	m	m
– <b>Total</b>	<b>128.6</b>	<b>136.7 (6.3%)</b>	<b>m</b>	<b>m</b>
<b>Azerbaijan</b>				
– tertiary	130.0	133.3 (2.5%)	140.1 (5.1 %)	142.9 (2 %)
– post-secondary, non-tertiary	226.7	227.4 (0.3 %)	72 (–215.8 %)	39.1 (–84.1 %)
– <b>Total</b>	<b>356.7</b>	<b>360.7 (1.1 %)</b>	<b>212.1 (–70.1 %)</b>	<b>182 (–16.5 %)</b>
<b>Belarus</b>				
– tertiary	385	399.3 (3.7 %)	417 (4.4 %)	424.7 (1.8 %)
– post-secondary, non-tertiary	108.8	109 (0.2 %)	107 (–1.9 %)	m
– <b>Total</b>	<b>493.8</b>	<b>508.3 (2.9 %)</b>	<b>524 (3.1 %)</b>	<b>m</b>
<b>Georgia</b>				
– tertiary	143.9	140.8 (–2.2 %)	109 (–29.2 %)	84.6 (–28.8 %)
– post-secondary, non-tertiary	28.4	28.8 (–1.4 %)	6.1 (–372.1 %)	13.9 (127.9 %)
– <b>Total</b>	<b>172.3</b>	<b>169.6 (–1.6 %)</b>	<b>115.1 (–47.4 %)</b>	<b>98.5 (–16.9 %)</b>
<b>Republic of Moldova</b>				
– tertiary	127.8	129.6 (1.4 %)	124.3 (–4.3 %)	116.1 (–7.1 %)
– post-secondary, non-tertiary	m	m	20.2	18.1 (–10.4%)
– <b>Total</b>	<b>m</b>	<b>m</b>	<b>144.5</b>	<b>134.2 (–7.1%)</b>
<b>Ukraine</b>				
– tertiary	2 203.8	2 318.6 (5.2 %)	2 372.4 (2.3 %)	m
– post-secondary, non-tertiary	185.3	176.4 (–5 %)	172.1 (–2.5 %)	171.4 (–0.4 %)
– <b>Total</b>	<b>2389.1</b>	<b>2495 (4.4 %)</b>	<b>2544.5 (2 %)</b>	<b>m</b>

Sources: UNESCO UIS 2010 and OECD calculations.

What do Figure 3.8 and Tables 3.10 and 3.11 tell us about the competitiveness of EESC countries in terms of tertiary enrolment? The OECD average entry rate to tertiary education is 56%.<sup>10</sup> Ukraine and Belarus do better than this, with gross enrolment rates of 79% (2008) and 77% (2009) respectively; these are also the two countries which devote the highest percentage of their education budgets to funding tertiary education. Armenia's position seems reasonably healthy; at 50%, its tertiary enrolment is approaching the OECD average, and numbers continue to rise every year.

Republic of Moldova is in a weaker position: tertiary enrolment was over 40% in 2007 but fell a little in both 2008 and 2009 and is now 38%. Georgia's position is weaker still: tertiary enrolment reached a reasonably healthy 46% by 2005 but has been dropping ever since, with particularly sharp falls in 2008 and 2009, which have reduced the enrolment rate to 26%, giving the country a poor competitiveness outlook. Tertiary enrolment levels in Azerbaijan have never been competitive. The 2008 enrolment rate is 16%, no higher than in 2009, below every other EESC country and below Kazakhstan, the Kyrgyz Republic, Mongolia and Tajikistan. The figures show that Azerbaijan, Georgia and to a lesser extent Republic of Moldova are not only failing to meet the needs of their populations for higher-level education; they are also threatening their own future economic prospects.

Do all those enrolling in tertiary courses go on to graduate? If large numbers do not, the investment in their courses has been largely wasted. All systems experience some drop-out: the average OECD tertiary graduation rate in 2007 was 39%<sup>11</sup>, indicating that of every ten tertiary entrants, seven go on to graduate successfully. Therefore in a competitive

and efficient tertiary system, other things being equal, we would hope to see completion rates at or above 70% of enrolment rates.

The last column of Table 3.10 shows completion rates as a percentage of enrolment rates for the six EESC countries. The figure for Belarus is below the OECD average, at 53%. This may be partly explained by rising enrolment rates in recent years, but OECD countries have been increasing their enrolments too, so it seems that there is some inefficiency and/or excessive drop-out in Belarus's system. The latest enrolment rate and recent growth trajectory in Ukraine are broadly similar to those of Belarus, but Ukraine's figure of 32% is considerably worse, suggesting serious inefficiencies in the tertiary system. The completion rate in Armenia is a respectable 83% of its enrolment rate, although it has seen faster (if bumpier) growth in numbers enrolled in recent years than either Belarus or Ukraine. The figure of 84% for Republic of Moldova is in fact less impressive than that of Armenia at 83%, given that its enrolments have not grown by nearly as much as Armenia's over the last five years (the length of a typical first degree course in former Soviet Union countries).

Azerbaijan's completion rate might be expected to be higher than the OECD average, given that tertiary enrolments have not been rising in recent years, unlike in most OECD countries. The country's figure of 96% indicates that its system deserves credit for efficiency, if for nothing else. The lucky few who get into the country's universities seem to have a very good chance of completing their studies. Georgia's figure of 165% is biased by the huge drop in enrolments in that country since 2005.

### **Tertiary education: quality and relevance**

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. Research has shown that economies with large cohorts of well-educated scientists and engineers receive a productivity bonus. Table 3.12 shows the fields of study in which university graduates in the EESC countries are trained.

**Table 3.12. Graduations by field of study as a share of total numbers of graduations, 2008**

Notes	Field of study	Armenia	Azerbaijan	Belarus	Georgia	Republic of Moldova	Ukraine
			1	1	2		
(1)	Agriculture	4.6%	>1%	8.4%	3.6%	m	4.2%
(2)	Education	15.7%	18.6%	12.2%	8.7%	m	8.6%
(3)	Engineering, construction	5.7%	6.2%	23.8%	16.8%	m	20.2%
(4)	Health	18.7%	8.0%	4.0%	6.1%	m	6.5%
(5)	Humanities and arts	4.5%	19.7%	5.2%	23.1%	m	4.9%
(6)	Social sciences, business, law	29.3%	30.0%	40.6%	29.2%	m	44.7%
(7)	Natural sciences	1.3%	9.6%	2.2%	12.5%	m	3.6%
(8)	Services	2.0%	7.6%	3.7%	N/A	m	5.4%
(9)	Unspecified	18.2%	>1%	>1%	N/A	m	1.9%

1. Data from 2009

2. Data from 2008/2009, GEOSTAT

Source: UNESCO UIS 2010.

Natural sciences, engineering and construction together account for just 5% of Armenia's graduate output; 15.8% of Azerbaijan's; 23.8% of Ukraine's; 26% of that of Belarus and 29.3% of Georgia. Comparable figures are not available for Republic of Moldova. If agricultural sciences are included within science and engineering, Armenia's total increases to 9.6%; Azerbaijan's total rises by less than 1%; Ukraine's total rises to 28%; that of Georgia to 32.9% and that of Belarus to 34%. Therefore these five EESC countries range from less than 1 in 10 to more than 1 in 3 graduates in science (including agricultural science) and engineering disciplines. From these figures, Armenia seems to be the country least likely to be producing enough science and engineering graduates. Surprisingly, as Table 3.12 below shows in the Forum GCI 2010 rankings for "availability of scientists and engineers" based on Executive Survey responses to the question "To what extent are scientists and engineers available in your country?", Armenia ranked 93 rd, just higher than its overall ranking. The low rankings of Republic of Moldova (118th) and Georgia (122nd) suggest that they too need to boost science and engineering numbers. Azerbaijan, with science and engineer graduate output equal to or less than Georgia's (depending on whether agriculture is included), ranked 78th; but as any ranking significantly lower than a country's overall ranking signifies a competitive disadvantage, Azerbaijan too might consider boosting output. The only country in which the Executive Survey produced a satisfactory response on the availability of scientists and engineers was Ukraine, ranked 53rd.

Azerbaijan has the highest proportion of graduates in the discipline of education (19%), followed by Armenia (16%) and Belarus (12 %). All the countries have sizeable percentages of graduates in social sciences, business and law, ranging from 29% in Armenia to 45% in Ukraine. Percentages gaining degrees in the humanities and arts vary greatly, from around 5% in Armenia, Belarus and Ukraine to nearly 20% in Azerbaijan and 33.5% in Georgia. Armenia produces more than twice as many graduates in health disciplines (19%) as any of the other countries, though it does not do significantly better on Forum GCI health indicators.

Table 3.13 presents more Forum GCI rankings, for various aspects of the tertiary sector's contribution to competitiveness.

Ukraine ranks an impressive 8th for tertiary enrolment, and also has the highest ranking of the five EESC countries for the quality of its management schools – in 108th position. Nevertheless, overall (with the lowest-ranked, Armenia in 130th position) all of the EESC countries have ample scope for improvement in that domain.

Research and innovation ranks are related to the quality of a country's higher education system. Ukraine is the highest-ranked (68th) and beats its general ranking on all the research and innovation indicators. Georgia is the lowest-ranked in all research and innovation areas and does not beat its general ranking on any of them. The other three countries beat their general rankings only on their capacity for innovation (Armenia and Azerbaijan significantly, Republic of Moldova only just and in Armenia's case also on local availability of research and training to firms).

Table 3.13 also shows how the countries were assessed by Executive Survey respondents when they were asked to rank "inadequately educated workforce" among the 15 most problematic factors for doing business. (Their answers probably related to all education, not just at tertiary level.) As might have been predicted from other rankings, executives in Georgia were the most concerned, regarding "inadequately educated

Table 3.13. **World Economic Forum GCI education and research rankings**

	Armenia	Azerbaijan	Georgia	Republic of Moldova	Ukraine
	(1)	(2)	(3)	(4)	(5)
<b>Overall rank (of 139)</b>	<b>98</b>	<b>57</b>	<b>93</b>	<b>94</b>	<b>89</b>
<b>Education ranks</b>					
Tertiary enrolment	68	98	66	59	8
Availability of scientists and engineers	93	78	122	118	53
Quality of management schools	130	124	116	123	108
<b>Research and innovation ranks</b>					
Quality of science research institutions	103	77	119	105	68
University-industry collaboration on R+D	124	92	134	125	73
Local availability of research + training	93	78	122	118	53
Capacity for innovation	65	40	112	91	37
<b>Survey of Most Problematic Factors for doing Business</b>					
Rank of 'Inadequately educated workforce' among the 15 factors (the lower the number, the greater the problem).	<b>8</b>	<b>5</b>	<b>3</b>	<b>8</b>	<b>14</b>
<b>Percentage of respondents</b> who put this among the 5 most problematic factors	<b>5.4</b>	<b>10.0</b>	<b>13.3</b>	<b>5.5</b>	<b>1.4</b>

Source: World Economic Forum (2010).

workforce” as the third most problematic factor for doing business, after “access to finance” and “policy instability”, with over 13% putting this factor among their top five. Second most concerned were executives in Azerbaijan, who considered “inadequately educated workforce” the fifth most problematic factor, behind “corruption”, “access to finance”, “tax” and “bureaucracy”. A relatively high 10% of them put this factor among their top five. In Republic of Moldova and Armenia, this was the eighth most problematic factor, put in their top five by just over 5% of Executive Survey respondents. Ukraine, again, did best. Executive Survey respondents there did not see “inadequately educated workforce” as a major problem for doing business, ranking it 14th of 15, with just 1.4% putting it in their top five. The final sources of evidence on the quality and relevance of tertiary education are assessors’ reports and studies carried out by independent experts. For the purposes of this chapter, OECD asked assessors in the EESC countries to contribute reports addressing various aspects of human capital development. Assessors’ reports were received from the Armenian Chamber of Commerce and Industry, the Azerbaijan Marketing Society, the German Chamber of Commerce and the Tempus Office in Georgia and the Employers Confederation and four universities in Ukraine. These assessors’ comments and other studies provide the following information:

- In **Armenia**, the assessor suggests, there is a tendency for young people to think that they must enter tertiary education and that tertiary education is all they need to get a job. As a result, there is a surplus of specialists with tertiary education and unclaimed specialisations, which leads to serious youth unemployment. A 2010 European Training Foundation (ETF) study<sup>12</sup> notes that cooperation between universities and business is improving, though often this is based on the personal initiatives of university rectors, and it is more difficult to establish cooperation in remote rural areas where there is no economic development.
- In **Azerbaijan**, a forthcoming World Bank report (not yet published at the time of preparation of this chapter) notes, the current student admission quota system has contributed to a mismatch between training of graduates and skills demanded by the economy. The system has overproduced specialists in areas such as education, health,

and manufacturing which have relatively limited job opportunities, while very few graduates have been trained in employment growth areas like agriculture and services. Many employers are unable to find university graduates who have the right set of skills such as computer skills, English language, engineering and management. Also, the current attestation/accreditation system ensures that every specialisation is taught in more or less the same way by all higher education institutions (HEI). Though this may keep weaker HEIs up to minimum standards it constrains the freedom of all HEIs to respond to labour market demand and employers' requirements. It is undeniable, the report states, that the quality and relevance of tertiary education in Azerbaijan needs considerable improvement.

- An ETF study of education-business cooperation in **Georgia**<sup>13</sup> notes that though many university graduates in the labour market today have poor quality or irrelevant labour market qualifications, and consequently tertiary graduates have a relatively high unemployment rate, this problem mainly dates from the period between 1991, when a law was passed allowing private universities, and 2004, when the National Centre of Education Accreditation was set up and a large number of inadequate providers closed down for failing to meet minimum quality standards. The private, for-profit universities that remain – 48 of Georgia's 71 universities in 2009 – are notably better than the public universities at designing programmes, in cooperation with employers, with a view to labour market relevance. Some of these private universities have a good reputation in the business sector because employers know that their students acquire labour-market-relevant skills, *e.g.* in economics, business administration and computer science. The assessor from Georgia's Tempus Office<sup>14</sup> confirms that, although dialogue between universities and businesses in Georgia is weaker than it should be, 80% of higher education institutions have cooperation agreements with private business, mainly designed to ensure the employability of graduates and traineeships for students; 11% of universities conduct labour market surveys in order to identify graduate demand; and 10% of universities cooperate with employers on curriculum design.
- A 2009 study of **Ukraine** by NORRIC<sup>15</sup> (a consortium of Nordic National Academic Recognition Information Centres) noted that the challenges confronting Ukraine in higher education today include the proliferation of small specialised higher education institutions, financial difficulties, underpaid teachers and the popularity of business and management studies at the expense of natural science subjects.
- A 2010 study by ETF of labour markets and employability in **all the EESC countries**<sup>16</sup> refers to quality problems at tertiary level, linked to underfunding combined with a rapid increase in enrolment (except in Azerbaijan) and the slow modernisation of education programmes. Also, student-teacher ratios have worsened in state universities in almost all countries and corruption in the form of gifts and bribes for preferential treatment is commonly reported; where students can enter and graduate from universities by paying rather than strictly on merit, quality tends to slide. And in Ukraine, Georgia and Republic of Moldova, poor infrastructure and low salaries often prevent private higher education institutions from attracting the best professionals.

### **Tertiary education: International competitiveness**

Countries can greatly improve the international acceptability and competitiveness of their universities and university graduates by joining the Bologna Process<sup>17</sup> and thereby undertaking to co-ordinate higher education policies with the other participating states in

the European Higher Education Area (EHEA). Signing up to the Bologna Process makes countries eligible for financial assistance in implementing its goals. All the EESC countries except Belarus joined the Bologna Process in May 2005, and are now adapting their tertiary systems to Bologna requirements.

The latest Bologna Stocktaking Report<sup>18</sup> uses a traffic-light system to show what progress signatory countries have made up to 2009. Of the EESC countries, Georgia had progressed furthest. Of the ten Bologna indicators, Georgia has received a dark or light green light on all but two: it had not yet implemented its National Qualifications Framework (NQF) for higher education (yellow light), and had not yet ensured international participation in quality assurance (orange light). Georgia had, however, implemented the Bologna three-cycle model of bachelors, masters and PhD degrees and fully implemented the Lisbon Recognition Convention, including the European Credit Transfer Scheme and recognition of prior learning. Armenia had also made progress, although it had one orange light and five yellow. The other countries had either two or (Azerbaijan) three red lights, though all have implemented the three-cycle model.

Belarus has carried out some curricular reforms to bring its higher education system into line with a two-level bachelor/master system but has not signed up to the Bologna Process. The country may not feel any urgent need to do so. Although, judging from 2008 figures, Belarus exports quite a number of young people to undertake tertiary studies in other countries (fewer, in relation to its total population, than Republic of Moldova and Georgia, more than Armenia, Ukraine and Azerbaijan); 92% of them go to Russia.<sup>19</sup>

### **Non-tertiary vocational education and training (VET): Enrolment**

It is quite difficult to construct a complete picture of VET within the education systems of the EESC countries because each country has its own definition and classification of VET. In principle, vocational education and training may be provided at any or all of three International Standard Classification of Education (ISCED) levels: level 3 (upper secondary level, though VET at this level may be provided either during secondary schooling or afterwards); level 4 (above upper secondary but below tertiary level, almost always undertaken after leaving school); and level 5B, or Tertiary Type B, the classification used by most OECD member countries to record tertiary vocational courses of a more practical than academic nature. Such courses last at least two years and lead to a work-related qualification below bachelor's degree level. Table 3.14, showing the VET share of total enrolment at various ISCED levels in the EESC countries, is taken from the ETF study of Labour Markets and Employability.<sup>20</sup>

**Table 3.14. VET enrolment rates by level (2008)**

	VET enrolment in ISCED level 3 as % of all ISCED 3 enrolment	VET enrolment in ISCED levels 3+4 as % of all ISCED 3+4 enrolment	VET enrolment in ISCED level 5B as % of all ISCED level 5B, 5A and 6 ( <i>i.e.</i> all tertiary) enrolment
	(1)	(2)	(3)
Armenia	3.3	24.6 (2007)	–
Azerbaijan	38.4	18.0 (2009)	19.8 (2009)
Belarus	2.6 (2007)	35.8 (2007)	26.9
Georgia	1.2	5.6	15.5
Republic of Moldova	34.5	35.7	12.1
Ukraine	25.0	34.9	15.5

Source: ETF study of Labour Markets and Employability, ETF 2010a, Table 3.3.

Tertiary 5B VET enrolment has been included in the overall tertiary enrolment figures presented and discussed earlier in this chapter. Tertiary 5B VET's share of all tertiary enrolment in the EESC countries – column (3) – ranges from 12% in Republic of Moldova to 27% in Belarus. In OECD member countries, average net entry rates are 16% of the relevant age group into Tertiary 5B and 58.4% into Tertiary 5A+6. Assuming that 5B courses typically last two years and other tertiary courses typically last four, the OECD average for Tertiary 5B as a share of all tertiary enrolment would be around 12% of the age group. Although Armenia has no tertiary VET, the other EESC country figures are similar to, or higher than, the OECD average. This is the case in Belarus and to a lesser extent Azerbaijan. Belarus has 77% of its relevant age group enrolled in tertiary education, meaning that even with its high Tertiary B percentage the country still has internationally competitive rates of enrolment in Tertiary Type A education. On the other hand, Azerbaijan's figure implies an even lower percentage of students enrolling in degree-level courses than might have been expected from its overall tertiary enrolment rate of 16%.

The rest of this section will focus on the VET in columns (1) and (2) of Table 3.15. ETF notes that the share of VET at upper secondary ISCED 3 level has been decreasing in recent years as the VET systems of most EESC countries move towards a post-secondary non-tertiary model offering more provision at ISCED 4 (technician training) level. The exception is Georgia, which in 2008 re-classified as level 5B (professional training) much of its VET that had previously been classified as level 4.

Table 3.15 shows the percentage of students in upper secondary schools in each country who are in vocational schools or streams. Azerbaijan has the highest percentage, followed by Republic of Moldova and Ukraine; all these have at least one in four pupils in VET. Armenia, Georgia and Belarus all have less than one pupil in 20 in VET. Such low percentages suggest that in these countries the vocational schools or streams are seen as a remedial or a “better than nothing” option for the least teachable and most disadvantaged students. This is unlikely to be high-quality training.

**Table 3.15. Students in VET: number and % of relevant group, 2009**

	Notes	Number of students in upper secondary education	% of students in VET of all students in upper secondary education
		(1)	(2)
Armenia	1	91 202	4.2%
Azerbaijan		405 583	42.7%
Belarus	2	185 728	2.1%
Georgia		174 279	2.9%
Republic of Moldova		103 478	36.7%
Ukraine	3	1 060 639	25.7%

Notes: 1. Data for 2008. 2. Data for 2010. 3. Data for 2008.  
Source: UNESCO UIS 2010, OECD calculations.

Table 3.11 showed each EESC country's numbers in post-secondary non-tertiary education or training, and how these figures have changed from 2006 to 2009. In the latest year for which complete figures are available, post-secondary training accounted for 23% of all tertiary and post-secondary enrolment in Armenia (2007); 21% in Azerbaijan (2009); 20% in Belarus (2008); 14% in Georgia (2009); 13.5% in Republic of Moldova (2009); and 7% in Ukraine (2008). Looking at the percentages from Tables 3.11, 3.14 and 3.15 together,

different patterns emerge in different countries. Armenia offers little VET in upper secondary but a relatively high proportion of post-secondary non-tertiary training afterwards; Azerbaijan offers quite a lot of VET in upper secondary school (173 000 enrolled) but, in numerical terms, much less beyond upper secondary school (39 000 enrolled in all post-secondary non-tertiary training). Belarus offers very little VET in upper secondary school but a reasonable amount afterwards, both at the post-secondary and tertiary levels; Georgia offers very little upper secondary school VET and very little post-secondary non-tertiary VET; Republic of Moldova offers a fair amount of VET in school (38 000 enrolled) and less afterwards (18 000 enrolled in all post-secondary non-tertiary). Ukraine offers a certain amount of VET in school but very little post-secondary non-tertiary training, although compared to Georgia, more of what it does offer at this stage (post-secondary) is VET.

As shown in ETF's 2010 country note on Ukraine, many EU countries have post-secondary non-tertiary VET participation rates of over 30%. None of the EESC countries reach this level, even if all their post-secondary non-tertiary training can be assumed to be VET, which is doubtful. And while post-secondary training numbers have been maintained or have declined only slightly in Armenia, Belarus and Ukraine, Azerbaijan reduced its numbers from 227 000 in 2007 to 39 000 in 2009, taking out more than four places in five, while tertiary places rose by less than 10 000. Georgia's post-secondary training enrolments fell from 29 000 to 14 000 over the same two years, mainly because of the re-classification just mentioned; meanwhile tertiary enrolment was also falling. Georgia and Azerbaijan are compounding the competitiveness problems of low tertiary enrolment by also providing insufficient sub-tertiary VET.

### **Non-tertiary vocational education and training (VET): Quality and relevance**

A report by Deutsches Volkshochschul-Verband International (DVV International) on VET in Armenia, Azerbaijan and Georgia<sup>21</sup> confirms that VET rates in these three countries are too low, but that limited quantity is far from the only challenge facing their VET provision. The report's key points are summarised in Box 3.2.

ETF studies confirm that VET in all EESC countries shares these problems to some extent. The ETF study of Labour Market Needs and Employability in the six countries (ETF 2010a) observes that their VET systems have lost credibility and attractiveness due to the closure of big enterprises (the main users of the skills it produced) and the rapid deterioration of its relevance to emerging labour market requirements. Despite intense efforts in all countries to develop and improve VET strategies and laws, rationalise training supply and develop national qualifications frameworks, the quality of VET is declining, while cutbacks in public funding increase the cost to students and their families of undertaking it, leading to access and equity issues. Many challenges need to be met to ensure high-quality, relevant and responsive VET. System governance must improve: countries like Republic of Moldova and Belarus still have highly centralised systems that prevent training providers from adapting provision to meet local labour market needs. System financing must improve: countries like Armenia, Georgia and Republic of Moldova need to become more efficient and mobilise large amounts of funding to counteract years of underfunding and proceed with reform. Great improvements are needed in the capacity of VET institutions to implement reforms and adopt new approaches in teaching and learning. The countries must improve their systems for monitoring labour market developments and anticipating future skills requirements, given that statistical systems



### Box 3.2. VET in Armenia, Azerbaijan and Georgia<sup>1</sup>

According to the study from DVV International, VET systems in Armenia, Azerbaijan and Georgia share three core problems:

- Lack of occupational standards, agreed by employers, on which to base VET course standards;
- Demand that outdistances supply – VET provision falls short of labour market needs in quantity, quality and occupational range;
- Teaching inadequate to meet modern requirements – teaching methods are badly outdated.

The issue is not a lack of VET strategies or enabling legislation: those exist in all three countries. Armenia launched an active and comprehensive VET reform process in 2004, with help from the EU TACIS (Technical Assistance to the Commonwealth of Independent States) programme.<sup>2</sup> A National VET Concept and VET strategy were developed, and a draft Law on Primary and Secondary Vocational Education was adopted in 2005. Another TACIS project has recently established a National VET Development Centre. Georgia established a governmental intra-agency commission for social partnership in 2005; the parliament adopted a Law on vocational education; and activities were started to develop new educational programmes, pilot vocational guidance programmes and training of staff for the VET system. Azerbaijan started reforming its VET system in 2007, developing a State Programme to Develop Vocational Education for 2007-10 and adopting an Employment Strategy and Strategy Implementation Programme. Other projects involving international organisations are ongoing.

However, the VET-related strategies and legislation in these countries do not yet ensure responsiveness to national and local labour market needs, adequate employer involvement or quality competitive with European countries. They are often not supported by the necessary detailed regulations and financial resources, and as a result are not being implemented in practice.

All three countries have extensive networks of state-run institutions providing VET in different specialties. A number of private institutions and informal VET providers have set up in recent years. But little has been done to ensure that the VET institutions collectively cover all territories and all occupations where labour market needs exist. In Armenia and Azerbaijan the system of VET qualifications has remained almost unchanged since Soviet times, and fails to meet international requirements for mutual recognition of qualifications. Georgia, by contrast, has a National Qualification Framework corresponding to the European Qualification Framework and provides for recognition of informal education certificates and diplomas; however, in 2008 specific procedures for implementing it had yet to be developed.

In DVV's view, financing of the VET system in the South Caucasus leaves much to be desired. In 2008 the sector's share of the education budget ranged from 1% in Georgia to 4.4% in Armenia. Government financing covers mainly teachers' salaries and students' allowances; only from 2006 in Georgia and from 2008 in Armenia and Azerbaijan did the governments start investing in renovation of the infrastructure (buildings, equipment, etc) with support from donor organizations. All three countries have introduced per capita financing systems, but whereas in Georgia and Azerbaijan the government pays students' tuition fees in state-run institutions, in Armenia students must pay the fees themselves. In 2008, none of the countries expected to increase VET funding in the future.

**Box 3.2. VET in Armenia, Azerbaijan and Georgia (cont.)**

VET infrastructure (buildings, training equipment, information resources and technologies) is in an extremely unsatisfactory condition. Major funding is needed to rehabilitate and refurbish buildings, re-equip laboratories and workshops, buy new learning materials and introduce ICT. VET teachers are unacquainted with modern interactive teaching methods and have not undergone retraining or professional development for 10-15 years (unless they have benefited from training courses organised by donor projects); re-training is badly needed to introduce them to modern teaching methods and enable them to relate training content to the requirements of employers and workplaces. Low remuneration and the lack of a training system for VET teachers make it extremely difficult to attract suitably-qualified new recruits to the VET teaching sector.

Social partnership in the VET system is provided for by legislation in all three states, but practical mechanisms are ineffective. Contacts between the VET system and employers are limited to practical training in companies and enterprises; trade unions and associations are inactive. Accreditation of educational institutions and programmes is at an early stage in all countries, though Georgia has progressed furthest. Standards have been developed and approved for a few professions, but even they fail to meet modern market requirements and are not outcomes-based. Work has started in all countries on the development of outcomes-based standards but is being hampered by lack of funding, shortage of standards development experts and insufficient involvement of employers. In all three countries, public awareness and esteem of the VET system is low; most employers know little about it and are not particularly inclined to hire its graduates; most institutions make little effort to engage with potential employers.

1. See endnote 1 at end of this chapter.

2. The TACIS programme aims to promote the transition to a market economy and to reinforce democracy and the rule of law in the partner states in Eastern Europe and Central Asia.

Source: DVV International: *Vocational Education and Training in the South Caucasus: On the Road from Survival to Efficient Functioning of National Systems*, a Policy Analysis by DVV International, 2008

are weak, social partnership is underdeveloped and much current VET provision is mismatched to the training needs of both businesses and students.

The assessors' reports we received (none from Belarus or Republic of Moldova) generally supported this picture of inadequate VET systems in which employers were insufficiently involved. The Armenian assessor noted that VET is not provided to a high enough level and is too formal and insufficiently practical; he confirmed that lack of financial resources is often a barrier to VET entry. Consultation with employers and unions on VET issues has previously been ad hoc and limited, but he hopes that the newly-formed VET Development National Council, including the social partners, will improve the situation. Armenia has no CET strategy as yet, but is developing the concept of lifelong learning, a law on the education of adults and a charter for the National Training Fund, which envisages raising private sector funds for VET.

The Azerbaijan assessor says that ongoing work on VET strategy formulation and educational reform has not resulted in any visible progress; there is no real or systematic mechanism for consultations or cooperation between the public and private sectors on job-related training development. A workforce skills strategy has been defined and published but there is no CET strategy. A teacher recruitment and retention strategy is being developed but there is still huge subjectivity and corruption in the recruitment

process. The author of an unpublished World Bank report on Azerbaijan adds that the quality of vocational colleges is dubious – a study in the early 2000s showed that only 28% of their graduates were employed and, while the situation should have improved since, linkages to the labour market remain unsatisfactory. The scope for expansion of the vocational sub-sector is significant, but poor quality, weak labour market linkages and lack of streamlined pathways to higher education are important barriers to an effective skills growth strategy. Given the state of industrial development as well as the small size of higher education in Azerbaijan, vocational college education can play a critical role both in supplying the needed skills into the economy and in providing diversified educational opportunities.

The assessor from Georgia's German Chamber of Commerce wrote that the country has no workforce skills strategy and no CET strategy and that, while consultation across ministries and with external stakeholders is used to improve programmes and policies, this happens on an ad hoc basis. The assessor from Georgia's Tempus Office said that in fact, a strategy on lifelong learning was developed by the Adult Education Association of Georgia in 2009, although there has been no follow-up action. At the time of preparation of this publication, consultation with the social partners on VET issues has not been institutionalised: this still depends on the level of initiative of VET school directors. There is no general system of quality assurance in VET, though in "renovated" VET schools quality assurance arrangements have been developed with support from local and international experts. An ETF report in 2008<sup>22</sup> stressed that "At present the capacity of the VET providers' network is insufficient to cope with demand for training from the population."

