TRANSITION REPORT 2013

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The EBRD seeks to foster the transition to an open market-oriented economy and to promote entrepreneurship in its countries of operations. To perform this task effectively, the Bank needs to analyse and understand the process of transition. The purpose of the *Transition Report* is to advance this understanding and to share our analysis with partners.

The responsibility for the content of the report is taken by the Office of the Chief Economist. The assessments and views expressed are not necessarily those of the EBRD. All assessments and data are based on information as of early October 2013.
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Country abbreviations

Albania	ALB	Montenegro	MNG
Armenia	ARM	Morocco	MOR
Azerbaijan	AZE	Poland	POL
Belarus	BEL	Romania	ROM
Bosnia and Herz.	BOS	Russia	RUS
Bulgaria	BUL	Serbia	SER
Croatia	CRO	Slovak Republic	SVK
Egypt	EGY	Slovenia	SLO
Estonia	EST	Tajikistan	TJK
FYR Macedonia	FYR	Tunisia	TUN
Georgia	GEO	Turkey	TUR
Hungary	HUN	Turkmenistan	TKM
Jordan	JOR	Ukraine	UKR
Kazakhstan	KAZ	Uzbekistan	UZB
Kosovo	KOS		
Kyrgyz Republic	KGZ	France	FRA
Latvia	LAT	Germany	GER
Lithuania	LIT	Italy	ITA
Moldova	MDA	Sweden	SWE
Mongolia	MON	United Kingdom	UK

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Executive summary

Can the transition region ever catch up with the living standards of the world's most advanced market economies?

Economic growth remains well below pre-crisis levels and many countries have turned their backs on the reforms that could put economic expansion back on track.

The evidence suggests that countries can promote and accelerate the return of reform, particularly if international integration, domestic leadership and broader social movements work hand in hand.

Chapters 1 to 5 of the *Transition Report 2013* look into the relationship between transition and democratisation, the scope for strengthening economic institutions, the state of human capital in the transition region, and the inclusiveness of economic systems.

The last two sections of this report examine the regional macroeconomic developments and outlook as well as recent trends in structural reform during 2013.

In addition, assessments of the economic performance of individual countries in the transition region are available online at www.tr.ebrd.com

Convergence at risk

Economic reform has stagnated in the transition region since the mid-2000s, even in countries that are still far from reaching the transition frontier. Progress in transition has been closely correlated with political systems: countries which are more democratic have come further, in terms of reform, than their less democratic counterparts. However, public opinion turned against market reform after the 2008-09 financial crisis, especially in the more democratic countries. This is reflected in an increased number of "downgrades" in EBRD transition indicators since 2010, particularly in EU countries.

The results of a long-term forecasting model suggest that under current policies and institutions, productivity growth will likely remain modest over the next 10 years – around 2-4 per cent on average – and decline further in the following decade. At that rate, convergence with the living standards in western Europe would stall in some countries and slow to a crawl in many others. Only the countries of central Europe and the Baltic states would reach or exceed 60 per cent of the EU-15 average per capita income in the next 20 years. Most countries in the transition region would remain far below this threshold.

To revitalise growth, it is important to invigorate reforms and improve economic institutions. There is no shortage of advice in this regard, including in the Country Assessments that are available in the online version of this report. But reforms face political, social and human capital constraints. The purpose of this *Transition Report* is to investigate how countries can circumvent or loosen these constraints. The report analyses (i) the forces shaping political institutions; (ii) the scope for strengthening economic institutions within prevailing political systems; (iii) the relationship between human capital and growth; and (iv) the inclusiveness of institutions in the transition region.■

Political institutions

Since the onset of transition in 1989, many countries in the region have become consolidated democracies, while in others democratisation has stagnated or even gone into reverse. Why do some countries succeed in building sustainable democracies and others not? What role does economic development play in the process? Does transition to a market-based economy led by the private sector strengthen the medium and long-term prospects for democratic consolidation?

This chapter reviews the literature on economic development and democratic change. Although the academic community remains divided on this issue, there is strong empirical support for the proposition that economic development – measured in terms of GDP per capita – leads to advances in democracy over time, up to a point of diminishing returns. Furthermore, countries that cross a threshold of economic development are less likely to experience democratic reversals. The main exceptions are countries with large natural resource endowments, where state authorities can monopolise resource rents so as to avoid reliance on a system of broad taxation of the population – and therefore face less pressure to accept accountable representation. In addition, democratisation is less likely in the context of high inequality.

Empirical analysis confirms that most of these findings also hold for countries in the transition region. Those with higher levels of per capita income are more likely to democratise and less likely to experience reversals in the process. Large resource endowments are found to impede, or at least slow down, democratisation. There is also evidence that, among countries with similar levels of per capita income, early and more vigorous market reforms help to consolidate democracy. This is consistent with the view that economic liberalisation can prevent the formation of vested interests that benefit from weak political institutions.

In order to support countries in their long-term transition to democracy, it therefore makes sense to encourage policies and institutions that underpin economic growth, foster market reforms, and assist countries that are rich in natural resources as they seek to diversify their economic base.■

Economic institutions

How can countries in the transition region improve their economic institutions? Cross-country analysis shows that the quality of such institutions depends not only on the level of democracy, but on several other factors. Some are immutable or hard to change, such as history, natural resource endowments, ethnic divisions and eligibility for EU accession. Others such as openness and the design of democratic institutions are easier to alter. The analysis finds that countries with greater openness to trade and finance tend to have better economic institutions. Furthermore, political systems with proportional representation seem to have worked better in the transition region than majoritarian electoral systems.

A comparative study examining the success or failure of reforms at "critical junctures" –political shifts that opened a window of opportunity – in Georgia, Romania, the Slovak Republic and Ukraine confirms the relevance of the factors mentioned above. It also suggests that early transition histories were important because they sometimes gave rise to vested interests that became entrenched. Political polarisation makes the success of reforms less predictable and reformers and civil servants more hesitant. External anchors and international backing can have strong supportive effects, particularly when sought by the reformers. In addition, the background and conviction of leaders play a critical role in determining the success of reforms.

The chapter concludes with a survey of the options available to reformers who have to operate within the broad constraints of the prevailing political system. What can they do to help improve economic institutions? First, they can promote both economic and intellectual integration with advanced economies – through trade, finance and education. Second, they can seek to benchmark themselves internationally and become members of organisations with high institutional standards. Third, in some settings, they may also be able to pursue constitutional or electoral reform – for example, introducing proportional representation, which although not a panacea, can improve decision-making, particularly in societies that are less polarised or where vested interests are weak. Lastly, they can improve the transparency of political institutions at the regional and local level, as they play a key role in the shaping and reform of the business environment.■

Executive summary

Human capital

Education is critical for building a human capital stock conducive to economic growth and development. Primary and secondary education in most of the transition region compares favourably with that in developing countries in terms of quantity and quality and matches what many advanced economies can offer. At the tertiary level, however, transition economies perform much worse, and the gap with advanced economies has increased over the last decade. Southern and eastern Mediterranean (SEMED) countries are embarking on their own transition with lower stocks of human capital and are lagging significantly behind, particularly in terms of the quality of primary education.

The financial returns from tertiary education ("returns to education") are critical to the successful development of a high quality human capital stock. Unless the returns are sufficiently high, individuals will be unlikely to pursue education beyond secondary level. The chapter shows that the returns to tertiary education depend not only on the supply of tertiary-educated workers and the quality of tertiary education, but also on the quality of a country's economic, legal and political institutions. Institutions affect the link between human capital and growth, because they influence how human capital is used and the flow of migration.

A country's ability to retain and attract skilled people is another important factor for building a high quality human capital stock. Countries in the transition region and SEMED have experienced emigration of their skilled workers, but have also received skilled immigrants in turn. However, only a few have managed to attract sufficient incomers to replace those who leave. By 2000, in most of these countries net emigration stock rates had increased compared to 1990. Due to the global economic crisis and to the accession to the European Union of 11 countries in the transition region, this trend is likely to have continued.

A high quality institutional environment makes it easier to attract and retain skilled people, who will innovate and adapt to global technological changes, and so stimulate economic growth. It also provides rewards to tertiary-educated individuals, thereby maintaining the incentives needed to invest in education. Human capital development and institutional improvements are thus complementary, and policy-makers should pursue them in parallel.■

Economic inclusion

Economic inclusion, defined as broad access to economic opportunity, is essential for well-functioning market economies. If people are denied the chance to succeed, they will lack incentives to seek education, participate in the workforce, invest or otherwise engage in activities that lead to growth and prosperity. Furthermore, market reforms that fail to benefit the population at large will not enjoy public support for long.

This chapter provides some direct evidence on economic inclusion in the transition region. Inclusion is not automatically apparent in measures of democracy or economic institutions, and so merits independent analysis.

Two approaches are used to characterise inclusion in the transition region. A *bottom-up* approach focuses on the individual or household level, measuring the extent to which differences in wealth or education across households are attributable to circumstances at birth. The stronger the relationship between circumstances and outcomes, the further a country lies from the ideal of equality of opportunity. A *top-down* approach rates the institutions, markets and education systems in regard to the capacity of countries to extend economic opportunity to individuals regardless of gender and place of birth, and to young adults regardless of social background.

This combined analysis finds large variations across geographic regions and the dimensions of inclusion. Inequality of opportunity is highest in the Western Balkans and some eastern European and Central Asian countries. In part, this reflects a failure to provide young people with relevant education and job opportunities. Place of birth – urban or rural – turns out to be an important driver of inequality of opportunity. Inclusion gaps also exist in regard to gender, particularly in the SEMED region. Except in Egypt, Morocco, Tajikistan, Turkey and Uzbekistan, education is not a major factor contributing to inequality of opportunity suffered by women, and in most countries gender does not seem to play a role in explaining differences in tertiary education. At the same time, the analysis suggests that education – and its quality and economic relevance in particular – is likely to influence inequality of opportunity that is based on people's social or geographical origin.■

Macroeconomic overview

The economic slow-down in the transition region, which began in the second half of 2011 as a result of the eurozone crisis, has continued in 2013. However, external drivers and regional distribution of growth have recently shifted. While the eurozone returned to modest growth in the second quarter of 2013, there has been a downturn not only in key emerging markets like China and India but also in the three largest economies of the transition region: Russia, Turkey and Poland.

As a result, countries initially less exposed to the eurozone crisis have suffered weaker trade and remittances and declining growth. In central Europe and the Balkan states, and in south-eastern Europe exports have recovered and deleveraging has moderated. Nevertheless, the slow-down in their economies has continued, driven by a fall in domestic consumption and investment. Regional growth is projected to accelerate modestly in 2014, in line with a slightly improved external environment.■

Reform overview

Structural reforms in the transition region continue to face serious challenges. 2013 has once again seen a relatively high number of downgrades for sector and country-level indicators. At the sector level, reform reversals and increasing government interference in the energy sector are reinforcing the negative trends of recent years, in particular in central and south-eastern Europe. However, financial sector reforms enacted in the wake of the 2008-09 crisis have proven more resilient. There have also been other positive developments, with progress on public-private partnerships and the restructuring of utilities in infrastructure. The corporate sector continues to suffer following the crisis, but there are signs of recovery in certain countries.

At the country level, transition indicator downgrades outnumber upgrades for the first time. There have been three downgrades for Hungary and two downgrades for the Slovak Republic, mainly due to increased government involvement in the energy and insurance sectors which may negatively affect the confidence of domestic and foreign private investors.■

Foreword

by Erik Berglof

Stuck in transition?

For more than five years, the transition region has been buffeted by the fall-out from the global recession of 2008-09, and the eurozone crisis of 2011-12. Beyond their short-term impacts – collapse in output, followed by stagnation or sluggish recovery – these shocks have triggered doubts about the ability of the transition region to return to "convergence": the process of catching up with the living standards in advanced market economies. The main reason for such doubts has been the decline of international capital flows to the region, which have been an important element of the "growth model" of countries in transition.

This *Transition Report* shows that convergence is indeed at risk in most countries in the transition region – but for different reasons. Although they will not return to their pre-crisis highs (nor should they, since in many cases these reflected an unsustainable bubble) capital flows will eventually recover. In addition, several countries are rebalancing toward home-grown sources of finance, which is generally a positive development as these economies mature. A more compelling concern is the stagnation in reforms and in improvements to market-supporting institutions in most countries in the region since the mid-2000s, including many that are still far from the transition frontier. Furthermore, following the 2008-09 crisis there have been reform reversals in several of the more advanced economies.

How can reforms regain their momentum? The *Transition Report 2013* seeks to answer this question based on an area of analysis that was first studied in the *Transition Report 1999*: the political economy of reform and institutional development.

The 1999 report showed that successful reforms during the first decade of transition were more likely to have occurred in countries with stronger political competition and less polarised electorates. Contrary to conventional wisdom, political turnover benefited reforms, while strong executives tended to deter them. These findings were explained by the influence of political and economic elites who – in the absence of appropriate checks and balances – profited from state subsidies, insider privatisation and weak enforcement of the rule of law.

With the benefit of considerable hindsight, this report confirms some of these findings. Its analysis particularly supports the presence of a strong causal impact of democracy on the success of reform. At the same time, the report expands the analysis of economic reform in four directions.

Chapter 2 investigates the causes of democratisation. Why do some countries succeed in building sustainable democracies and others not? Does market reform help or hinder the medium and long-term prospects for democratic consolidation? This is particularly important in the wake of the changes that the Arab world has been undergoing for the past two-and-a-half years, as the international community looks for the most effective ways to support these countries in their political transitions.

Based on international evidence and data from the transition region, the chapter finds that (i) economic development makes democratisation more likely, (ii) natural resource endowment holds back democratisation, and (iii) market reforms appear to influence future democratisation – at least in the sense of preventing reversals to less democratic systems. This could be because economic liberalisation weakens the power of interest groups who benefit from less democracy. Hence, the causal links between democracy and reforms appear to run in both directions.

Chapter 3 takes a broader view of reform, focusing on the quality of economic institutions. Beyond liberalisation, stabilisation, and privatisation, this encompasses regulation, effective government, strong rule of law, low corruption, and other aspects of the business environment. It finds that determinants of institutional quality include history, geography, initial reform experiences, and other factors that are beyond the control of policy-makers. But economic integration, human capital, and the design of democratic institutions matter as well. Furthermore, countries with difficult histories of reform sometimes benefit from a second chance. The chapter compares such "critical junctures" in four countries in order to understand why some experienced permanent improvements in institutions while others did not.

"This year's *Transition Report* explains why some countries may be 'stuck' in traps with little or no reform, but also indicates ways to break out of them."

Chapter 4 investigates the state of education and human capital in the transition region. Most formerly communist countries have good primary and secondary education systems. In some of these countries, they are on a par with the equivalent systems in more advanced economies in the Organisation for Economic Co-operation and Development (OECD). Tertiary education, however, is much weaker. In addition, the returns to university education are comparatively low, particularly in countries with weak economic institutions. Just as in the case of democracy and good economic institutions, economic institutions and human capital appear to complement each other.

Chapter 5 investigates a dimension of economic institutions that is rather overlooked by traditional measures of institutional quality, but is key to the long-term success of market systems – their ability to provide economic opportunities to individuals regardless of gender, region of birth or social background. The chapter measures economic inclusion in the transition region for the first time: from a *bottom-up* perspective, by examining how household assets and educational attainment are influenced by circumstances at birth, and *top-down*, by rating the inclusiveness of economic institutions. The results indicate severe inequality

of opportunity in several countries, particularly in regard to employment practices, job opportunities and quality of education. This hurts young adults from less educated social backgrounds and from rural areas, but in some countries it also affects women.

Collectively, these findings not only explain why some countries may be "stuck" in traps with little or no reform, but can also indicate ways to break out of them.

External shocks, elections, or periods of popular discontent can offer windows of opportunity. During these windows, political and economic institutional reform can become politically feasible and have permanent impact – particularly if used to build supportive constituencies and to strengthen the incentives for further reform. The chances of such reforms succeeding are higher in societies that are less polarised and in which vested interests are less powerful, but they also depend on leadership and external support.

In addition, there are policies that can promote successful, if gradual, economic reform in normal times – even in less democratic environments. These include openness to foreign investment and other forms of international integration. The presence of foreign companies can generate demand for better government services and set standards for better corporate governance. International institutions can provide inspiration, expertise and commitment, while external benchmarks can encourage improvements in certain aspects of the business environment, such as cutting red tape.

There is often scope for political reform that supports economic reform. Even where incumbent elites or vested interests prevent the reform of political institutions at the national level, it may be possible to reduce corruption and foster transparency at local and regional levels. Research shows that business environment reforms are more likely to be effective in the presence of transparent local institutions. In turn, this can foster the entry and growth of small businesses which in turn generate pressure for reform at the national level.

Non-governmental organisations have an important role to play in demanding transparency and holding government institutions to account. Social media and the internet have additionally created an instrument to enforce rules and regulations and disclose abuses. Social media can also galvanise broader bottom-up reform movements, as in some Arab countries. Furthermore, the traditional media continue to play an important role in restraining politicians and bureaucrats alike. Ensuring media independence and protection from legal harassment is critical for this check on the system to be effective.

The findings of this report pose important challenges for the EBRD and other international financial institutions (IFIs). There are clearly limits to what can be achieved at the project level without improvements to national economic and political institutions. At the same time, some projects can spur sector reform and ultimately wider improvements, particularly when they involve equity investment by large companies. Corporate governance improvements, the separation of political influence from management and transparency of corporate accounting can be critical in the fight against vested interests. The participation of IFIs in infrastructure projects can also encourage transparency in procurement and draw end-users and consumers into the design and delivery of public services. Such grassroots involvement should also increase the prospect of genuine political democracy in the long term.

The recent history of transition has shown that weak political institutions and entrenched interest groups can cause countries to become "stuck" in transition. However, evidence suggests not only that time is on the side of reform but that countries can promote and accelerate reform, particularly if international integration, domestic leadership and broader social movements work hand in hand.

Erik Berglof
Chief Economist
EBRD

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Erik Berglof, Chief Economist of the EBRD, highlights the main findings of the *Transition Report 2013*.

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CHAPTER 1

Convergence at risk

Reforms in the transition region have stalled since the mid-2000s, and in some countries reversals have occurred in specific market sectors. Long-term growth projections suggest that unless reforms are revived, living standards in most transition economies will remain below those in mature market economies, or at best converge very slowly. However, reforms face political, social and human capital constraints. This *Transition Report* examines how these constraints can be relaxed or circumvented.

FACTS AT A GLANCE

2%
projected growth of the transition region in 2013, the lowest rate in 15 years (with the exception of the 2009 recession).

AROUND
2005
The year by which most transition countries had closed the productivity gap, compared to other countries at similar income levels.

IN
15
countries support for markets declined after the crisis.

1%
estimated average boost to long-run annual growth of GDP per worker in non-EU transition countries resulting from institutional reform.

Income convergence at risk

The transition region is experiencing a fifth consecutive year of substandard growth. Since the collapse of Lehman Brothers in 2008, central Europe and the Baltic states (CEB), south-eastern Europe (SEE) and eastern Europe and the Caucasus (EEC) have not once managed to reach their pre-crisis rates of expansion (see Chart 1.1). Growth rates have remained low, not only compared with the boom period of 2004-08, when output in the transition region as a whole expanded by 6.6 per cent a year, but also compared with the five-year period preceding the boom. In 2013 the transition region as a whole is projected to grow at an annual rate of 2 per cent, the lowest rate in 15 years (with the exception of the 2009 recession).

This low growth largely reflects the difficult external environment in the short term. As this gradually improves – and barring a resurgence of the eurozone crisis – modest growth of up to about 2.8 per cent is expected in the region in 2014 (see the "Macroeconomic development and outlook" section of this *Transition Report*). However, this does not dispel concerns about the long term. Some of the problems that have constrained growth in the eurozone are of a longer-term nature. And even if their major trading partners were to fully recover, it is still not clear whether the transition countries would emerge from the crisis with satisfactory long-term growth prospects.

Two decades ago per capita income in a range of countries in the transition region (excluding the least developed countries in EEC and Central Asia and the Western Balkans) was between about 15 and 45 per cent of the EU-15 average in purchasing power terms.[1] Relative incomes in most of these countries have since risen by about 20 percentage points to stand at between 35 and 65 per cent of the EU-15 average – an impressive achievement.[2]

This chapter looks at whether convergence can continue at a sufficient pace to push average per capita income in most of these countries above 60 per cent of the EU-15 average (and above 80 per cent in a few cases) by about 2035. It concludes that the transition region does indeed face a serious long-term growth problem and that, given the current policies, convergence with Western living standards as defined above will not be achieved in most countries. Even if convergence is eventually achieved, progress will be very slow.

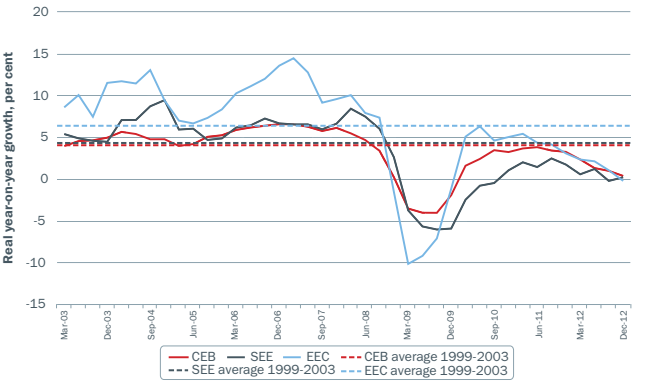
What can the region do to invigorate its long-term development, both to increase growth and to make it more inclusive? The answer depends on the diagnosis of the problem. This chapter maintains that although the reduction in long-term growth prospects has coincided with the crisis, its causes are only partly related to that crisis.

The slow-down is due in part to the intrinsically temporary nature of the "productivity catch-up" that followed the initial dismantling of communism and the countries' subsequent integration into the global economy. This cannot be remedied and can only be offset by finding new and permanent sources of growth – with continued improvements in political and economic institutions and sector-level frameworks.

However, efforts in this respect have stalled in most transition countries. This largely pre-dated the crisis and occurred before satisfactory levels of institutional development had been achieved. The crisis has made things worse by undermining support for market-oriented reform, particularly in CEB and SEE countries.

Restoring long-term growth in transition economies requires an understanding of how political and social constraints on reform can be influenced or circumvented. This question lies at the heart of the remaining chapters in this *Transition Report*.

Chart 1.1. CEB, SEE and EEC growth has not returned to pre-crisis levels



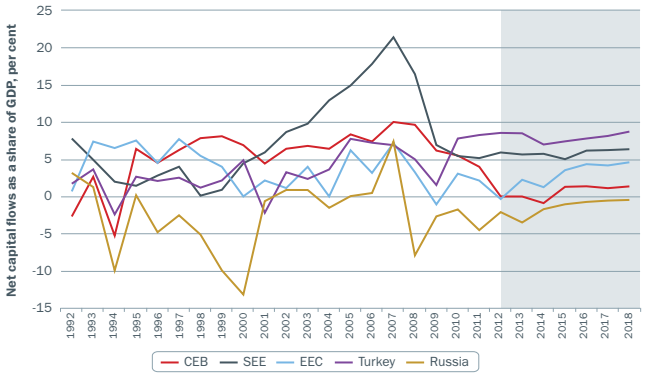
Source: National authorities via CEIC Data.
Note: The chart shows regional aggregate year-on-year growth rates for quarterly real GDP. The dotted lines show the average annual growth rates in the five-year period preceding the boom (1999-2003).

POTENTIAL CAUSES OF LOWER LONG-TERM GROWTH

It is often argued that the crisis might have damaged long-term growth prospects in transition countries because it may imply permanently lower levels of external financing. Pre-crisis growth in many countries in the transition region was boosted by large and ultimately unsustainable inflows of debt and foreign direct investment (FDI).[3] The crisis triggered a sharp reduction in FDI and portfolio flows, which have not recovered and are forecast to remain below those earlier levels in the medium term (see Chart 1.2). Similarly, there has been a sizeable decline in the cross-border exposures of foreign banks. Coupled with a rise in local deposits, this signals a shift away from the foreign-financed banking model that has prevailed until now in many countries in the transition region.

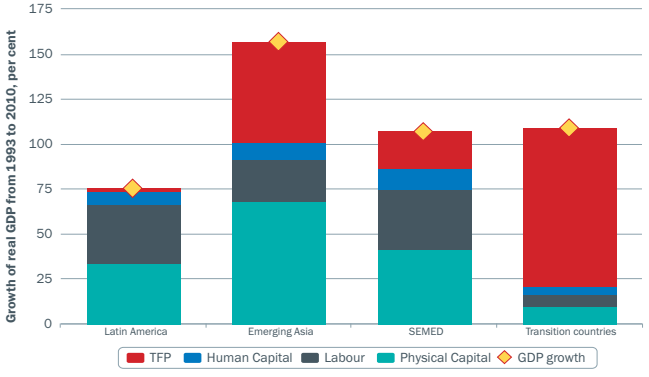
[1] "EU-15" refers to the 15 Member States of the European Union prior to its enlargement in 2004.
[2] The Czech Republic and Slovenia are above this range, with GDP per capita above 70 per cent of the EU-15 average. However, Ukraine is below this range. Having suffered a particularly protracted post-transitional recession and a 15 per cent decline in output in 2008-09, its per capita income is further from EU-15 levels than it was in 1993 (Source: Penn World Tables).
[3] See EBRD (2009), Becker et al. (2010) and World Bank (2012).

Chart 1.2. Capital flows are projected to remain lower than in 2004-07



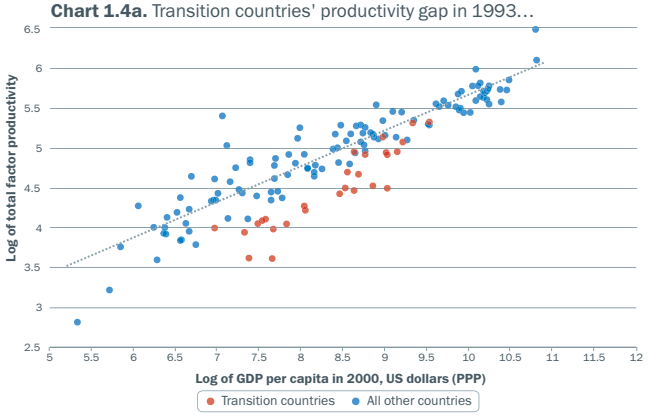
Source: International Monetary Fund World Economic Outlook (IMF WEO) database and projections, October 2013.
Note: Net capital flows are calculated as the sum of net FDI, net portfolio flows and net other investment.