The assessor from the Ukraine Employers Confederation reported that: there is currently no workforce skills strategy, but a draft Law on a National Qualifications Framework has been developed; there is no system of regular consultations with employers on VET, because Ukraine's existing legislation does not envisage employer participation in such consultations; employers may initiate development of vocational standards but are not involved in the processes of consulting on and co-ordinating them; there is no separate system for assessing VET and VET outcomes; and there are no teacher recruitment, retention or staff development strategies. Ukraine has no plans to implement a national system of CET, but legislation does give employees the right to paid refresher or upgrading training, to be provided by their employer.

## Other human capital outcomes

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. Employers must 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.

One important indicator of relevance is **unemployment rates**, and how these vary between people who have been educated to different levels. The statistics available for the EESC countries are in Table 3.16, showing how much of total unemployment is youth unemployment; Figure 3.8 gives a breakdown of the registered unemployed by education

level in four countries. The position in 2008 of OECD member, accession and enhanced engagement countries is shown for comparison.

**Table 3.16. Youth unemployment as a percentage of total unemployment vs. general unemployment rates, 2008**

	Notes	Youth unemployment (15-24) as share of total unemployment	General unemployment rates
		(1)	(2)
Armenia	1	0.306	0.063
Azerbaijan		0.356	0.061
Belarus	2	0.265	0.008
Georgia		0.2248	0.165
Republic of Moldova		0.3036	0.04
Ukraine		0.2942	0.041
OECD average	3	0.132	0.055
Partner countries			
Brazil	3,4	0.255	0.082
Estonia	3	0.26	0.055
Israel	3	0.258	0.061
Slovenia	3	0.233	0.044

1. Youth: 16-24

2. Employment office data. Youth: 16-24

3. Unemployment by level of education as % of the labour force aged 25-64 years. All other countries - as % of total labour force

4. Data from 2008. In column (2) from 2007.

Sources: OECD; ILO Laborsta Database - labour force surveys except where indicated

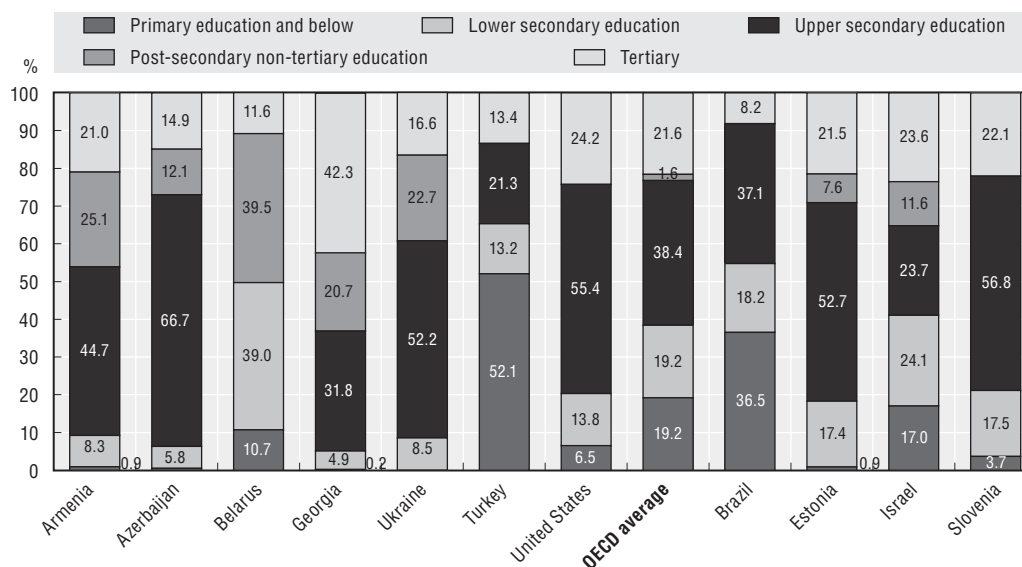
The general unemployment rates of EESC countries are within 1-2% of the OECD average. The exceptions are the rate for Belarus – which some independent commentators suggest is lower than in reality<sup>23</sup> – and Georgia's rate, which is not only much higher than the OECD average but also twice as high as the highest of the four partner countries shown. By contrast, youth unemployment as a share of total unemployment is much higher than the OECD average in all the EESC countries. Georgia has the lowest level, below that in all the four partner countries, but every other EESC country has a higher level than all the partner countries, with Azerbaijan having the highest rate of unemployment of all of them.

Where young people make up a high proportion of the unemployed compared to other countries, it is usually the case that their preparation for working life – in school and in further and higher education – is less effective or less relevant than in other countries. From this perspective Georgia can take some comfort from its relatively low rate; nevertheless, as the general unemployment rate is so high, it is true in Georgia as in the other countries that the talents and potential of far too many young people are going to waste.

People with tertiary education make up a smaller percentage of the unemployed than the OECD average in four of the five EESC countries shown. The exception is Georgia, where 42% of the unemployed are graduates, almost twice the OECD average, while graduates make up only 28% of the employed population;<sup>24</sup> though, as explained earlier, this may be mainly due to low-quality tertiary provision during the period from 1991 to 2004 when private HEIs were free to set up and operate without any regulation or enforcement of minimum quality standards. The lowest percentage is in Belarus (12%), followed by Azerbaijan (15%), Ukraine (17%) and Armenia (21%, very near the OECD average of 22%). Azerbaijan's low figure needs to be seen against the low percentage of those who receive

tertiary education in that country – tertiary entry rates have been around 15% for at least the last 10 years (see Figure 3.8) so tertiary education does not seem to reduce the risk of unemployment there. It is encouraging to note that in Belarus and Ukraine, where tertiary entry rates were around 50% in 1999 and had risen to almost 80% by 2009, tertiary education significantly reduces the likelihood of being unemployed – though in Belarus this must be due partly to the system of preferential allocation of jobs to those who have graduated from a publicly-funded tertiary institution.

Figure 3.9. **Distribution of unemployed people by level of educational attainment, 2008**



Source: OECD, based on data from the ILO Laborsta Database 2010.

Compared to the OECD average of 1.6%, all these five countries have very high percentages of unemployed who have post-secondary non-tertiary education, ranging from 12.1% in Azerbaijan to 39.5% in Belarus. Given the many quality, relevance and status problems associated with post-secondary VET in the EESC countries (see Box 3.2), this is perhaps not surprising. Other things, particularly quality and relevance, being equal, the high figures in Belarus and Ukraine could be explained either by weaknesses in their VET, or by the fact that the higher a country's recent tertiary entry rate, the lower may be the calibre and attractiveness to employers of those who take up post-secondary non-tertiary training instead.

At the other end of the education scale, only Belarus has a significant percentage (10.7%) of unemployed people whose education ended at or below primary level. It may well be that the other four countries have extremely few people in this category in their working-age populations. It would be surprising if Belarus, with its current 100% rate of progression to secondary school and high numbers of tertiary entrants, had many, so those who remain in the workforce clearly pay a high price in terms of employability.

People whose highest level of education is secondary (upper or lower) but who have had no education after leaving secondary school, account for 73% of the unemployed in Azerbaijan, 61% in Ukraine, 54% in Armenia, 49% in Belarus and 37% in Georgia. As all the

countries have high rates of youth unemployment compared to OECD countries, it is likely that every country will have high numbers of young unemployed people in this category. These young people represent a sad waste of human potential, and will be more expensive to train or retrain because they start from a low educational base. It is in the interest of every EESC country's future competitiveness to improve the availability of post-secondary education and training opportunities for school-leavers. Whether the extra opportunities should be mainly tertiary, mainly non-tertiary or a mixture, will depend on the individual country's circumstances: how many tertiary and non-tertiary places it already provides; how far these meet the demand from young people and labour market needs; how many school-leavers already have the necessary entry qualifications for higher education or post-secondary training, but are frustrated by lack of places, lack of financial means, lack of information or all three; and what more can be done in schools to improve young people's employability and readiness to undertake further training.

Table 3.17 presents Forum GCI rankings for **other human development indicators** showing how fully a country's native workers are contributing to business success, and whether their potential is being fully used. These include rankings for brain drain, based on Executive Survey responses to the question "Does your country retain and attract talented people?"; female participation in the labour force; and the extent of staff training, firm-level technology absorption (which depends at least partly on workers' educational preparation) and worker-employer cooperation.

Table 3.17. **Additional World Economic Forum GCI rankings**

	Armenia	Azerbaijan	Georgia	Republic of Moldova	Ukraine	
	(1)	(2)	(3)	(4)	(5)	
(1)	OVERALL RANK (of 139)	98	57	93	94	89
	<i>Relevance and Labour Force Skills ranks</i>					
(2)	Brain drain	97	94	104	130	115
(3)	Female participation in labour force	41	37	81	4	32
(4)	Extent of staff training	116	68	108	117	109
(5)	Firm-level technology absorption	121	62	125	133	96
(6)	Worker-employer cooperation	53	55	77	106	110

Source: World Economic Forum (2010).

Executive Survey responses would suggest that brain drain – the exodus of talented young people from their home country – is most severe in Republic of Moldova, followed by Ukraine, Georgia, Armenia and Azerbaijan in that order. However the ETF study of Labour Markets and Employability in the six countries (ETF 2010a) showed that when numbers of permanent emigrants are set against population size (2008 figures), the countries with the highest population loss are Armenia (26.9%) and Georgia (22.9%), followed by Belarus (18.4%), Republic of Moldova (16.8%), Azerbaijan (16.2%) and Ukraine (13.1%). The ETF country note on Ukraine 2010, seeking to explain the mismatch between perceptions and reality in that country, observed that while a recent survey by the International Organisation for Migration showed a relatively large number of Ukrainians were considering going abroad or had taken steps to prepare for this, most Ukrainians who went abroad only went temporarily for short-term jobs. The same survey estimated that 4% of illegal foreign workers in OECD countries are Ukrainian nationals (IOM, 2010).

Female participation in the labour force is ranked very high in Republic of Moldova, where it amounts to a major competitive advantage, and is high in all the other countries except Georgia, whose ranking is unremarkable (81st place out of 139 countries). For the extent of staff training, all the countries are ranked below their general rankings, but Azerbaijan does best: this seems surprising in view of Ukraine's law giving employees rights to undertake training (these rights likely apply only to blue-collar workers). The position is the same for firm-level technology absorption, though here Ukraine comes second to Azerbaijan with a reasonable ranking and the other three countries rank very low. Worker-employer cooperation is ranked best in Armenia and Azerbaijan; Georgia too does quite well, but Republic of Moldova and Ukraine lag behind. Overall, Azerbaijan emerges with the best ranking in this group of human development indicators.

### **Conclusion: Policies for competitiveness - towards a comprehensive human capital strategy**

The following recommendations apply to all or most EESC countries:

- Countries which have not yet tested the effectiveness and quality of their secondary education in the three key subjects of reading, maths and science by participating in PISA, OECD's international study of student performance, should aim to do so in future. (This recommendation applies to all countries except Azerbaijan.)
- In order to ensure that all education and training provision, both existing and new meets the economic needs of each country and its businesses, all countries should take steps to involve employers or their representatives routinely in national and local decision-making concerning tertiary education and VET. Specifically, employers should be regularly consulted on whether the existing balance between higher education and VET places, nationally and in particular localities, is right or needs adjusting; on the subjects and specialisms for which provision should be made, and the numbers of graduates industry needs from each; on course design, content, quality assurance, equipment and practical elements; on the knowledge, training and qualifications teachers in VET should have; and on the final standards and outcomes to be achieved. Central controls and constraints which prevent tertiary and VET institutions from responding to employer needs should be relinquished.
- In order to ensure fair access to education, all countries which have selection, formal or informal, in their schools should aim to ensure that as much effort and resource is devoted to educating those selected out as to those selected in – if not more. All countries should also review the financial and non-financial barriers to accessing tertiary education or VET, and remove those barriers that discriminate against students from less advantaged families.
- As good education is not possible without good teachers, all countries should try to find ways of attracting better teachers to the profession, as well as improving the status, remuneration, initial training and continuous professional development of teachers. Because pupil-teacher ratios in the EESC countries are much higher than in high-performing OECD countries, particularly at secondary-school level, all countries could potentially benefit by having fewer but better teachers.
- To help make higher education systems in EESC countries internationally competitive, the five signatory countries should press on with their efforts to meet the full requirements of the Bologna Process.

- All countries should give priority to renewing and improving their VET systems and infrastructure, as well as their tertiary systems and infrastructure, where necessary. This may require significant new funding, but such funding should be seen as an essential investment in a more competitive future.
- As signalled in the Forum GCI 2010, all countries should find ways of improving their business and management schools. There is a general need to address the quality of these countries' research institutes and the collaboration between universities and industry, as well as encouraging more staff training by firms. This could be done by improving the collaboration between teaching institutions and the private sector, offering internships, sponsoring courses and facilitating the access of students to the working environment throughout the later years of their schooling.

Tailored recommendations for individual countries are:

- **Azerbaijan** needs urgently to: address severe school and teacher quality problems; establish many more tertiary places and enable more equal access to them; improve the output of scientists and engineers through better-targeted research programmes; and boost the quantity as well as quality of VET.
- **Georgia** deserves some credit for having done the most to dismantle old Soviet systems and open itself up to private enterprise and European competition. However, the country needs to: boost the numbers of places in both tertiary education and VET; to tackle school quality issues indicated by the mediocre performance of its students in international comparisons; to produce more scientists and engineers<sup>25</sup>; and to address the underlying causes of its many low ratings from Executive Survey respondents in the Forum GCI.
- The competitive position of **Belarus** – the least-reformed country – can only decline if it does not end its isolation, engage more with neighbours other than Russia and learn from good practice in education from other countries. Specifically, Belarus is recommended to: participate in the next PISA and the next Forum GCI and sign up to the Bologna Process; to reverse its recent cutbacks in public spending on education; and to invest in improving the efficiency of its tertiary education (signs of excessive drop-out were noted earlier) and decentralising and modernising its VET and school systems.
- **Republic of Moldova and Armenia** are recommended to: address the education quality issues indicated by low Forum GCI ratings; to work at ensuring equal access for all groups; and to improve the quality and quantity of their VET. Both should consider boosting their numbers of scientists and engineers, and Republic of Moldova should also try to reverse the recent decline in its tertiary enrolment rate.
- As many aspects of **Ukraine's** education system emerge well from the Forum GCI and other evidence, our only specific recommendation is that Ukraine should boost the number of places in its post-secondary VET.

## Notes

1. In the course of preparation of this chapter for print, the Georgian authorities informed about the adoption in 2009 of a mid-term strategy and action plan for VET development. A VET council was called into existence to support the implementation of the action plan and ensure all stakeholders' participation in the process. Georgia also informed of information centres for VET-s, opened in various regions of the country for promotion and delivering information on available VET courses.
2. 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.



3. With the thematic groups established under the new VET Council, Georgia is undertaking steps to increase the labour market relevance of VET.
4. [www.etf.europa.eu/web.nsf/opennews/8BB6F9F82AE6D9C8C1257842003D2DB9\\_EN?OpenDocument](http://www.etf.europa.eu/web.nsf/opennews/8BB6F9F82AE6D9C8C1257842003D2DB9_EN?OpenDocument)
5. For Georgia this was true after 2008.
6. OECD Competitiveness and Private Sector Development: *Central Asia 2011: Competitiveness Outlook*, OECD, Paris, July 2011 (forthcoming)
7. See article "Demographic situation in Republic of Moldova acute" at <http://social.moldova.org/news/demographic-situation-in-moldova-acute-birth-rate-1213-babies-per-woman-208345-eng.html>.
8. PISA analyses whether students perform differently depending on where they live – in villages/small towns, in large towns/small cities, or in large cities with over a million people. Azerbaijan's results showed that students in large cities performed significantly better. Baku is the only city in Azerbaijan with over one million people.
9. BBC News website, 21 January 2011 [http://news.bbc.co.uk/2/hi/europe/country\\_profiles/1102180.stm](http://news.bbc.co.uk/2/hi/europe/country_profiles/1102180.stm)
10. OECD Factbook 2010.
11. OECD Factbook 2010.
12. ETF Education and Business Study: Armenia 2010.
13. European Training Foundation, Education and Business Study, Georgia, Final draft 18.06.2010
14. Tempus (The Trans-European mobility scheme for university studies) supports the modernisation of higher education and creates an area of cooperation in countries surrounding the EU. Established in 1990 after the fall of the Berlin Wall, the scheme now covers 27 countries in the Western Balkans, Eastern Europe and Central Asia, North Africa and the Middle East.
15. NORRIC, The Educational System in Ukraine: A Nordic Recognition Network Country Report, 2009.
16. ETF, Labour Markets and Employability: Trends and Challenges in Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova and Ukraine, 2010.
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## Chapter 4

# Improving Access to Finance for Smaller Enterprises\*

by

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*Access to finance is critical for small and medium-sized enterprises (SME), as it allows small enterprises to leverage their limited internal funds and provides additional resources to expand their turnover and their investment. However, due to the high administrative costs associated with small-scale lending, the high risk attributed to small enterprises, asymmetric information and the lack of collateral provided by SMEs, banks and financial institutions have lower incentives to provide credit to SMEs. In the Eastern Europe and South Caucasus region in particular, SMEs face constraints in the form of high real interest rates and collateral requirements as well as reduced possibilities of external financing outside the banking sector.*

*This chapter discusses the challenges facing SMEs in accessing finance and the measure to be taken by policy makers. In the long run, the sustainability of a viable SME sector will depend on such factors as the creation of an efficient regulatory framework, and a sound and competitive financial sector. However, in the near term, a number of options are available to policy makers: A system based on multiple licences should be introduced to allow microfinancing institutions to gradually become self-sustainable. The quality of credit demand should be improved through financial education and entrepreneurial skills training. In the short term, SMEs can also be financially supported through credit guarantee schemes.*

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## Executive summary

The high priority given to the policy objective of ensuring access to adequate financing for SMEs reflects their critical importance to a country's economic development. The high administrative costs of small-scale lending, the perception of their high risk, the asymmetric information available on SMEs and their lack of collateral all hamper their access to finance and have a negative impact on their overall performance. The lack of access to finance is also due to the macroeconomic environment, the existing regulatory framework and the personal preferences of the small business owner. This chapter focuses on the policy challenges that face SME access to financing and the reforms required to support such access.

In the EESC region, SMEs grew on the back of the shift from a command to a demand-driven economy. They acted as a safety net for the unemployed during the transitional recession. They react quickly to changing market conditions and are recognised as an important engine for development. Every country in the EESC has its own SME definition, and definitions differ also within sectors and institutions, making comparisons difficult. Data on SMEs in the EESC is scarce, statistics are often distorted due to the informality of many participants, and hence the real size of the SME sector tends to be underestimated. According to available data, SMEs account for around half of national employment in Armenia, Georgia, Republic of Moldova and Ukraine. They contribute relatively little to GDP as they are concentrated in low-value-added sectors; their productivity is lower than that of larger firms and they invest less in innovation and human capital.

Access to finance is a top concern for small businesses in the EESC region. Banks are reluctant to lend to them due to macroeconomic uncertainty, an incomplete regulatory and legal framework and asymmetric information. SMEs, in turn, are constrained by the high interest rates of lending institutions, stringent collateral requirements and complex application procedures.

To establish an effective regulatory framework to improve access to finance for SMEs, central banks must be independent. Although legislation tends to confirm this independence for most of the six countries in the region, in many cases it is difficult to assess the real status of the central bank. Commercial banks continue to prefer collateral with a value that can be easily estimated and converted but this preference is undermined by fragmented and incomplete property registries throughout the EESC region, imperfect bankruptcy laws and weak enforcement of creditors' rights. Overall, most EESC countries have good registration systems, with the exception of that of Ukraine which is fragmented and Belarus which has very stringent collateral requirements.

The problem of asymmetric information can be addressed by developing credit history agencies, both public and private; these have a much lower coverage in the EESC countries than in OECD countries. For the proper functioning of credit history bureaus, a strong supervisory authority is essential. Private credit history bureaus should be created in Belarus and Azerbaijan, while the coverage of existing bureaus should be expanded in all the countries.

The banking sector currently dominates financial markets in the EESC region, providing credit to the economy in the amount of 36.6% of GDP; this is in comparison to 242% in OECD countries. The lack of competition in the banking system throughout the EESC has limited the number of services that banks provide. Competition could be improved by opening the market to foreign banks; the share of the state should be reduced to ensure fair competition and the geographical and demographic outreach and coverage of the banking sector must be improved. Despite rapid credit growth, bank credit penetration in the EESC countries is low. This is due to limited savings, weak governance, and poor financial supervision. Following the recent economic crisis, credit provision was reduced as banks reduced their risk exposure. Only a diversified and competitive banking sector can provide financial products specially designed for SMEs at reasonable prices.

Even with government support, the banking sector often may not provide sufficient long-term credit. Structured finance may be a better solution. Its collateral is based on the performance of the transaction and it is specially designed to consider the characteristics and needs of the players at a particular stage of the value chain. The countries of the region should further promote competition in the banking sector and seek alternative forms of external financing, such as leasing and factoring.

EESC countries have a large number of microfinancing institutions (MFI). The majority of borrowers are covered by credit unions, downscaling banks, microfinance banks and non-bank financial institutions. A main obstacle to MFI growth is their lack of funding, as well as exchange-rate risk exposure. They also face many constraints such as high interest rates and their dependency on external donors. A framework that would allow the collection of deposits could encourage them to become self-sustainable.

Venture capital and business angels networks are not very developed in the EESC countries due to the uncertain business environment, a reluctance of the business owners to dilute ownership, few innovative fast-growing enterprises and reduced possibilities for an exit strategy, as well as taxes on capital gains. This uncertainty could be resolved by improving contract enforcement and reducing corrupt practices; there should also be greater awareness of the possibilities and advantages of equity financing. Innovative firms should be encouraged to attract equity investors.

Guarantee schemes – whether portfolio guarantees or mutual guarantee schemes – should focus on expansion of access to credit for the excluded, rather than covering the default risk of loans that already exist.

Large firms are the main and often only participants in capital markets. The introduction of a capital market for SMEs may help improve their access to finance, although this may be premature for the region.

The lack of financial literacy and entrepreneurial training are two demand-side characteristics which may affect the availability of financing for SMEs. An EESC country survey found that the average consumer is not very knowledgeable about finance, unaware of consumer rights and distrustful of financial institutions. Financial literacy is particularly important for countries that receive large amounts of remittances which are spent on consumption rather than invested in entrepreneurial activities. The EESC countries lack a systemic nation-wide strategy to increase the level of financial literacy and rely on ad-hoc training organised by the government or local NGOs, MFIs or credit unions. A broad strategy should be considered that would encourage entrepreneurial activity and develop entrepreneurial skills.

Among the recommendations to improve access to finance for SMEs is the strengthening the legal environment and completing the regulatory framework, which are pre-conditions for a balanced expansion of the banking and financial sector and for removing obstacles to accessing bank credit and other financial products for private enterprises. Better statistical data and a single definition of SMEs, as well as collecting more information on each SME would allow comparison and help develop relevant policies. All EESC countries should ensure the independence of their central banks, develop and simplify company registration procedures and develop a legal framework for the development of private credit history bureaus. Competition in the banking sector should be increased and particularly Belarus should make lending decisions based on profitability and not government directives.

MFIs should develop a multi-tier financial system for microfinancing non-bank financial institutions and provide credit guarantee schemes (although only as a short-term solution). Innovative and high growth enterprises should be encouraged and in the long term a capital market for low-capital firms with reduced requirements for listing should be considered. Finally, financial education with the banks should be internalised and financial education should be included in basic education. Financial literacy programmes should also focus on remittance receivers to put their resources to productive use.

### **Introduction: the importance of access to finance for SMEs**

All the OECD countries have given high priority to a policy objective ensuring that small and medium enterprises (SMEs) have access to adequate financing (OECD, 2006). This high priority stems from the perception among policy makers that SMEs are critically important to a country's economic development and a lack of finance may be a serious barrier to their development.

Access to external finance allows companies to grow and leverage their internal funds to invest in growth at a faster pace. However, due to the high administrative costs of small-scale lending, the perception of high risk attributed to small enterprises, asymmetric information and their lack of collateral, banks and financial institutions have less incentive to provide credit and equity investments to SMEs (Naïm, 2008). SMEs are a less attractive borrower for banks and are either excluded completely from the credit market or are offered financing at prices that they cannot afford.

This limited access to finance has a negative impact on the overall performance of SMEs and their competitiveness potential within the economy. For example, SMEs generally innovate less than large firms because innovation often requires significant investment in research and development; this is hard to achieve in a small size company (OECD, 2010), translating into under-investment and low productivity.

Overall, access to finance for SMEs depends on a wide range of factors, starting from the general macroeconomic environment, the regulatory framework, the development of the financial system and including the personal preferences of the small business owner.

This chapter focuses on the policy challenges that face SME access to financing in the Eastern Europe and South Caucasus region, and specifically on the reforms required to support such access. It provides a brief description of the SME sector in the region, within the limits of available data, and describes the problem of access to finance while evaluating its severity. A more detailed analysis includes a focus on the main issues in the region and by country where necessary and concludes with a list of policy recommendations. Both

publicly available data and results from the Policies for Competitiveness Framework (PfC) Assessment (OECD), described in Box 1.1, were used to develop this chapter.

## **SMEs in the EESC region**

Despite their relatively small size, SMEs play an important role in the economic development of countries. During the early transition years in the EESC region, and more generally in transition economies, the SME sector has helped facilitate the shift from a command economy based on large-scale production to a demand-driven and market-oriented supply of products (Smallbone et al., 2001). In the post-Soviet years, new firms had to enter the market to absorb the surplus of labour and capital resulting from economic restructuring. SMEs, and in particular individual entrepreneurs and micro-enterprises, also served as a safety net for the unemployment resulting from the down-sizing of the public sector as they were well-positioned to react quickly to changing market conditions (Woodward, 2001). Currently, the small and medium enterprise sector is recognised as an important engine for development and growth in the region.

### **Definition**

Despite a common concept of what SMEs are, each country has its own definition for the SME sector. SMEs are typically defined as firms with a relatively small number of employees and low turnover or few fixed assets. The way it is defined largely depends on the economic environment, the size of the country and the economic importance attached to a certain grouping of companies. While the variety of definitions is often justified by the different economic environments, it renders any comparison between the countries very difficult, and is an obstacle to creating appropriate general policies for SME development. In addition, often within the same country different definitions are used by different institutions. For an in-depth analysis of the level of development and contribution of SMEs to the economy, a common definition across countries would be required to collect comparable data. Box 4.1 gives more details on the different definitions applied to SMEs by the EESC countries.

### **The size of the SME sector**

Data on the SME sector in the EESC region is scarce. Available information is mainly collected from national business registries; some of the registered firms may no longer be operating, while the firms that are operating informally are not accounted for. As a result the statistics of the SME sector are often distorted and its size tends to be underestimated. This lack of data should be kept in mind when further analysing the size and structure of SMEs.

The available data on the size of the SME sector in the EESC countries – collected from the National Statistical Services (NSS) – are presented in Table 4.2.<sup>1</sup> No data on SMEs are available for Azerbaijan.

Bearing in mind that the SME sector is defined differently in each country, in general it is agreed that SMEs make up a very large proportion of the business community. Particularly in Armenia, Georgia, Republic of Moldova and Ukraine, SMEs represented 95% or more of businesses in 2009. In Belarus the share of small businesses within the business community is only 48% – partly because it does not count individual entrepreneurs who are considered as a separate category, but also because the economy is dominated by state-owned firms which tend to be larger in size.<sup>2</sup>

### Box 4.1. Defining SMEs

Each country in the EESC region has a different definition for the SME sector. In most cases, the number of employees is used as a key criterion for classification; however, other criteria such as turnover, value of assets, type of economic activities or any combination of these can apply (Table 4.1). Classification may also differ by sector, reflecting structural differences between capital-intensive and labour-intensive industries.

Table 4.1. **Criteria for defining SMEs in the EESC countries**

	Number of employees	Turnover	Total assets	Different definitions by industry sector
Armenia	X			X
Azerbaijan	X	X		X
Belarus	X			
Georgia	X	X		
Republic of Moldova	X	X	X	
Ukraine	X	X		

Source: Compilation based on information from national statistical offices of the countries and official documents (see Annex for further details).

In the OECD, SMEs are generally considered to be non-subsidary enterprises with a typical upper limit set at 250 employees. The United States is an exception, setting the limit at enterprises with fewer than 500 employees, while other countries have introduced ceilings at 200 employees.\* In the European Union, a new SME definition was introduced in 2005 which is applied by member states on a voluntary basis. According to that definition, SMEs are enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million.\*\*

In the EESC countries, enterprises are typically categorised into micro, small, medium and large companies. Azerbaijan and Ukraine define “small businesses” without a further breakdown between micro and small size companies, whereas Georgia uses an additional category for medium-sized enterprises. Only Armenia, Belarus and Republic of Moldova use separate categories for micro, small and medium enterprises.

Individual entrepreneurs (sole proprietors), who are natural persons carrying out an economic activity without being registered as a legal entity, are included in the micro-firm category in all countries except Belarus where individual entrepreneurs are considered a separate category of small business.

The criteria used for defining SMEs range from number of employees, turnover, to total assets in the case of Armenia and Republic of Moldova (Table 4.1). Thus, Armenia and Republic of Moldova are the only countries that use all three criteria that are also applied in the definition of the European Union, but they are adjusted to the characteristics of their economies. The definitions of SMEs are further described in Annex 4.1.

\* OECD SME and Entrepreneurship Outlook, 2005, p. 17.

\*\* Article 2 of the Annex of Recommendation 2003/361/EC.

Micro-enterprises represent a large majority of the SME sector. In Armenia and Republic of Moldova these firms make up approximately 75% of the registered business population. In Ukraine, there is no separate category for micro-firms, but the small firms



represent 94% of registered enterprises. Their number also tends to be underestimated due to the large informal sector which is not incorporated in the business registries, and which mainly consists of micro and small enterprises.

According to the available data, SMEs account for around half of national employment in Armenia, Georgia, Republic of Moldova and Ukraine (ranging from 42% in Armenia to 59% in Republic of Moldova). In Belarus, SMEs provide 20% of employment, but this figure includes only firms that have submitted data to the statistical authorities.

Despite their large share of the business population, SMEs contribute relatively little to their country's GDP. For example in Georgia, in 2009, SMEs accounted for 42% of employment and at the same time contributed only 19% of GDP. In the same year, SMEs accounted for 59% of employment and contributed only 39% of GDP in Republic of Moldova. In Belarus the numbers are 20% and 11% respectively. In Armenia, the proportions in employment and in GDP are roughly the same. There are no data on the contribution of SMEs to the GDP of Ukraine.

This low GDP contribution is often a result of the concentration of SMEs in low-value-added economic sectors such as agriculture and trade. However, productivity is also lower in small-scale firms compared to large firms. This is due to less investment in innovation and human capital, a lack of economies of scale and other factors.

### **Large informal sector**

As already mentioned, official statistics understate the size of the SME sector due to the region's large informal sector. Unregistered economic activities, if registered, would otherwise contribute to the officially calculated Gross National Product (GNP). Even though there are no exact figures for the size of the informal sector, indicative estimates are given by Schneider *et al.* (2010). According to their estimates the informal sector represented approximately half of the "official" GDP of the EESC economies in 2007 (Table 4.3).<sup>3</sup> Over the past decade it has been steadily decreasing but it is still much higher than in the OECD countries, where, on average, in 2007, the informal sector represented 18% of GDP. It is important to point out that some countries like Georgia, have made progress in this area by implementing various measures to reduce the informal economy (liberalisation of tax policy and tax administration, fight against corruption, simplification of administrative and registration procedures etc.)

One of the main reasons for such a large informal sector in the EESC region, and in transition economies in general, is the steep transformational recession which followed the collapse of the Soviet Union. The subsequent economic stagnation, unemployment, and depreciation of capital all stimulated participation in informal activities (Gërzhani, 1999). In times of economic distress, the informal sector serves as a safety net for the unemployed, while the increasing price of formal production encourages the shift to informality.

At present, operating in the informal sector is often a deliberate decision of firms and is based on the balance of costs and benefits of staying in or moving out of the formal sector. Tax, social security contributions, and excessive bureaucracy impose both direct and indirect costs on firms operating formally. Since small firms often have a limited number of employees and do not have specialised departments for dealing with administrative procedures, regulatory constraints represent a bigger burden than for their larger peers. On the other hand, when operating informally, firms do not have access to public services or formal financing, while their employees may not receive social benefits, such as medical insurance and pensions. Moreover, when operating informally, they risk

Table 4.2. **Structural indicators for registered enterprises**

	Armenia, 2009			Belarus, 2009 <sup>2</sup>			Georgia, 2009			Republic of Moldova, 2009*			Ukraine, 2009		
	Share in business population	Share in employment	Share in GDP	Share in business population <sup>4</sup>	Share in employment	Share in GDP	Share in business population	Share in employment	Share in value added	Share in business population	Share in employment	Share in turnover	Share in business population	Share in employment	Share in turnover
Individual entrepreneurs (IE) <sup>1</sup>	55%	–	–	58%			68%	6%	2%	–	–	–	4223.5 (33.6%)	–	
Micro	76%	9%	10%				–	–	–	76%	16%	6%	–	–	–
Small	17%	16%	18%				84.8%	22%	8%	19%	22%	20%	94%	25%	17%
Medium	5%	17%	14%	-			9.9%	20%	11%	4%	21%	14%	6%	35%	38%
Total SMEs	98%	42%	43%	48%	20.4% <sup>3</sup>	11%	94.7%	42%	19%	98%	59%	39%	100%	50%	54%
Large	2%	58%	58%	52%			5.3%	58%	81%	2%	41%	61%	-	50%	46%
Total (including IE)	136008			380190			324917			44633			370278**		

Note: The figures incorporate both private and public sectors and are based on the definitions of SMEs from Annex 1;

1) the micro, small and medium enterprises, calculated below include individual entrepreneurs;

2) In Belarus the SME sector includes micro, small enterprises (up to 100 employees) and individual entrepreneurs

3) includes individual entrepreneurs and firms that submitted their data to the statistical authorities;

4) the figures have been calculated in accordance with the methodology of registration of small business entities adopted in 1996; “-” means that the data is not available or is available but not reliable; In Ukraine, the numbers refer to active enterprises.

\* The information is based on firms that reported to the National Bureau of Statistics of the Republic of Republic of Moldova in 2009, which excludes firms that did not have any transactions in the reported year and firms that use single entry accounts. Patent holders are not included.

\*\* This number is estimated using data from the State Statistics Committee of Ukraine on the number of enterprises per 10 000 persons and the average population of the country.

Source: Armenia: SMEDNC (2010), Republic of Armenia Ministry of Justice Legal Entities State Registry Agency; Georgia: geostat.ge, Business Statistics; Republic of Moldova: National Bureau of Statistics of the Republic of Republic of Moldova, Belarus: Ministry of Economy of the Republic of Belarus; Ukraine: State Statistics Committee of Ukraine.

Table 4.3. **Estimates of the informal sector as a share of GDP (in % of “official” GDP)**

	1999	2003	2007	Country average 1999-2007
EESC simple average	53.8	51.7	49.06	51.4
OECD simple average	19.3	19.2	18.3	19

*Note:* The size of the shadow economy is estimated based on a Structural Equation Model, which analyses the relationship between different variables of the system. The estimation uses a range of variables that measure tax and social security contributions, intensity of regulations, public sector services, situation in the official economy and monetary and labour market indicators. For more details see Schneider *et al.* (2010).

*Source:* Schneider *et al.*, (2010).

being caught and penalised. It is the balance between these costs and benefits that determines the firms' decision to function formally or informally.

The smaller the firms, the higher the cost of compliance with the various administrative rules. As a result, the informal sector is largely made up of micro and small enterprises. The incidence of informality tends to decrease as the size of the firm increases.

### **Difficult access to finance as a major obstacle for SME development**

According to the EBRD and World Bank Enterprise Survey 2008/2009 (BEEPS), access to finance is identified as the top business concern in three countries of the EESC region (Azerbaijan, Georgia and Republic of Moldova), and is included in the top five concerns in Armenia and Ukraine. In Belarus access to finance was identified as the sixth most severe obstacle faced by the firms surveyed. Firms participating in the World Bank's *Doing Business 2011* and the Global Competitiveness Index Report of the World Economic Forum also identified access to finance as one of the main obstacles for business in the region.

The financial system in the region is largely bank-based, but banks are generally reluctant to lend owing to macroeconomic uncertainty, an incomplete regulatory and legal framework, and asymmetric information. For example, among firms in the region that purchased fixed assets in 2007, only 26% used banks to finance their investments (BEEPS, 2008/2009).<sup>4</sup> According to BEEPS 2008/2009, the main reasons behind not applying for a bank loan are the high interest rates, high collateral requirements and complex application procedures. Moreover, financial resources are often allocated based on personal connections and other non-market criteria, putting small and medium enterprises at a disadvantage relative to their larger peers.

Apart from banking finance, there are few options for obtaining financing. Private equity and capital markets are not developed, while leasing services are in their early stage of development (EBRD, 2010). At the same time, capital markets operations tend to be limited to large firms or state bonds. This situation excludes SMEs from any financial alternatives, apart from bank credit and their own internal resources.

**High inflation and real interest rates**

The private sector in the EESC countries has traditionally experienced a shortage of financing. Immediately after the collapse of the Soviet Union, the countries of the region opted for liberalisation of the financial markets as part of their structural reform programmes. Due to economic distortions inherited from the Soviet era, the first phase of liberalisation of the financial markets did not lead to a more efficient allocation of resources and in the short term resulted in a severe crisis across the entire region, followed by hyperinflation and the bankruptcy of a large number of banks (Korosteleva and Lawson, 2010).

In 1992-94 almost all the EESC countries reached 4-digit inflation<sup>5</sup>; this discouraged any financial or investment activities within the business sector. The high inflation eroded both the value of deposits, hence discouraging savings, and the equity capital of banks, leading to their undercapitalisation. As the banks had to adjust their nominal interest rates to cover the loss caused by the erosion of capital, high nominal interest rates in turn imposed financial constraints on borrowing firms. In addition, due to high inflation, banks would lend only short-term.

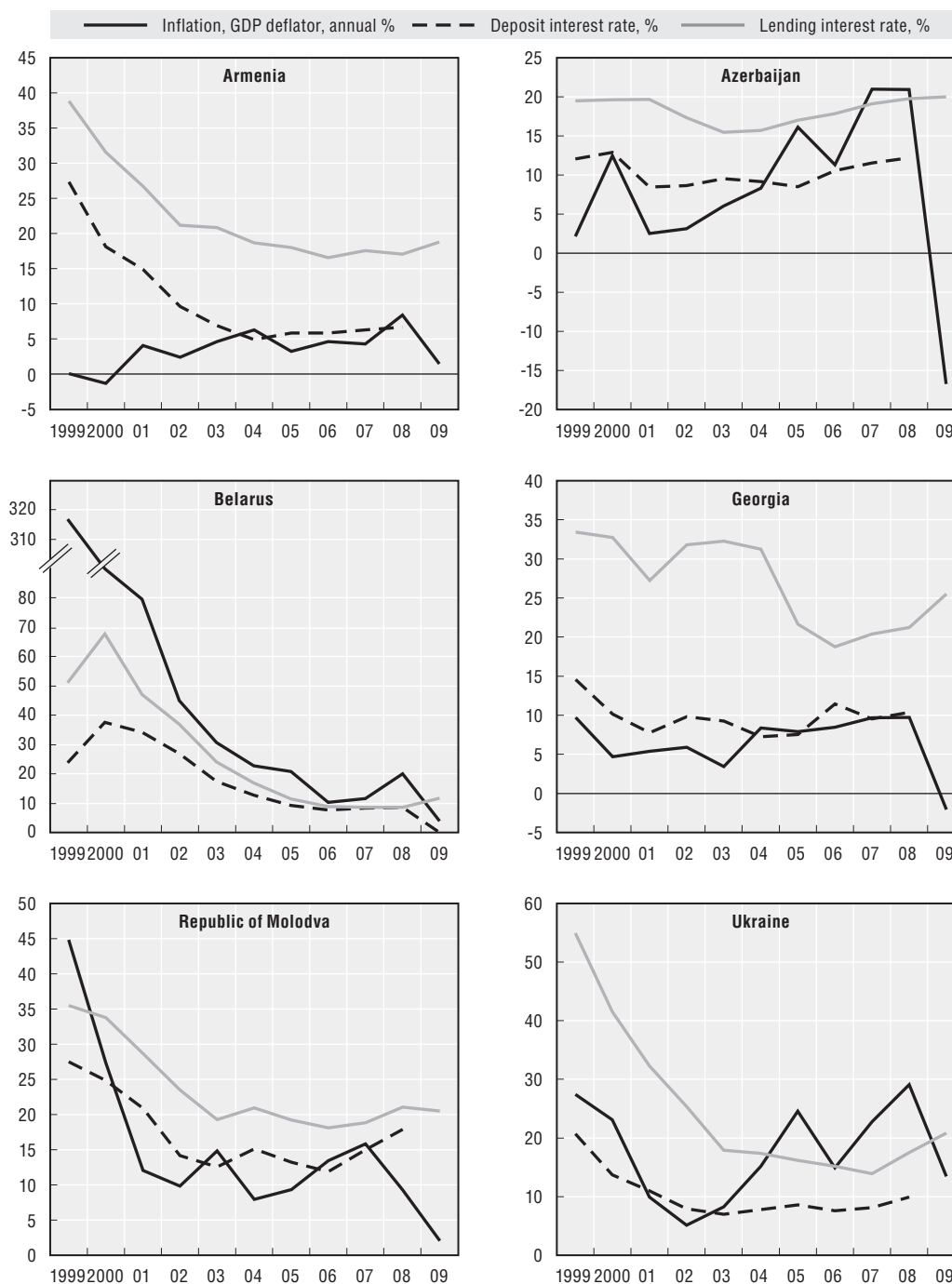
Starting in 1995, the inflation rate started to gradually decrease, and by 2000 it stabilised at around 10% in Armenia, Azerbaijan and Georgia. Republic of Moldova and Ukraine had inflation rates of 27% and 23% respectively.

Between 2000 and 2007, the average rate of inflation in Armenia stabilised at 4%, in Georgia at around 7% and in Republic of Moldova at around 12 %. In Azerbaijan and Ukraine inflation went up after 2002, increasing from 3.2% in 2002 to 21% in 2007 in Azerbaijan, and increasing from 5.1% in 2002 to 22.1% in 2007 in Ukraine (see Figure 4.1). However, inflation rates declined sharply across the entire region in 2008-09. That said, inflation rates remained substantially higher than in OECD countries where the average inflation rate during 2000-08 was 2.7%. During the same period, 2000-07, real interest rates in the EESC countries, with the exception of Belarus, steadily decreased and in some countries, such as Ukraine, turned negative (Figure 4.1). This decline pushed up the demand for loans and encouraged the expansion of credit in the region. The sharp decline in inflation rates in 2009 was however a problem for many companies: Since firms were not able to adjust their own prices quickly to keep up with the new economic situation, the real cost of funds surged.

In Belarus, the situation was slightly different. In 2000, unlike in other countries of the EESC region, inflation was still very high at 85%. In 2008 the inflation rate experienced a steep drop to 20%. For the entire decade the real interest rate has been negative and surged only in 2009 as a result of the deflation induced by the crisis. This negative real interest rate is the result of the high inflation rate, but also of the ability of some firms to contract loans with subsidised interest rates. Belarus has a long history of supporting state-owned enterprises and providing credit at low interest rates to certain strategic industries (Korosteleva and Lawson, 2010).

Overall, the unstable macroeconomic environment during the transition period kept the expected returns down and discouraged entrepreneurial activities in all of the EESC countries. Price stability is important as it allows the banks to assess risk more easily and permits firms to make long-term projections to better manage their business. Price stability consequently results in more access to finance on better terms. While the macroeconomic environment is important for better access to finance, it is not within the scope of this chapter.

Figure 4.1. **Inflation rate and nominal lending and deposit interest rates in EESC countries**



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

### **Collateral requirements**

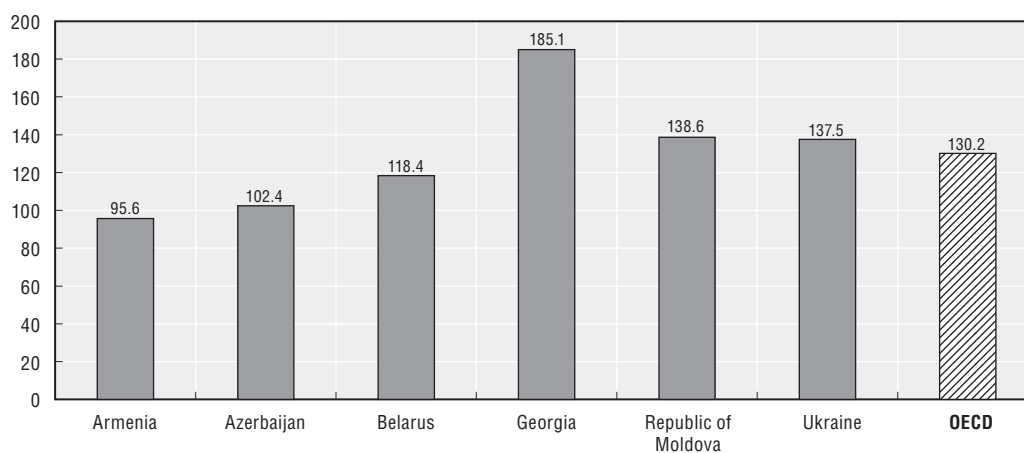
SMEs in the EESC region face a second major constraint – high collateral requirements. The guarantees required by banks are usually based on assets that must be valuable enough to encourage the borrower to pay the debt and whose ownership can be easily

transferred to the bank if the firm defaults. Asset-based lending and relationship-based lending are the most frequently used types of lending in the region.

Asset-based lending is based on assets that can be provided by the borrowing firm and can then be sold or their ownership transferred to the creditor in case of repayment default. Theoretically, assets may be real estate, equipment, movable assets, inventory or receivables. In the EESC region however, collateral accepted by banks tends to be mainly marketable land or buildings. In some cases, machinery, equipment and other types of movable assets that can be easily liquidated on the market are also accepted as collateral.

According to the BEEPS 2008/2009, collateral requirements in the region range between 95.6% of the value of the loan in Armenia, to 185.1% in Georgia (Figure 4.2). At first glance, the data seem to indicate that collateral requirements in the region are not particularly large, with the exception of Georgia. However data for Armenia, Azerbaijan and Belarus must be interpreted with caution, in view of the general distortions in the local credit markets. Access to credit appears to be largely restricted to state-owned or well-connected enterprises that can either leverage on indirect state guarantees or on their special relationship with financial institutions; therefore they may face lower collateral requirements. In contrast, access to finance for smaller and less well-connected enterprises appears to be highly rationed.

Figure 4.2. **Collateral rates in the EESC region**  
(% of value of the loan)



Note: Collateral requirements for OECD countries are included for just a sample of OECD countries.

Source: BEEPS 2008/2009 Database, [www.enetrprisesurvey.org](http://www.enetrprisesurvey.org)

In the case of assets-based financing, well-defined bankruptcy laws and the proper enforcement of creditors' rights are crucial. Creditors are less willing to provide credit if receiving the pledged assets is costly and requires lengthy procedures in case of default. Burdensome collateral requirements can be alleviated through guarantee schemes or by providing other types of guarantees, such as a positive credit history. This type of instrument will be further discussed below.

### **Limited access to formal financing**

As previously discussed, a large majority of firms operate on the margins of the formal sector, thus limiting their access to formal channels of financing. Instead, they often rely

on their own internal resources or informal types of external financing, such as financing from friends and relatives.

Since informal firms do not need to comply with any accounting standards, their financial data are less credible and transparent. These firms also have no credit history, historic balance sheets or cash-flow records. Lacking this type of basic financial data, potential creditors cannot properly assess the lending risks and are therefore more reluctant to lend. Furthermore, firms may not have enough incentive to leave the informal sector, either because the banks are not willing to give them credit, or because the benefits of formal financing do not counterbalance the costs of complying with the regulations and taxes associated with running a business in the formal sector.

The presence of an informal sector also has negative effects on competition in the market. The profit margin of the entire market is reduced through unfair competition. Since firms operating informally do not pay taxes or social contributions, they have lower production costs compared to firms operating formally, leading to unfair competitiveness. On the contrary, a fair competition would have involved innovation, new managerial practices and other positive developments, which would benefit the entire economy. Unfair competition may push out of the market healthy enterprises just because they are operating formally. Moreover, as the informal sector does not pay taxes, the government may increase the tax burden on the firms operating formally in order to compensate for the loss of tax revenue.

### **Lack of trust**

Finally, it is important to mention the role of trust in the relationship between the different players of the financial markets in the EESC region and in transition countries in general. After the severe crisis which followed the collapse of the Soviet Union and the devaluation of the local currencies, local firms and banks developed a deep mistrust of each other (Woodward, 2001). Such lack of trust is destructive and discourages mutually beneficial, long-term cooperation that is the basis of a healthy economic relationship. Trust is especially important for SMEs because, unlike large firms which have assets and audited financial reports to prove their creditworthiness, SMEs have to rely on external factors, such as unofficial information and cooperation with other firms.

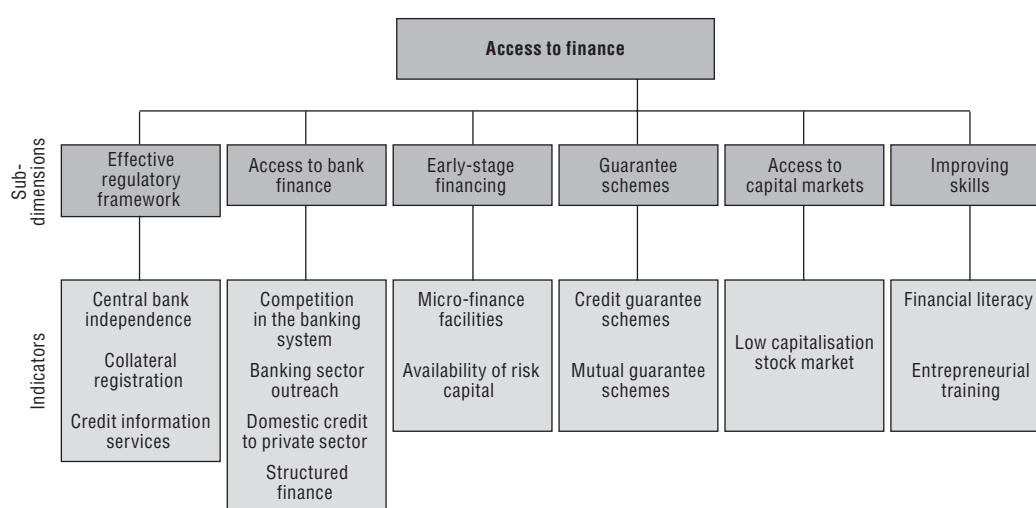
In the context of the financial crisis, many businesses were unable to meet their contractual obligations on time, both for paying back credits and for fulfilling contracts with other businesses, and as a result trust between firms and credit providers has deteriorated even more. This effect has been especially severe in the manufacturing and industrial sectors (EBRD, 2010), the two sectors most seriously affected by the international financial crisis. The problem of mutual lack of confidence can be tackled by stricter contract enforcement, which may compensate for the lack of credibility among SMEs.

To sum up, access to finance is generally a problem for all the firms in the region, but particularly for SMEs, which are often excluded from the credit market or simply cannot fulfil the conditions required to obtain financing. Policy makers should ensure that the business environment, regulatory framework and all the players in the market allow healthy SMEs to access financing despite their small size.

## Access to finance assessment framework

In order to evaluate the level of reform affecting access to finance for SMEs, the Policies for Competitiveness (PFC) Assessment Framework has been used to develop this chapter (see Box 1.1 in Chapter 1 for a more detailed description of the framework). Figure 4.3 highlights the six sub-dimensions included in the assessment of access to finance. Both the supply and the demand side are assessed. In this way, the framework aims to assess the performance of all actors involved in the process of accessing finance, moving from the macro- to the micro-level: from central financial authorities to banks, capital markets and firms (whether they are established businesses or start-ups), and concluding with business managers and individual clients themselves.

Figure 4.3. **Policies for Competitiveness Assessment Framework (OECD): Access to finance**



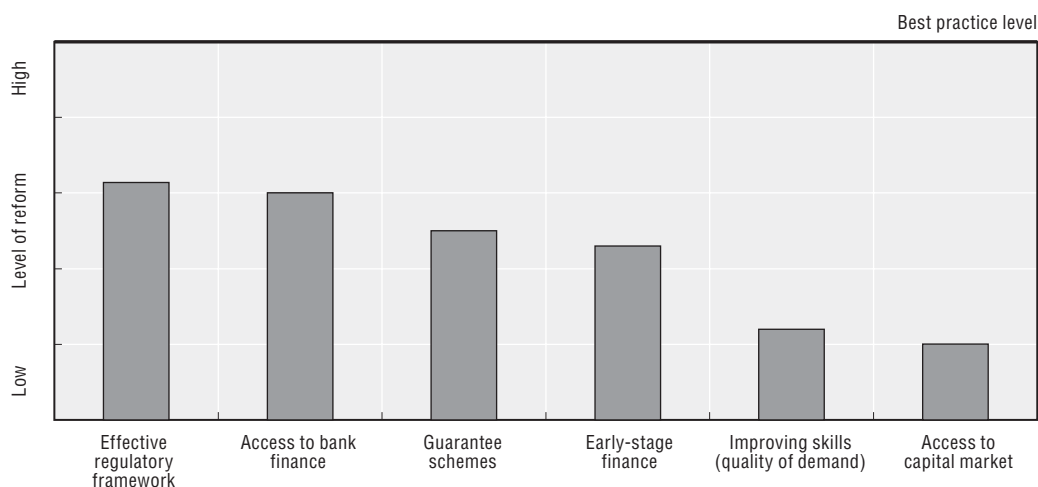
Source: PFC Assessment Framework 2010 (OECD).

The sub-dimensions are composed of a set of indicators. For each indicator, international best practices have been used as a benchmark against which the Eastern Europe and South Caucasus economies have been assessed. The framework functions as a self-assessment tool, with information provided by both public and private representatives of a given EESC economy.

All governments and private sector representatives in the region responded to the assessment framework. Belarus was not part of the EESC Initiative at the time of assessment, so its analysis is based on secondary research only.

The results of the survey showed that all the areas of access to finance covered by the survey are perceived as being worse than the best-practice level and there is room for improvement (Figure 4.4). The results also highlight that early-stage financing, quality of demand (i.e. financial literacy and entrepreneurial training) and capital markets are the areas with the lowest levels of development. In the long run, the capital market, despite its current low level of development, could be a source of diversification for SME financing, particularly for enterprises with high growth potential.



Figure 4.4. **PfC Assessment Framework results: access to finance**

Note: No survey data is available for Belarus. “Best practice” represents the benchmark used in the PfC surveys which corresponds to 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 (OECD).

### **Effective regulatory framework**

The legal and institutional environment sub-dimension covers the laws, regulations and supervisory authorities that facilitate the development of efficient financial markets. A qualitative legal and regulatory framework ensures that financing resources are distributed for their most efficient use and that all players in the economy have an equal opportunity to access them. The framework is also a pre-condition for balanced expansion of the banking and financial sector and for removing obstacles to access of bank credit and other financial products for private enterprises. Without an effective legal and regulatory framework, more targeted measures supporting access to finance for SMEs, such as credit guarantee schemes and credit bureaus, tend to be less effective.

Over the last five years there have been significant developments in these areas across the region. According to the EBRD index of banking sector reform, which assesses the progress of institutional reform, the regional average moved from 2.3 in 2004 to 2.7 in 2010<sup>6</sup>. However, there are still substantial differences among the EESC countries and a country-specific analysis is needed - to assess the quality and efficiency of the legal and regulatory environment of each country.<sup>7</sup> This chapter highlights some features that are common across the region. The central banks play a regulatory and supervisory role in their financial markets. In addition, Republic of Moldova has a regulatory body for financial markets, while Ukraine has a body for regulating capital markets (State Commission for Securities and Stock Market of Ukraine) and another one for the regulation of financial services (State Commission for Regulation of Financial Services Markets of Ukraine).

### **Central bank independence**

The independence of the central bank is demonstrated by its ability to choose its objectives autonomously and make decisions on monetary policy and on financing the public deficit. The independence and transparency of the central bank are positively correlated with a higher quality of national institutions and lower inflation (Crowe and Meade, 2008). Low inflation in turn encourages risk-taking and entrepreneurial activity.

Legislative independence does not necessarily mean independence in practice. This is especially so in transition economies, where historically financial markets were controlled by the government. Ilieva and Gregoriou (2005) used the index of central bank independence applied to OECD countries to create indices adjusted for the particularities of the transition economies. The resulting index, which ranges from 0 to 1, describes central bank independence in 2000. Republic of Moldova and Georgia had a score comparable to Poland and Slovenia in the same year. Armenia had a score comparable to Croatia. Belarus and Azerbaijan had the lowest scores in the sample used – 0.43 and 0.39 respectively. Ukraine was not included in the study.

Table 4.4. **Central Bank Independence Index, 2000**

Country	Central Bank Independence Index
Armenia	0.52
Azerbaijan	0.39
Belarus	0.43
Georgia	0.7
Republic of Moldova	0.74
Ukraine	–

Note: the index ranges from 0 to 1, where 1 represents full independence and 0 represents full dependence.

Source: Ilieva and Gregoriou (2005).

With the exception of Belarus and Ukraine, the independence of central banks from their governments is formally stated in the legal provisions. In Belarus, membership of the board of the national bank is decided by the President of the Republic of Belarus and the bank is directly accountable to the President. In other countries the situation is less straightforward. In Ukraine the March 2009 Law on the National Bank of Ukraine avoids the formulation “an independent body”, and indeed the separation between the national bank and the government is somewhat blurred because the composition and the distribution of power on the board shows that the national bank depends partially on executive and legislative organs.<sup>8</sup>

However, even in countries where the government has officially given up the role of regulating the financial markets, it is difficult to assess the real independence of central banks. Central banks may be under pressure from governments that are pursuing short-term political benefits rather than aiming to attain long-term monetary goals. This may be especially true in countries with uncertain political environments, where politicians try to take advantage of monetary tools to improve the economic environment in the short-term. Most often the intervention takes the form of budget-deficit financing.

An independent central bank is a prerequisite for a stable macroeconomic and low-inflation environment. The countries of the region should ensure that the central bank is not being pressured by the government. In Belarus in particular, the changes should start with amendments in legislation, by providing more independence to the central banks and reducing their links to the political powers.

### **Collateral registration**

SMEs typically have limited assets to provide as collateral when applying for a loan, especially in the situation where banks prefer collateral with a value that can be easily estimated (i.e. there is a market for these assets and they are relatively liquid). Often this

may completely prevent SME access to credit. The extension of the collateral definition to include movable and other types of assets as well as the proper functioning of collateral registries and cadastre can significantly improve access to finance for small and medium enterprises, as these types of collateral are more liquid and can find a market more readily.

In many countries in the EESC region, collateralised transactions are undermined by fragmented and incomplete property registries and unreliable judicial protection for lenders. Property registration and cadastre has significantly improved in some EESC countries. With the exception of Ukraine, all the EESC countries are in the top 20 of the Registering Property indicator of the World Bank's *Doing Business 2011* report. Georgia and Armenia in particular have managed to improve their registration systems in recent years; these are now modern, and self-sustainable (World Bank, 2010).

Ukraine was ranked 164th (out of 183) in the Registering Property Dimension of *Doing Business 2011*, mainly due to the long time required to register property – 117 days. It lacks a unified registration system for land and real estate, and registries are currently maintained at the regional level (Wehrmann, 2010).

Much remains to be done to extend the types of assets that can be registered and used as collateral. In Belarus, for example, the registration system is in place but allows only the registration of real estate. Recently the use of pledge as a security arrangement has been facilitated, but the implementation of these changes is the real challenge (World Bank, 2010).

Collateralised transactions are further undermined by imperfect bankruptcy laws and weak enforcement of creditors' rights. Loan recovery has been difficult for banks through the court system. In Armenia, for example, the problems vary from flawed registration and the impossibility of tracking the owners, to allegations of corruption in the judicial system<sup>9</sup> (USAID, 2006-2009). In other countries, the court system is also an obstacle to the efficient functioning of credit institutions due to corruption and lengthy procedures which impose costs on creditors.

Overall, most countries have good registration systems. Ukraine should focus on unifying its registration system and establishing a common national and regional registry. Belarus could extend the definition of collateral that can be registered.

### **Credit information services**

Asymmetric information is another reason why small enterprises have difficulty in obtaining credit on favourable terms. Inappropriate accounting records and lack of collateral create problems to banks in assessing SMEs' risk. Credit history agencies can provide an effective tool for risk assessment. Moreover, a positive credit history can in itself be considered to be collateral; when borrowers know that their credit information is being registered they have an additional incentive to pay. Evidence shows that information sharing is associated with improved availability and lower cost of credit to firms (Brown, Jappelli and Pagano, 2007). This correlation is found to be stronger for opaque firms, i.e. small and medium enterprises, than for transparent firms, which are the large firms.

The EESC countries have much lower credit information coverage than the OECD countries. According to the World Bank's *Doing Business 2011*, on average, within the EESC countries public registry covers 9.6% of adults; this high average is due to the extensive public registry in Belarus, which covers 33.5% of adults (Table 4.5). For comparison, in the Central and Eastern Europe and Central Asia (ECA) region it represents 13.1% and in OECD

Table 4.5. **Doing Business 2011: “Getting credit” dimension in EESC region**

	Rank	Strength of legal rights index (0-10)	Depth of credit information index (0-6)	Public registry coverage (% of adults)	Private bureau coverage (% of adults)
Armenia	46	6	5	16.9	38.3
Azerbaijan	46	6	5	7	0
Belarus	89	3	5	33.5	0
Georgia	15	7	6	0	16.4
Republic of Moldova	89	8	0	0	0
Ukraine	32	9	3	0	10.1
ECA 2011		6.6	4	13.1	21.3
OECD 2011		6.9	4.7	8	61

Note: The Strength of legal rights index (0-10) describes the protection of rights of borrowers and lenders through collateral laws and protection of secured creditors' rights through bankruptcy laws; Depth of credit information index (0-6) describes the scope and accessibility of credit information distributed by public credit registries and private credit bureaus; Public registry and private bureau coverage describes the number of individuals and firms listed in public credit registry and in the largest private credit bureau as a percentage of the adult population.