Chart 1.3. Transition growth was primarily driven by total factor productivity



Source: Penn World Tables 8.0.
Note: The chart shows simple average growth rates for real GDP and the respective contributions of human capital, labour, physical capital and total factor productivity.

Chart 1.4a. Transition countries' productivity gap in 1993…



The capital inflows seen in the mid-2000s are not, however, a relevant comparator when analysing long-run growth potential. In Chart 1.2 the projections for future years look low by contrast with the 2004-07 boom, but are comparable to the levels seen in the late 1990s and early 2000s (a period when many CEB countries grew vigorously). It would therefore be wrong to argue that the crisis has plunged transition countries into an unprecedented era of weaker capital flows which is likely to constrain growth.

While concerns about weaker capital inflows may be overblown, there are other – more fundamental – reasons to expect a long-term slow-down. These relate to the nature of the catch-up in productivity that followed the recessions in countries in the transition region in the early 1990s, the slowing of structural reform since the mid-2000s, and the political and social repercussions of the crisis and the low growth seen since 2008.

THE END OF PRODUCTIVITY CATCH-UP

After the recession in the early 1990s most countries in the transition region saw their convergence towards Western income levels accelerate, but in a way that differed fundamentally from that of other fast-growing emerging markets. Physical capital growth was initially constrained by the depreciation of obsolete Soviet-era means of production. Also, saving rates had historically been low, particularly compared with Asian countries, making foreign capital an important source of investment. And unlike most emerging economies, countries in the transition region already had comparatively old populations at the start of their transition process, so they did not benefit from significant growth in the labour force. Indeed, unfavourable demographics and declining participation rates mean that, 20 years on, some countries in the region have smaller labour forces than they did in 1993. Educational attainment was also relatively high at the start of the transition process, comparable to the levels seen in advanced countries, which initially limited the scope for growth in human capital.

In short, the substantial factor accumulation which fuelled growth in many developing countries was not feasible in the transition economies. Instead, their high growth rates primarily reflected a rapid catch-up in productivity (see Chart 1.3, which shows the contribution of total factor productivity, or TFP).

Compared with other countries with similar levels of GDP per capita, transition countries were relatively unproductive in the early 1990s (see Chart 1.4a). This reflected their inherited capital-intensive economies and the fact that many goods produced by Soviet-era capital stocks held little appeal for domestic consumers or foreign importers. However, following the liberalisation of prices and the reorientation of trade patterns, some of the old capital stocks became obsolete and production shifted towards new activities and technologies. The result was sustained productivity growth.

By the mid-2000s, however, productivity was comparable to that of other emerging economies with similar income levels

(see Chart 1.4b), and it has remained at that level, in relative terms, since then. This is not surprising: the price liberalisation and opening-up to the outside world were one-off effects in all but the least developed of the transition economies.[4] Once the economies had adapted to those new conditions over that 10 to 15-year period, the transition-related catching-up process came to an end. Having successfully closed the gap, economies in the region are likely to grow more slowly in future – unless there are additional, productivity-enhancing reforms.

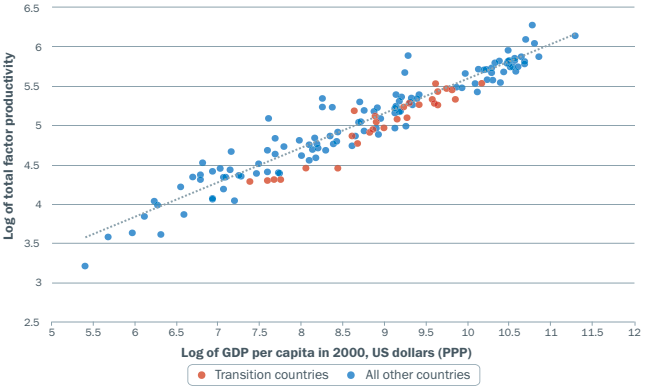
REFORM STAGNATION

In the early 1990s countries in the transition region faced sizeable productivity gaps due to inherited capital and production structures, but also inadequate and ineffective institutions supporting economic activity. Structural reforms, as measured by the average of the EBRD's six country-level transition indicators (see the section of this *Transition Report* entitled "Progress in transition: structural reforms"), advanced rapidly until the end of the decade. Thereafter the reform process began to lose momentum, and by the mid-2000s it was stagnating in most EBRD countries of operations (see Chart 1.5a).

In part, the slowing of reforms simply reflected the fact that transition economies were catching up with advanced market economies. Price liberalisation, small-scale privatisation and the opening-up of trade and foreign exchange markets, which trigger large "upgrades" on the EBRD's transition indicator scale, were mostly complete by the end of the 1990s. However, Chart 1.5b shows that reforms slowed even in areas such as governance, enterprise reform and competition policy, which remain substantially below the standard of advanced economies in virtually all countries in the transition region. Furthermore, reform stagnation set in, particularly in the EEC countries, Russia and Central Asia, where market structures and institutions lag far behind those in advanced economies. Most of the countries that have stalled at particular transition levels since the mid-2000s cannot remain there without compromising their long-term growth prospects.[5]

What are the chances that they will recover their momentum? At this point it is useful to consider the striking correlation between the transition indicators and the quality of political institutions – specifically, the degree to which societies are democratically organised, as gauged by a widely used database, the Polity IV dataset (see Chart 1.6). Without exception, those countries which score highly on an index of democratisation have achieved at least reasonable progress towards market-oriented economic institutions.

Chart 1.4b. ...had largely disappeared by 2007



Source: Penn World Tables 8.0.
Note: The charts plot logged levels of TFP and per capita income at purchasing power parity (PPP) in 1993 and 2007 respectively. The fitted line is estimated separately for each year.

Chart 1.5a. In most transition countries, market reforms stagnated after the mid-2000s...

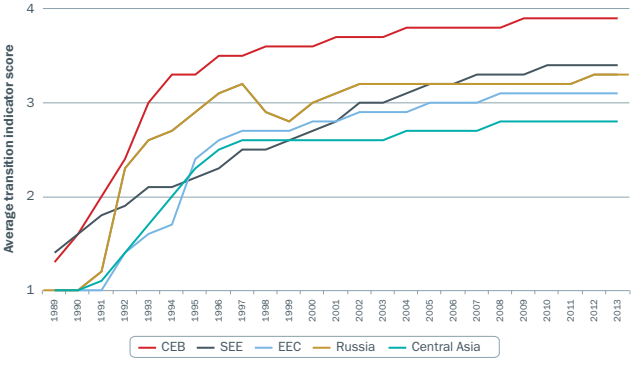
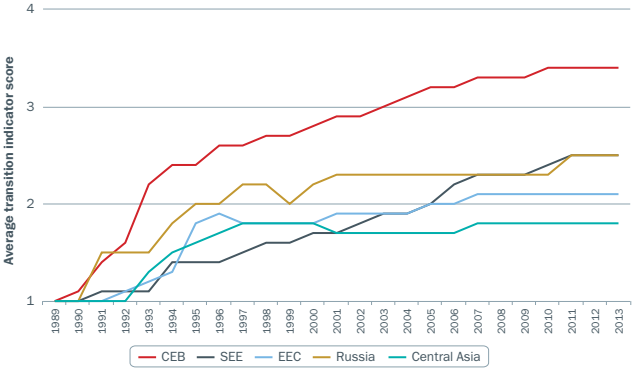


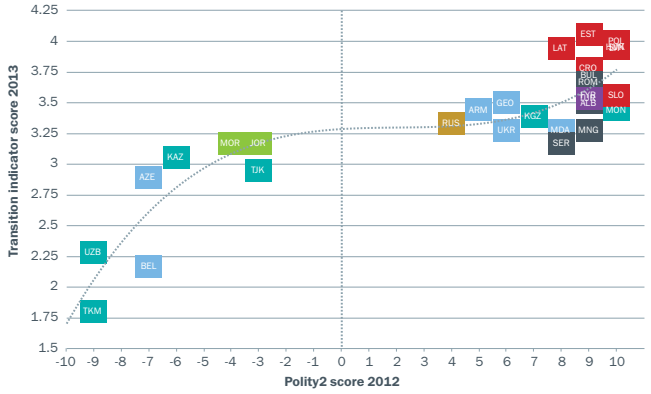
Chart 1.5b....even in areas such as governance and competition policy



Source: EBRD country-level transition indicators.
Note: There are six country-level transition indicators for each country: Large-scale privatisation; small-scale privatisation; governance and enterprise restructuring; price liberalisation; trade and foreign exchange systems; and competition policy. For each geographical region, Chart 1.5a shows the simple average of the scores for all six indicators across all countries in the region. Chart 1.5b shows only the simple average of the scores for governance and enterprise restructuring and for competition policy.

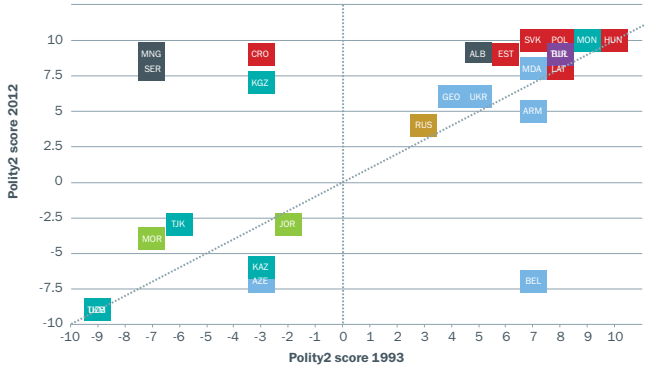
[4] Namely Belarus, Turkmenistan and Uzbekistan, where considerable scope for price and trade liberalisation remains.
[5] Several studies provide evidence for a link between reforms and long-term growth in transition economies. See Campos and Coricelli (2002) and Falcetti et al. (2006).

Chart 1.6. Political institutions are correlated with economic reform



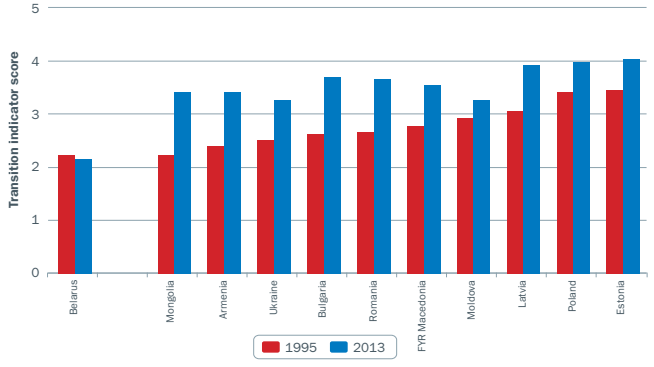
Source: Polity IV dataset and EBRD transition indicators.
Note: The transition indicator score is calculated as the average of the six country-level transition indicators (see the "Progress in transition: structural reforms" section of this *Transition Report*). Polity2 is a political institutions index defined from -10 to +10, where +10 denotes the highest score for democratisation.

Chart 1.7. Political institutions in the transition region: 1993 and 2012 compared



Source: Polity IV data series (2012 version).
Note: Polity2 is a political institutions index (see note accompanying Chart 1.6).

Chart 1.8. Transition indicators in Belarus stopped improving after its political institutions deteriorated in the mid-1990s



Source: EBRD.
Note: The chart shows the average of six country-level transition indicators in the respective countries in 1995 and 2013.

The correlation shown in the chart may not necessarily reflect a causal relationship between political institutions and economic reform. However, a body of influential literature in the fields of economics and political science (which is discussed in more detail in Chapters 2 and 3 of this *Transition Report*) asserts that there may be such a relationship, and that it may work in both directions. In particular, political regimes in the transition region can have an effect on the type and quality of economic institutions.

A simple way to see this is to examine the consequences of political regime change for economic reform. For the most part, the political systems in the countries featured in Chart 1.6 came about soon after the end of communism in the late 1980s and early 1990s, but there were some important exceptions. In the early 1990s Croatia, the Kyrgyz Republic, Montenegro and Serbia (the last two being part of the same country at the time) had negative values on the Polity scale (see Chart 1.7), but they eventually became democracies. Belarus, on the other hand, had a level of democracy that was broadly comparable to a number of CEB and SEE countries following its independence in 1992, but its political institutions took a sharp turn for the worse in the mid-1990s. These political transitions – which were driven largely by factors unrelated to contemporaneous economic developments, such as geography, internal struggles and external military intervention – seem to predict the subsequent level of success (or the lack of it) as regards economic reform.

Chart 1.8 compares economic reforms in Belarus with a comparator group of transition countries that had similar political ratings in 1993 (that is to say, countries with Polity scores of between 5 and 9). All the comparators except Armenia maintained or improved their democracy scores between 1993 and 2013. In contrast, Belarus' score declined from 7 between 1991 and 1994 to 0 in 1995 and -7 in 1996, and has remained at that level ever since. The chart shows that by 2013 Belarus had achieved an economic transition score of just over 2 (on a scale ranging from 1 to 4+), while all comparator countries had exceeded 3 (see right-hand bars for each country in Chart 1.8). This does not only reflect a lack of reform following its democratic reversal, as Belarus was already lagging behind most comparator countries by that point. Nevertheless, most of the difference between the 2013 transition scores for Belarus and the other countries seems to be attributable to its political institutions, which have prevented economic reform from progressing.