Source: World Bank (2010).

countries 8%. Coverage of the largest private credit-history registry is highest in Armenia and Georgia – 38.3% and 16.4% respectively, compared to 61% in OECD countries and 21.3% in the ECA region.<sup>10</sup> Data on coverage is not yet available for Republic of Moldova, due to the lack of any operational credit bureau.

Credit bureaus can be public or private. Public bureaus are usually set up by the central bank or a bank supervisory agency whose aim is to support the supervision of the financial system. Data on loans is thus collected in order to assess the stability of the financial system.

As opposed to public credit history bureaus, private credit history bureaus are created specifically in response to the demand for credit history on the market, and are designed to facilitate credit transactions by providing credit history on potential borrowers to interested parties. They are usually set up by banks or specialised companies.

Among the EESC countries, all the countries except Azerbaijan and Belarus have private credit information bureaus. Among these, in Ukraine at least five private credit information bureaus are known to exist; one of the most obvious reasons for such a large number of bureaus is its large territory and population. In Republic of Moldova the Law on Credit History Bureaus was passed in 2009, and a first credit bureau has been established (OECD, forthcoming). However, the bureau will provide only negative data on borrowers.

Due to their different roles, public and private credit history bureaus are complementary rather than substitutes. The EESC countries should encourage the development of private credit history bureaus, as these could help overcome information asymmetries in the financial market in the medium and long-term. Moreover, access to financial data should be granted to all financial institutions. A strong supervisory authority that would give licences, supervise and monitor credit bureaus, as well as request audits and impose penalties on their activity, is also very important for the proper functioning of credit history bureaus (IFC/VISA, 2007).

In Azerbaijan a project developed by the International Financial Corporation (IFC) started implementation in 2010, with the aim of improving and implementing a legal framework for credit information sharing, by building the capacity of credit information

bureaus and raising awareness about the role of credit bureaus.<sup>11</sup> The project should help financial institutions to make faster and more accurate credit decisions, thereby increasing the availability and affordability of financial services for SMEs in the region.

To sum up, the regulatory framework in the EESC countries must still be improved and consolidated, as it is the basis for the development and efficiency of financial markets. The credit environment will benefit significantly from the strengthening of the judiciary system and from better contract enforcement.

Collateral registration systems should be further developed and made easily accessible in Ukraine. In Belarus, collateral registration could be extended beyond real estate. Finally, a legal framework for the development of private credit history bureaus should be created in Belarus and Azerbaijan, while the coverage of existing bureaus should be expanded in all the countries.

### ***Access to bank finance***

The EESC region inherited an underdeveloped banking sector characterised by structural segmentation, state control and a concentration of bank assets from the Soviet central-planning system (Bonin, Hasan and Wachtel, 2008). During the early transition period, the banking sector developed at a fast pace due to the lax entry requirements aimed at liberalising the financial market and increasing competition. The banking sector also became attractive for investments compared to other sectors of the economy due to its higher profitability and facility of entry and exit for investments.

Currently, the banking sector dominates the financial markets in the EESC region. In Ukraine, for instance, the banking sector accounts for 96% of the assets of the financial sector (USAID, 2010). Despite their dominance, banks are rather fragmented and are underperforming; in 2008, on average, the banking sector provided credit to the economy in the amount of only 36.6% of GDP in the EESC countries, compared to 242% of GDP in OECD countries (WB/WDI). This difference in the amounts of credit provided can be explained by the still underdeveloped mortgage market in the EESC region, which represents a major part of lending in developed economies.

Generally, banks are more reluctant to lend to SMEs than to large companies. Therefore, given the region's reliance on banks, in the short-term and medium-term any improvement in SME access to finance has to come from an expansion in bank lending. Only a diversified and competitive banking sector will be able to provide financial products specially designed for small businesses at reasonable prices.

### ***Competition in the banking system***

Healthy competition in the banking sector leads to the development of a wide range of services at affordable prices, including financial services and products for SMEs. A more concentrated banking sector, on the other hand, creates greater obstacles to financing for all firms. This negative effect is even greater for smaller enterprises. Such a situation is particularly true for emerging economies, as the negative effect of bank concentration is increased in countries where the institutional and regulatory framework is weak and where the share of the state in the banking sector is large (Beck, Demirgüç-Kunt, and Maksimovic, 2004).

The lack of competition is a serious problem in Azerbaijan, where the financial sector is dominated by one state-owned bank, the International Bank of Azerbaijan, which owned 43.4% of banking sector assets at the end of 2009 (EBRD, 2011).

Similarly, in Belarus the banking sector is dominated by a few state-owned banks which accounted for 77.9% of bank assets at the end of 2008 (EBRD, 2011); the foreign-owned banks are small in size and have a limited impact on the market. Moreover, the state-owned banks offer loans with subsidised interest rates (EBRD, 2010), crowding out the commercial banks which are unable to compete with the abnormally low interest rates.

The least concentrated banking sector is that of Ukraine where the five largest banks control only 33% of assets, while the share of banks with foreign capital has been increasing and amounted to 39.4% at the end of 2007 (EBRD, 2008).

Competition on the market can be further improved by allowing new entries to challenge incumbent firms. This can be done by opening the market to foreign banks. However foreign bank penetration in the financial markets in the transition countries of Eastern Europe and the former Soviet Union is associated with more access to credit only for larger firms, but not for the smaller ones (Maurer and Brown, 2006). So far, the highest foreign penetration is in Georgia where 89.1% of bank assets were foreign-owned in 2009 (EBRD, 2011). The lowest foreign penetration is in Azerbaijan (9.3% in 2009) and Belarus (20.6% in 2008), mainly due to the large share of state-owned assets in the sector.

While more competition improves access to credit, too much competition can reduce it, due to the information asymmetries that are too costly to overcome in a competitive market (Maurer and Brown, 2006). The banking sector in many EESC countries, such as Ukraine and Republic of Moldova, is very fragmented, with an excessive number of underperforming banks serving a reduced number of clients. Given the high concentration of assets, an excessive number of banks often leads to harsh competition in the market of small loans, where a large number of banks fight for a small profit share. Competition is the highest in consumer loan and retail business credits.

In Belarus and Azerbaijan, measures should be taken to increase competition and allow more players onto the market. Corporate governance of the state-owned banks should be improved. The share of the state in banking assets should be reduced in order to ensure fair competition and the efficiency of the banks (so that lending is not being affected by state interests through directed lending or subsidised interest rates).

### ***Banking sector outreach***

SME lending is traditionally the market niche of small local banks. Compared to lending to large companies, it is more relationship-oriented and hence considered to be more the expertise of small banks or local branches of larger banks that are situated close to their clients. Moreover, a large proportion of SMEs, especially the agricultural ones, operate outside the main cities. The geographical and demographic outreach and coverage of the banking sector is therefore very important for adequate access to finance for SMEs.

In the EESC region, several banks have a large geographical presence as part of their strategy of specialising in small business and consumer loans. Belarus has the largest geographical coverage with 45 bank branches per 100 000 adults and 18 branches per 1 000 km<sup>2</sup>, a figure comparable to the coverage of commercial banks in many OECD countries (Table 4.6). The lowest coverage is in Ukraine with 2.74 and 1.88 branches per 100 000 adults and 1 000 km<sup>2</sup> respectively.

Table 4.6. **Banking sector outreach of commercial banks in the EESC region**

Country name	Branches per 100 000 adults	Branches per 1 000 km <sup>2</sup>
Armenia	16	13.9
Azerbaijan	9.6	7.6
Belarus	45	17.9
Georgia	18.6	9.7
Republic of Moldova	9.6	8.8
Ukraine	2.7	1.9

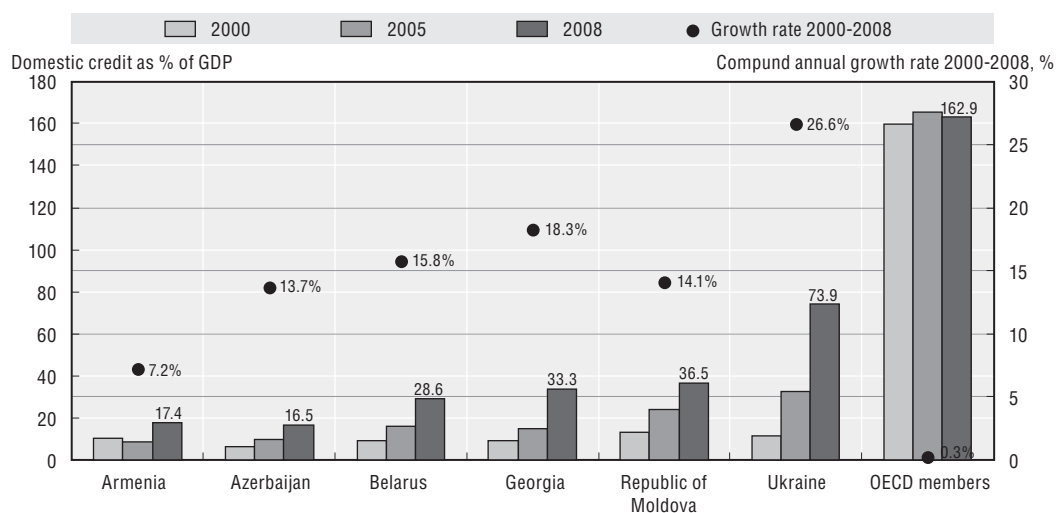
Source: CPAG (2010).

Despite their broad coverage, commercial banks are disproportionately present in urban areas. According to the Consultative Group to Assist the Poor (CGAP) (2010), in Georgia there were 15.2 branches per 100 000 adults in urban areas and only 3.3 in rural areas. In Republic of Moldova these figures are 9.4 and 0.2 respectively. In Armenia the figures are roughly the same for urban and rural areas. The data for Ukraine, Belarus and Azerbaijan is not available.

EBRD finances several projects to develop the regional networks of the beneficiary banks. An example is the OTP Bank in Ukraine that in 2008 received a loan of USD 65 million to increase the number of branches throughout the country.

### **Domestic credit to the private sector**

Between 2000 and 2008, the share of domestic credit to the private sector in GDP more than doubled in all the EESC countries, with the exception of Armenia where credit had a more modest growth (see Figure 4.5). This rapid growth of credit can be explained by their low starting base of the EESC countries and the gradual decrease in real interest rates.

Figure 4.5. **Domestic credit to private sector (% of GDP)**

Note: 2000-2008 growth rate is calculated as compound annual growth rate.

Source: World Bank/World Development Indicators (initial source: International Monetary Fund, International Financial Statistics and data files, and World Bank and OECD GDP).

In Ukraine, the high credit growth (26.6%) was partly due to a pre-crisis credit boom when the share of loans to the private sector almost doubled in three years (going from 32%

in 2005 to 74% in 2008). In Armenia and Republic of Moldova, the expansion in credit has been largely supported by the development of the real estate market and construction. In Belarus, credit growth has been supported by extensive government programmes with subsidised interest rates.

Despite the rapid credit growth, bank credit penetration in the EESC countries is low compared to other countries. In 2008, the countries of the region had a ratio of domestic credit to GDP between 17.4% and 73.9%, which is lower than in the comparison countries from the OECD and South East Europe. On average, in 2008 it represented 34% of GDP, compared to 163% of GDP in OECD countries. Clearly, the role of the banking sector of providing credit is not yet fulfilled and its contribution to the growth of the economy is limited. Domestic credit to the private sector is particularly low in Armenia and Azerbaijan (almost twice as low as that of other countries in the region).

This low credit penetration in the EESC region is the result of a combination of factors, including a lack of financial resources due to limited savings as well as weak governance and poor financial supervision. Such a situation opens up opportunities for fraud and moral hazard, and thus discourages external financing on favourable terms. In some countries, it may also be the result of state-directed lending, which crowds out commercial lending (Box 4.2).

#### Box 4.2. State-directed lending

State-directed lending – lending at subsidised (below market) prices offered to certain sectors or firms as decided by the state – may distort competition if directed towards a particular group of firms. Apart from undermining the competition, directed lending leads to crowding out of commercial lending and imposes fiscal costs.

Belarus has a long history of state-controlled credit which was directed at agriculture and house construction as a part of financial legislation. Directed credits were for the first time officially mentioned in 1998 in the “main requirements for banks to use directed credits”, National Bank of Belarus Resolution No. 6.2 (11 February 1998). According to this resolution the agricultural sector and house construction were prioritised. Currently, the private sector is also disadvantaged due to lending directed by the government to state-owned enterprises.

There is no control over the allocation of credit in Armenia, Georgia or Republic of Moldova; the credit mainly goes to the traditional sectors where tangible collateral can be provided by firms: consumer loans, construction, trade and industry. There is no clear information on whether credit is directed in Azerbaijan or Ukraine. According to the Statistical Bulletin of the National Bank of Azerbaijan, in Azerbaijan, in 2010 on average 23% of credit went to the trade and services sector, while 14.5% went into power engineering and natural and chemical resources.

Sources: Relations of the National Bank of the Republic of Belarus with the International Monetary Fund. Belarus-2009 Article IV Consultation, Concluding Statement of the IMF Mission, August 26, 2009, 2009; National Bank of Belarus Resolution No. 6.2 (11 February 1998).

As the crisis hit, many countries in the region had to cope with a current account crisis because they could not roll over or refinance their debt in combination with the collapse of export demand. As a result, the share of non-performing loans<sup>12</sup> sharply increased in the



EESC countries, in particular in the sectors that were booming in the pre-crisis period (World Bank, 2009). The credit provided to the economy decreased, and the banks had to reduce their risk exposure.

The first economies to recover from the international financial crisis in terms of credit growth were mainly in countries with state-subsidised lending<sup>13</sup> (Belarus), and those with large remittance inflows (Armenia and Republic of Moldova) (EBRD, 2010). Countries with more capitalised banks had a stronger basis to expand credit to the private sector in the context of tightening financial regulations. Ukraine entered the crisis with the least capitalised banking sector as a result of its significant credit growth before the crisis: 11.6% in 2007 and 12.9% in 2008.

### **Structured finance**

Even with government support, the banking sector often may not provide sufficient long-term credit due to its narrow capital base or riskiness of operations. In this case, structured finance may be a better solution for firms that need financing.

Structured finance is finance whose collateral is based on the performance of the transaction, rather than the strength of the balance sheet of the borrowing firm (FAO, 2009). Leasing, supplier finance, warehouse receipts, and financing based on accounts receivable (factoring) are some of the most popular financing tools in developed countries; this can also apply to the economies of the EESC region.

Structured finance is not covered by the OECD's PfC assessment. Nevertheless, because of its importance and its fairly poor utilisation and understanding in the transition economies, it will be covered briefly in this section.

Because of their small-scale activities, SMEs usually occupy smaller segments in a larger value chain of production. Structured finance allows financing at different stages of the value chain and it is specially designed to consider the characteristics and needs of the players at a particular stage. For example, the assets or the receivables involved in the transaction can serve as a back-up for financing. This type of financing crucially requires vertical cooperation between the value chain partners, contractual commitment, and especially trust. Unlike traditional financing, the assessment of the loan is based on the strength of the transaction and not the creditworthiness of the borrower. In this way the focus can be moved from the risky SME to a strong partner, such as a wholesale buyer, or an international exporter.

Financing based on receivables, such as factoring, forfeiting and receivables-backed finance is usually provided by banks. In order to use such a tool, two conditions must be met. First, there should be an asset, such as a receivable, to serve as collateral for the loan. Second, there should be a guarantee for enforcement of contractual obligations from the third party (the debtor) in case of default, which implies either trust or strong law enforcement. The lack of the second condition is generally the reason why structured finance is not very popular in the EESC countries.

Among the structured finance instruments, factoring is one of the most frequently used in the EESC economies, even if it is not employed as much as in Russia and the Baltic States. For example, in Armenia factoring represented only 1.1% of total bank assets on average for 2010 (*Statistical Bulletin of the Central Bank of Armenia*), while in Azerbaijan, it represented 0.1% (*Statistical Bulletin of the National Bank of Azerbaijan*).

Leasing is usually provided by non-bank financial institutions that are subsidiaries of banks or are controlled by banks. Leasing represents a strong security advantage for the lessor, because he still owns the lease assets. This is especially useful for SMEs, which usually have a small working capital, few assets to provide as collateral and/or lack a credit history record. Leasing is also one of the few long-term financing possibilities for SMEs. The volume of transactions of leasing in EESC countries remains small and mostly confined to car leasing. However, thanks to its numerous advantages, leasing is becoming increasingly popular in transition economies. In Belarus, the legal framework that regulates the development of leasing has recently been expanded.<sup>14</sup>

To conclude, banking finance in the EESC countries is the dominant form of external financing. However, credit penetration is still very low compared to OECD countries. The countries of the region should further promote competition in the banking sector and decrease the state's share in bank assets, particularly in Belarus and Azerbaijan. Other alternative forms of external financing, such as leasing and factoring, should also be encouraged for the long-term improvement of access to finance.

### **Early-stage financing**

SMEs, unlike larger firms, have less access to traditional external financing (bank credits), because of the high cost of providing small size loans and because they are perceived as being a riskier investment. For this reason, small firms need special financing tools adapted to their small size or high risk, such as microfinancing facilities and risk capital.

Table 4.7. **General information on MFIs in the EESC region, 2008**

	Number of MFIs that reported in 2008	Number of active borrowers	Loan portfolio, million USD	Average loan (balance) per borrower, USD
Armenia	32	295 960	577	1 949
Azerbaijan	74	270 377	481	1 779
Belarus	20	7 280	65.3	8 975
Georgia	31	160 880	478.5	2 974
Republic of Moldova	447	148 278	200.7	1 354
Ukraine	837	2 768 620	1 532.6	554

Source: MIX/CGAP (2010).

### **Microfinance facilities**

Following the collapse of the Soviet Union and as a result of ensuing high unemployment and lack of job opportunities, many individuals were forced to switch to self-employment and sustain themselves through agriculture or other small-scale activities. Microfinance institutions have emerged in the region largely to meet the unfulfilled financing needs of the self-employed and of micro and small enterprises (MFC, 2003). At present, EESC countries have a very large number of microfinancing institutions (MFI).

In terms of active borrowers, the MFIs in the EESC are smaller in terms of lending capacity than in SEE countries and the Balkans (MIX/CPGA, 2009). The majority of borrowers are covered by credit unions, the dominant source of microfinancing in Republic of Moldova and Ukraine. Other microfinance players in the region include downscaling

banks (commercial banks that provide loans to SMEs), specialised microfinance banks, and non-bank financial institutions (NBFI).<sup>15</sup>

- *Credit unions* are associations whose members are also potential borrowers. Together with banks, they are the only microfinancing institutions that can collect deposits. Typically, members of the credit union have a common feature: working in the same geographical region, or working in the same field. This common feature represents an advantage as it permits better risk assessment of the borrower. Apart from consumer loans, credit unions are also popular with the self-employed and micro-enterprises in rural areas, and they have the largest coverage among the microfinancing institutions.

Credit unions are the main providers of financing in Republic of Moldova and Ukraine. The main credit unions in the region are credit cooperatives in Ukraine which in 2008 served 96.4% of total micro-loan borrowers in the country, and the Credit and Saving Association (CSA) in Republic of Moldova which served 83.3% of total micro-loan borrowers (excluding the non-bank credit organisations) out of the total number of micro-loan borrowers from the reporting MFIs.<sup>16</sup>

- *Non-bank financial institutions* (NBFIs) and non-governmental organisations (NGO) are usually funds or associations which are capitalised through external donations and grants from IFIs, and provide credits but do not collect savings. This last feature makes them less self-sufficient, but most of them try to reach sustainability by covering their operational costs with revenues.

In Azerbaijan, NBFIs are the main sources of financing as they provided loans to 66.1% of small-loans borrowers (MIX/CGAP, 2010). In particular, the Foundation for International Community Assistance (FINCA) network, a charitable microfinance organisation which operates in Azerbaijan, in 2008 provided loans to 83 948 borrowers, representing the largest NBFI in the region.

- *Microfinance banks* are banking institutions specialised in lending only to SMEs. They are usually self-sustainable as they can collect deposits and use them for further lending. Moreover they are usually the most profitable as the size of their loans is bigger and they can collect fees from foreign-exchange operations and other non-lending services.

Microfinance banks have the largest number of borrowers per institution. In 2008 the largest microfinancing bank in the region was ACBA– Credit Agricole Bank of Armenia which served 104 702 borrowers with a gross loan portfolio of USD 252.6 million. The ProCredit network which is active in Armenia, Georgia, Republic of Moldova and Ukraine represents other large microfinance banks in the region.

- Finally, *downscaling banks* are universal banks that provide loans to SMEs; they usually have a unit specialised in SME lending. The commercial banks that provide SME loans (downscale into microfinance) do not have a large population coverage, as they operate mainly in urban areas and towns. On the other hand, they can provide larger loans compared to MFI and thus are a better option for small and medium enterprises, rather than micro.

Downscaling banks are represented in the region by the extended programmes of EBRD, Eurasian Development Bank and other IFIs. In Belarus for example all the microfinancing is done by the EBRD microfinancing programmes via downscaling banks. The institutions so far had only 5 506 borrowers in 2007, a number which increased to 6 551 in 2008. Despite the small number, of borrowers, the banks serve 90% of the total active borrowers of the reporting microfinancing institutions.

The regulatory environment for MFIs is very diverse across the region. In all the countries, except Republic of Moldova, the MFIs are regulated and supervised by the central bank. In Republic of Moldova, a specialised authority, the National Commission of Financial Market of Republic of Moldova, extends its authority over non-bank financial institutions.

One of the main obstacles to MFI growth remains the lack of funding. Many are heavily dependent on external financing such grants and loans from international organisations (EBRD, Eurasian Development Bank etc.). Microfinance banks and credit unions are the only institutions that can collect deposits. The legislation does not allow non-bank financial institutions to mobilise deposits (deposits can be collected only by licensed banking institutions which fulfil capital requirements stipulated by the law). Moreover, the loans provided by international organisations and banks to the MFIs from the EESC region and which are not guaranteed by the state (for example loans from EBRD) have higher interest rates compared to their peers from the Balkans (MIX/CGAP, 2009). This puts additional pressure on MFIs.

Republic of Moldova and Azerbaijan are examples of how the law can be adjusted to allow more flexibility for funding sources for MFIs; by law they were not allowed to collect deposits. Since 2009, both countries can issue two types of licences. In Republic of Moldova, a type-A licence issued to CSAs allows provision of loans based only on existing capital, while a type-B licence allows the collection of deposits (OECD, forthcoming). In Azerbaijan, according to the newly adopted Law on Non-Bank Credit Organizations (2009), the first type of licence is for non-profit microfinancing institutions and does not allow the collection of deposits (MIX/AMFA, 2009). The second type allows the collection of collateral deposits, which are lump-sum funds or funds gradually paid as one of the guarantee forms for repayment of loans by the borrower. In both countries, the second type of licence is also subject to stricter capital requirements and there are specific stipulations for their deposit-taking activities.

The number of MFIs in the region has been growing during the past few years and they now compete for a relatively small base of borrowers. This competition is provoking more relaxed terms in the loans granted, potentially leading to over-indebtedness of many borrowers (MFC, 2011; MIX/CGAP, 2010).

Another problem is the exchange-rate risk exposure. When funds for SME financing are borrowed from international organisations at reduced interest rates, they are usually provided in foreign currency, exposing either the bank (if the loan to SMEs is in local currency) or the borrower (if the loan is in foreign currency) to the exchange-rate risk. Some measures are being taken to reduce this risk. For example, in 2010, EBRD offered a USD 10 million loan; half of the credit line was offered in the local currency so as to mitigate the foreign currency risk. Hedging is not practiced because there is no developed market for local currencies.

Following the financial crisis, microlending has decreased in most of the EESC countries, as the financial intuitions have focused on the quality of their portfolios rather than growth. Many MFIs that depend on loans from the banks or external financing were indirectly affected by the crisis which saw a sudden reduction in funding (MIX/CGAP, 2010). Armenia and Azerbaijan were the least affected by the crisis, both continuing their positive growth since 2007, both in outreach (active borrowers) and in their loan portfolio (MIX/CGAP, 2010).

The MFIs in the region face many financial constraints, such as high interest rates and dependency on external donors. A framework that would allow the collection of deposits with a gradual increase in capital requirements could encourage the MFIs to gradually become self-sustainable.

### ***Availability of risk capital: venture capital and “business angels” networks***

Venture capital is financial capital provided to start up a company or at the early stages of high-growth-potential high-risk companies. Business angels are individuals who provide financial capital to start-ups in exchange for ownership equity. Business angels also often offer business advice and support; such additional support decreases the risk of failure.

Both venture capital and business angels are types of equity financing, which is typically a source of financing for start-up firms with high-growth potential or young, dynamic and highly innovative enterprises. Banks are generally reluctant to take on this kind of equity exposure because the uncertain future revenues cannot insure the regular payments required of a bank loan.

Venture capital and business angels' networks are not very developed in the EESC countries for several reasons:

- the uncertain business environment, and a general lack of trust in economic partners;
- a reluctance to dilute ownership;
- few innovative fast-growing enterprises;
- reduced possibilities for an exit strategy for equity investors due to underdeveloped capital markets;
- taxes on capital gains (not covered in this report).

An uncertain economic environment and a general lack of trust in other partners (discussed at the beginning of the chapter) are some reasons for this deficit of risk-taking and entrepreneurial behaviour. The chronic deficit of confidence among all the actors participating in a business relationship, starting with the providers of resources and ending with the final consumer who has to pay for the product, creates an atmosphere of distrust and unwillingness to cooperate (Woodward, 2001). The lack of knowledge of investors about the business environment, political uncertainty and challenges faced by the firms in these particular countries further decrease the chances of attracting equity financing.

There is also a problem on the demand side. Often business owners in transition economies are reluctant to share ownership of the firm and prefer debt to equity financing. The problem often lies in the lack of financial literacy.

In transition countries, SMEs are mainly subsistence-driven rather than innovation and growth-driven (OECD, 2006; Smallbone *et al.*, 2001). The owners of SMEs seek low-risk and stable returns. As a result, they are also less profitable than larger firms and provide few incentives for potential investors to take additional risks by investing in countries with an already risky business environment and an uncertain economic climate.

Finally, venture capital is not developed because in emerging countries there is no comprehensive exit strategy for investors, making equity investment very risky. The capital markets, especially capital markets for SMEs, which could allow for a fast and easy exit, are not developed in the EESC countries. Therefore, venture capitalists usually realise

their investment by selling to other investors, or through bankruptcy and liquidation. Given that in the EESC region the legal framework is far from perfect, this option is also not very attractive. As a consequence, venture capital has only a marginal role to play in SME financing in the region. Most venture investment in transition economies is related to restructuring already existing enterprises rather than start-up investing (OECD, 2006).

Thus, the reduced equity investment in EESC countries is the result of a range of factors. Lack of confidence and uncertainty could be resolved by improving contract enforcement and reducing corrupt practices. The population should also be made more aware of the possibilities and advantages of equity financing. Finally, the creation of innovative firms with high potential growth should be encouraged, as they are more attractive to equity investors.

### **Guarantee schemes**

As a result of the higher administrative costs of small-scale lending and asymmetric information, banks select their potential borrowers by size; they also decide the size of collateral to offer in order to insure the quality of their loan portfolio. As result of this selection, SMEs are often excluded from the credit market, or are offered credit but on very expensive terms.

A guarantee scheme is designed to alleviate the collateral requirements of small enterprises and cover part of the default risk of their loan. The positive effect of guarantee schemes on the access to credit of SMEs is well documented (Green, 2003; Levitsky, 1997). However, to avoid moral hazard, guarantee schemes should be implemented with caution. Moreover, the focus should be more on the expansion of access to credit of those firms that are excluded from the credit market, rather than covering the default risk of already existing loans.

However, guarantee schemes are only a short-term solution to the problem of access to finance. This tool does not go to the root of the problem but merely allows firms to improve their loan terms on an ad-hoc basis.

Guarantee schemes are often dependent on support from external donors. For example, the Development Credit Authority (DCA), set up by USAID – a major donor in the region – pursues its development goals by partnering with local financial institutions in order to improve access to resources for the private sector. The scheme provides partial guarantees, of up to 50% of the loan value, to eligible firms and is often coupled with training and technical assistance, thus decreasing the risk of default. The DCA operates through several types of mechanisms, such as loan portfolio guarantees, loan guarantees, portable guarantees (guarantees that can be used for different creditors) and bond guarantees (guarantee of payment of the interest and principal on the bond). Currently the scheme offers portable guarantees to the microfinance organisation, Crystal, and a local bank, Constanta in Georgia (in order to enable these banks to borrow from local and/or international lending institutions. The funds are to be used for lending to SMEs.

Guarantee schemes can provide individual-level or portfolio guarantees. *Individual-level guarantees* are based on the direct approval of the guarantee by the guarantor after analysis of the application. This type of guarantee implies a case-by-case assessment of firms and usually results in a higher-quality portfolio.

A *portfolio guarantee*, on the other hand, targets a group of firms that share similar features. For example, they all should be SMEs, from a certain region and from a specific

sector. The portfolio approach is less costly as the assessment of each applicant is less rigorous, but is also riskier. Portfolio guarantee schemes are used when the aim is to expand the volume of credit.

Credit guarantee schemes are mainly provided to individual operations. However, in some cases, portfolio guarantees are also provided. For example, USAID's DCA also provided loan portfolio guarantees to the Basis Bank (2010-14, USD 9 million) to facilitate commercial credit to SMEs, including agricultural firms which will represent 35% of the credit portfolio.

In the EESC region, guarantees are mainly issued for the banking sector. Some of the guarantees are issued for loans for banks specialised in SME financing –such as the Pro Credit banks in Georgia, Republic of Moldova and Ukraine – or banks that direct a part of the loans to financing smaller enterprises. In Armenia and the Republic of Moldova, the national agencies for SME development provide credit guarantees directly to SMEs.

*Mutual guarantee schemes* represent guarantee schemes where the borrowers mutually guarantee the repayment of the loan. Unlike credit guarantee schemes the mutual guarantee funds are also financed from the financial contributions of the participants in the fund. However mutual guarantee funds also depend on external financing or government support, especially regarding initial capitalisation. Because mutual guarantee funds are usually created by firms from the same sector, the advantage of this type of scheme is the expertise of the management of the fund in assessing the risk of the firms applying for guarantees and their ability to assist with technical and management advice; this reduces the asymmetry of information and increases credibility.

Mutual guarantee schemes require mutual trust and cooperation. Unfortunately, the post-Soviet culture is characterised by excessive individualism and lack of trust among the actors of a particular economic relationship (Woodward, 2001). As a result, such types of guarantee schemes are not widely used in the EESC countries. Evidence shows that in countries with a weak legal framework and a non-competitive banking sector, mutual guarantee schemes are not very successful (Levitsky, 1993). However, Poland is an example of a successful group loan scheme implemented in the early 1990s, where the members of the group guaranteed each other's loans (See Box 4.3).

Guarantee schemes should be used for improving access to bank finance for SMEs – by increasing the outreach of the schemes, by offering guarantees to SMEs with no access to the financial market at all, but have high cash-flow potential – rather than improving loan conditions for firms that can already obtain credit.

### **Access to capital markets**

Firms whose credit risk is easy to assess are more likely to use capital markets to access financing; the listing on capital markets requires a number of accounting and auditing procedures to ensure the efficiency of markets. As a consequence large firms are the main and often only participants in capital markets because they have more transparent internal procedures, accounting records and longer credit histories. The high compliance requirements in terms of accounting and financial reporting are more costly for small-sized firms. Investors are often not interested in investing in SMEs because of the cost of overcoming the information asymmetries pertaining to SMEs. The introduction of a capital market for SMEs, with lower compliance requirements, may increase access to finance for SMEs as well as raise their profile in the investment community.

**Box 4.3. Fundusz Mikro in Poland**

Fundusz Mikro (FM) was founded in 1994 by the Polish-American Enterprise Fund, which invested USD 20 million of loan capital. A USAID grant covered initial operating costs. Most borrowers employed fewer than five staff and their typical occupations were carpenters, hairdressers, stonemasons, metal workers, car repair mechanics, taxi drivers, bookkeeping consultants and stall and shopkeepers. As the first micro-lending institution in Poland, FM recognised the importance of developing innovative loan products to suit the economic environment of the country.

FM's greatest achievement was launching the group loan concept in Poland. Group loans represent loans offered to a group of people, with all the borrowers also being the guarantors of each other's loans. At the time, this idea was met with considerable reserve. FM managed to convince its customers by presenting loan groups as an additional valuable service rather than a loan requirement. Another innovation to motivate group formation was linking interest rates to group size. Highest interest rates were charged on individual loans and the lowest rate applied to groups of at least four people. These innovations benefited other micro-loan programmes in Central and Eastern Europe.

Loan security is provided by co-signer guarantees from at least three persons. This refers both to individual and group loans. In the case of individual loans, the three guarantors must have incomes making it possible for them to lend assistance to the borrower if there are any problems with repayment. Within the framework of group loans, all guarantors are simultaneously borrowers. Each of them receives an individual loan and is simultaneously a guarantor for all other loans granted to the group. Groups can consist of 4 to 7 people. Loans within the group framework can have various repayment periods and various sums, but all group members must guarantee all group loans throughout their duration.

Group members must know each other well before creating a group. They should have confidence in each other and must convince the loan officer that they will help each other in the event that any of them experience repayment problems. FM does not assist in the creation of groups. Members of groups can be acquaintances as well as members of one family, on the condition that each of them has separate assets.

The partnership finance product is unique in that the borrower participates in setting the loan terms and profit sharing with the lender. One goal of the product is to educate borrowers to evaluate potential profits in a difficult market rather than focusing on the loan cost. Borrowers estimate the profit they will earn from the loan, then they suggest the amount they will repay the lender. If an otherwise qualified borrower lacks the skill to determine accurately the expected return, a loan officer provides assistance in calculating the projected return. Once the estimated return is properly identified and agreed upon by the loan officer, the loan is committed.

Source: Szwajkowski (2003); Capital Plus (2004).

Although every EESC country has a stock exchange, the development of capital markets in the region has been highly uneven.<sup>17</sup> There is no data available on market capitalisation in Azerbaijan, Belarus or Republic of Moldova. The capital market in Ukraine is the most developed among the other three EESC countries, while Georgia and Armenia are behind. Eastern European Union members such as Bulgaria, Romania, the Slovak Republic, Slovenia and Estonia could be used as relevant benchmarks. In terms of traded volume, the Ukrainian capital market is currently at the same level as Bulgaria and Estonia, but mainly as a result of a drop in market capitalisation from 78.3% to 13.5% of GDP in 2008,



#### Box 4.4. Credit guarantee schemes in Middle East and North Africa (MENA) region

There is already substantial experience among the MENA countries with regard to export guarantee schemes and most countries also have some loan/credit guarantee measures in place. In general terms credit guarantee schemes (CGS) in the MENA region have been established relatively recently, have fairly low penetration rates in the SME community and have been subject to little or no systematic evaluation of either effectiveness or additionality. The amounts of loans, sectoral coverage, eligibility criteria and organisational structure differ considerably between countries. Several examples are presented below.

In Algeria, for example, loan guarantee funds were set up with support from the EU MEDA programme in 2002 and developed with the EU MEDA SME II which was launched in 2008. Two funds are now operating: the *Fonds de garantie des crédits aux petites et moyennes entreprises* (FGAR-PME) and the *Caisse de garantie des crédits à l'investissement pour la PME* (CGCI-PME). FGAR is a standard CGS covering part of the (possible) loss incurred by the lender to SMEs; the guarantees cover up to 80% of the net loss of the lending institution. CGCI guarantees loans for investment and covers up to 80% of the value of the loan for start-ups and 60% for existing enterprises. High levels of rejection of projects particularly by the CGCI suggest considerable conservatism.

Egypt also has a well-established Credit Guarantee Corporation which has operated since the early 1990s. Established as a partnership between the Egyptian government (which holds around a quarter of the equity in the company) and nine banks and insurance companies, its aim is the development of micro-enterprises and small and medium enterprises in Egypt. The guarantee fund supports investments in both physical capital and working capital with loan-level guarantee approval required for each company applying. This programme guarantees a maximum of 75% of the loan provided by the banks (short- and long-term loans), where the loan amount does not exceed EGP 10 million (USD 1.8 million) and the guarantee does not exceed EGP 2 million (USD 0.4 million). Firms pay a premium of around 2% of the value of the loan in return for the guarantee; the scheme now guarantees loans by most banks operating in Egypt.

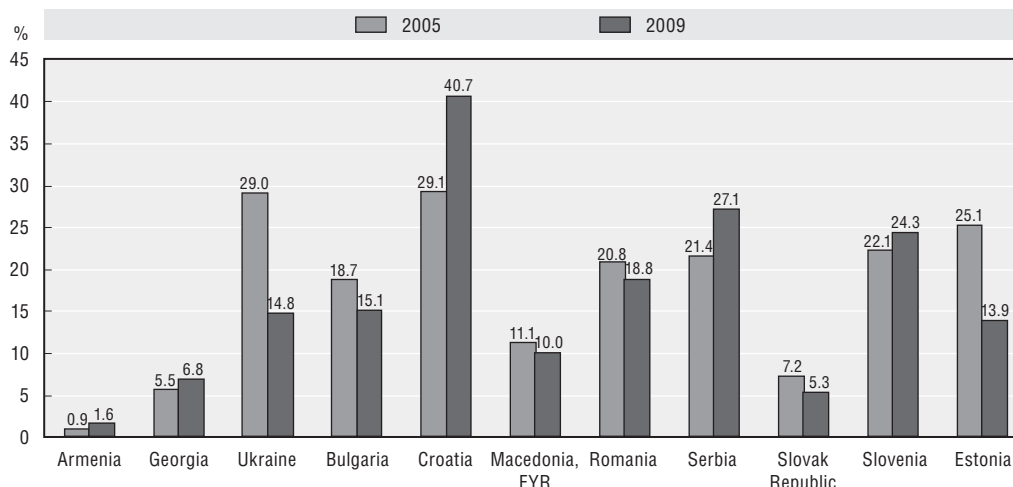
In Morocco, an investment loan guarantee scheme exists, although its eligibility criteria are more restrictive than those in other MENA countries. Eligible firms must be engaged in the production of goods and/or services (trade and property development sectors are not eligible) and loan guarantees are only available for investment in physical capital, not working capital. Commission and guarantee levels depend on the creditworthiness of the business but can reach 80% of the value of the loan in return for a commission of 0.4 per cent per annum.

The Tunisian Guarantee Company – Société Tunisienne de Garantie (SOTUGAR) has been operating since 2003 and provides loan guarantees to firms in manufacturing, computer services and information technology. Loan guarantees cover investments between TND 50 000 and TND 4 million (USD 40 000 - USD 3.1 million), as well as capital risk joint investment funds and start-up funds. Guarantee proportions vary depending on the location of the business ranging from 50% to 60% for most of the country but up to 75% in regional development zones. Predating SOTUGAR by some three years the Tunisian National Guarantee Fund (FNG) also provides loan guarantees to SMEs in other sectors with a focus on primary industries.

Source: OECD (2010), Credit Guarantee Schemes to Promote SME Growth and Innovation in the MENA Region, Report and Guidelines.

after the crisis hit. Armenia and Georgia are currently at a lower level than their SEE peers (Figure 4.6). The exception is Georgia, which has a higher capitalisation than the Slovak Republic.

Figure 4.6. **Market capitalisation as a share of GDP, 2005 and 2009**



Source: WB/WDI, original source: Standard and Poor's, Emerging Stock Markets Factbook and supplemental S and P data, and World Bank and OECD GDP estimates.

Within the European Union, the European Commission has already initiated a proposal for the development of a stock market focused on SMEs. One of the main objectives of the proposal is to reduce the level of red tape required for small firms to be listed on the stock exchange.<sup>18</sup> Finding the right balance between transparency and cutting red tape is crucial, as investors prefer firms that provide high-quality information about their financial situation. As a result, well-functioning capital markets could provide an important exit for venture-capital funds as well as other interested investors. Egypt provides an example of a small capitalisation stock exchange index – the Nile Stock Exchange (NILEX) – with the aim to increase access to finance for SMEs (Box 4.5).

#### Box 4.5. Nile Stock Exchange (NILEX) for SMEs

NILEX is the Egyptian Exchange market for growing medium and small companies and the first SME bourse for the Middle East and the North Africa region. The NILEX, which was formally launched in 2009, so far has 17 listed companies (as of 25 March 2011). To facilitate the listing of companies on the new exchange, requirements have been relaxed and the disclosure requirements are on a par with larger firms, which are considered to be less risky investments than smaller SMEs.

So far the small capitalisation index has been active for a short time, so there is no clear picture of its impact on access to finance for SMEs. The fact that only 17 firms are listed and that they are mainly among the largest of the SME category of firms, shows that this type stock exchange will still need to further develop to have an impact on the smaller companies.

However it is important to note that capital markets in the EESC region are still underdeveloped and deficient in liquid assets compared to their western peers and provide a limited range of products to firms. Therefore, devoting a part of the stock market to SMEs at this stage may be premature for the region.

### ***Improving skills: Financial literacy and entrepreneurial skills***

There is a lack of financial literacy and entrepreneurial training in a range of situations in the region. For example, potential borrowers may lack sufficient knowledge on the financial alternatives available to them. In a different context, they may be reluctant to share the ownership of the firm, in many cases giving up growth opportunities. Finally, many households and firms become excessively in debt as a result of lack of research skills, a lack of financial targets or budget planning (MFC, 2011). Financial literacy and entrepreneurial training are therefore two of the important demand-side characteristics that may affect the availability of financing for SMEs.

#### ***Financial literacy***

A lack of financial literacy is an important obstacle to financing, which needs to be tackled by the governments of the region. Apart from improving access to finance for individual consumers of financial services, financial literacy leads to more efficient and stable financial markets, as the imbalance of information between consumers and their financial service providers is reduced. Improving financial literacy in the region may also help build trust of individuals and firms when dealing with financial institutions and better understanding of financial product choices; this in turn may lead to better and more efficient cooperation between the business and financial sectors.

The global financial crisis has revealed that, given the current level of sophistication of financial markets, even in developed countries, the average individual has only a very modest knowledge of modern financial instruments (OECD, 2009). In developing and emerging markets the level of financial awareness is even lower. As an example, in Ukraine, the latest Financial Literacy Survey conducted by USAID, showed that out of 15 questions asked about financial knowledge and consumer rights, only 2% of respondents could answer ten or more questions correctly (USAID, 2010). The same survey states that the average consumer of financial services is “not very knowledgeable about finance, is a user mainly of simple bank services, is largely unaware of his/her consumer rights, and is distrustful of financial institutions.”<sup>19</sup> Even if there is no survey data for other countries, existing evidence shows that this profile is similar to that of neighbouring countries. One of the indicators of the level of financial literacy is the number of opened accounts per 1 000 adults. According to CGAP/WB (2010), in Armenia there were 163.7 accounts in commercial banks per 1 000 adults, while the figure for Republic of Moldova was 313.2 accounts, which is lower than most of the OECD countries. There is no data for other countries of the region.

#### ***Entrepreneurial skills***

Entrepreneurial skills are particularly important in countries that receive large amounts of remittances from abroad, such as Armenia and Republic of Moldova. Most remittances are spent on consumption and the purchase of durable goods (which are often imported), rather than invested in entrepreneurial activities.

Financial literacy and entrepreneurial training is expected to increase the awareness of money holders of the different possibilities of the use of money and also encourage them to put the money to some productive use, by either saving or investing it in entrepreneurial activities, instead of consuming. EBRD has set up a new project in 2011 on Financial Inclusion of Remittance Receivers in Armenia and Republic of Moldova<sup>20</sup>; this follows similar projects in Georgia and Azerbaijan in 2008. The project consists of placing financial educators in participating banks from which remittance recipients withdraw their money.

However, while it is widely recognised that investing in financial literacy and entrepreneurial skills is a long-term project, the countries lack a systemic nation-wide strategy to increase the level of financial literacy of the population. For example, a study of Republic of Moldova found that, despite a number of trainings and courses organised by MFIs and international organisations, a systemic country-wide approach to increase financial literacy levels of the population does not exist (MFC, 2008). The problem of financial literacy and the lack of entrepreneurial skills are most often tackled through government programmes or ad-hoc training organised by local NGOs, MFIs or credit unions. For example UNDP and MFC started a programme on raising financial literacy in Belarus through financial education in response of the overindebtedness of household micro-loan borrowers (MFC, 2010).

In order to improve financial literacy and entrepreneurial skills in the EESC region, a broad strategy should be considered by policy makers that would encourage entrepreneurial activity and develop entrepreneurial skills. Entrepreneurial training should be included in the basic education of the population and training for entrepreneurs should be available throughout the country; such training would provide knowledge about basic accounting and administrative procedures as well as presenting the different financing possibilities.

## **Policy implications**

Based on the indications emerging from the cross-country analysis conducted in this chapter, we can derive the following initial policy implications:

### ***Strengthening the legal and regulatory framework***

The quality and the stage of development of the legal and regulatory environment act as major constraints to accessing finance for enterprises, and in particular for SMEs. Strengthening the legal environment and completing the regulatory framework are therefore key priorities and pre-conditions for a balanced expansion of the banking and financial sector and for removing obstacles to accessing bank credit and other financial products for private enterprises. Without an effective legal and regulatory framework, more targeted measures supporting access to finance for SMEs, such as credit guarantee schemes and credit bureaus, tend to be less effective.

Over the last five years there have been significant developments in those areas across the region. However, there are still substantial differences among the EESC countries and therefore a country-specific analysis is needed in order to assess the quality and efficiency of the legal and regulatory environment.<sup>21</sup> This chapter highlights some features that are common across the region.

Creditor rights must be clarified and in many cases strengthened. Collateral registration should be improved and should be extended to movable assets. The credit environment will benefit significantly from the strengthening of the judiciary system and from better contract enforcement.

A strong and independent banking regulator, a function performed by the central banks, is vital to ensure that the banking sector operates according to high standards and within a competitive regime. The role of the state in credit allocation, resulting from the large market share of state-owned banks in some of the EESC countries (particularly in Azerbaijan and Belarus), and from the application of discriminatory practices that favour state-owned or well-connected enterprises, should be reduced.

### ***Reducing information asymmetries***

A second key priority across the region is to reduce the asymmetry of information between SMEs and financial institutions. This could be achieved by improving the quality of financial information provided by the companies, by the adoption of improved accounting standards based on international best practices, by assisting SMEs in applying and conforming to those standards and by developing credit bureaus and other form of credit monitoring. Such measures can contribute to building a relationship between banks and SMEs based on trust and can also reduce loan assessment and loan monitoring costs.

### ***Opening access to bank credit for expanding SMEs***

A number of credit guarantee schemes are already operating in the EESC region. Their role is invaluable as they compensate for the lack of collateral and deficiencies of the legal and regulatory framework. However, their role could be further enhanced, opening access to bank credit for new categories of enterprises, such as innovative and high-growth companies with considerable intangible assets but lacking tangible assets. However, in order to do so, credit guarantee schemes need to be properly capitalised, their operation should become sustainable over the medium term, their credit analysis and project evaluation capacity should be further refined and their governance and supervision must be strengthened.

Innovative and high-growth enterprises should be encouraged to operate, as this type of firm can attract venture capitalists and business angels. In the long term, the creation of a capital market for low-capital firms, with reduced requirements for their listing, should also be considered as a source of diversification of financing for companies with high-growth potential

### ***Increasing the availability of microfinance and cooperative and rural credit***

Microfinancing and cooperative and rural credit, currently provided mostly by non-banking institution such as NGOs, foundations and credit associations, are less dependent on a certain level of development of the legal and regulatory framework. Therefore those instruments represent, in the short to medium term, an effective solution for providing credit to individual entrepreneurs and micro-enterprises.

However, in order to secure the sustainability and long-term development of those institutions it is important that they reduce dependency on external concessionary loans or grants and progressively rely more on local deposit. This implies the gradual transformation of those micro-credit providers into banks or quasi bank institutions. In

order to move into this direction it is necessary to develop the supportive regulatory and supervisory framework, through the introduction of a multi-tier financial system, allowing the issue of different types of banking licences with different capital requirement. Commercial banks should also be encouraged to move downstream into small loans and micro-loan market.

***Diversifying sources of financing for SMEs and setting the basis for the development of a capital market for low-capitalised companies***

SMEs in the EESC region depend largely on bank credit for external financing. However, governments should take measures to diversify the sources of finance. Leasing and factoring have considerable potential in the region. Governments should take steps to complete and clarify the legal, regulatory and fiscal framework that can facilitate their activity.

Access to equity capital for SMEs is highly underdeveloped in all the EESC countries. This situation particularly limits the expansion of innovative and high-growth enterprises. It is important that governments work on improving the general framework affecting entry and exit conditions for equity investors, whether they are venture capital funds or business angels. To improve entry conditions, it would be beneficial to improve company governance standards, increase the protection of minority stakeholders, upgrade financial reporting requirements for limited liability companies and take measures to improve transparency in company ownership structures. As for exit conditions, governments should consider developing a separate section within the stock market for low-capitalised companies and should also review capital gain taxation.

***Improving the quality of demand***

Financial education and entrepreneurial skills can further improve access to finance for SMEs by improving the skills and knowledge of the borrower on how to optimally manage the borrowed funds. Upgrading skills should be considered as an incremental measure for improving the quality of loans, as it cannot significantly improve access to finance on its own.

Banks should improve the skills of their credit officers, making them more aware of the needs and characteristics of SMEs and enable them to provide balanced advice to entrepreneurs on a number of financial products and solutions for SMEs.

Action should be taken to improve financial literacy across the population, introducing the subject as part of the education curriculum; potential and active entrepreneurs should also receive training in financial planning, cash flow management and basic finance.

***Better data***

The availability of up-to-date and accurate statistical information is also important for the development of policies that are more targeted and more accurately adjusted to the needs of SMEs. There should be one definition for SMEs within a country and, to the extent possible, the same definition should be used both for policy making and for statistical data collection. A common definition across the region would also be beneficial, as it would allow comparison with neighbours. Finally, the definition could be harmonised with EU criteria for defining SMEs (employment, total assets and turnover), but adapted to each country's characteristics.

More information on each SME firm should be collected, both from the SMEs themselves and from the providers of financial services. The list of indicators required to provide a comprehensive view of the supply of finance for SMEs should be extended to indicators such as business loans to SMEs, share of SME business loans as a proportion of total business loans, interest rates for SMEs, non-performing loans from SMEs, amount and growth rate of invested venture capital and bankruptcies of SMEs.

## Notes

1. The statistical data for Armenia is based on the former definition of SMEs, adopted in 2000. Starting 2011, a new definition is in place.
2. It is important to note that we do not distinguish between state-owned and private enterprises due to the lack of data. In practice, however, this makes a difference. State-owned firms are more likely to be supported by the state and thus less likely to go bankrupt. This distorts the field of competition between the two types of firms.
3. In Schneider (2010), the shadow economy is defined as “all market-based legal production of goods and services that are deliberately concealed from public authorities to avoid payment of income, value added or other taxes; to avoid payment of social security contributions; having to meet certain legal labour market standards, such as minimum wages, maximum working hours, safety standards, etc.; and complying with certain administrative procedures, such as completing statistical questionnaires or administrative forms”. Note that this definition is narrower than the one generally used.
4. The number was calculated based on raw data from BEEPS 2008/2009.
5. The data on the inflation rate is taken from World Bank/World Development Indicators Database, October 2010 and is based on the indicator Inflation (GDP deflator).
6. The EBRD index of banking sector reform ranges from 1 (little or no progress in reform) to 4+ (policies and performance standards similar to those of an advanced industrial economy); source: EBRD website, Research and publications/ Forecasts, macro data, transition indicators, [www.ebrd.com/pages/research/economics/data/macro.shtml#ti](http://www.ebrd.com/pages/research/economics/data/macro.shtml#ti).
7. The OECD is currently conducting a SME policy assessment in the EESC countries, including a review of access to finance for SME, in cooperation with the European Commission, the EBRD and the ETF. The results will be available in the first quarter of 2012.
8. According to the Law of Ukraine on the National Bank of Ukraine as amended as of 17 March 2009; ([www.bank.gov.ua/ENGL/B\\_legisl/LawNBU\\_e.pdf](http://www.bank.gov.ua/ENGL/B_legisl/LawNBU_e.pdf)), the Council “develops, pursuant to the state economic program and the basic parameters for economic and social development of Ukraine, the Basic Principles of Monetary and Credit Policy and submit them to Verkhovna Rada of Ukraine for information”. The Board merely “ensures the implementation of [these Basic Principles] by means of relevant monetary instruments and other means of banking regulation”. The Council also has to “approve the Regulations of the Council, the budget revenues and expenditures of the National Bank, decisions of the Board on participation in international financial organizations, etc.” The Council thus stands as a watchdog for the board of the national bank.
9. USAID, Financial Sector Deepening Project, 2006-2009, Annex 1a: Armenia Financial Sector Assessment, [www.usaid.gov/locations/europe\\_eurasia/countries/am/](http://www.usaid.gov/locations/europe_eurasia/countries/am/).
10. According to World Bank classification, the ECA region includes the following 30 countries: Albania, Armenia, Azerbaijan, Belarus, Bosnia & Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kosovo, Kyrgyz Republic, Latvia, Lithuania, FYR Macedonia, Republic of Moldova, Montenegro, Poland, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan.
11. The IFC Azerbaijan-Central Asia Financial Markets Infrastructure Advisory Services Project aims to strengthen the financial market infrastructure in Azerbaijan, Kyrgyzstan, Tajikistan, and Uzbekistan by developing the sharing of effective credit information between financial institutions and introducing formal risk education and certification for employees of financial institutions. ([www.ifc.org/ifcext/acafi.nsf/Content/Home](http://www.ifc.org/ifcext/acafi.nsf/Content/Home))
12. According to IMF's Compilation Guide on Financial Soundness Indicators, a loan is nonperforming when payments of interest and principal are past due by 90 days or more, or at least 90 days of interest payments have been capitalised, refinanced or delayed by agreement, or payments are

less than 90 days overdue, but there are other good reasons to doubt that payments will be made in full.

13. A state-subsidised loan is a loan that has an interest rate lower than the market interest rate, with the difference being paid by the government.
14. [www.belarus.by/en/business/business-news/belarus-expands-legal-framework-for-leasing\\_i\\_0000001149.html](http://www.belarus.by/en/business/business-news/belarus-expands-legal-framework-for-leasing_i_0000001149.html)
15. This classification of microfinancing is overtaken from MIX (Microfinance Economic Exchange), which is an online source of financial indicators for the performance of MFIs across the globe; [www.mixmarket.org/](http://www.mixmarket.org/).
16. Calculated based on number of active borrowers provided by MIX/CGAP (2010)
17. In Ukraine and Republic of Moldova the stock exchange was established in 1991 and 1994 respectively. The South Caucasus countries already had these institutions in the early 2000's (in chronological order: Georgia: 1999; Azerbaijan: 2000 and Armenia: 2001). This delay partially explains the development gap between the two regions.
18. Euractiv. [www.euractiv.com/en/enterprise-jobs/eu-plans-stock-market-small-firms-news-497489](http://www.euractiv.com/en/enterprise-jobs/eu-plans-stock-market-small-firms-news-497489)
19. For example, according to the 2010 survey on public opinion on pension reform in Ukraine, only 15% of respondents said that they trusted private banks, 11% trusted insurance companies, 6% investment funds and 5% non-state pension funds (USAID, 2010; Pension Reform in Ukraine Public Opinion Survey, 2010).
20. The project also includes Kyrgyz Republic and Tajikistan ([www.ebrd.com/russian/pages/workingwithus/procurement/notices/csu/31530.shtml](http://www.ebrd.com/russian/pages/workingwithus/procurement/notices/csu/31530.shtml))
21. The OECD is currently conducting a SME policy assessment in the EESC countries, including a review of access to finance for SME, in cooperation with the European Commission, the EBRD and the ETF. The results will be available in the first quarter of 2012.

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## ANNEX 4.A1

## Definitions of SMEs in Eastern Europe and South Caucasus

	Micro	Small	Medium	Large	Source:
Armenia	Less than 10 employees; sales and assets less than AMD 100 million	Less than 50 employees; sales and assets less than AMD 500 million	Less than 250 employees; sales less than AMD 1 500 million and assets less than AMD 1 000 million	Firms that are not included in the definition of micro, small or medium enterprises	Amendments from 5 October 2010 to the Law of the Republic of Armenia "On State Support of Small and Medium Entrepreneurship", in force since 1 January 2011
Azerbaijan	Less than 50 employees and less than AZN 500 000 turnover for construction and industry Less than 25 employees and less than AZN 250 000 for agriculture Less than 15 employees and less than AZN 1 000 000 for wholesale trade Less than 10 employees and less than AZN 250 000 for other sectors			Firms that are not included in the definition of "small business units"	Decision of the Cabinet of Ministers of the Republic of Azerbaijan, from December 18, 2009
Belarus	Up to 15 employees	16-100 employees	101-250 employees	Firms that are not included in the definition of micro, small and medium businesses	Law of the Republic of Belarus of 1 July 2010 No. 148-31 "On State Support for Small and Medium Entrepreneurship"
Georgia	Up to 20 employees and up to GEL 500 000 turnover		Up to 100 employees and up to GEL 1 500 000 turnover	Firms that are not included in the definition of small or medium enterprises	Law of Georgia on "Georgian National Investment Agency"
Republic of Moldova	Up to 10 employees, MDL 3 million turnover and MDL 3 million total assets	Up to 50 employees, MDL 25 million turnover and MDL 25 million total assets	Up to 250 employees, MDL 50 million turnover and MDL 50 million total assets	Firms that are not included in the definition of micro, small or medium enterprises	Law 206-XVI (2006) on Support of Small and Medium Sized Enterprises; National Statistical Bureau of the Republic of Moldova
Ukraine	Up to 50 employees and up to UAH 70 million turnover		Firms that are not included in the definition of small and large business	More than 250 employees and more than UAH 100 million turnover	Commercial Code of Ukraine of 16.01.2003 No. 436-IV Article 63

Source: Compiled based on information from national statistical offices of the countries and official documents



## Chapter 5

# Maximising the Potential of Foreign Direct Investment

by

Daniel Quadbeck\* with Contributions From Milan Konopek

*Foreign direct investment (FDI) flows are increasingly important as a source of finance for the economies of Eastern Europe and the South Caucasus (EESC). To unlock the region's full potential, further reforms are needed to improve the investment environment following the proclamation of new investment laws in the 1990s. Key areas to address include better law enforcement mechanisms which include ensuring transparent and non-discriminatory legal proceedings. Policy makers in Eastern Europe and the South Caucasus also need to focus on diversifying the sectors receiving FDI and strengthen investment promotion and facilitation capabilities. Investment promotion activities should be more closely linked to investment policy reform and industrial policy objectives, as well as supporting regional development.*

\* The author would like to thank Stephen Thomsen, Senior Economist, Investment Division, Directorate for Financial and Enterprise Affairs, for his review.

## **Executive summary**

The global financial crisis and resulting economic downturn have had a major impact on global foreign investment flows. OECD countries responded by reinforcing their policy commitment to openness and transparency. All six countries of the Eastern Europe and South Caucasus region (EESC) – Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine – have also recently experienced rapid growth and then a downturn of FDI inflows.

This chapter reviews the legislative framework for FDI and the investment promotion capabilities of the EESC countries. Policy conclusions and specific recommendations at the regional level and a first set of draft policy guidelines conclude the chapter.

### ***Evolution of FDI in Eastern Europe and the South Caucasus since 2000***

EESC countries experienced increasing flows of FDI between 2003 and 2008, increasing yearly on average by 25%. In 2009, FDI flows declined by almost 50% as a result of the crisis. The region only holds about 0.5% of global FDI stocks, all accumulated before 2009; 62% of these were invested in the Ukraine, although per capita the largest FDI stock is held by Georgia. The majority of FDI inflows into EESC countries since 2002 has been linked to privatisation (most of which is now completed). New levels of FDI inflows will only be successful if new greenfield investment can attract investments into higher value-added sectors. This will require more open and transparent investment regimes.

### ***Non-discriminatory treatment provisions***

All countries of the EESC have introduced legislation on FDI that provides national treatment, access to most sectors of the economy and participation in privatisation processes. However, there are few coherent review mechanisms to benchmark the scope of restrictions relative to practices in other countries. Establishing such review processes would enable governments to carry out cost-benefit or regulatory impact analysis to study whether the restrictions meet their intended purposes. This process should include inputs from national and international investors and stakeholders.

### ***Property rights***

Across the EESC countries some restrictions apply to foreign ownership of land, but long-term leases are permitted. Armenia and Georgia have the most open regimes, allowing the purchase of agricultural land through foreign-owned domestic companies, but all other countries require a joint venture with a domestic company. The lack of proper land titling and cadastre systems is the biggest pitfall for foreign investors. Intellectual property rights, although protected by legislation in line with international treaties, are still vulnerable to weak law enforcement mechanisms.

### **Protection of investors**

All EESC countries have bilateral investment treaties (BIT) with selected partner countries and most (except the Republic of Moldova) adhere to the New York Convention and the Washington Convention which provide for international arbitration as a means of resolving disputes related to foreign investments. However, protection against expropriation and compensation remain weak due to non-transparent and arbitrary legal proceedings.