Chart 1.9 shows the result of countries moving in the opposite direction. In 1993 Croatia, the Kyrgyz Republic, Montenegro and Serbia were all assigned negative values under the Polity index (with scores ranging from -7 in the federation comprising Serbia and Montenegro under Slobodan Milošević to -3 in the other two countries). They all subsequently became full multi-party democracies: Croatia, Montenegro and Serbia in 2000, and the Kyrgyz Republic in two steps, in 2005 and 2011. In the chart the reform trajectories of these four countries are compared with those of other countries in the transition region

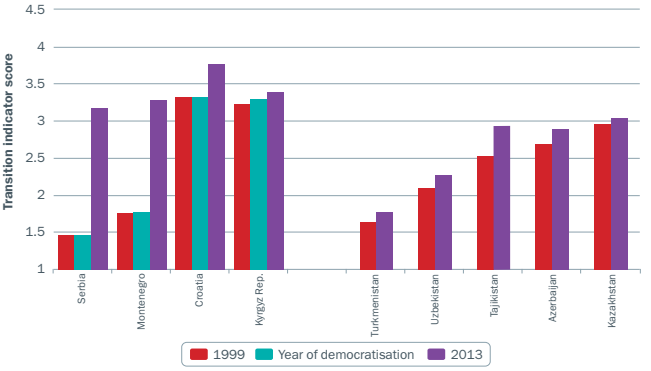
whose Polity scores have remained negative over the last 20 years – Turkmenistan and Uzbekistan (both assigned scores of -9 in 1993), as well as Tajikistan (-6), Azerbaijan (-3) and Kazakhstan (-3).

Chart 1.9 shows that the four countries which eventually became multi-party democracies have carried reform further than those that have made less political progress, eventually achieving transition scores in excess of 3. Reforms carried out in Serbia and Montenegro after the end of the Milošević era were particularly impressive. As in the case of Belarus, there is a sense that economic reforms in these countries were affected by political institutions.

But Chart 1.9 also suggests that political regimes are not the whole story when it comes to explaining differences in reform trajectories. Although Azerbaijan and Kazakhstan have never had an average transition score of more than 3, they have managed to implement significant reforms in spite of their Polity classifications. In the Kyrgyz Republic democracy does not seem to have helped to improve economic institutions, a puzzle to which we return in Chapter 3.

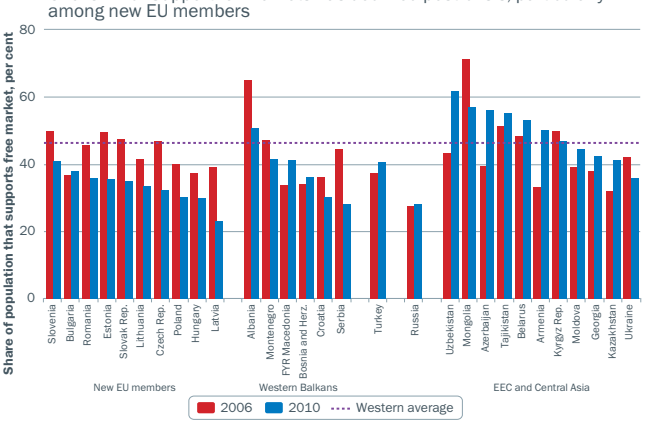
While democracy appears to be neither a necessary nor a sufficient condition for successful economic reform, more democratic systems of government have tended to take reforms further than other political systems in the transition region. With only two exceptions – Croatia and the Kyrgyz Republic in the 1990s, both of which had relatively pluralistic regimes, even though Polity did not consider them democracies at the time – no country with a negative Polity2 rating has been able to push reforms beyond a transition rating of 3 (on a scale ranging from 1 to 4+). The stagnation of reform in these countries could be taken to imply that the reform process has reached the limits of what is feasible within the constraints of prevailing political institutions.

Chart 1.9. Democratic change prompted economic reform in Serbia and Montenegro



Source: EBRD.
Note: The chart shows average country-level transition indicator scores for a group of countries that were initially assigned negative scores in 1993 under the Polity index.

Chart 1.10. Support for markets has declined post-crisis, particularly among new EU members



Source: EBRD Life in Transition Survey.
Note: For each country the chart shows the share of the population that unequivocally supports the free market. The horizontal line indicates the 2010 average for five comparator countries (France, Germany, Italy, Sweden and the United Kingdom).

REFORM REVERSALS

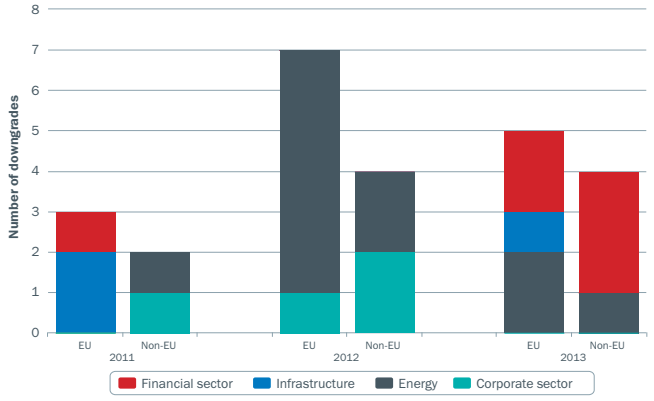
It is tempting to conclude from the analysis above that transition countries which are stable democracies – the new Member States of the European Union, for example – should have no problem completing their transition and developing market institutions in line with advanced market economies. However, there may be reasons for concern even for this group.

First, while there is a strong correlation between democratisation and economic reform in the transition region, Chart 1.6 shows that there is considerable variation in economic reform among full democracies (that is to say, countries with Polity2 scores of 8 or above). Transition indicator averages for these countries range from slightly above 3 to above 4 (close to the theoretical maximum of 4+). In the case of Serbia and Montenegro this may be due to the reform process starting late. In other cases the causes are not immediately clear.

Second, for the new members of the EU, the prospect of EU accession is no longer available as a driver of reform or an anchor against reform reversals. It is noteworthy that the region where reforms appear to have stagnated the least – in the sense that there continues to be an upward trend – is south-eastern Europe (see Chart 1.5a). This region mostly comprises countries which were either EU candidates or EU aspirants at the time in question. This is consistent with the notion that the goal of EU membership is a powerful driver of reform. However, this effect may weaken after accession countries pass specific membership hurdles, and it stops once countries become members. Indeed, Chapter 3 shows that the pace of reform peaked in the years preceding accession.

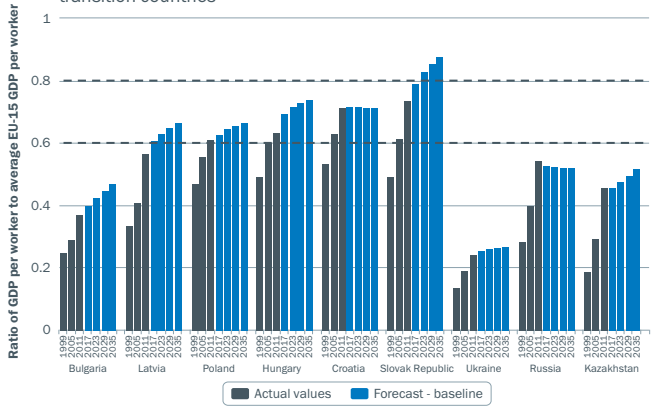
Lastly, the 2008-09 crisis – and perhaps also the period of slow growth and austerity since then – has prompted decline in public support for market reform and democracy, particularly in the more advanced countries (see Chart 1.10). This reversal was apparent in the EBRD's 2010 Life in Transition Survey (LiTS)

Chart 1.11. EU transition economies account for majority of reform reversals since 2010



Source: EBRD.
Note: The chart shows the number of downward revisions of sector-level transition indicator scores in 2011, 2012 and 2013, broken down by sector and region.

Chart 1.12. The rate of convergence is projected to drop significantly in transition countries



Source: See Box 1.1.
Note: The chart shows actual and forecast developments, based on the methodology described in Box 1.1, in the ratio between GDP per worker in the countries indicated and GDP per worker in the EU-15.

and seemed to reflect the depth of the crisis, which was much worse for the EU countries than for those further east, as well as being worse than the crises of the 1990s. The proportion of survey respondents who stated that the crisis had affected their household "a great deal" or "a fair amount" was particularly high in EU countries such as Bulgaria, Hungary, Latvia and Romania. In addition, in many countries the crisis seems to have been blamed on the political and economic system in place at the time – democracy and free markets in the case of the EU countries.[6]

This shift in sentiment appears to have had palpable effects on economic reform. While reforms have continued in some countries – in some cases, in the context of EU and IMF-supported programmes initiated during the crisis – there have been 11 downgrades in EBRD country-level transition indicators since 2010, six of which relate to the EU countries of Hungary, the Slovak Republic and Slovenia.[7] This compares with seven upgrades in EU countries – in Latvia, Lithuania, Poland, Romania and the Slovak Republic. Five of the six downgrades were in 2013 – the first year since the collapse of communism in which downgrades have outnumbered upgrades across the entire transition region (see the "Progress in transition: structural reforms" section of this *Transition Report* for details). Most downgrades in EU countries are arguably related to policies reflecting the same anti-market sentiment that is detectable in the LiTS data.[8]

At the sector level, the overall picture is more hopeful. Based on a new set of sector-level EBRD transition indicators introduced in 2010 (see Chart 1.11) upgrades have continued to exceed downgrades by about two to one. However, it is remarkable that of the total of 25 downgrades relating to sector-level market structures or market-supporting institutions, the majority took place in EU countries, even though these make up less than one-third of the countries tracked by the *Transition Report*.[9]

The downgrades mainly reflect populist measures involving increases in government subsidies and/or state control in areas such as energy, transport and pensions. For example, ***Hungary*** was downgraded: (i) in 2010 for new legislation introducing price caps for electricity to households, (ii) in 2011 for the establishment of a National Transport Holding Company (which was expected to weaken competition), for an increase in subsidies in the transport sector and for a reversal in the pension system resulting in the virtual elimination of the private pillar, (iii) in 2012 for a significant decline in private investment in the electric power and natural resources sectors (which was attributable to a tax on energy groups and state interference with the regulator in the gas sector), and (iv) in 2013 for related reasons (see the "Progress in transition: structural reforms" section of this *Transition Report* for details).

Bulgaria and ***Romania*** were downgraded in 2012 for their failure to implement previous commitments to liberalise their energy sectors. There was then a further downgrade for Bulgaria following government intervention discouraging investment in renewable energy. In addition, ***Estonia*** has been downgraded in

[6] See EBRD (2011a and 2011b) and Grosjean et al. (2011).
[7] The remainder relate to Armenia, Belarus, Kazakhstan and Uzbekistan, and concern price and/or trade and exchange restrictions.
[8] The one exception is the Slovenian downgrade in 2012, which was in the area of competition policy. For a description of the 2013 downgrades, see the "Progress in transition: structural reforms" section of this *Transition Report*. Earlier downgrades in 2010 were a reaction to Hungary's decision to introduce disproportionate levies on the banking system and a reaction to changes to the Slovak pension system which made the operating environment for private pensions more uncertain.
[9] Until 2011 the sector-level assessments covered 29 countries in Europe and Central Asia. As of 2013 they also cover Egypt, Jordan, Kosovo, Morocco and Tunisia. All of the new Member States of the EU are covered, with the exception of the Czech Republic, which "graduated" from EBRD operations at the end of 2007.

the urban transport sector in 2013 for offering travel without user charges to all residents of the capital, Tallinn.

To sum up, there are causes for concern regarding long-term growth in transition economies. Temporary sources of total factor productivity growth associated with initial transition steps are likely to have abated, and reforms had stagnated even before the crisis began. The long period of austerity since 2008 has led not only to more reform fatigue, but also to reform reversals. The next section considers the likely quantitative impact of these developments on growth and convergence in transition economies.

LONG-TERM GROWTH PROSPECTS

In order to analyse the long-term growth prospects in transition economies, an empirical analysis was undertaken that relates investment, savings and productivity growth to countries' institutional quality, levels of human capital, population structures, geography and openness to trade and finance (see Box 1.1).

Political institutions enter the analysis through a variable that measures constraints on the executive[10], while economic institutions are proxied by an index that captures the rule of law.[11] The analysis was used to generate forecasts for countries in the transition region and for western European comparator countries that predict the likely rate of income convergence over the next 20 years, based on different assumptions about political and economic reform. The baseline scenario assesses growth prospects in the event of continued reform stagnation. Political and economic institutions are assumed to remain at their current levels, with no anticipated reversals, but also no progress.

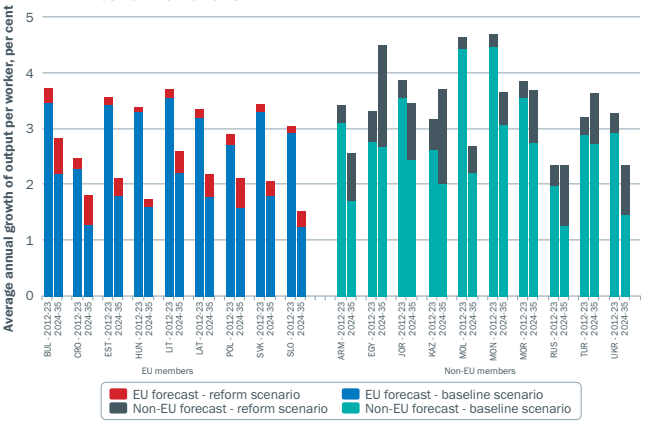
Chart 1.12 shows the predicted rate of convergence of GDP per worker for a group of relatively advanced transition economies.[12] Assuming an absence of reform, most countries would continue converging, but far more slowly than over the past decade (something that is also true for countries not shown in the chart). In 20 years' time only the CEB countries would have incomes per working member of the population that were in excess of 60 per cent of the EU-15 average. This is not very impressive given that all CEB countries except Latvia already exceed the 60 per cent threshold. Only the Czech and Slovak Republics are projected to have incomes in excess of 80 per cent of the EU-15 average in the baseline scenario.

In some countries, including Croatia, Slovenia and Russia, the model predicts stagnation in income growth to roughly the same or slightly lower rates than the EU-15 average over the next decade or so. This means that, in the baseline scenario (which assumes an absence of reform), convergence is projected to stop entirely in these countries. In the case of Russia this would occur at a relative income level of just 55 per cent of the EU-15 average.

In order to gauge how political and economic reform might impact on growth in the transition region, we can look at an alternative scenario in which openness to trade, financial openness and political and economic institutions are assumed to converge to the highest level currently prevailing among advanced EU countries by 2035 (the end of the last forecasting period).

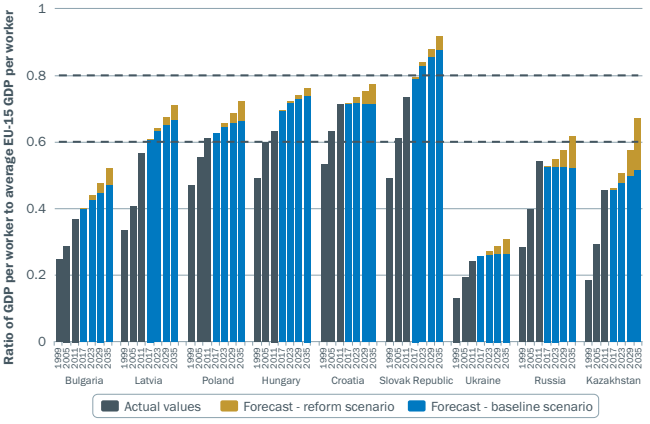
Charts 1.13 and 1.14 illustrate the impact on growth and convergence respectively. In new EU members this reform scenario would lead to increases of about 0.2 to 0.5 percentage points in the annual growth rate of output per worker in the most distant forecasting period (see Chart 1.13). This may seem modest, but it would be sufficient to restore convergence in all countries and propel several additional CEB countries (including Croatia, Estonia, Hungary and Slovenia) to income levels per worker of around 80 per cent of the EU-15 average in about 20 years (see Chart 1.14).

Chart 1.13. Reforms would have a large impact on growth in countries with weaker institutions



Source: See Box 1.1.
Note: The chart shows projected growth, based on the methodology in Box 1.1, under the baseline scenario and the reform scenario described in the text.

Chart 1.14. Restoring convergence requires decisive reform



Source: See Box 1.1.
Note: See Chart 1.12.

[10] "Executive constraints" is a subcomponent of the Polity IV project's democratisation variable that is commonly used in the literature on growth and institutions. It captures checks and balances on those in power, and as such is also seen as a measure of the strength of property rights (see for example Acemoğlu and Johnson (2005)).

[11] The analysis was based on a large sample of countries including those in the transition region and in the rest of the world. This precluded the use of the EBRD transition indicators as a measure of reform or market institutions.

[12] The analysis focuses on output per worker rather than aggregate GDP. Growth rates of output per worker will differ from aggregate growth rates as a result of demographic developments that are an important determinant of the output of countries in the long run (see Box 1.1), but are less directly influenced by economic and political institutions.

Non-EU countries where institutional and reform gaps are larger could expect a greater impact – in the order of 1 to 1.5 percentage points in the most distant forecasting period, and more in some cases. While all the above variables positively affect growth, political institutions – as measured by constraints on the executive – are estimated to make the greatest contribution, as a determinant of both productivity and capital accumulation. For this reason the reform scenario has the highest impact on growth and convergence in countries where constraints on the executive are currently judged to be weak – for example, Kazakhstan, Russia and some southern and eastern Mediterranean (SEMED) countries.

CONCLUSION

Economic reform has stagnated across most of the transition region since the mid-2000s, with the marked exception of the Western Balkans (where reform has been supported by the EU approximation process). In less advanced transition economies improvements in economic institutions have been stunted by weak political institutions. In more advanced economies, particularly the new members of the EU, the crisis and austerity have led to a sharp decline in support for market-oriented reform, and reform reversals have been observed in a number of countries.

As a consequence – and without the benefit of the initial productivity boost associated with the global integration and liberalisation seen in the 1990s and early 2000s – growth in potential output per worker is projected to be modest in the next 10 years (around 2 to 4 per cent on average) and to decline further in the following decade. At that rate convergence will stall in some countries and slow to a crawl in many others. On the basis of current policies only the CEB countries are projected to reach or exceed 60 per cent of the average per capita income of the EU-15 over the next 20 years, with most transition countries remaining far below this threshold.

How can countries escape from this growth trap? This is not a new question and has been considered in several recent studies.[13] These studies have focused on identifying key areas of reform that could help to invigorate growth, such as improving the business environment, fostering competition, reducing non-tariff trade barriers and developing local sources of finance.

For the most part, such policy recommendations are not controversial. The question is why transition countries will not necessarily embrace them. What can be done to promote not just growth, but reforms that may lead to growth? That issue is central to this *Transition Report*. The remaining chapters address it from four angles.

First, analysis suggests that political institutions are a key determinant of economic reform in transition countries. They also appear to influence growth directly – as implied by the long-term forecasting model presented in Box 1.1 and by academic literature.[14] Chapter 2 examines political change in the transition region, particularly the question of whether progress towards democracy becomes more likely as a result of economic development.

Second, what determines economic reform and the quality of market-supporting institutions in the transition region? Political institutions are an important factor, but clearly not the only one. Some countries with few constraints on the executive, or with imperfect democracies, have made significant progress with reforming their economies. Others have stunted reform almost entirely. Chapter 3 looks at what, if anything, can be done to encourage the development of better economic institutions in less-than-perfect political environments and why there is significant variation in the quality of economic institutions, even among stable democracies.

Third, Chapter 4 analyses the development of human capital in the transition region and its links to economic institutions. Like political institutions, human capital benefits growth directly (see Box 1.1). It might also interact with economic reform. Better economic environments may influence the returns to education and hence the incentives that determine a country's human capital stock. Conversely, better education may increase the chances of successful reform. Furthermore, reforms to education are achievable and have been attempted even in environments with weaker political institutions.

Lastly, Chapter 5 considers the extent to which countries in the transition region are inclusive in terms of broad access to economic opportunities. Economic inclusion is a likely reason why some market-based systems have been more successful than others, both in generating growth and in making reforms work. This is correlated with the extent to which countries are democratically organised, and with the quality of economic institutions and education, but merits separate study. This chapter represents the first attempt, to our knowledge, to measure economic inclusion in the transition region using a consistent dataset, assessing the inclusiveness of institutions and education systems in the region.

In short, this *Transition Report* takes the view that it is not enough to debate which reforms are the most critical in order to revive long-term growth in transition countries. It is also important to understand the political, social and human capital constraints that stand in the way of these reforms. Only then can one hope to find policy levers that might eventually help to relax or circumvent these constraints.

[13] See Becker et al. (2010), EBRD (2010) and World Bank (2012), among others.
[14] See Acemoğlu and Robinson (2012), North and Weingast (1989), North (1990) and Olson (2000).

Box 1.1
Forecasting long-term growth in transition economies

The "productivity catch-up" phase associated with opening up to the outside world and international integration has ended in most transition economies. Much work remains to be done to bring their institutions and market structures up to the level of mature market economies. However, the way in which growth relates to capital stocks, human capital and institutions in the transition region should no longer be very different from other market economies.

It is therefore possible to analyse the long-term growth potential of transition economies in a standard growth accounting framework using a large sample of advanced, emerging and transition countries.[15] Growth, physical capital, total factor productivity, the saving rate and foreign direct investment are determined inside the model, whereas geography, demographic variables, institutions and human capital are treated as exogenous.

The following assumptions are made.

- TFP growth depends on human capital, FDI, the distance from major economic centres and the quality of political institutions (measured by constraints on the executive), as well as initial levels of TFP.
- The saving rate depends on demographic variables, natural resources and financial openness.
- Growth in the physical capital stock (investment) depends on the saving rate, FDI, the quality of political institutions and the initial level of capital.
- Finally, FDI depends on trade and financial openness, law and order (as a proxy for economic institutions), the shares of services and manufacturing in GDP, and the initial level of GDP.

The fact that growth in physical capital and TFP are functions of their initial levels implies that the model allows for "factor-specific convergence" – that is to say, the possibility that capital and TFP growth may slow as their levels rise.[16] The results suggest that this is indeed the case.

This system of four equations is estimated by three-stage least squares using a world sample of 88 countries over the period 1982 to 2011. The panel consists of five six-year intervals with period averages for all contemporaneous variables and the values of the final year of the preceding period for all initial conditions. Not all data are available for all countries over the entire period – data for transition countries typically start around 1990 – resulting in an unbalanced sample of 361 observations.[17]

The results support the contention that political and economic institutions play a crucial role in determining the prospects for growth. Variables related to policies (trade openness and financial openness) or institutions (constraints on the executive, and law and order) are significant in all four equations (see Table 1.1.1). For example, countries with stronger constraints on the executive are found to have a higher rate of TFP growth and faster accumulation of physical capital, while more open trade policies are associated with greater FDI inflows.

In addition, the levels of human capital and FDI are found to be important determinants of productivity growth. The negative coefficient for economic remoteness suggests that being close to global centres of economic activity promotes productivity catch-up. This is in line with the experiences of CEB and SEE countries, whose proximity to western Europe is widely viewed as having helped them to catch up.

The model is used to predict long-term growth rates based on specific assumptions about developments in the exogenous variables. In order to evaluate what the continued stagnation of reforms would imply for the growth prospects of transition countries, the baseline forecasts assume that institutions and openness will remain at their current levels, while human capital continues to grow at its current rate. The remaining variables are held constant, with the exception of demographic characteristics, which evolve in accordance with United Nations projections.

In this scenario the model predicts that transition countries will not sustain their pre-crisis growth rates in the long term. Chart 1.1.1 shows that in virtually all countries the average growth rate of output per worker is projected to be lower over the next two forecasting periods[18] (that is to say, from 2012 to 2023) than it was between 2000 and 2011.[19] In absolute terms, growth in output per worker is projected to be modest in most countries between 2012 and 2023 – between 2 and 4 per cent – and to decline further, by about one to two percentage points, between 2024 and 2035. The initial slow-down occurs despite the fact that the preceding period includes the deep recessions of 2008-09. The drop in growth rates is primarily due to diminishing TFP growth. For most economies shown, the slow-down in output per worker will be compounded by a stagnation or decline in employment as populations age.[20] The exceptions here are the SEMED countries and Turkey, where the growth rate of GDP will remain significantly above that of output per worker as a large number of young people join the workforce.

The main finding of this analysis – the fact that, under their current policies, most transition economies can expect a significant slow-down in long-term growth relative to the past – is robust to variations in how exactly "current policies" are defined. For example, modest improvements in political institutions (such as a 1-point improvement on a 10-point scale) will not change the main result, and neither will a slow continuation of financial opening. To make a difference, large improvements in political and economic institutions are needed, as described in the main text.

[15] The analysis assumes a human capital-augmented Cobb-Douglas production function in which output is a function of TFP (denoted by A), physical capital (K), human capital (h) and labour (L):

$$Y_t = A_t K_t^{\alpha}(h_t L_t)^{1-\alpha} \text{ and } y_t = A_t k_t^{\alpha} h_t^{1-\alpha}$$

where y is output per worker (Y) and k is capital per worker (K).

$$\Delta \ln(y) = \Delta \ln(A) + \alpha \Delta \ln(k) + (1-\alpha)\Delta \ln(h)$$

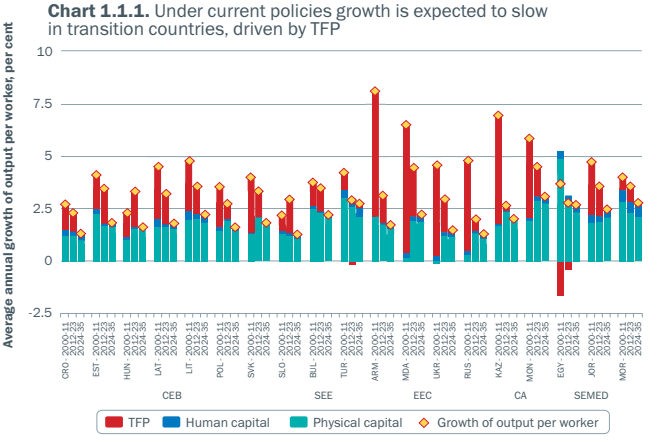
[16] This approach draws on recent literature on long-term conditional growth projections; see Lee and Hong (2010) and Chen et al. (2012). Data sources include the Penn World Tables (for capital, TFP, human capital, labour shares and growth data), the World Bank (for natural resource rents and sector shares), UNCTAD (for gross FDI), the Chinn-Ito index database (for financial openness), ICRG historical data (for law and order) and the Polity database (for executive constraints). Openness to trade is structurally adjusted using the adjusted trade intensity approach employed by Pritchett (1996). For further details, see Lehne and Zettelmeyer (2013).