### **Promotion of investments**

All countries in the EESC have created investment promotion agencies (IPA) specifically to provide investor facilitation services, but promotion activities are not yet sufficiently targeted to attract foreign investors. Most IPAs lack a coherent strategy. Existing IPAs focus more on marketing and investor support rather than on their policy advocacy role. Information gaps should also be addressed at the global level by mandating the network of foreign embassies to engage in investment promotion activities. Across the EESC region, none of the national agencies provide true one-stop shop (OSS) services and investors have yet to obtain all their approvals and clearances at one agency. FDI-SME linkage programmes could also be developed.

## **Introduction**

This chapter provides a review of investment policy standards and investment promotion trends in the countries of Eastern Europe and the South Caucasus (EESC) comprising Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova and Ukraine. It describes the overall role of foreign direct investment (FDI) in building long-term country capabilities, followed by an overview of the evolution of FDI across the EESC region over the past decade.

It then describes how the international financial crisis and the ensuing economic downturn has affected FDI inflows in the EESC region, both directly and indirectly, as a result of declining international investment activity and increasingly fierce competition for FDI globally. A brief description shows how OECD countries have responded to the crisis by introducing investment measures aimed at facilitating and encouraging investment flows and by reinforcing their policy commitment to keeping investment regimes open and transparent.

The in-depth assessment of investment policy and investment promotion in the EESC countries (except Belarus which did not participate in the assessment process) that follows looks specifically at i) the legislative framework for FDI and the regulations providing for non-discriminative treatment, property right enforcement and investor protection, and ii) the investment promotion framework, including specific investment promotion services and activities.

The analysis of every sub-dimension policy is followed by conclusions and specific recommendations at the regional level. A first set of policy guidelines is included as a draft which will be further developed with the six partner countries as part of the work of the OECD Policy Working Group on Investment Policy and Promotion for Eastern Europe and the South Caucasus.

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

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

Inward FDI in developing and transition economies can support the development and internationalisation of small and medium-sized enterprises (SME) through the introduction of new technology and management know-how (Smallbone, 2006). Domestic firms can benefit from FDI via productivity spillovers generated by labour mobility (Kaufmann, 1997; Haaker, 1999). Exposure to international competition by means of open and non-protectionist investment regimes 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).

Provided that an open and transparent investment regime is in place and linked to trade openness, the efficiency of local firms is likely to increase. This will further encourage economic growth through the exploitation of economies of scale and by allowing firms to access better and lower-cost capital equipment (Berg and Krueger, 2003).

## Evolution of FDI in Eastern Europe and the South Caucasus over the past decade

EESC countries have experienced increasing flows of FDI and other foreign capital flows over the past six years. Since around 1990, FDI inflows have started to move further eastwards expanding to the countries of the former Eastern Bloc. EESC countries benefited from a third wave of FDI inflows after a first and second wave that was oriented toward Central Europe and South East Europe had already started to become stagnant. Since 2003, FDI inflows into EESC countries have increased at a year-on-year average growth rate (CAGR)<sup>1</sup> of 25% reaching almost USD 16.5 billion in 2008 before dropping almost by half in 2009 as a result of the global economic downturn.

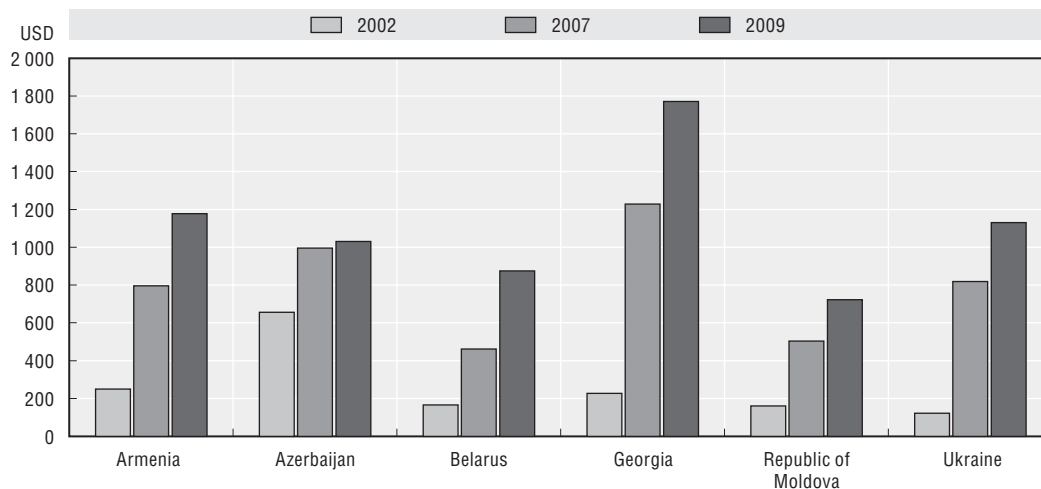
Despite high growth rates, the region only holds about 0.5% of global FDI stocks. These have been accumulated before 2009 and are concentrated in one country: 62% has been invested in Ukraine (UNCTAD, 2010a). However, in terms of per capita figures, the largest FDI stock is held by Georgia: USD 1 771, compared to USD 1 105 per capita on average across the region (UNCTAD 2010).<sup>2</sup> In 2009, 54% of total regional FDI inflows went to Ukraine. Belarus received 21% of FDI inflows, followed by Armenia (9%), Georgia (9%) and Azerbaijan (5%). Less than 1% of inflows went to Republic of Moldova.

### Armenia

In Armenia, FDI inflows grew rapidly between 2002 and 2008, rising by 47% year-on-year on average compared to 18% annual growth of global FDI inflows over the same time period (UNCTAD). This strong performance can largely be explained by the relatively low initial base of inflows in 2002 (USD 111 million) growing over six years to an annual inflow



Figure 5.1. **FDI stock per capita in Eastern Europe and the South Caucasus, 2002, 2007 and 2009**



Source: IMF, UNCTADstat, 2010; OECD analysis.

of USD 1.1 billion in 2008. However, in 2009, as a result of the international financial crisis, FDI inflows decreased to USD 837 million or 9.6% of GDP. The total FDI stock held by the country in 2009 was USD 3.6 billion which equals approximately USD 1 176 in stocks held per capita. This is slightly above the regional average (UNCTAD.Stat).

35% of FDI inflows to Armenia in 2009 went into the communication sector, followed by transport (20%) and power supply/gas (20%). The largest investment share came from the Russian Federation (52%) followed by France (27%), mainly as a result of Russia's continued investment in the energy sector and the entry of France Telecom into the Armenian market.<sup>3</sup> A large share of past FDI inflows stemmed from privatisations; these are completed today. In the 1990s, the country received large investments in its public utility sectors (water, gas, electricity) and in the early 2000s in transport (airport, railway) and telecommunications.

To further attract foreign investors, Armenia would benefit from creating more greenfield investment opportunities to support the development of its manufacturing industry. Specifically, the government could explore new ways to mobilise its large diasporas to channel remittance flows into investment projects. In addition, this land-locked economy is held back by its small domestic market and only a limited number of trade routes leading mainly to Georgia and Iran.

### **Azerbaijan**

In Azerbaijan, net FDI inflows between 2002 and 2008 decreased significantly from USD 1.3 billion annual inflows in 2002 to only USD 14 million in 2008 (-53% annualised average). This development was largely caused by disinvestments in the oil sector that occurred between 2006 and 2008, as well as few new projects related to oil and gas. Nevertheless, Azerbaijan has a total stock of about USD 9 billion (2009) which represents USD 1 029 per capita (UNCTAD). In 2009, FDI net inflows grew again to USD 473 million. However, this was still only 1.1% of GDP.

More than two-thirds of FDI has been invested in the oil and gas industry and related sectors. Other sectors that have attracted foreign investment include transport, communication, financial services and the industry sector, including agricultural

processing. So far, the slow pace of privatisation has restricted the level of FDI in public utilities. According to the State Statistical Committee, the top investing countries in 2010 were Great Britain (45.8%) followed by the USA (20.3%) and Japan (10.6%).<sup>4</sup> About 100 British companies are operating in the country, one of the largest being BP, a UK energy conglomerate, which recently signed an agreement to explore and develop the Shafaq-Asiman gas field, a huge offshore natural gas field in the Caspian Sea.<sup>5</sup>

One of the major challenges for this oil-rich economy is to further support economic diversification and by directing investors specifically to non-oil sectors. More than half of the country's GDP is still generated by the oil sector, leading to rising inflation and a strong national currency (the Azerbaijani Manat). This trend continues to limit the competitiveness of agricultural commodities and domestically produced goods on export markets and makes it harder to attract investors looking for business opportunities in non-oil sectors.

### Belarus

Between 2002 and 2008, FDI inflows into Belarus increased by 42% year-on-year on average, starting at the relatively low level of USD 253 million and reaching USD 2.1 billion in 2008. In 2009, net FDI inflows dropped slightly to USD 1.8 billion or 3.8% of GDP. In 2009, the total FDI stock accumulated to USD 8.4 billion, representing USD 875 per capita (UNCTAD.Stat, 2011).

Sectors with a significant FDI presence, mainly as a result of large one-off investments, are telecommunications and energy. In 2008, the largest share in those sectors stemmed from two major acquisitions of GSM providers as well as investments into the Belarusian gas transporting company, Beltransgaz, by the Russian company Gazprom. Since 2007, other investment opportunities have arisen in the banking sector; 25 out of 31 banks have significant foreign ownership.<sup>6</sup> In 2008 and 2009, large investments were mainly being realised by Russian, Austrian, German and Turkish companies (UNCTAD, 2009).

Belarus managed to realise several large investment projects over the past few years through cautious attempts at privatisation and a gradual liberalisation of the economic environment. A relatively stable political and social environment also helped to attract large investors, mainly from the Russian Federation. However, recent economic and political developments have raised concerns among the foreign investor community to what extent a further opening of the economy can be expected.

Table 5.1. **Net FDI inflows**

	2002	2008	2009	2010e	average annual growth (CAGR)	net FDI inflow as % of GDP	
					2002-2008	2008	2009
Armenia	111	1 132	838	525	47%	9.49	9.60
Azerbaijan	1 392	14	473	n/a	-53%	0.03	1.10
Belarus	253	2 158	1 863	1 706	43%	3.58	3.80
Georgia	160	1 564	764	n/a	46%	12.23	7.12
Republic of Moldova	84	708	86	n/a	43%	11.70	1.60
Ukraine	693	10 913	4 816	5 000	58%	6.05	4.17
<b>Total EESC</b>	<b>2 694</b>	<b>16 489</b>	<b>8 840</b>	<b>n/a</b>	<b>35%</b>	<b>5.20</b>	<b>3.81</b>
<b>World</b>	<b>628 114</b>	<b>1 770 873</b>	<b>1 114 189</b>	<b>n/a</b>	<b>19%</b>	<b>2.91</b>	<b>1.88</b>

## Georgia

In Georgia, net FDI inflows were reduced by half as a result of the global financial crisis and decreased from an all-time high in 2007 (USD 1 750 million) to USD 763 million in 2009 or 7.1% of GDP. Inflows were expected to further decrease in 2010 (UNCTAD.Stat, 2011). Nevertheless, over the period 2002-08, FDI inflows increased by 46% year-on-year on average and the total FDI stock grew from around USD 1 billion in 2002 to USD 7.5 billion in 2009. This growth is the highest across the region in per capita terms (USD 1 771).

Until 2005, a large share of inward FDI was directed towards the construction of two main oil and gas pipelines, the Baku-Tbilisi-Ceyhan (BTC) and the Baku-Tbilisi-Erzurum (BTE) pipeline. Since then, Georgia has attracted FDI mainly into the energy sector, transport and communication, real estate and mining and mineral processing. Major sectors which received the largest share of FDI in 2009 were real estate (22%), industry (21%), construction (16%) and transport and communication (15%). Investors from the United Arab Emirates (UAE) accounted for the largest share of FDI (25%) followed by Turkey (15%). The EU-27 countries combined accounted for 35%.<sup>7</sup>

Even though Georgia promoted economic liberalisation heavily, the country faces difficulties in attracting investors into sectors such as banking and agriculture due to a lack of market opportunities. Georgia's agricultural sector is fragmented, employing over 50% of the population but contributing only 12% of GDP.<sup>8</sup> There is also little investor interest in setting up hydro-energy plants or production facilities although these are among the stated priorities of the Georgian government.<sup>9</sup> To further increase the country's competitiveness, the government is currently considering providing investors with detailed feasibility studies for selected investment projects. It is also exploiting the country's strategic geographic location; it is well-positioned and serves as a secure location for long-term investment to produce consumer goods for both domestic and export markets.

## Republic of Moldova

Between 2005 and 2008, net inflows to Republic of Moldova almost quadrupled, growing from USD 190 million to USD 707 million (UNCTAD.Stat, 2011). However, the country was hit hard by the global financial crisis and as a result, in 2009 net FDI inflows dropped to USD 86 million or 1.6% of GDP. Total FDI stock in 2009 was accumulated to USD 2.6 billion, representing USD 722 in per capita terms which was the lowest across the region.

FDI traditionally flows into the processing industry, electrical and thermal energy, gas and water and wholesale and retail trade, and car and motorcycle components. In 2007-08 the share of FDI in financial services grew as a result of the expansion of several European banks, including Veneto Banca, Société Générale and Banca Comerciala Romana. The biggest investments in 2008 were coming from the Netherlands (22%), followed by Russian companies (12%).

Republic of Moldova managed to attract investors mainly through the privatisation of state-owned enterprises and favourable investment conditions in the financial and telecommunications sectors. Another key factor in favour of Republic of Moldova is the relatively low cost of labour, compared to other countries in the region. In 2009 the average monthly salary per employee was EUR 174. However, the country will have to further focus on attracting quality investments which support moving up the value chain as cost competitiveness will only be a short-term advantage.

### **Ukraine**

Between 2002 and 2008, Ukraine attracted above-average FDI inflows with a year-on-year average growth of 58%. Annual FDI inflows increased from USD 693 million in 2002 to USD 10.9 billion in 2008. However, the country was hit hard by the international financial crisis and inflows dropped to USD 4.8 billion in 2009 or 4.1% of GDP. Total FDI stock in 2009 accumulated to USD 52 billion – USD 1 130 per capita (UNCTAD.Stat).

Most FDI flows were directed towards the privatisation of previously state-owned enterprises, and few investments were made in greenfield projects. Almost 80% of FDI inflows originate in the EU and are directed towards construction (22.6%), primary processing industries (19.4%) and financial services (20%). Major investor countries include Germany, the Netherlands, Austria, the United Kingdom and the Russian Federation.<sup>10</sup>

There are still many investment opportunities in Ukraine but to return to its previous growth rates a more comprehensive investment policy framework would be required. At present, the country faces an unfavourable combination of policy barriers and difficult market conditions. Some improvements have been made through a government commitment to reimburse overdue value added tax (VAT) payments as part of an anti-crisis package and through several other governmental initiatives to streamline business-related administrative procedures.

### **EESC**

Since 2002, EESC countries have managed to attract considerable amounts of FDI. However, most FDI was linked to privatisation which has largely been completed, apart from a few exceptions, such as privatisation of the energy and financial sector in Belarus. Reaching higher levels of FDI inflows will only be successful if new greenfield investment opportunities<sup>11</sup> arise that can also support attracting investments into higher value-added sectors. Such a development would help increase the overall competitiveness of the region – FDI would provide the necessary capital inputs, transfer of technology and create new jobs.

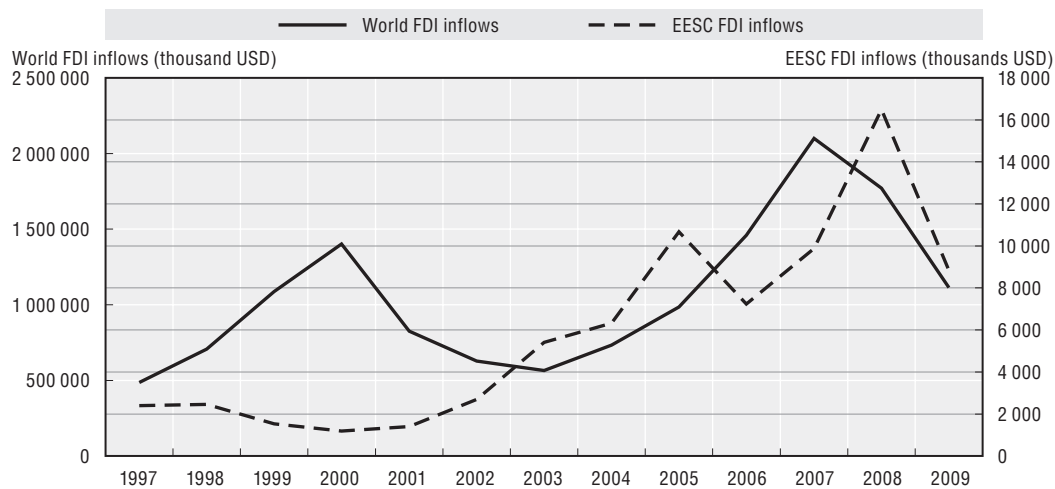
However, achieving this outcome will not be an easy task, especially not in the context of the increasingly fierce global competition for FDI resulting from declining investment activities in the aftermath of the global crisis. The section below provides a brief overview of the impact of the financial crisis on global investment flows in both OECD and EESC economies and shows how OECD governments responded to this increasing challenge. One of the key experiences of the OECD is that to restore investor confidence and attract foreign investors to achieve sustainable long-term improvements requires more open and transparent investment regimes.

## **The impact of the global crisis on FDI flows**

The global financial crisis and resulting economic downturn have had a major impact on global foreign investment flows. Total global flows 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 have increased again in 2010 and were estimated to reach USD 1.2 trillion in 2010, to rise further to USD 1.3-1.5 trillion in 2011, and to head towards USD 1.6-2 trillion in 2012 (UNCTAD, 2010).

The economies in Eastern Europe and the South Caucasus felt the impact of the credit crunch in 2009 as FDI and other capital flows to emerging markets started to dry up. Until that time, FDI inflows into the region had increased at a similar rate as the world average

Figure 5.2. **FDI net inflows: World and EESC countries**  
(in USD million)



Source: UNCTADstat, 2010; OECD analysis.

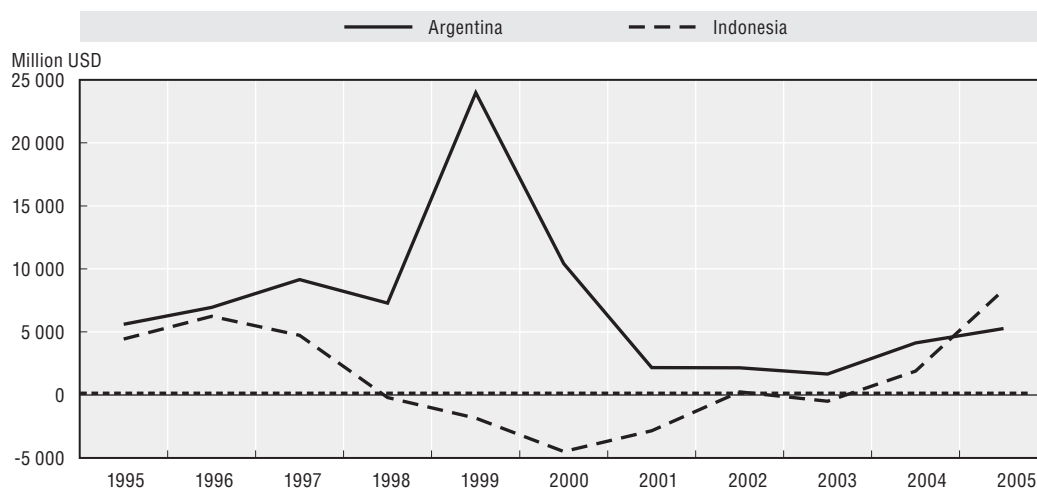
(about 25% average year-on-year growth between 2003 and 2008). In 2009, FDI inflows dropped by almost 50% (as opposed to a 35% decline globally) reaching USD 8.8 billion in total or about 0.8% in terms of global share (UNCTAD.Stat). According to estimates for 2010 and forecasts for 2011, FDI inflows into EESC economies are expected to increase slightly as confidence in a global recovery regains momentum (EBRD, 2010).

#### 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 the official rate (*pesificación*), deterred foreign investors and led 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 takeover of two large private banks which supported recapitalisation of the banking sector and speeded up recovery from the crisis (OECD, 2010d).

The experience of past economic crises suggests that policy makers should avoid imposing any further restrictions on investors and should demonstrate commitment and openness in 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.

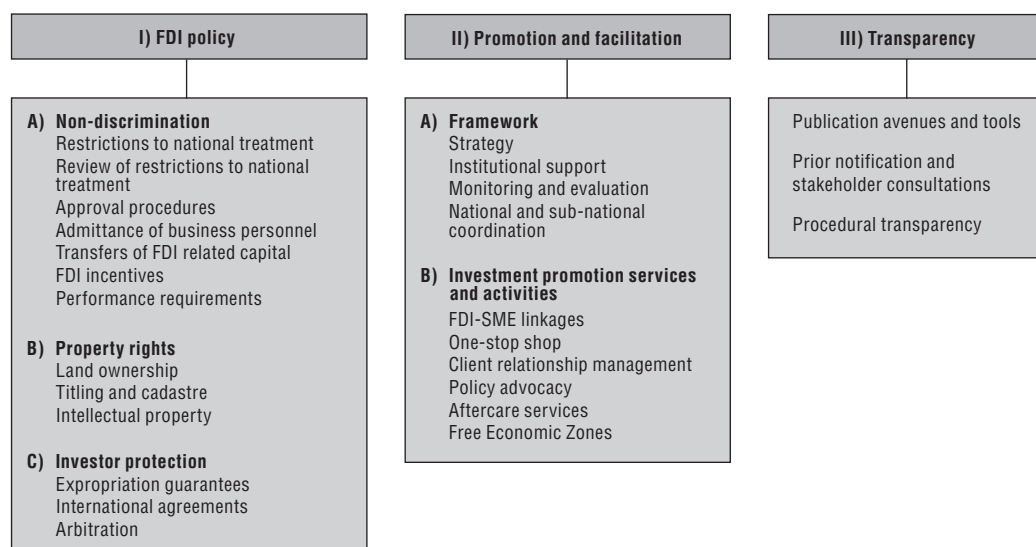
Source: UNCTADstat, 2010.

Figure 5.3. **Argentina and Indonesia, net FDI inflows 1995-2005**  
(in USD million)

Source: UNCTADstat, 2010.

### Assessing investment policy standards and investment promotion trends in the EESC region

The analytical framework presented in this chapter is inspired by many of the elements contained in various OECD instruments and policy tools to assist governments in developing and promoting stable, transparent and predictable business environments for international investment (OECD, 2010a). It covers investment policy issues and promotional activities to help governments evaluate their reforms in these areas.

Figure 5.4. **Investment policy and promotion: Policies for Competitiveness (PfC) Assessment Framework (OECD)**

Source: PfC Assessment Framework 2010 (OECD).

The framework expands on the OECD's Policy Framework for Investment (PFI)<sup>12</sup> and is divided into three sub-dimensions: I) FDI policy; II) investment promotion and facilitation; and, III) transparency. Each sub-dimension 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.

- 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 of disputes which cannot be resolved effectively through local courts.
- 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.
- 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.

## Reducing investment restrictions and building investment promotion capabilities

The OECD assessment of Investment Policy and Promotion was carried out across five countries of Eastern Europe and the South Caucasus: Armenia, Azerbaijan, Georgia, Republic of Moldova and Ukraine. Only the questions related specifically to FDI policy and to investment promotion and facilitation were covered in this assessment cycle. Data were gathered both from public authorities and private sector representatives. Additional evidence was collected based on secondary research. Belarus did not participate in this cycle as the country only joined the OECD Eastern Europe and South Caucasus Initiative in July 2010. However, some conclusions can be drawn from other sources (see Box 5.3).

### I. FDI policy: The need to further reform the FDI policy framework

The following section provides a country-specific review of i) non-discriminatory treatment provisions, ii) property rights enforcement, and iii) investor protection including dispute settlement mechanisms. Each section also contains a regional level assessment with policy recommendation.

**Box 5.2. The OECD approach to investment policy reform**

The OECD has long been active in identifying appropriate framework conditions to enhance 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 adhere, thereby committing themselves to keeping open and transparent investment regimes. Implementation of these principles and instruments is regularly assessed with the support of an in-depth peer review mechanism 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\* – and by encouraging observance of voluntary rules as outlined, among others, in the *OECD Guidelines for Multinational Enterprises* (OECD, 2000). Further instruments such as the *OECD Code of Liberalisation of Capital Movements* (OECD, 2010e) and the *Code of Liberalisation of Current Invisible Operations* (OECD, 2010f) 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.

**A. Non-discrimination: Ensuring non-discriminatory treatment of 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 left to the discretion of the approval authority. Moreover, a foreign investor who has been denied entry should have a right of appeal.

This section poses questions such as: Are restrictions to national treatment clearly codified in law? It is also important to ask whether approval procedures are discriminatory and made on a discretionary basis. The OECD's *FDI Regulatory Restrictiveness Index* cautions that obligatory screening and other discriminatory approval procedures may limit inward FDI flows (OECD, 2006a).

**1) FDI legislation and sector-specific restrictions**

“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 restrictions should be transparent and codified in the law. Typical 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) (OECD, 2010g).

**Armenia's** investment environment is relatively open to foreign investors and the government is committed to further attracting FDI.<sup>13</sup> The 1994 Law on Foreign Investments provides the regulatory framework for FDI and includes guarantees for national treatment and non-discrimination.<sup>14</sup> Foreign investors and foreign employees are entitled to freely transfer property, revenues and other means legally gained as a result of investments or as



a payment for labour. Restrictions imposed on currency exchange and transfers of capital have been abolished and the national currency is fully convertible. Both national and foreign companies are able to open bank accounts in national and foreign currency. However, investors have reported instances of unfair tender processes in privatisation as well as failure of the judiciary to ensure a fair investigation.<sup>15</sup>

The legal regime for foreign investment in **Azerbaijan** was established by the 1992 Law on Protection of Foreign Investment and the 1995 Law on Investment Activity. Foreign investors may invest in all sectors of the economy unless prohibited by specific legislative acts. This mainly excludes investments in sectors related to national security and defence. Also, investments in strategic sectors, such as energy and communications, are carefully controlled. By law, foreign investors enjoy non-discriminatory treatment and have the right to repatriate profits, revenues and other means legally earned in connection with an investment project. All foreign investments need to be registered with the Ministry of Justice. Investors have repeatedly reported receiving demands for bribes when trying to register a company.<sup>16</sup>

**Georgia** is open to FDI and committed to attracting further investors to the country. The legal framework governing foreign investments consists mainly of the 2006 Law on State Promotion of Investments, the 2002 Law on Georgian National Investment Agency and the 1996 Law on Investment Activity Promotion and Guarantees (1996).<sup>17</sup> National treatment restrictions may apply where issues of national security are concerned, for example in sectors such as air and maritime transport, broadcasting, satellite communication and related activities. Foreigners may hold foreign exchange accounts and capital transfers are not restricted but must be registered. There are no approval procedures to screen foreign investment other than standard registration or licensing requirements. The Government of Georgia is only involved insofar as it conducts privatisation of state-owned property through tender or auction procedures.

The 2004 Law on Investment in Entrepreneurship of **Republic of Moldova** incorporates the principle of national treatment. Restrictions to national treatment have been progressively reduced, transfers of FDI-related capital can be made freely and foreign investors are allowed to own urban and residential land. Administrative barriers have been significantly reduced over the past few years. However, a number of issues remain including non-transparent, burdensome and inconsistent regulatory administration. In its country partnership strategy, the World Bank highlights that institutional flaws and invasive special interests continue to distort the policy-making environment.<sup>18</sup>

The legal framework for international investment activities in **Ukraine** was established by the 1991 Law on Investment Activity, the 1996 Law on the Treatment of Foreign Investments and the 2000 Law on the Removal of Discrimination in Taxation of Subjects of Entrepreneurial Activity. Ukraine applies a few restrictions to national treatment, mostly based on public order and national security considerations (defence-related manufacturing and activities). Some others, such as limitations on foreign participation in wholesale trade of books and newspapers or interdiction of branching by foreign insurance companies, should be gradually eliminated as a part of Ukraine's World Trade Organisation General Agreement on Trade in Services commitments.<sup>19</sup>

Issues that remain to be resolved in all **EESC** countries include insufficient enforcement of investment-related laws as well as a lack of coherent review mechanisms to benchmark the scope of restrictions to national treatment relative to practices in other

countries. Establishing such review processes would also enable governments to undertake detailed cost-benefit or regulatory impact analysis to see whether restrictions meet their intended policy purposes. Ideally, this process should also seek inputs from national and international investors and other stakeholders.

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

FDI incentives can be used to attract investments according to certain policy priorities, such as innovation, employment or export generation. 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) (OECD, 2003b).

Similarly, host countries may impose performance requirements on foreign investors to promote specific policy objectives. These include local content requirements, minimum export levels, links between imports and exports of foreign exchange inflows and obligatory technology transfer. The *FDI Regulatory Restrictiveness Index* of the OECD identifies domestic content requirements as a factor in discouraging inward FDI flows.

To encourage FDI in **Armenia**, additional privileges can be granted by legislation for investments in priority areas contributing to social and economic development.<sup>20</sup> Specific incentives include exemption from export duties and VAT refunds on exported goods and services. Foreign investors can benefit from income tax holidays and ad hoc incentives can be negotiated on a case-by-case basis. There are no performance requirements for new investments with the exception of privatisation investments in large state assets.<sup>21</sup>

In **Azerbaijan**, investors are exempt from duties and taxes on the import of machinery and equipment and other property. FDI incentives are not widely available. A law on special economic zones was adopted in 2009 but there is no operational zone at this stage in which investors would benefit from additional privileges. Some performance requirements regarding future investment and employment creation exist for investors participating in privatisation processes. There are no local content rules or minimum export requirements.

Over the past few years, **Georgia** has dramatically simplified licensing and permission requirements to ease constraints on investments and business in general. Georgia does not provide any specific FDI incentives to foreign investors but relies on its open and attractive investment environment. There are no performance requirements for new investment, however investors participating in privatisation processes might have to commit themselves to maintaining employment levels or to re-investing.

**Republic of Moldova** offers various incentives to foreign investors including exemptions from customs duties on imports supporting the manufacturing of export goods (until April 2014) as well as a 0% tax rate on re-invested corporate income. Moreover, there is a five-year 50% income tax exemption for companies with investments higher than USD 250 000. If investments exceed USD 2 million, companies benefit from a three-year 100% income tax exemption. However, at least 80% of income tax savings need to be re-invested. This share is progressively reduced for companies with higher investments. According to the Tax Code, other tax exemptions may be granted to SMEs or to companies active in

specific sectors, such as software development, agribusiness, and scientific research and innovation. There are no specific performance or local content requirements; however, investors reported that such requirements have been imposed by Moldovan authorities on an informal basis.<sup>22</sup>

In **Ukraine**, the import of capital equipment is exempted from import duties. Additional exemptions, for example on VAT payments, exist for investments in energy-saving technologies.<sup>23</sup> In general, FDI incentives may be available to investors which implement investment projects in areas promoted under the state programme of the development of priority branches of the economy, social sphere and territories.