Table 1.1.1
Estimation results

	TFP growth	Saving rate	Growth rate of K/L	FDI
Log of initial TFP	-2.032***		1.12***	
	(-8.21)		*(4.15)*	
FDI	0.258***		0.202***	
	(3.3)		*(3.07)*	
Constraints on the executive	0.171**		0.158**	
	(2.24)		*(2.51)*	
Human capital	0.936**			
	(2.55)			
Economic remoteness	-2.382**			
	(-2.47)			
Log of life expectancy		0.382***		
		(5.23)		
Old age dependency ratio		-0.009***		
		(-3.81)		
Youth dependency ratio		-0.002***		
		(-5.74)		
Natural resource rents/GDP		0.004***		
		(7.59)		
Financial openness		0.01**		
		(2.22)		
Log of initial capital per worker			-1.35***	
			(-7.58)	
Saving rate			8.028***	
			(5.22)	
Trade openness				1.4***
				(4.67)
Law and order				0.387***
				(2.76)
Manufacturing/GDP				0.06**
				(2.44)
Services/GDP				0.058***
				(3.62)
Log of initial GDP				-0.598***
				(-6.02)
Regional and time-fixed effects	(not reported)			
Constant	(not reported)			
Number of countries	**88**			
Observations	**361**			

Source: EBRD, based on data sources cited in footnote 12.
Note: The table shows regression coefficients for the three-stage least squares estimation. The four columns correspond to the four equations in the system (TFP, saving rate, growth of capital per worker and FDI). Z ratios are shown in parentheses.

Chart 1.1.1. Under current policies growth is expected to slow in transition countries, driven by TFP



Source: See footnote 12.
Note: The chart shows actual (2000-11) and projected (2012-23 and 2024-35) average annual growth of GDP per worker and the contributions of TFP, human capital and physical capital, assuming an absence of reform.

[17] Dropping the measure of law and order allows a larger sample (455 observations), with a longer time horizon (1976-2011) and more countries (99). Estimating the model on the basis of this sample does not change the results for the other variables in the system. Neither does dropping the observations for the transition economies prior to 2005, a period when (as argued in the text) they may have been undergoing a unique catch-up process that made them structurally different, in terms of the model coefficients, from other countries. Further robustness checks are conducted in Berglöf, Lehne and Zettelmeyer (2013).
[18] Separate forecasts are generated for each six-year interval from 2012 to 2035.
[19] Hungary and Slovenia are two exceptions. They experienced particularly weak growth between 2000 and 2011, which the model expects will be partly corrected in the next period.
[20] Eighteen transition countries are expected to see their working age populations decline by the mid-2020s.

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CHAPTER 2

Markets and democracy

Why have some countries in the transition region succeeded in building sustainable democracies, while in others political reform has stagnated or even gone into reverse? Evidence suggests that countries with higher per capita income are more likely to develop pluralistic political systems and less likely to experience a reversal in this process, while large resource endowments impede – or at least slow – democratisation. Earlier and more vigorous market reforms may also help to consolidate democracy.

FACTS AT A GLANCE

ABOVE
70%
Global proportion of countries which had democratic institutions in 2012, compared with 30 to 40 per cent from 1960 to 1990.

94%
of countries with average per capita income above US$ 10,000 held free and competitive elections in 1999.

INCOME IN
1992
is correlated with levels of democracy in 2012 in a global sample.

BY
2000
all constituent democracies of the former Yugoslavia had become full democracies.

Markets and democracy in the transition region

The fall of the Berlin Wall in 1989 was seen by many as a defining moment in the evolution of political systems, crowning the "third wave" of democratisation, which was famously described by Francis Fukuyama as "the end of history".[1] Fukuyama argued that liberal democracy had prevailed over all other systems of political organisation and was the inevitable endpoint for all societies.

Many countries in the transition region have since become consolidated democracies, while others have at least made significant strides towards building robust democratic institutions, lending support to Fukuyama's assertions. However, the experience of transition in some countries has been more erratic, with reforms stagnating or even going into reverse.

Why do some countries succeed in building sustainable democracies, while others do not? What is the role of economic development in this process? Does transition to a market economy strengthen the medium and long-term prospects for democratic transition and consolidation?

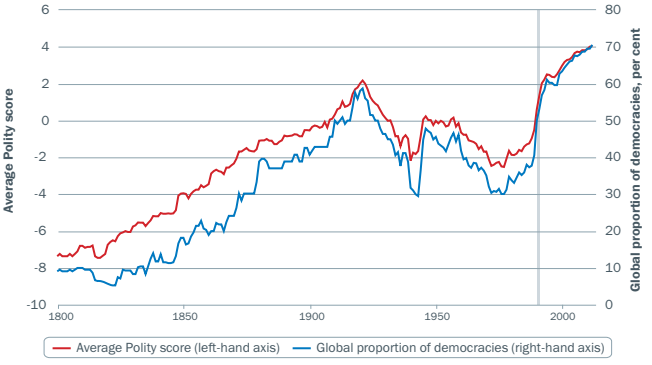
The answers to these questions are particularly relevant to those countries which have yet to fulfil their democratic potential, as well as newly democratising states in the southern and eastern Mediterranean (SEMED).

The academic literature is filled with theories and explanations of what makes democracy work. The overall expansion of democracy and global wealth has been fairly evident, but the causal mechanisms remain a contested area among social scientists, and exceptions to the pattern of growth and democracy are too large to overlook.

The existence of a sizeable middle class – allegedly a bulwark of democracy based on its own interests, incentives and values – does seem to be associated with the presence of democratic institutions. Why, then, do some transition countries become "stuck" with imperfect market-based economies, reasonably large middle classes and non-democratic (or only partially democratic) political systems?

This chapter reviews some of the literature addressing these questions and submits some of the main insights to empirical testing. Using data from the EBRD/World Bank *Life in Transition Survey* (LiTS), it looks at where the demand for democracy is strongest and weakest, and how that might compel or constrain democratic reform. It then looks at specific cases within the transition region that may shed further light on the relationship between economic development, demand for democracy and democratic outcomes.[2]

Chart 2.1. Democracy resumed its upward trend after the end of the Cold War



Source: Polity IV.
Note: The vertical grey line marks the year 1989.

EXPLAINING DEMOCRACY

Democracy may not be inevitable, but it has been gaining ground steadily over time. Representative democracy has spread pervasively around the world over the last 200 years. In the first half of the 19th century it was limited to a few Swiss cantons and several states in the north-eastern United States. The European revolutions of 1848 sparked a prolonged wave of democratisation that would peak in 1921, when almost three-fifths of all sovereign countries were democracies. A second, shorter wave occurred just after the end of the Second World War.

Between 1960 and 1990 the proportion of the world's countries that had democratic institutions fluctuated between 30 and 40 per cent. In the wake of the collapse of the Soviet Union, the figure rose to more than 60 per cent by the beginning of the 21st century, and by 2012 it exceeded 70 per cent.

This global expansion is depicted in Chart 2.1, which shows the proportion of countries classified as democracies by the Polity IV dataset over the period 1800-2012 and the average global Polity score for each year.

[1] The term "third wave" was coined by Huntington (1993). The thesis on the end of history was first outlined in Fukuyama (1989) and was developed further in Fukuyama (1992).
[2] For an earlier treatment of these topics, see EBRD (1999) and EBRD (2003).

ECONOMIC DEVELOPMENT AND DEMOCRACY: THEORY

The expansion of democracy around the world coincided – albeit imperfectly – with the industrial revolution and global growth. The first major study demonstrating the relationship between economic development and democracy was undertaken by Lipset (1959), who found that a range of development factors – including wealth, industrialisation, urbanisation and education – were statistically associated with the emergence of democratic political systems.

Lipset hypothesised that, together, the changing social conditions of workers (who became free to engage in political activity), the rise of a wealthy and politically active middle class and the creation of social capital and intermediate institutions generated conditions that supported robust democracy and demand for it.

His ideas are central to a branch of the literature known as "modernisation theory", which continues to attract attention and more sophisticated empirical testing. Since Lipset, many studies have claimed that development – mainly measured through per capita income – increases the likelihood of transition to democracy and increases the stability of democracies.[3]

However, critics of modernisation theory have challenged Lipset's central claim that development leads to democracy. For example, some have argued that development does not influence the probability of a country becoming democratic, though the risk of democratic reversal does recede as levels of economic development rise.[4] Others have claimed that when proper statistical controls are applied, per capita income has no effect on the likelihood of a country becoming or staying democratic, and that democracy and development are both the result of "critical historical conjunctures" that took place more than 500 years ago.[5]

While the debate continues among scholars, there is an emerging consensus that development has indeed had a causal effect on democracy, but that this is conditional on specific domestic and international factors.

Long time series data starting in the early 19th century (when hardly any countries were democratic; see Chart 2.1) show income having a positive and significant effect on the likelihood of democratic transition and consolidation. However, the effect diminishes as income grows, and vanishes in richer countries that have already become democratised. In addition, economic development does not generally lead to democracy in resource-rich countries, and democratic institutions imposed by colonial powers or international organisations tend not to last.

Importantly, the impact of economic development on democracy may take between 10 and 20 years to materialise. In the short term, faster economic growth increases the likelihood of political survival for a non-democratic leader, while higher income levels do not usually prompt a breakthrough to more democratic politics until after an incumbent leader has left office.[6]

The literature on the mechanisms that bring about democracy and stabilise it can be classified in two broad schools of thought on the basis of the assumptions made by authors about the reasons why individuals support democratic regimes.[7] The first makes democracy dependent on the liberal or democratic beliefs or values of its citizens. The second, conversely, claims that key political actors will support democracy when it is convenient or rational for them to do so.

UNDERLYING DEMOCRATIC BELIEFS

At the core of a democratic system lie regular, free and fair elections. By definition, fair democratic elections are uncertain events: before they are held, their outcome is unknown. After they have taken place, there is no guarantee that the winners will not exploit their victory to extract resources from their opponents, and perhaps even suspend future polls – or that the losers will not reject the results and rebel against the winners.

Democracy and the undisrupted holding of elections will only come about if both winners and losers are willing to comply with the outcomes of the periodic elections that form the core of this system of governance, accepting the possibility of losing and deferring to the will of the majority – and in the case of the winners, resisting the temptation to permanently prevent the losers from gaining power.

One important strand of the literature contends that a democratic outcome will only be possible if voters think of democratic institutions, including free elections, as the most legitimate means of governance. If a sufficient majority of the population sees democracy as the most appropriate political regime, winners will not exploit their political advantage and losers will not challenge the electoral outcome. Given the proper democratic convictions, everyone will embrace democracy permanently.[8]

While beliefs may influence the intensity of individual support for democracy, the theory of democracy as a function of democratic convictions is problematic. From a conceptual point of view, beliefs do not seem to provide very strong foundations for complying with fair elections and other democratic practices. A belief that democracy is the best form of government will not necessarily deter individuals who stand to obtain significant economic or status-related benefits as a result of undermining the rule of law and behaving undemocratically.

Once they have been tempted to distort or oppose democracy, even those individuals who hold strong convictions about democracy may not be willing to uphold their principles if that implies losing an election. From an empirical point of view, democratic beliefs (aggregated at the country level) do not seem to have a particularly strong impact on the transition to – or consolidation of – democracy.

[3] See Przeworski and Limongi (1997). Some have claimed that this is true mainly for richer democracies; see Dahl (1971), Huntington (1991), Barro (1999), Boix and Stokes (2003), Epstein et al. (2006) and Heid et al. (2012). Frye (2003) and Jackson et.al. (2013) have shown how the introduction of private property rights and the creation of new private businesses in Russia and Poland have generated greater support for pro-reform parties and the holding of elections.
[4] See Przeworski et al. (2000).
[5] See Acemoğlu et al. (2009) and Moore (1966).
[6] This summary is based on Barro (1999), Boix (2011) and Treisman (2012). See also Glaeser et al. (2004), Epstein et al. (2006) and Miller (2012).
[7] For a critical review, see Geddes (2007).
[8] See Welzel and Inglehart (2006). For the first generation of studies on modernisation and belief change, see Lipset (1959) and Almond and Verba (1965).

THE ROLE OF INEQUALITY

Another approach to understanding the causes of democratisation focuses on incentives that may encourage key participants in the political process to abide by an electoral outcome. Given that a winning majority has the potential to redraw the political and economic rules of the game, voters (and parties) will accept democracy if losing an election does not threaten their living standards or political survival. Similarly, election winners will uphold democratic institutions if the political value of the offices they hold and the decisions they are empowered to make are kept in check by other institutions of governance.[9]

Democracy, then, is more likely when all voters and their representatives live under relative economic equality. Where income inequalities among voters are not excessively large, elections will not threaten asset holders or high-income individuals. In contrast, if a small minority control most of the wealth, the less well-off majority will seek redistribution through the ballot box and the tax system. In those circumstances, the wealthy will probably prefer an authoritarian political regime that acts in their interests, rather than those of the majority, and blocks any introduction of high, quasi-confiscatory taxes.[10]

Industrialisation and development have sometimes been associated with increased inequality in the short term.[11] However, in the longer term, development has generally been correlated with lower levels of inequality through the expansion of education, the accumulation of a skilled labour force and a consequent improvement in wages and conditions across the population.[12] This would explain why, in 1999, 94 per cent of countries with average per capita income of more than US$ 10,000 (in constant 1996 US dollars) held free and competitive elections, while only 18 per cent of those with average per capita income of less than US$ 2,000 did so.[13]

NATURAL RESOURCES AND THE "RENTIER STATE"

Faced with the risk of high taxes imposed by a democratic majority, a wealthy minority has two options to protect itself: it can invest in repression and authoritarian rule, or it can take its assets elsewhere. If wealth is mobile, capital holders can credibly threaten to leave if taxes become too high under a democracy. However, if wealth is immobile (as in the case of land or other natural resources) and/or its control depends heavily on state regulation, democracy becomes potentially much more threatening, and asset holders are more likely to support authoritarian regimes.

At the same time, regimes that draw heavily on rents from extractive industries do not rely on a fiscal system that taxes the general population and are in a better position to provide side payments and subsidies – for example, payments to less well-off regions or disadvantaged groups – financed by natural resources. They therefore face less pressure to be accountable to the taxpaying population through democratic institutions.[14]

CONCLUSIONS FROM THE LITERATURE

We can draw the following conclusions from this brief review of the academic literature on the subject.

- Although the research community remains divided, there is strong support for the proposition that increases in economic development are likely to lead to an increase in democracy, up to the point where the democratising effects of development begin to diminish.
- Once a country crosses a particular democratic threshold – especially when this is achieved through the traditional modernisation route – it is unlikely to slip back into authoritarian rule.
- The spread of democratic beliefs and demand for democracy play a role in consolidating democracies and preventing them from slipping back, but empirical support for them as independent causes of initial democratisation is weak.
- Countries with lower levels of inequality are more likely to become – and remain – democracies.
- The relationship between economic development and democracy is considerably weaker in countries that rely heavily on the extraction of natural resources as a means of generating national wealth.

The rest of this chapter examines whether these broad conclusions apply to the transition region. It uses some descriptive statistics and the results of regression analysis to test the propositions, as well as using household survey data to explore the democratic beliefs in different segments of society.

REFORM AND DEMOCRACY

The collapse of the Soviet Union and communism was a political "big bang" moment, giving countries in the transition region an opportunity to recreate their political institutions. To what extent, and at what speed, should this result in the development of stable democracies? The literature cited in the previous section offers three main propositions.

First, one would expect some correlation between initial political institutions and the underlying social and economic conditions of each country. Countries with economies based on manufacturing and a relatively well-educated population would tend to establish and consolidate democratic institutions. By contrast, agrarian or extractive economies would typically find it more difficult to adopt democratic systems.

Second, as economies develop and grow, democracy would be expected to take hold. However, given the time lag between economic development and democratisation, there would probably be relatively few immediate transitions to full democracy in the first 10 to 20 years after the beginning of post-communist economic recovery.

Third, one would expect the speed of transition to market economies – particularly in the first few years after the collapse of communism – to be a predictor of the countries' propensity

[9]The idea of democracy as a political equilibrium – that is, as an outcome that is only possible if all political participants accept it (and the related possibility of losing elections) over any other political regime – was first developed informally by Dahl (1971), before being developed analytically by Przeworski (1991) and Weingast (1997).

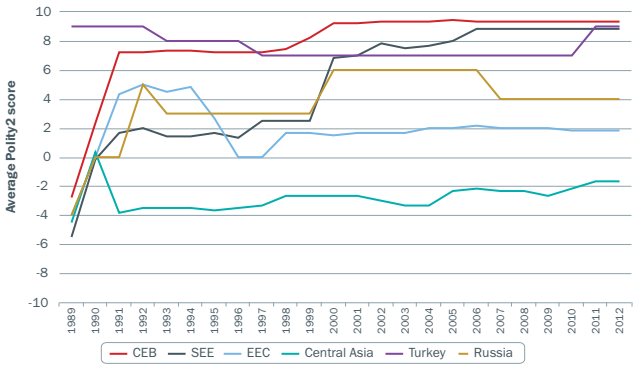
[10]The effect of economic inequality on democracy has a long tradition in the literature, going back to Aristotle and Machiavelli's Discourses. For more recent analysis, see Boix (2003) and Acemoğlu and Robinson (2006).

[11]See Kuznets (1955).

[12]See Atkinson et al. (2009), Davies and Shorrocks (2000) and Morrisson (2000).

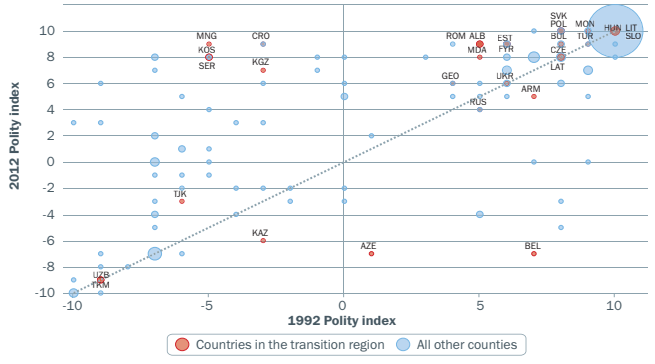
[13]This empirical relationship between income and democracy is even closer for earlier historical periods. Just by looking at per capita income, we can successfully predict 76 per cent of annual observations regarding political regimes in sovereign countries after the Second World War. The proportion of cases that are predicted correctly rises to 85 per cent in the inter-war period and 91 per cent before the First World War. These results are taken from Boix (2011).

Chart 2.2. The collapse of communism led to widely diverging levels of democracy



Source: Polity IV.
Note: The chart reports, for each region, the mean of the Polity2 variable as contained in the Polity IV dataset, for the period from 1989 to 2012.

Chart 2.3. A few countries in the transition region experienced large changes in levels of democracy after 1992



Source: Polity IV.
Note: The chart shows the Polity2 index for countries in the transition region (labelled) and other countries (not labelled) in 1992 and 2012. The size of chart markers corresponds to the number of countries with those given scores in 1992 and 2012. For example, the blue marker at point 10,10 represents the 24 countries with a Polity2 score of 10 in both 1992 and 2012.

to democratise, or at least to develop nascent democratic systems with some degree of stability. Adopting liberal market institutions quickly would make it less likely that a political elite could take control of large parts of the economy (either directly or in collusion with specific economic groups or firms) and block the introduction of democratic mechanisms, or distort them, to preserve their political control and economic rents.[15]

These propositions are supported by the evidence. The political shock of 1989-92 led to a wide divergence in political systems across countries, followed by considerable stability in both the level of democracy and free markets over time (see Chart 2.2).

In central European countries – which were the most advanced economies in the former Soviet bloc and had the shortest period under communism (imposed from outside), highly educated populations, but few natural resources – political institutions were democratic by 1991 and reached the level of advanced Western democracies by the early 2000s.

Conversely, in eastern Europe and the Caucasus (EEC) and Central Asia, democracy generally started from a low level and has made uneven gains. In many cases, this reflects the power of the old elite (or part of it, combined with new political entrepreneurs), who ended up with control over strategic sectors of the economy or the post-communist state itself. Democratic progress has been particularly subdued in most countries in resource-rich and agrarian Central Asia.

Several countries in south-eastern Europe (SEE) have made significant progress towards democracy over the 20-year period since 1992 (see Chart 2.3, which compares Polity scores in 1992 and 2012). The constituent states of the former Yugoslavia started out with authoritarian or weak democratic systems, but by 2000 had become full democracies.

These transitions partly reflected external shocks (as in the case of the Milošević regime in Serbia, whose end was accelerated by the Kosovo war), but also domestic pressure for change (as in Croatia). Similarly, the Kyrgyz Republic experienced a home-grown democratic transition in 2010. However, other countries, such as Belarus, slid down the democracy scale in the 1990s (see the case study later in this chapter).

This leads us to the core question in this chapter: what drives these changes in democracy over time, and what explains the differences in outcomes across countries? To what extent is there systematic empirical support for the drivers of democracy discussed earlier in this chapter?

[14]See Mahdavy (1970) and Beblawi and Luciani (1987). A related argument is that resource-rich economies tend to have worse political and economic institutions – in the sense that the executive is not held accountable and property rights are insufficiently enforced – because the improvement of these institutions would restrict the ability of powerful elites to syphon off resource revenues. See Tornell and Lane (1999), Sonin (2003) and EBRD (2009). To the extent that democracies lead to greater public accountability, this is another reason why natural resource wealth might hinder democracy.

[15]See Hellman (1998).

ECONOMIC DEVELOPMENT AND DEMOCRACY: EVIDENCE

Does economic development encourage democratisation in transition countries? The literature suggests at least four reasons why average per capita income might influence a country's propensity to democratise.

- At higher average income levels, high-income voters will be more willing to accept the redistributional consequences of democracy, especially if the costs of repression are considered excessive.
- Development is generally correlated with lower levels of inequality, at least in the long term.[16]
- Development is linked to a shift in the nature of wealth – that is to say, from fixed assets, such as land, to mobile capital.
- Higher per capita income is associated with education and secularisation, with educated citizens being more likely to demand political participation and to embrace democratic beliefs.

Table 2.1 presents the results of a simple regression of the level of democracy on economic development for a global sample over the period from 1800 to 2000. It looks at the impact of economic growth on the development of democracy with lags of 5, 10 and 25 years. This shows that per capita GDP has a strong positive impact on the emergence of democracy globally. Levels of democracy will be higher today for countries that were richer 5, 10 or 25 years ago (see the three left-hand columns of the table).

Unsurprisingly, the relationship between economic growth and democracy does not hold true in the countries that make up today's transition region, many of which were part of non-democratic states or empires for much of their recent history – the Habsburg, Ottoman and Russian empires prior to the First World War, and then the Soviet Union or one of its satellites in eastern Europe.

During these periods many countries in the transition region experienced rapid development led by industrialisation, but remained undemocratic. Consequently, the rest of this analysis focuses on the period between 1989 and 2012 to examine the relationship between economic development and political regime outcomes in the post-communist period.

Table 2.2 shows the results of a panel regression that is analogous to that of Table 2.1, except that it also includes measures of natural resource endowments (as a share of GDP) and income inequality (measured by the Gini coefficient). These are variables that should, based on the preceding analysis, influence the propensity to democratise for a given level of per capita income.

As in Table 2.1, the regression considers the relationship between democracy in year t and lagged GDP per capita (as well as income inequality and natural resources). Because of the shorter length of the sample, the lag length is always five years.[17]

Three variants of the dependent and lagged dependent variable are considered: first, the level of democracy as expressed by the Polity index (as in Table 2.1); second, the highest Polity score over the preceding five years (Max5Polity), which effectively restricts the analysis to cases where there has been an increase in democracy; and lastly, the minimum score over the previous five years (Min5Polity), which restricts the analysis to cases where there has been a decline in democracy.

The rationale for analysing these variants in addition to the Polity index at time t is that the effect of some of the explanatory variables may not be the same when it comes to promoting or delaying democratic improvements and when it comes to defending or undermining a level of democracy that already exists.

Table 2.2 shows that, when controlling for the type of political regime in place five years previously, for natural resources, and for inequality, the probability of a country becoming more democratic depends strongly on lagged GDP per capita (see columns 1 to 6). The coefficient estimated is larger for the transition region than for the rest of the world, and statistically significantly larger than zero in all specifications except model 1. The effect of lagged GDP growth appears to be larger as regards inducing democratic improvements – columns 3 and 4 – than it is when it comes to protecting countries from democratic reversals – columns 5 and 6.

Table 2.1
Historically, higher per capita income has been a predictor of democratisation – but that is not the case in today's transition region

	Countries outside transition region			Countries in transition region		
	Lag length τ (years)			Lag length τ (years)		
	5	10	25	5	10	25
Polity at t-τ	0.66***	0.39***	0.21**	0.58***	0.07	0.55**
Log of GDP per capita at t-τ	0.04**	0.14***	0.23**	-0.04	0.10	-0.04
Observations	2007	911	269	163	78	26
Countries	143	137	78	11	11	8
R^2	0.81	0.67	0.55	0.82	0.69	0.37

Source: Polity is taken from the Polity IV dataset. GDP per capita, which is in 2000 US dollars, is taken from Gleditsch (2002) for the period 1950-2004 and Maddison (2008) for earlier years, as merged in Boix et al. (2012).
Notes: The table shows regressions for a sample period of up to 200 years (1800-2000). The dependent variable is the Polity index of democracy at time t-. * = p<0.10; ** = p<0.05; *** = p<0.01.

[16] See Atkinson et al. (2009), Davies and Shorrocks (2000) and Morrisson (2000).
[17] For each country, the dependent variable in the first observation in the sample is the 1995 democracy score, while the lagged dependent and independent variables correspond to 1990; the second observation is the 2000 democracy score, while the lagged dependent and independent variables correspond to 1995, and so on.