Overall, most **EESC** economies grant additional privileges and incentives to foreign investors such as income-tax preferences and customs duties exemptions to encourage investment in priority sectors. However, governments that engage in incentive-based strategies should consider conducting a thorough cost-benefit analysis and regularly assessing relevance and economic benefits of such measures.

Also, privileges and incentives are often linked to performance requirements or other conditions, such as local employment requirements. These can also easily be applied on an informal basis which can expose foreign investors to arbitrary application of laws and regulations, as reported by investors in Republic of Moldova. In Armenia, Azerbaijan and Georgia, specific performance requirements are imposed on investors for participating in privatisation. Governments should reconsider these restrictions and refrain from imposing additional requirements as FDI incentives and performance requirements for foreign business operations limit a firm's ability to operate in another country (OECD, 2008).

### ***B. Property rights: Securing land ownership and strengthening intellectual property rights***

Secure, verifiable and transferable rights, including land registers and cadastre information for agricultural and other types of land and forms of property, give investors and entrepreneurs an incentive to shift into the formal economy. Investors need to be confident that their ownership of, or right to use, property is legally recognised and protected. Having a land title that contains legal information about a parcel of land provides a foreign investor with added security that land purchased for a foreign investment is not subject to claims for restitution. Similarly, a foreign investor will seek cadastre information prior to undertaking a new investment which provides a comprehensive register for real property of a country.

Protection of intellectual property rights is equally important as it gives businesses an incentive to invest in research and development. This section assesses whether countries of the region are signatories to major international treaties on the protection of intellectual property rights including the WTO Trade-related Aspects of Intellectual Property Rights (TRIPS) Agreement, the WIPO Copyright Treaty (WCT) as well as the Berne Convention for the Protection of Literary and Artistic Works, the Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations and the Paris Convention for the Protection of Industrial Property.<sup>24</sup>

Foreign enterprises registered in **Armenia** are permitted to acquire ownership of land; the administrative procedures of registration do not discriminate among national or foreign representatives. The country ranks 5th (out of 183) in Registering Property in *Doing Business 2011* which is related to significant improvements in the cadastre system (World

Bank, 2011). As for intellectual property rights, Armenia has been a member of the World Intellectual Property Organisation (WIPO) since 1993. Its domestic legislation, including the 2006 Law on Copyright and Related Rights, is in full conformity with WTO provisions on intellectual property, including the TRIPS Agreement. However, law enforcement remains weak and foreign investors have suffered from inadequate protection of intellectual property rights.<sup>25</sup>

**Azerbaijan** restricts foreign ownership of land but allows foreign citizens and enterprises to lease land. The government is currently reviewing its restrictions on the acquisition of land by foreign investors. It has also been working to improve the property registration system and is currently ranked 10th (out of 183) on the Registering Property indicator in *Doing Business 2011* (World Bank, 2010). However, the system is seen by foreign investors as corrupt and inefficient.<sup>26</sup> Legislation on intellectual property rights has been adopted and is consistent with the WTO TRIPS Agreement. Azerbaijan is a party to the Paris and Berne Conventions and ratified both WIPO treaties in 2005. Enforcement of intellectual property rights has improved over the past few years, although counterfeit products are still widely available in the country.

In **Georgia**, agricultural land may be purchased by an individual only through a corporation registered in Georgia. The property registration system has significantly improved in recent years and is now modern and self-sustainable (World Bank, 2010). As regards intellectual property rights, Georgia is a party to the WTO TRIPS Agreement as well as to the two WIPO treaties, and the Paris and the Berne Conventions. However, the country has a weak record of enforcing intellectual property rights. The estimated rate of software piracy is 95% of all marketed software which is an extremely high rate, and leaves the country with the top rank of number one worldwide for piracy rates in 2009.<sup>27</sup>

In **Republic of Moldova**, foreign investors are allowed to purchase both urban and residential land. However, in its *White Book 2009*, the Foreign Investors Association of the Republic of Moldova underlines that discrimination towards foreign investors has been persistent, especially in its regulations on land purchase.<sup>28</sup> The country ranks 18th (out of 183) on the Registering Property indicator in *Doing Business 2011* (World Bank, 2010); a system for recording property titles is in place.<sup>29</sup> Regarding the protection of intellectual property rights, the country adheres to WIPO and WTO TRIPS agreements. It is also a member of the Paris Convention and a signatory to the Berne Convention.

Foreign ownership of agricultural land in **Ukraine** is prohibited by the 2001 Land Code; however, a revision of the law is currently underway. Foreign investors can lease agricultural land or create a legal Ukrainian-registered business to purchase arable land.<sup>30</sup> The country only ranks 164th (out of 183) on the Registering Property indicator in *Doing Business 2011*, mainly as a result of lengthy procedures and the 117 days required to complete the process (World Bank, 2010); one of the main reasons for this delay is the lack of a unified registration system at the national level (Wehrmann, 2010). Legal protection of intellectual property rights (IPR) has improved as part of the country's efforts to comply with WTO requirements under the TRIPS Agreement but IPR violations remain frequent. Ukraine is the only country in the EESC region to be placed on the United States' 2010 Special 301 Report Watch List on IPR protection as serious concerns remain regarding the transshipment of counterfeit goods as well as weak law enforcement and limited awareness of IPR issues in general.<sup>31</sup>

Across **Eastern Europe and the South Caucasus**, certain restrictions apply to foreign ownership of land but long-term leases are permitted. Armenia and Georgia have the most open regimes which permit purchases of agricultural land through foreign-owned domestic companies. Both countries have also significantly improved their property registration systems in recent years. In all other countries, foreign companies usually need to agree on a joint venture with a domestic company to own (arable) land. For most business needs, agreeing on a joint venture or signing long-term leases is acceptable if the right to use a certain type of land and other forms of property are legally recognised and protected.<sup>32</sup> This requires adequate titling legislation and a cadastre system to ensure that land purchased or rented is not subject to claims for restitution. While this is the case for most countries of the region, Ukraine still lacks a comprehensive registration system at the national level and property protection thus remains one of the biggest pitfalls for foreign investors in the country.

This is also true of intellectual property rights. Legislation in all EESC countries is in line with international treaties; however, law enforcement mechanisms are very weak. Software piracy is a significant challenge as the rate of estimated software piracy in 2009 was between 85% (Ukraine) and 95% (Georgia) throughout the region.<sup>33</sup> Better policies and law enforcement mechanisms for securing intellectual property rights will be required to give foreign and domestic businesses an incentive to further invest in research and development, thus fostering the creation of innovative products and processes.<sup>34</sup>

### ***C. Protecting investors: Providing guarantees against expropriation and dispute settlement mechanisms***

Below we review whether compensation for expropriation is provided in domestic law. We also expand on investor-state dispute settlement mechanisms as agreed upon in bilateral investment treaties (BITs) or by being a signatory 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 (1965). International regimes for arbitration play an important role in dispute settlement, especially if domestic legislation for investor protection remains weak or unreliable. Furthermore, investor-state dispute settlement mechanisms contained in most BITs typically provide additional rights to foreign investors to seek redress for damages arising out of alleged breaches by host governments of investment-related obligations (OECD, 2006b).

In **Armenia**, property is protected by the Armenian Constitution and expropriation of foreign investments is not allowed except in cases of natural or state emergency and upon appropriate compensation. Moreover, Armenia is a member of the Multilateral Investment Guarantee Agency (MIGA) which provides foreign investors with guarantees against political risks including transfer restrictions, expropriation, war and civil disturbance and breach of contract. Armenia concluded 11 BITs with OECD countries which allow investors to opt for binding international arbitration in case a dispute arises.<sup>35</sup> Armenia is a party to both the New York and ICSID Convention as well as to the CIS Convention on the Protection of Investor Rights which aims at harmonising the legal framework for investment activities in the CIS.<sup>36</sup>

Foreign investments in **Azerbaijan** are protected by the 1992 Law on Protection of Foreign Investments which provides guarantees against nationalisation and requisition except in cases of natural calamities, accidents, epidemic, epizootic situations and other

### Box 5.3. Investment policy environment of Belarus

The legal regime for FDI in Belarus was established by the Investment Code of 2001. The code underwent several revisions over the past decade, reflecting the increasing government commitment to further attracting foreign investors. By law, all sectors of the economy are open to FDI apart from restrictions related to defence and security as well as manufacturing and distribution of narcotic, powerful and toxic substances. Other restrictions exist in insurance as well as banking and financial services. However, these are fairly standard in comparison with other countries.

Since 2007, the government has made significant efforts towards economic liberalisation with a focus on simplification of administrative procedures. However, a system of direct public management and operation of the economy has been maintained which limits competition between state-owned enterprises and private companies. The establishment of a level playing field, including a liberalised price and wages regime, would be an important pre-condition to further attracting investments. More specific challenges that need to be tackled to promote FDI and private sector development would require the credible implementation of reform, specifically in areas such as:

*Land ownership:* Foreign investors can buy property or acquire various land use rights, such as leasehold or right of temporary use based on concession. However, as 90% of all land is state-owned and allocated to agriculture, most foreign investors must undergo a rezoning procedure to use land for industrial or commercial purposes – a lengthy and cumbersome procedure.

*Transfer of funds:* Free transfer of funds is guaranteed under the Investment Code; however, there is no regulation with regards to the transfer of compensation pursuant to expropriation or payments arising out of an investment dispute. Moreover, the central bank has recently taken steps to limit foreign currency exchange as a result of rapidly decreasing foreign currency reserves.

*Investor protection:* The Investment Code contains provisions on protection against expropriation and dispute settlement mechanisms. However, these provisions do not meet international standards, e.g. the Code does not set forth conditions providing a reason for expropriation. In some cases, de facto expropriation has occurred by introducing state management into privately owned companies (see Pinskdrev, a furniture manufacturer that lost control over its operations, arguably to ensure safety standards).

*Dispute settlement:* Recourse to international arbitration is not foreseen by law unless agreed upon by both parties. While investor protection mechanisms regulated by national law are relatively weak, this is compensated by an extensive network of bilateral investment treaties which expands the scope of foreign investor rights including granting access to the International Centre for Settlement of Investment Disputes (ICSID).

Overall, Belarus needs to increase the transparency and predictability of its investment regime and harmonise legislation with internationally accepted standards. Such a reform should also address inconsistencies between the Investment Code and relevant presidential decrees as well as between regional and national investment legislation.

Source: UNCTAD, Investment Policy Review: Belarus, New York and Geneva 2009.

force majeure instances. Foreign investors are entitled to adequate compensation which shall be paid in foreign currency. Azerbaijan is a member of MIGA and has ratified both the New York and ICSID Conventions; however, foreign arbitral awards are not generally recognised and are not enforced by local courts. The inefficient judiciary system, regulatory abuse and poor contract enforcement are among the biggest impediments for

foreign investors and several instances of the abuse of property rights have been reported.<sup>37</sup> Azerbaijan has concluded 9 BITs with OECD countries which provide additional protection for investors from partner countries.<sup>38</sup>

Foreign investments in **Georgia** are protected by the Georgian Constitution which permits expropriation only in cases of extreme public necessity and with appropriate compensation. Georgia has concluded 10 BITs with OECD countries.<sup>39</sup> International arbitration is carried out through the New York and ICSID Conventions.

**Republic of Moldova** protects investments according to the 2004 Law on Investment in Entrepreneurial Activity. Expropriation can only take place on a non-discriminatory basis and for the public good. Compensation must be paid equivalent to the real value of the investment. The country has signed 16 BITs with OECD countries which give additional protection and also provide for international arbitration.<sup>40</sup> Republic of Moldova signed the ICSID Convention in 1992 but it was never ratified.

Investment guarantees in **Ukraine** are established by the 1992 Law on the Regime of Foreign Investment which stipulates that expropriations may only occur in cases of a calamity, emergency, epidemic or epizootic and are subject to prompt, adequate and efficient compensation. Ukraine has signed 25 BITs with OECD countries on the promotion and mutual protection of investments which contain national treatment and most-favoured nation provisions and provide additional guarantees for investors.<sup>41</sup> Moreover, Ukraine is a signatory to the New York and ICSID Conventions.

To better protect investors, all **EESC** economies have concluded bilateral investment treaties (BITs) with selected partner countries to define foreign investment relationships and to protect investors against expropriation and nationalisation. Most countries (except Republic of Moldova) adhere to the New York and ICSID Conventions.

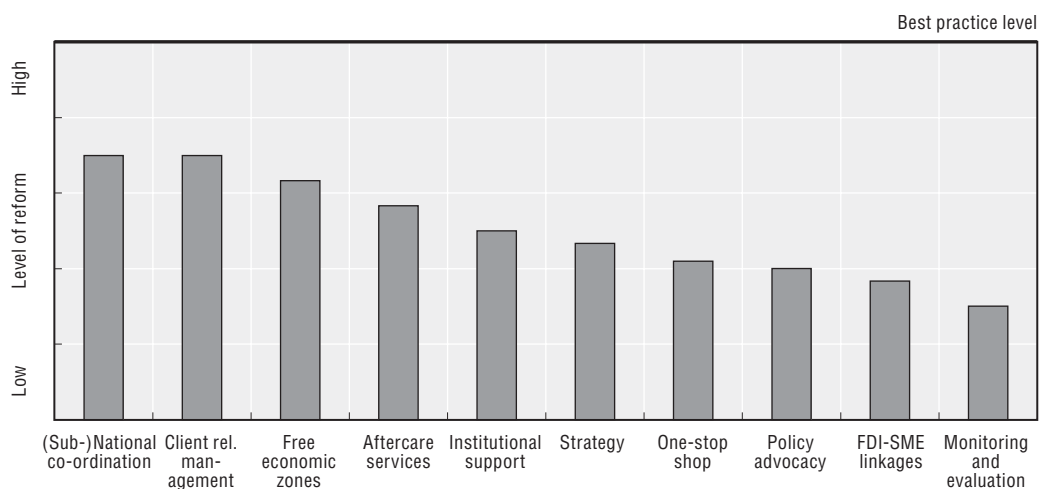
## ***II. The need to further develop investment promotion and facilitation (IPF) capabilities***

Creating the right framework conditions by putting in place a sound and stable regulatory framework is an important first step to attract investors. In addition, promoting investments through targeted facilitation services aims at closing the information gap and marketing a country's comparative advantages. This 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).

This section reviews the overall IPF framework which examines the guiding strategy underpinning IPF activities, the implementing institution (such as the investment promotion agency) and the monitoring and evaluation mechanisms in place; and 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.

### ***A. Providing the right framework conditions for investment promotion***

Framework conditions for investment promotion activities are mainly established through an investment promotion strategy and through the institutional setting that is put

Figure 5.5. **PfC Assessment Framework results: investment promotion reform**

Source: PfC Assessment Framework 2010 results (OECD).

in place for implementing the strategy, *e.g.* the investment promotion agency (IPA). Most countries have established IPAs 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, 2010c).

When defining a strategy and the responsibilities of an IPA, policy makers should keep in mind that a country's investment attractiveness mainly depends on two factors, *i.e.* the policy environment in place and available market opportunities for foreign investors. The IPA should thus be in a position to actively support improvements in the policy environment (*e.g.*, through its policy advocacy role) and the investment promotion strategy should be used not only as a marketing tool but as an instrument for supporting FDI-led policy reform and for building longer-term capabilities.

In order to succeed in global competition, investment promotion activities should be demand-driven and build on a country's comparative advantages. A strategy should therefore help to improve competitiveness at the national and at the industry level through identification of policy barriers and constant adjustments in the policy environment. These should be based on investor and SME requirements, as well as by specifically seeking to attract quality investments supporting the transfer of skills, innovation and technological spillovers. To be most effective, investment promotion efforts need to be targeted and bring added value to foreign investors.

The Armenian Development Agency (ADA) was established in 1998 by the Armenian government to facilitate foreign direct investments and promote exports. **Armenia** is currently developing an export promotion strategy to review the country's export potential and to provide solutions for export development. To facilitate FDI, ADA acts as the main national intermediary agency to bridge gaps between policy development and implementation. The Prime Minister of Armenia is the Chairman of the Board of ADA.<sup>42</sup>

In 2003, the Azerbaijani Export and Investment Promotion Foundation (AZPROMO) was established in **Azerbaijan** as a joint public-private initiative. Its aims were to support sustainable economic development and to implement measures necessary to attract



**Box 5.4. How to link investment promotion efforts to investment zones**

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 there is 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 to promote private sector investment and typically support the creation of employment. They are also often used as a testing ground for new policy frameworks, serving as a good model before implementation of 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 developed primarily as a private, sector-driven initiative.

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 they are only second-best solutions to economic development because they create distortions through "positive discrimination". Zones should not be used as a substitute for a country's broader trade and investment efforts but rather should be considered a complementary tool.

investments to create new jobs, particularly in rural regions within the poverty reduction strategy framework. There is no strategic plan to promote and facilitate investment. However, goals have been set to specifically promote investments in non-oil sectors. These are implemented through various state programmes.<sup>43</sup> AZPROMO is governed by a board of trustees which consists of representatives from both the public and private sectors, international organisations and delegates from foreign embassies in Azerbaijan.

**Georgia** has set up an investment promotion agency to attract FDI – the Georgian National Investment Agency (GNIA). It operates under the Ministry of Economy and Sustainable Development of Georgia and has a stable budget to cover all overhead and salary costs. While the agency monitors the implementation of investments it does not yet have an effective mechanism for monitoring and evaluating its activities. GNIA plans to create such a mechanism in the near future.<sup>44</sup>

**Republic of Moldova** is in the process of developing its investment promotion agency and associated capabilities. Crucial issues include facilitation services at the pre- and post-entry phase of investment, developing a client relationship management system to actively manage relations with foreign investors in an organised and strategic manner and developing a mechanism to monitor the performance of its investment promotion agency. Republic of Moldova is in the initial phase of creating an investment promotion unit with

the assistance of the UNDP. Much like other economies in the region, Republic of Moldova would benefit from exchanges of best practices in this area.

Investment promotion activities in **Ukraine** are based on the Programme on Development of Investment Activity in Ukraine in 2002-10. Its aims are the deregulation and liberalisation of the business environment including reforms in key policy areas such as competition, tax, banking, education and others.<sup>45</sup> Over the past few years, several agencies and investment promotion centres have been created with overlapping responsibilities and an unclear mandate.<sup>46</sup> In 2005, InvestUkraine was founded by government decree as an independent investment agency to provide information and facilitation services to potential investors.<sup>47</sup> In 2009, the National Agency for Foreign Investment and Development (UkrZovnishInvest), was set up as a central governmental body to implement state policies in the area of investment facilitation. In 2010 it was merged with the State Agency for Investments and Innovations (DerzhInvestysii)<sup>48</sup> and now operates as the State Agency for Investments and National Projects.<sup>49</sup>

All countries of the **Eastern Europe and the South Caucasus** region have established investment promotion agencies with a mandate to provide investor facilitation services. However, the assessment results indicate that investment promotion activities are not yet sufficiently targeted to add true value for foreign investors. Most IPAs in the region lack a coherent strategy for targeted investment promotion. Such a strategy should contain 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, for which customer types, etc.; and, iii) a roadmap of how to compete and offering appropriate services and continuous improvements to the business environment.<sup>50</sup>

Most IPAs focus mainly on marketing activities and on providing investor support services rather than on fulfilling their policy advocacy role. There are no clear links between investment promotion services and the efforts being made to strengthen a country's competitiveness by moving forward with the investment policy reform agenda. This can be facilitated through effective policy co-ordination mechanisms and, if an IPA has been granted the necessary authority to address and report back on investor concerns. In practice, for example, the IPA board of directors could include representatives from all relevant ministries, as well as the private sector, and operate under the direct supervision of the president or prime minister.

#### ***B. Investment promotion services and activities: Offering value-added investment promotion services***

A key question that must be addressed when providing investment promotion services is how to be most efficient with few available resources at hand and how to address the information gap to facilitate an investment decision. Setting up an IPA to provide marketing material is certainly not enough. The key objective of investment promotion is about addressing information gaps through multiple networks which include a wide variety of stakeholders at the global, country and sub-national levels. These stakeholders, including the network of foreign embassies, national agencies and local authorities, should be able to offer true investor support services through access to company networks and relevant authorities.

### Box 5.5. How to address the information gap

Considering the information flow, 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.

Investment promotion services and activities in **Armenia** are offered by the Armenian Development Agency (ADA). ADA acts as a one-stop shop 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. In its export promotion activities, ADA helps to identify markets for products, undertakes market studies and seeks out partners for joint ventures to increase the volume of exports and the development of Armenian enterprises.

The **Azerbaijan** Export and Investment Promotion Foundation (AZPROMO) acts as a one-stop shop for foreign companies only with regards to advisory and information services. Foreign investors are left to navigate approval, screening and other regulatory services by themselves. There are also no sub-national IPAs or investment zones that could provide similar services. Aftercare services are offered through a sophisticated client relationship management (CRM) system and include support of expansion/re-investment plans, individual troubleshooting and provision of information regarding changes to the business environment. However, AZPROMO does not have a policy advocacy unit that would engage with the government in policy discussions aimed at improving foreign investment laws and regulations. Consultations with foreign investors are held on an ad hoc basis and concerns are communicated to the relevant regulatory authorities. At this stage, the IPA implements only limited monitoring and evaluation activities, the results of which are not publicly available.

In **Georgia**, the Georgian National Investment Agency (GNIA) serves as a one-stop-shop and provides initial guidance and information to investors. It does not have the authority to approve the regulatory and procedural requirements necessary to establish a foreign enterprise; however, it provides assistance to the foreign investor when dealing with the relevant authorities. The agency has a client relationship management (CRM) process in place which still has some limitations in terms of its scope and nature. For example, there is no CRM software system to support the management of the CRM

strategy. However, GNIA does undertake follow-up conversations and meetings with interested foreign investors. Aftercare services are provided to some extent already and are expected to be expanded in the future.

In **Republic of Moldova**, the government has made significant efforts to streamline business registration. A “one-window” approach has been implemented to simplify document submission. The process has reduced the number of procedures required to eight and the time necessary for business registration to ten days.<sup>51</sup> However, a number of measures are still needed to increase the institutional and associated capabilities by creating facilitation services at all phases of investment, developing a client relationship management system and developing the process of monitoring.

The State Agency of **Ukraine** for Investments and Development has been mandated by the Cabinet of Ministers to co-ordinate the work of the central executive authorities in the sphere of investment promotion and to market investment projects of strategic priority to foreign investors. It conducts roadshows abroad and establishes one-stop-shop services. After a number of unsuccessful attempts in the past to establish an efficient investment promotion system, it is crucial that the new institutional setting allows for effectively addressing key obstacles to foreign investment. In light of international best practices, the new Ukrainian agency could participate more in designing and implementing policies to enhance the country’s investment climate, including through policy advocacy efforts aimed at promoting legislative and administrative changes in support of investment.

Across **EESC** countries, IPAs provide information and support services and have introduced one-stop shop (OSS) services. However, these services are not always satisfactory: investors will only see an added-value if an IPA can provide foreign investors with nearly all the approvals and clearances required. While the assessment shows that IPAs in the region help navigate investors through licensing and approval procedures across the various ministries concerned, none of the agencies provide true OSS services which would help to streamline administrative procedures in setting up a business.

Another key outcome of the assessment shows that IPAs in EESC countries have yet to implement FDI-SME linkage programmes to actively support the development of small and medium-sized enterprises. Schemes that specifically help SMEs to 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 normally entails approaching local SMEs and conducting strategic audits to assess their capacity for participating in a specific linkage programme as well as defining a development plan, promotional campaigns and a database to generate interest among foreign enterprises. Experience suggests that facilitating the creation of linkages can lead to sustainable business networks – invaluable to both foreign investors and domestic companies (OECD, 2004).

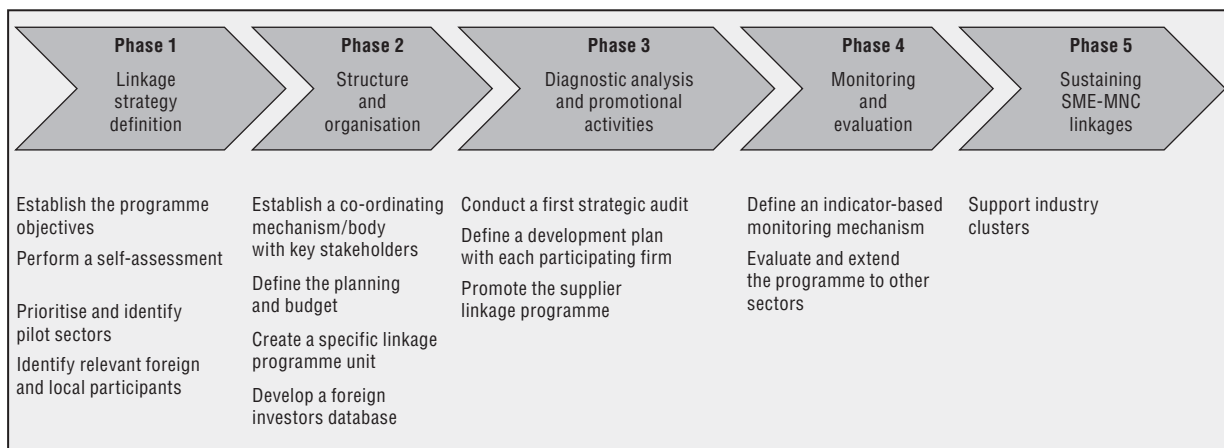
### Box 5.6. FDI-SME linkage programmes

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 question to be addressed by policy makers in emerging markets is how to mobilise FDI to support transfers of know-how and technology from multinational corporations to local SMEs, *e.g.* by developing the right policy environment to support the formation of business linkages (OECD, 2009b).

Business linkages can take a number of forms, ranging from backward linkages with local suppliers in the procurement of components, materials and services, over forward linkages with customers by outsourcing specific activities, to linkages with competitors and technology partners leading to positive spillover effects. Evidence of positive effects is strongest regarding backward linkages with local suppliers who are well-positioned to receive support in the form of technical assistance and training which help ensure quality standards and upgrade productive capacities (OECD, 2002).

The OECD Private Sector Development Division has 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 organisational structure for the linkage programme. Phase three describes the diagnostic and promotional activities that essentially launch the programme. Phase four outlines the mechanisms to monitor the results of the programme. Lastly, phase five examines how linkages facilitated by the programme might be sustained in the long run (OECD, 2009b).

Figure 5.6. The five-stage approach



Source: OECD Private Sector Development Division

### Conclusion: investment policies and promotion need to be better targeted

Across Eastern Europe and the South Caucasus, governments have introduced investment laws that contain the principle of national treatment and provide rules and

regulations for investor guarantees and international arbitration. All countries are trying to attract more and better foreign direct investment to support the upgrading of their technological capacities and economic growth. However, much remains to be done to build better policy frameworks to encourage foreign investors to bring quality investments to the region that specifically support employment generation and economic diversification.

While most sector-specific restrictions for FDI have been abolished, the assessment indicates that countries of the region continue to impose performance requirements on foreign participation in the privatisation of state-owned assets. The governments of Eastern Europe and the South Caucasus should consider introducing review mechanisms to benchmark the scope of existing restrictions to national treatment relative to practices in other countries. Establishing such a review process would also enable governments to undertake detailed cost-benefit or regulatory impact analysis to see whether restrictions meet their intended policy purposes or whether they should be removed. Ideally, this process should involve consultations with national and international investors and other stakeholders.

The assessment also shows that investor protection against expropriation and enforcement of intellectual property rights remains weak across the region, mainly due to the lack of non-transparent and arbitrary legal proceedings. Foreign investors seeking a court decision on conflicting titles or compensation for expropriation often face difficulties because contracts or other proof of land ownership are not properly recognised by courts. Most countries are signatories to the ICSID Convention (except Republic of Moldova) which provides access to international dispute settlement mechanisms. A degree of investor protection is also provided by several bilateral investment treaties (BITs) which normally include clauses for the settlement of international disputes.

In the area of investment promotion, all countries of the region have established investment promotion agencies (IPAs) which provide information to investors as well as support and facilitation services. However, investment promotion efforts overall are not yet targeted enough and focus mostly on marketing activities rather than providing true services to potential investors. One-stop shop services need to be upgraded and the policy advocacy role of IPAs should be strengthened to link investment promotion efforts to investment policy reform more effectively.

Countries from Eastern Europe and the South Caucasus could consider adopting a more integrated approach to investment promotion which is focused on sector competitiveness and regional development. By doing so, investment promotion can 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. Moreover, governments should consider introducing FDI-SME linkage programmes to upgrade local economic capacity through the presence of foreign investors.

### **Annex: Draft Guidelines for investment promotion capabilities in the EESC**

Draft Guidelines for Investment Promotion in Eastern Europe and the South Caucasus have been developed as part of the work stream of the Policy Working Group on Investment Policy and Promotion of the OECD Eastern Europe and South Caucasus Initiative. This Working Group convened on 3 July 2009 in Bodrum, Turkey 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 organisational 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 should 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 (FDI) to the national economic development framework.*

- 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.
- Develop longer-term capabilities through FDI-led competitiveness focusing on quality investment that supports innovation and employment creation.
- Implement policy reforms by analysing and removing policy barriers along the value chain based on investor “activities” per sector.
- 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.
- Analyse demand from a foreign-investor perspective and present a country’s comparative advantages by sector, including an outline of potential target markets.
- 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.
- Link investment promotion to regional development and ensure coherence of investment promotion efforts at the national and sub-national level.
- Also promote country-wide policy reform horizontally across policy dimensions to create an overall attractive investment environment.

## **II. Organisational 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.*

- 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.
- 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).

- Develop a demand-driven organisational structure that provides targeted support and facilitation services by sector to small- and middle-scale investors.
- Establish dedicated project teams including staff from ministries, investment agencies and municipal authorities to support large-scale investment projects.
- 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.
- 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).
- Use senior political figures and government officials, existing foreign investors and the overseas expatriate community as “ambassadors”.
- 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).*

- Link investment promotion to industrial policy to provide targeted support for the development of specific segments and geographical locations to diversify FDI.
- Establish local investment promotion branches to facilitate registration procedures/ issue licenses and provide aftercare services on the ground.
- Based on the target sectors identified, develop “centres of excellence” which will attract investors by making available the infrastructure that will give the country or region an advantage when competing internationally for investment.
- 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.
- Involve private companies in zone development and outsource non-core functions and services.
- Set up an independent zone authority with sufficient autonomy over staffing, budgets, spending and policy making.
- Encourage linkages between foreign businesses and local companies to maximise “spillover” 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.

### **Notes**

1. CAGR – Compound annual growth rate is as an imaginary number that describes the annualized gain of an investment if it grew at a steady rate.
2. Population data from IMF, World Economic Outlook Database, October 2010.



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## Chapter 6

# Ukraine: A Case Study on Diversification and Sector Competitiveness

by

*Based on the forthcoming OECD Ukraine Sector Competitiveness Strategy report,\*  
with additional text and analysis provided by Sergiy Rusnak,  
Antonio Somma and Ania Thiemann*

*This chapter is a country case study. It looks at specific ways to enhance a country's productivity levels through focusing on boosting the competitiveness of selected economic sectors. The chapter also looks at other elements likely to affect the general attractiveness of the business environment, such as a new Tax Code.*

*Ukraine's size, qualified labour force and natural endowments combined to make it one of the fastest growing economies in Europe between 2000 and 2008. Following its deeply-felt recession of 2009, Ukraine resumed positive growth in 2010. However, the recession exposed severe structural weaknesses in the economy, especially with regard to the underused potential of many of its economic sectors. Among the key challenges it must address to improve competitiveness and embed sustainable economic growth are: a low level of FDI per capita, an unfavourable business climate, high external debt, inadequate implementation of laws and the lack of a long-term strategy for investment policy and promotion. For optimum effectiveness of FDI it must be both diversified and its investment policies and promotion must be made sector-specific. Investment and promotion strategy and recommendations must focus on how to differentiate Ukraine and show its uniqueness for investment, how to identify sector-specific policy reforms, how to promote specific sectors, how to implement and monitor reform, how to evaluate progress and how to enhance its policy convergence with OECD investment instruments. The sectors identified for further study of their competitive advantage are Ukraine's grain and dairy sectors, energy production based on biomass and the civil aviation manufacturing sector.*

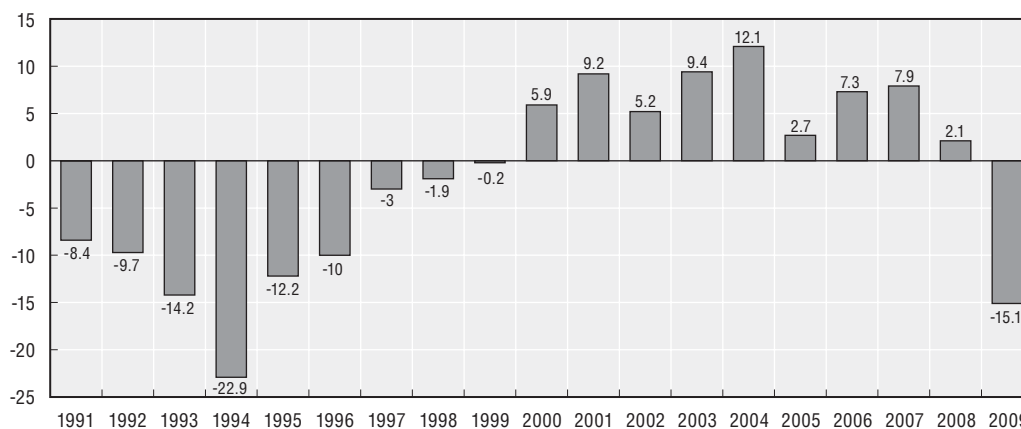
\* The "Ukraine Sector Competitiveness Strategy" report will be published in November 2011. It will be the result of a 24-month project conducted by the OECD Eurasia Competitiveness Programme with Ukraine in order to enhance sector competitiveness and help increase foreign direct investment.

## Ukraine: competitiveness review

Ukraine is the second-largest country in Europe by area and the seventh by population (45 million), and thus has a very low population density. The country's substantial natural resources, its geographical location and relatively low-cost and well-qualified labour force make Ukraine an attractive destination for investment. Its natural endowment of arable land is the largest in Europe, standing at 311 000 square km.<sup>1</sup> In comparison, France, the second-largest country after Ukraine, has 184 000 square km. Ukraine is the world's largest exporter of barley, the seventh-largest exporter of wheat and the eight-largest producer and fourth-largest exporter of steel. It is also the fifth-largest exporter of nitrogen-based fertilisers (Worldsteel, 2010; FAOSTAT, 2011). Agriculture remains one of the largest components of Ukraine's gross domestic product (GDP), contributing 9.3%.

During its first decade of post-Soviet independence (1991 to 1999) Ukraine's economy shrank by over 55% as it began its transition from a planned to a market economy. However, the economy recovered at the turn of the century, and real GDP grew by an average of 7.5% between 2000 and 2008, one of the fastest growth rates in Europe. The country also saw a significant increase in foreign direct investment (FDI) inflows during the past decade, with FDI stock increasing 13.4 times from USD 3.9 billion in 2000 to over USD 52 billion in 2009.

Figure 6.1. **Ukraine annual real GDP growth, %, 1991-2009**



Source: World Bank, 2011a.

However, the global financial crisis and subsequent economic recession affected Ukraine severely. The national currency depreciated by 35% against the US dollar in the last quarter of 2008 and real GDP contracted by 15% in 2009. As a result of the crisis the Ukrainian government was faced with a large and widening budget deficit and had to increase its external borrowing. Ukraine was granted IMF financing of USD 10.5 billion during 2008-2009. The loan was extended in tranches subject to specific conditions, such as keeping the budget deficit within single digits, applying a more flexible exchange rate regime and increasing the price of gas for the general population by 100% every six months until prices for home users were leveled with those for industrial consumers. In 2010 the government increased its foreign borrowing by a further USD 7.5 billion with loans from IMF and a Russian bank, VTB. In September 2010 the country also issued two Eurobonds maturing in 2015 and 2020, worth USD 500 million and USD 1.5 billion respectively (Ministry of Finance of Ukraine, 2011).

In 2010 the economy returned to positive growth, mainly as a result of the rising external demand for commodities and metals, some of Ukraine's main exports. After the steep contraction of 15% in 2009, in 2010 real GDP rose by 4.4%. Although the economic recovery is forecast to continue in 2011, the severe impact of the recent financial crisis shows that Ukraine remains highly vulnerable to external shocks. The government, in cooperation with the private sector, needs to address a number of challenges to improve the competitiveness of the economy and put the country on the path to long-term sustainable economic growth.

Among the key challenges to be addressed are:

- **Limited stock of FDI per capita.** Although the stock of FDI rose from USD 3.9 billion in 2000 to over USD 52 billion in 2009, in terms of FDI per capita Ukraine is far behind its neighbours in Eastern Europe and the Commonwealth of Independent States. For example, Russia accumulated USD 1 739 per capita of FDI, Romania USD 3 412 and the Slovak Republic USD 9 677; Ukraine has only managed to attract USD 1 078 per capita.
- **Unfavourable business climate.** Although efforts have been made to improve Ukraine's business climate, it is still perceived as being highly unfavourable. According to the World Bank's 2011 Doing Business survey, Ukraine was ranked 145th out of 183 economies for the attractiveness of its business climate. For example, despite official declarations to the contrary, Ukraine has introduced export quotas on agricultural commodities with unclear quota allocation procedures; they have resulted in the *de facto* exclusion of many international traders from the export markets. Continuing problems with VAT reimbursements, the recent introduction of regulations allowing the government to monopolise and restrict agricultural exports, as well as a moratorium on sale of agricultural land until 2012, heavily undermine FDI in the agribusiness sector.
- **High external debt level and banking sector reform.** During its period of sustained growth (2000-08) the Ukrainian economy considerably increased its exposure to foreign markets and its dependence on external financing. Private-sector external borrowing increased from USD 12.5 billion in 2003 to USD 86.1 billion in 2008, causing considerable inflationary pressures to build up in the country. Domestic banks increased their loan portfolio from 9% of GDP in 2000 to 78% in 2008 using cheap external borrowing. However, as the financial crisis unfolded, external sources of financing became unavailable for Ukrainian banks, leading to significant liquidity problems for the Ukrainian banking system. The global recession resulted in a 15% contraction of Ukraine's GDP in 2009 and a substantial increase in the government borrowing requirement. Public debt and debt guaranteed by the government grew by 150% from USD 15.9 billion at the beginning of 2007 to USD 39.8 billion at the end of 2009. Measured against GDP, state and guaranteed debt increased from 12.4% of GDP to 34.7% of GDP. During 2010 public debt continued to rise and reached USD 54.3 billion, which represents a 36% increase compared to the previous year (Ministry of Finance of Ukraine, 2011b).
- **Implementation of laws.** Implementation and enforcement of laws in Ukraine remains inadequate. Among the key problems are the delays in adoption of implementing regulations and often insufficient administrative and technical capacities of executive agencies. For example, electronic registration which would allow enterprises to make automatic declarations with the tax, social security and statistical authorities have yet to become operational. The participation of many agencies at different governmental levels

and the lack of clear and transparent procedures allow for discretion, creating an inherent risk of corruption.

- **Investment policy and promotion lack a long-term strategy.** Another area where Ukraine needs to concentrate its efforts is investment policy and promotion. Ukraine's FDI policy requires further reforms in areas such as land ownership, titling and cadastre, and with regard to investment promotion and facilitation. Establishment of the national land cadastre can contribute to attracting FDI, development of the real estate and land markets, improved access to finance for businesses as well as improving ownership rights protection and transparency of the land and property markets. According to the World Bank (2011c), 95.8% of the total number of land share owners received state deeds proving their rights. However, there is still no operational land cadastre despite the fact that its development was started in 2004. Policy reforms based on available resources and capabilities can help Ukraine improve sector competitiveness and increase awareness of local opportunities among foreign investors.

### **Business environment reforms have been insufficient**

The expansion of the Ukrainian economy between 2000 and 2008 was primarily driven by macroeconomic factors which included: the realignment of the exchange rate following the Russian financial crisis of 1998-99; rising export demand for steel and grain; favourable pricing of natural gas supplies; rising capital inflows, including FDI; and expanding domestic lending.

A number of economic reform measures also contributed to the development of the economy. They included improved titling of agricultural land; reduction of barter transactions; introduction of a flat-rate personal income tax; introduction of the new Joint Stock Company Law which brought corporate governance closer to OECD standards; allowing foreign banks to operate; privatisation of state enterprises; monetary stabilisation policies and WTO accession (World Bank, 2010).

In 2009, in response to concerns raised by domestic and foreign companies about obstacles faced when registering a company and obtaining business permits and licences, new laws were passed to simplify legal requirements and streamline the administrative procedures required to establish a business. For example, the minimum capital required for establishing a limited liability company was lowered from the equivalent of 100 minimum salaries to one minimum salary; and the time required to issue most business permits was reduced to 10 days. Foreign investors now enjoy the national treatment principle, meaning that they are subject to the same procedures and requirements as national investors in like circumstances.

In order to further simplify the process of establishing a business, in 2010 new legislation was adopted that introduced the “declarative” principle. This allows companies to start operations based on submission of a declaration of conformity to specified governmental agencies. The law on state registration of legal entities was amended to introduce electronic registration of businesses and simplify registration procedures.

A new Tax Code, adopted in December 2010, seeks to simplify Ukraine's complex tax system, to reduce the tax burden on businesses and improve tax administration. The introduction of the code was met with opposition from small and medium-sized enterprises (SMEs) as the initial draft sought to remove the simplified taxation system. However, this draft was amended and the final version of the simplified taxation system



has been restored. The new code aims to boost certain sectors by providing tax exemptions and tax holidays to companies in sectors such as the hotel and hospitality industry, biofuels and those producing energy-efficiency technologies. The IMF (2011) asserted that the introduction of the Tax Code was an important step towards simplification of the tax system in Ukraine. However, it also stated that the government had “missed an opportunity to improve further the quality of tax legislation and administration”. For example, the code has not addressed the issue of high payroll taxes that can reach up to 40% and thus will not help to improve tax collection and government revenues.

#### **Some key characteristics of the new Tax Code**

- Corporate Profits Tax rate lowered to 23% from 1 April 2011 and will gradually decrease to 21% in 2012, 19% in 2013 and will be 16% from 2014 onwards.
- Tax and financial accounting of Corporate Profit Tax are unified (with certain exceptions).
- Tax depreciation methodology is now closely aligned to financial accounting.
- Tax treatment of corporate re-organisations is improved with re-organisations having no VAT or profit tax liabilities for either companies or their shareholders.
- The beneficial ownership concept is introduced, however not fully in line with the OECD definition.
- Royalties paid to non-residents are limited to 4% of the net revenue for the previous year. Royalties are not deductible if the non-resident has off-shore status.
- The deduction of the cost of consultancy, marketing and advertising services purchased from a non-resident company is restricted to 4% of net revenue of the previous year. Also, such expenses are not deductible if the non-resident has off-shore status.
- The costs of engineering services purchased from a non-resident can be deducted to the limit of up to 5% of the customs value of imported equipment.
- The cost of goods or services (except for IT services) purchased from entrepreneurs on the simplified taxation system are not deductible.
- The rate of Value-Added Tax (VAT) will be reduced to 17% from 1 January 2014 from the current rate of 20%.
- Personal income tax rates are set at 15% for income up to ten minimum monthly wages and 17% for income above this level.
- Dividends will be taxed at a 5% rate. From 2015 interest on deposits and current accounts will be taxed at the rate of 5%.

Despite some improvements to Ukraine's overall business environment and some attempts at economic reform by the authorities, a number of policy challenges remain to be addressed in order to ensure Ukraine's long-term competitiveness potential.

### **Sectors with high potential should be better promoted to foreign investors**

The volume of FDI inflows to Ukraine peaked at close to USD 11 billion in 2008. In 2009, at the height of the financial crisis, FDI inflows decreased by more than 50%, dropping to USD 4.8 billion. According to preliminary data from the National Bank of Ukraine, FDI

inflows stood at USD 4.3 billion in the first nine months of 2010 and are estimated to have continued to expand in the last quarter (SSSU, 2011)<sup>2</sup>.

In relative terms, FDI annual inflows have consistently represented over 20% of Ukraine's domestic investment (annual gross fixed capital formation) since 2006. As of 2009 this figure was 22.8%, which is considerably higher than the 14.7% recorded in the Russian Federation or the 17.8% average for the CIS and South East Europe (SEE). This demonstrates both the extreme reliance of Ukraine on foreign investors and the fact that the level of domestic investment is rather low (UNCTAD, 2010).

In 2009, accumulated FDI stock stood at almost USD 52 billion, roughly 44% of Ukraine's GDP. The figure, while comparable to the FDI stock in Poland, is mainly the result of a sharp economic contraction in Ukraine that year. Ukraine's level of FDI is also very low compared to its peers in the region when measured by the FDI stock per capita (Table 6.1).

Table 6.1. **FDI Stock in selected countries, 2009 (current USD)**

	FDI stock	FDI stock per capita
Czech Republic	115 898.74	11 329.23
Slovakia	50 258.16	9 677.36
Kazakhstan	72 332.62	4 836.65
Poland	182 799.00	4 781.55
Romania	73 983.48	3 412.37
Russian Federation	252 456.43	1 739.08
Ukraine	52 021.00	1 078.36

Source: UNSTAT, World Bank, 2011b.

The bulk of FDI inflows results from a few large deals, mainly in the steel and metals sector and in financial services. Despite the country's comparative advantage in agriculture, the share of agriculture in total FDI stock remains modest (2%). According to the State Statistics Service of Ukraine 22% of inward FDI stock is accumulated in the financial services, followed by 19% in the manufacturing sector. The European Union is the main source of FDI to Ukraine, accounting for 78% of the total volume of FDI. The fastest growth of FDI inflows has been observed in construction, finance, mining and quarrying, non-metallic mineral products and business activities.

Despite the rise in FDI during the 2000s, Ukraine lacks investment in a number of key areas which continues to hamper the growth prospects of the economy. One such example is transport infrastructure. The still-limited capacity of Ukraine's ports limits exports of steel and agricultural products. For example, in 2008 five major Ukrainian sea ports handled 67.2 million tonnes of cargo with full capacity of 70 million tonnes, which represents a 96% utilisation ratio, leaving no scope to meet higher demand.

The long-term policy goal of the country is to embed sustainable economic growth by modernising and boosting competitiveness. The ability of Ukraine to attract FDI will to some degree depend on macroeconomic stability in the country, as in the current economic conditions investors are highly risk-averse. Therefore, Ukraine cannot escape the need to stabilise its budget deficit and reform its fiscal system to support private and state investments, especially investments in infrastructure.

However, such structural fiscal reforms need to be accompanied by comprehensive economic and investment climate reform measures, which would target the investment

framework, including for foreign investment. These reforms should aim, among others, to simplify the procedures and remove entry and exit barriers for companies in Ukraine. They should also go hand-in-hand with capital market reforms aimed at improving general access to finance, especially for SMEs, and wider educational reforms to improve and upgrade the skills-sets of Ukraine's labour force.

### **Investment policies and promotion: the need for a national, sector-specific strategy to optimise FDI**

The implementation of investment policy suffers from a lack of transparency in regulation. This is often a result of the complexity of new measures, a general lack of regulation or delays in implementation.

Based on the OECD Investment Policy Review of Ukraine (2010), some general investment policy recommendations for the country include:

- Define the strategic sectors in which foreign investment is prohibited or subject to specific authorisation procedures; specify relevant authorisation procedures, including the conditions/documents required for applications and the deadline for reply to applicants by the responsible authority.
- Specify clearly the conditions for foreign participation in the privatisation process in the new law on privatisation currently in preparation and avoid leaving room for administrative discretion in selecting those sectors and firms excluded from privatisation.
- Observe the guiding principles of non-discrimination, proportionality, transparency and accountability in the implementation of national security related to investment measures, as expressed in the 2009 OECD Guidelines for Recipient Country Investment Policies relating to National Security and consider the formal acceptance of these recommendations.
- Ensure that the new law on investment to be prepared by the State Agency for Investment and National Projects maintains the non-discrimination principle for foreign investment.
- Implement rapidly the state electronic registration and simplified business permit procedures, including the application of the “declarative principle” as foreseen by the law.
- Abolish the moratorium on agricultural land ownership in 2012 as currently foreseen and accelerate the implementation of the unified registration of land and real estate property.
- Remove remaining foreign investment limitations in line with WTO commitments, in particular with respect to direct branching in insurance.
- Develop implementing regulations to make possible the rapid and effective application of the law on public-private partnerships.

The investment promotion function in Ukraine has been subject to frequent changes which have resulted in the creation of a number of overlapping institutions. The most recent institution, the State Agency for Investments and Management of National Projects, created in 2010 to consolidate the previous overlapping institutions, and the restructured Consultative Council on Domestic and Foreign Investment, both need to become effective tools for the implementation of policies in close collaboration with investors. A national

long-term investment promotion strategy also must be developed in close consultation between the government, investment institutions and the private sector.

The following key components should be considered when developing such a strategy:

- Prioritisation of the most promising sectors of the economy, identification and removal of policy barriers hampering their development
- Organisation of investment promotion
- Targeting of appropriate clusters of investors

The experience of OECD countries demonstrates that countries with a sector-specific focus on investment promotion activities achieve better results and attract higher volumes of foreign direct investment. Thus, an investment promotion strategy needs to focus on specific sectors and FDI-originating countries. With OECD countries accounting for over 60% of inward FDI in Ukraine, the major countries for investor targeting should include Germany, France, Poland and Hungary, in addition to the Russian Federation.

Investment promotion should be based on understanding the flow of information and the decision-making processes of investors. This knowledge is critical as it enables the national investment agency to supply investors with the required information.

Central European countries provide an excellent example of successful investment promotion. For example, the Czech Republic effectively leveraged its skilled manufacturing tradition and focused on moving up the value chain in manufacturing and other sectors. CzechInvest's strategy was initially targeted at attracting multinational greenfield manufacturing projects, which would build upon Czech traditions and strengths in manufacturing and the technical skills of a highly trained, production-oriented labour force. Later, the strategy was extended to higher value-added sectors such as business support services and design centres. Key success factors for the Czech Republic included:

***Clearly defined priority sectors based on the country's existing capabilities:***

- high-tech manufacturing sector
- business support services
- technology (design) centres
- Provision of high quality services free-of-charge to potential investors, such as:
- identification of sites and buildings
- finding potential suppliers/joint venture partners
- liaison with government bodies
- investment incentives handling
- collection and provision of information

***Successful promotion strategy:***

- organising of road shows
- suppliers linkage programmes
- creation of agency's offices in the regions of the country
- ensuring the presence of investment promotion agency's offices in the main investing countries

A similar investment promotion strategy based on available resources and capabilities can help Ukraine to improve sector competitiveness and increase awareness of strategic opportunities among foreign investors.

## Competitiveness of target sectors

Competitiveness is a necessary prerequisite for long-term economic growth. With continuing globalisation of the world economy, business managers need to know the competitive advantages of different countries in order to make informed decisions about where to expand or where to locate a new production facility. Public policy makers, seeking to attract new businesses and investments, need to know how to create a competitive business environment where companies can thrive. Understanding the requirements of businesses and synchronising government policy with the needs of both domestic and foreign investors is thus critical. Enhancing competitiveness has become an integral part of economic policy making for both developed and developing economies.

The competitiveness of a country is determined by the productivity rate with which it uses its labour, capital and natural resources. The levels of productivity define the rates of return on capital and labour, which the companies can sustain while remaining competitive in international markets. Thus, more competitive economies can provide higher levels of income and higher standards of living for their citizens through higher wages. Higher productivity also means higher returns on capital which in turn attract higher volumes of investment into the economy.

A number of tools and methodologies, such as the Sector Prioritisation Framework<sup>3</sup> and value-chain analysis, have been used to identify the potentially most competitive sectors of Ukraine's economy and those that have the greatest potential to attract foreign direct investment into the country. The strategy and recommendations for selected sectors are developed around the following key questions:

- How to differentiate Ukraine from neighbouring countries and make it a unique case for investors?
- How to identify sector-specific policy reforms?
- Where and how to promote sectors?
- How to make reform happen and monitor results?
- How to evaluate Ukraine's progress in developing its investment regime in compliance with the principles of liberalisation, transparency and non-discrimination?
- How to enhance Ukraine's policy convergence with OECD investment instruments such as the OECD Declaration on International Investment and Multinational Enterprises?

A comprehensive analysis of Ukraine's economy, carried out during 2010-11, revealed a number of sectors which have the highest potential for improvement in competitiveness: agribusiness, incorporating the wheat and dairy sectors, energy production based on biomass, and civilian aircraft manufacturing. The choice of these sectors was based on the analysis of market attractiveness (including competitive advantage, growth potential, global trends and FDI attractiveness) and benefits for the country, such as technology transfer, human resource development and employment growth potential.

The competitive advantages of each of the identified sectors are described below.

### **Grain sector**

In the grain sector, Ukraine's endowment of excellent quality soil, abundant water supply and favourable climate makes it conducive to the large-scale and export-oriented production of grains. Production of wheat, corn and barley in Ukraine is very cost-competitive when compared to most OECD and non-OECD competitors. Concentration of wheat production in the southern and eastern regions gives Ukraine a clear advantage for transport of crops to sea terminals. The low cost of transport allows Ukraine to compete even with countries such as Kazakhstan, where production costs are lower but transport costs can be significantly higher depending on the destination.

In terms of target markets for wheat exports, African, Middle Eastern and East Asian countries will be the most promising wheat importers in the next decade. According to the *OECD-FAO Agricultural Outlook 2009-2018*, Saudi Arabia, Iran, Egypt and sub-Saharan countries are forecast to have the highest growth in wheat imports. The close proximity of Ukraine to the dynamic Middle Eastern and North African countries is a clear advantage. The opportunity to accelerate the move towards food processing activities, and therefore benefit from value-added activities, represents an additional opportunity for potential domestic and foreign investors.

The development of Ukraine's grain sector is hampered by a number of factors which include:

- long-term credit problems and unguaranteed loans;
- a chronic lack of modern harvesting equipment;
- government involvement, especially in exports;
- restrictions on land ownership (moratorium).

The ability to move up the value chain in the grain sector, attract foreign investors and further improve productivity and competitiveness will depend on the ability of the country to address these challenges and implement the required policy reforms.

### **Dairy sector**

The competitive advantages of Ukraine's dairy sector are based on cost advantages for raw milk as a result of low input and labour costs and proximity to the EU, as dairy farms are concentrated in the west and north of the country. The domestic market for dairy products is also promising, as GDP per capita increases and customers purchase higher-added-value products. The projected growth rate for dairy-product demand is markedly higher in Ukraine compared to developed economies. For certain types of dairy products it is even comparable to developing countries. For example, according to the *OECD-FAO Agricultural Outlook*, the volume of cheese consumed in Ukraine is forecast to grow by 5.3% a year in the period to 2018.

Ukraine has the potential to target the fast-expanding eastern EU markets and to diversify its export base, provided veterinary standards and certification issues are addressed. In the longer term, Middle Eastern and Asian markets can be targeted with higher value-added non-cold storable dairy products such as milk powder.

Foreign companies have already invested in Ukraine and produce branded and added-value dairy products. Attracting global companies focusing on utilising raw fresh milk could help the country to move up the value chain to produce finished cold dairy products with added-value packaging and branding (*e.g.*, pasteurised or sterilised milk, yoghurt and cheese).

In order to increase the competitiveness of the dairy sector and take advantage of opportunities in domestic and foreign markets, Ukraine needs to upgrade the skills of individual farmers, to improve milk quality to meet EU standards by enforcing quality standards and certifications and improve cows' productivity through both increased breeding and genetic improvement. Facilitating access to financial instruments for farmers and processors would give a strong push to the reform of the dairy sector in Ukraine.

### **Energy production based on biomass**

Ukraine is an energy-dependent country and is a net importer of gas, oil and oil products. Its imports of petroleum increased at an average rate of 7.8% a year between 2000 and 2008. Ukraine's industry is very energy-intensive and uses three times the amount of energy to produce one tonne of cast iron and twice as much to produce one tonne of steel compared with the OECD European<sup>4</sup> average. As the price of oil and gas are expected to continue to rise, new energy-saving and energy-efficient technologies need to be introduced.

Heat production based on biomass, industrial waste and municipal waste is underdeveloped compared to OECD countries, although it is becoming increasingly profitable. Biomass resources are widely and conveniently available from a sizeable agriculture and forestry sector and include straw, manure and wood. The country also has strong engineering capabilities in the production of energy-saving equipment and potential for technological updates.

Ukraine could potentially attract utilities companies interested in entering district and rural heating production. Production plants for biofuels could be located in rural and peri-urban areas, and heat could be sold to urban customers including households and industries. Providers of biomass-related engineering equipment and services could also be targeted. Investors in agriculture and forestry could be interested in heat production based on biofuels as a potential diversification or a complementary activity.

Development of the heat production sector based on biomass requires Ukraine to implement sector-specific investment policy and promotion reforms (*e.g.*, open heat production utilities to private and foreign investors, for example by privatising the facilities and/or stimulating public-private partnership policies, supporting the creation of a market for agricultural waste to ensure stability of supplies, creating a one-stop shop for private investors, improving transparency for permits or licences, advertising economic advantages of biomass-based heat production and improving access to finance for private investors potentially interested in investing in such facilities. Ukraine should also reform heat tariffs to make non-fossil-fuel heat production increasingly attractive, while increasing gas prices to reach parity with import prices.

### **Civil aircraft manufacturing sector**

Ukraine has a strong tradition of aircraft manufacturing and is one of the nine countries in the world that have a full cycle of aircraft engineering and production. The Antonov Design Bureau is the producer of two of the world's largest cargo airplanes – the An-124 Ruslan and the An-225 Mriya.

Ukraine's aircraft manufacturing has been in decline for the past two decades. Nevertheless, production of civilian aircraft in Ukraine has strong potential. Production of a regional short-haul aircraft (AN-148) is one of the most promising projects for the Ukrainian aviation industry.

The global demand for finished aircraft over the next 20 years is expected to be high, with 80% of production coming from the OECD and the Asia-Pacific regions. Total world sales are estimated to be at around 30 000 aircraft and are valued at approximately USD 3.2 trillion between 2009 and 2028. The market for passenger aircraft in 2009 shows a “double duopoly” with Airbus and Boeing dominating the middle-to-large-size segments and Embraer and Bombardier dominating the small-size segment.

The country’s long aircraft tradition, high-level engineering skills and capabilities, relative cost competitiveness and quality of products make the Ukrainian civilian aircraft value chain competitive. It is also versatile, being able to produce a wide range of products, from basic components to complex sub-systems. Investment could be directed to components, sub-systems, aircraft manufacturing or after-sales, using several non-exclusive strategic options:

- long-term option: Developing Original Equipment Manufacturers (OEM) and tier-1 suppliers – for eventual supply to OECD countries
- medium-term option: developing high-end tier-2 and tier-3 suppliers
- short-term option: focusing on low-end tier-2 and tier-3 components

Steps will be taken by Ukraine to remove policy barriers in this sector and make it attractive for foreign investors by:

- opening the sector to foreign and private investors and applying increased transparency on rules;
- revising governance of the sector, which is currently governed in a similar way as military activities;
- improving trade policy to accommodate global supply chains that are involved in this sector: providing time to clear customs, honouring VAT refund on exports; and
- matching human skills more effectively with the needs of aeronautics companies.

#### **Next steps:**

Following this in-depth review, the OECD will work closely with the government of Ukraine to formulate and implement a number of specific policy recommendations at the national level. Among these will be a recommendation to the government to adhere to the OECD’s Declaration on International Investment and Multinational Enterprises, and to launch an Agricultural Review to help maximise the potential of the sector.

#### **Notes**

1. This excludes Russia which is partially located in Asia.
2. State Statistics Service of Ukraine.
3. SPF analysis allows sectors to be positioned relative to each other in two main dimensions: market attractiveness (which incorporates the competitive advantage and potential growth of a sector in a country) and country benefits.
4. “OECD-IEA Ukraine Energy Policy Review 2006) [www.iea.org/textbase/nppdf/free/2006/ukraine2006.pdf](http://www.iea.org/textbase/nppdf/free/2006/ukraine2006.pdf)

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# EASTERN EUROPE AND SOUTH CAUCASUS

## COMPETITIVENESS OUTLOOK

With a total population of over 75 million people and a strategic location between wealthy trading partners, with Russia to the east and a vast market of EU citizens to the west, the Eastern Europe and South Caucasus (EESC) region is attractive as a destination for investment and trade. It is endowed with significant human and natural resources ranging from the black soil in Ukraine that produces some of the best wheat in the world, to energy reserves in Azerbaijan and unexplored water resources in several countries. However, in spite of recent growth – an average of almost 8% of GDP during 1998–2008 – the region's productivity levels remain 77% below the world average. The *OECD Eastern Europe and South Caucasus Competitiveness Outlook* examines the key policies that would increase competitiveness in the countries of the region through developing human capital, improving access to finance for SMEs and creating more and better investment opportunities.

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Chapter 1. The Competitiveness Potential of Eastern Europe and South Caucasus

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Chapter 5. Maximising the Potential of Foreign Direct Investment

Chapter 6. Ukraine: A Case Study on Diversification and Sector Competitiveness

### Further reading

*Competitiveness and Private Sector Development: Central Asia 2011: Competitiveness Outlook* (2011)

*Development in Eastern Europe and the South Caucasus: Armenia, Azerbaijan, Georgia, Republic of Moldova and Ukraine* (2011)

*Competitiveness and Private Sector Development: Kazakhstan 2010: Sector Competitiveness Strategy* (2011)

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