Table 2.2
Determinants of democracy in the transition region and in all other countries, 1989-2012

Dependent variable	Polity		Max5Polity		Min5Polity		Polity	Max5Polity	Min5Polit	Min5Polity
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Transition region	All other countries	Transition region	All other countries	Transition region	All other countries	Transition region	Transition region	Transition region	Transition region
Polity at *t*-5	0.139***	0.679***	0.397***	0.635***	1.003***	0.944***	0.095*	0.386***	0.961***	0.950***
	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.07)	(0.00)	(0.00)	(0.00)
Log of GDP per capita at *t*-5	0.545	0.391**	1.204**	0.356**	0.474**	0.276***	0.343	1.191**	0.375	0.275
	(0.36)	(0.01)	(0.01)	(0.02)	(0.05)	(0.00)	(0.57)	(0.02)	(0.15)	(0.31)
Natural resource rents at *t*-5	-0.027*	-0.037***	-0.080***	-0.030***	-0.002	-0.012**	-0.036**	-0.081***	-0.006	-0.006
	(0.09)	(0.00)	(0.00)	(0.01)	(0.83)	(0.04)	(0.03)	(0.00)	(0.54)	(0.55)
Inequality at *t*-5	0.026	0.021	-0.041	0.025	0.045*	-0.004	-0.046	-0.051	0.018	0.031
	(0.49)	(0.26)	(0.27)	(0.16)	(0.07)	(0.67)	(0.32)	(0.30)	(0.57)	(0.35)
Transition indicator at *t*-5							0.732***	0.117	0.608***	0.544**
							(0.00)	(0.67)	(0.00)	(0.01)
EU membership										0.503
										(0.24)
Constant	-1.027	-1.794	-4.698	-1.234	-6.022**	-2.183***	1.082	-4.537	-5.712**	-5.213*
	(0.86)	(0.29)	(0.33)	(0.46)	(0.01)	(0.01)	(0.85)	(0.39)	(0.03)	(0.05)
N	103	376	103	376	103	376	95	95	95	95
chi^2	17.6	849.8	181.5	793.4	1816.0	6475.4	25.4	161.6	1822.2	1849.5
p	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ll	-235.3	-916.2	-217.7	-838.5	-182.8	-664.8	-216.0	-204.2	-166.3	-165.6
p_c	0.000	0.158	0.000	0.001	1.000	0.377	0.000	0.000	1.000	1.000

Source: Polity IV, EBRD (for transition indicators), World Bank World Development Indicators.
Notes: The table shows the results of a panel regression involving observations at four different points in time – 1995, 2000, 2005 and 2010. The estimation technique is a multi-level mixed (fixed and random) effects, maximum likelihood model, using Stata's xtmixed command. Errors are clustered at the country level. *Polity* refers to the Polity2 index, *Max5Polity* to the maximum level of the Polity2 index over the preceding five years, and *Min5Polity* to the minimum value of the index over the previous five years. P-values are shown in parentheses. * denotes that p<0.10; ** that p<0.05; and *** that p<0.01. "Natural resource rents" refers to the share of natural resource production in GDP, and "inequality" refers to the Gini coefficient of income inequality. "EU membership" is a variable taking the value 1 if a country is among the 10 new Member States in central and eastern Europe that joined the European Union in 2004 and 2007, and 0 otherwise. *N* denotes the number of observations, p the overall significance level of the regression, chi^2 the chi-squared statistic, ll the log of the likelihood of the comparison model, and p_c the p-value of the comparison model.

NATURAL RESOURCE RENTS

Table 2.2 also shows that, worldwide, a country's level of natural resource rents – defined as the share of GDP that stems from natural resource extraction – is a significant negative predictor of levels of democracy five years ahead. In the transition region the effect is only detectable when the dependent variable is an improvement in the Polity2 score for democracy (Max5Polity). This means that natural resource rents reduce the chances of a country becoming more democratic over the five-year horizon.

The negative impact of natural resource rents on the probability of an improvement in democracy is about twice as large in the transition region as it is in the rest of the world. The regressions do not find that natural resources trigger declines in democracy, reflecting the fact that few countries in the transition region that are rich in natural resources have seen declines in their levels of democracy. Most have stayed at low levels, and some have improved.

Chart 2.4 illustrates the potential role of natural resource rents in impeding democracy. The chart plots per capita GDP in 1992 against democracy in 2012 in oil-producing countries (red rectangles) and non-oil producers (blue rectangles) in the transition region, as well as oil producers (red triangles) and non-oil producers (blue dots) outside the transition region. Countries in the transition region which have high natural resource rents are significantly less democratic than their level of income would otherwise predict.

DO MARKET REFORMS PROMOTE DEMOCRACY?

Based on the foregoing analysis, one would expect market reform to support the process of democratisation indirectly by contributing to rising per capita GDP. The question is whether it has also directly helped democratisation in the transition region. Is there evidence that faster transition to a market economy, particularly in the early years of the transition process, may have helped or protected democratisation by preventing powerful elites from becoming entrenched?

Chapter 1 shows that there is a strong correlation between current levels of market-oriented reforms, measured by the 2013 average of the EBRD's country-level transition indicators,[18] and current levels of democracy (see Chart 1.6). This correlation also works over time. Levels of democracy in 1992 help to predict transition indicators in 2012, and vice versa.

Chart 2.5 plots the average transition indicators in 1992 against the transition countries' Polity2 scores in 2012. The chart suggests an S-shaped relationship between the two concepts, as was apparent in Chart 1.6.[19]

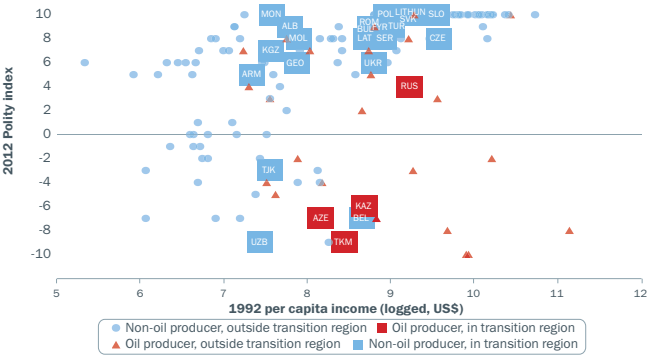
With some exceptions (such as Georgia and Ukraine), very low levels of transition in 1992 are generally associated with very low levels of democracy in 2012. The curve then becomes very steep, indicating that even slightly higher initial levels of transition tend to be predictors of much higher levels of democracy in 2012. After that, the curve levels off, reflecting the fact that even the most advanced economies in the transition region in 1992 cannot have democracy scores that exceed 10 in 2012.

This correlation need not necessarily imply a causal relationship. We could interpret the correlation in at least four ways.

- Cross-country differences in market reform in 1992 could reflect variation in democratisation at the time, which may still be felt in 2012.
- Differences in initial market reform could have been correlated with per capita income at the time, which could have an impact on democratisation.
- Initial market reform and democratisation could reflect the influence of geography or prospective EU membership (see Chapter 3).
- There could be a direct or indirect causal effect running from early transition to democratisation through faster growth and higher per capita income in the intervening period, or through the prevention of the formation of new elites opposed to democracy.

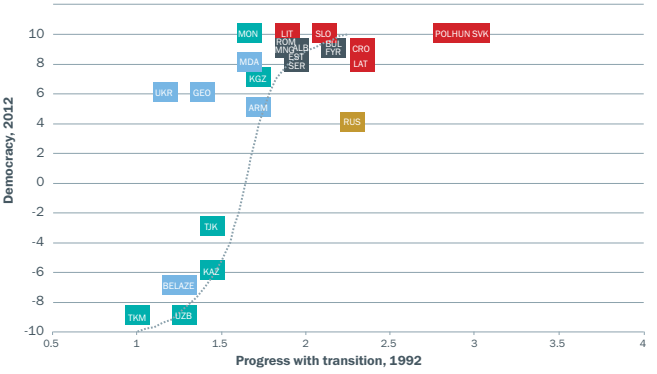
This analysis cannot confirm which of these interpretations is correct, but it suggests that neither the first two nor the "EU effect" can be the whole story. Column 7 of Table 2.2 shows a strong correlation between transition and future democratisation, even when controlling for past levels of democracy and per capita income. Columns 8 and 9 indicate that this is driven mostly by the fact that transition reduces the risk of democratic reversal. Importantly, column 10 shows that this effect persists even when the regression accounts for the impact of EU membership.

Chart 2.4. Oil producing countries tend tend to have lower levels of democracy for their level of development



Source: Polity IV and World Bank World Development Indicators.

Chart 2.5. Economic transition in 1992 is correlated with democracy in 2012



Source: Polity IV and EBRD.
Note: Progress in transition is measured as the average of the EBRD's six country-level transition indicators.

This shows that the effect of transition does not simply capture the fact that prospective EU members were more likely to pursue more vigorous reform and less likely to backslide in their progress towards democracy.

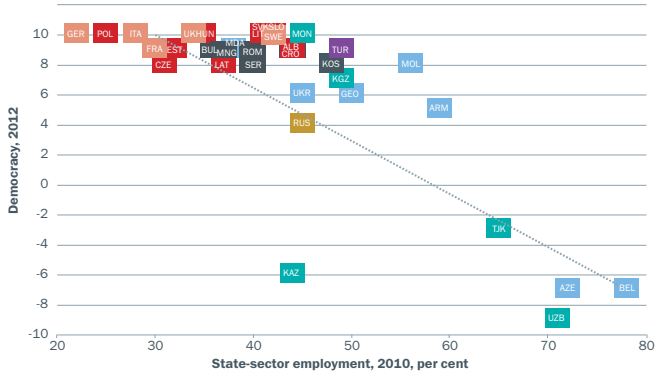
Of course, there might be factors other than the "EU effect" (such as an historical predisposition towards both democracy and market economies in some countries),[20] which could be picked up in the regression. However, the results in Table 2.2 are certainly consistent with the interpretation that early reformers were better able to defend their democratic regimes against backsliding if they also liberalised their economies – perhaps because this prevented the rise of any groups of economic or political forces inside the country that had an interest in holding back democracy.

[18] The EBRD's six country-level transition indicators measure: (i) large-scale privatisation; (ii) small scale privatisation; (iii) governance and enterprise restructuring; (iv) price liberalisation; (v) trade and foreign exchange liberalisation; and (vi) competition policy (see Annex 2.1).

[19] Note that the axes have been reversed relative to Chart 1.6 – that is to say, democracy appears on the vertical axis and transition on the horizontal axis.

[20] See Chapter 3, Box 3.1.

Chart 2.6. Less democratic countries tend to have higher levels of state employment



Source: LiTS (2010) and Polity IV.
Note: State employment is expressed as a percentage of total employment in 2010.

INDIVIDUAL SUPPORT FOR DEMOCRACY

The analysis so far suggests that early market reform and economic development promote democratisation and prevent democratic reversals, while natural resource endowments can be a hindrance. The causal channels through which these factors operate are demand for, or opposition to, democracy by specific groups benefiting from its presence or absence, and the impact of economic development on education (which is, in turn, assumed to influence democratic convictions).

Complementing the previous country-level analysis, this section uses household data from the 2010 round of the EBRD/World Bank Life in Transition Survey (LiTS) (see Chapter 5 of this *Transition Report*) to explore individual attitudes to democracy in the transition region.

The survey collected detailed socio-economic information on respondents and their households, and also asked respondents about their values and beliefs, including support for democracy.[21] Using these data, one can test three hypotheses.

- Although the survey is not designed to cover the views of elites who might have an interest in opposing democratisation, it does include some groups who arguably derive economic benefits from maintaining the status quo in less democratic systems. These include public sector employees, specifically those in state-owned enterprises (SOEs), who may stand to lose from democratisation and market reforms.[22] Is there any evidence that these groups are less supportive of democracy than others in the same country?
- Are well-educated individuals more supportive of democracy than those with lower levels of educational attainment?
- Are individuals who have fared well under democratic systems more supportive of democracy? On the one hand, individuals who have seen their incomes rise may want to maintain a status quo that has benefited them; on the other, rising incomes may lead to greater demand for political participation, even for given levels of formal education.

We have used regression analysis to investigate whether household-level support for democracy is influenced by:

- respondents' employment type (whether public servants, employees of SOEs or employees of private domestic or foreign-owned firms);
- the level of educational attainment (primary, secondary or tertiary);
- perceived progression up the income ladder over the previous four years;
- the age of the respondent.

The analysis is undertaken separately for consolidated democracies and less democratic regimes. The main results are as follows (see also Annex 2.1).

- As expected, employees of SOEs are less likely to support democracy than those who work for private companies, whether in democracies or in less democratic countries. However, the effect is statistically significant only in the latter, where the probability of supporting democracy is about twice as low for employees of SOEs' as it is for private-sector employees.
- In democratic countries respondents with upper secondary and tertiary educations are more likely to support democracy than less educated respondents. Interestingly (and against all expectations), the opposite effect appears to hold in countries with very few constraints on the executive, although these effects are generally not statistically significant. The main exception is that highly educated public servants and employees of SOEs in less democratic regimes are far more likely to support democracy than peers with lower levels of educational attainment.
- Respondents from democratic market-oriented countries are more likely to support democracy if they think they are better off (compared with others) than they were four years previously, even if their relative position on the income ladder has not changed in those four years.[23] This is not the case for less democratic countries.

These results are relevant to the prospects for further democratisation in the transition region. Countries with less democratic regimes – in which employees of SOEs tend to oppose democratisation – also have particularly high levels of state employment (see Chart 2.6). In Azerbaijan, Belarus and Uzbekistan state employment exceeds 70 per cent of total employment, while in Tajikistan it is over 60 per cent. This could slow the democratic transition process in these countries. More encouragingly, education seems to partly offset this effect, in that the more educated the state employee, the less likely he or she will be to oppose democratisation.

[21] Specifically, respondents were asked if they thought that democracy was preferable to any other political system, whether in some circumstances authoritarian government might be preferable, or whether it did not matter what system was in place. See EBRD (2011a) and EBRD (2011b).
[22] This link is explored further in Chapter 3.
[23] The 2010 LiTS asked respondents to evaluate their own position on a ladder ranging from 1 to 10 – where 1 corresponds to the poorest 10 per cent and 10 corresponds to the richest 10 per cent – at the current time, four years previously and four years hence. By taking the difference between these rankings, respondents' relative well-being in 2010 compared to 2006 can be measured, as can respondents' expected future well-being.

CASE STUDIES

The following country case studies illustrate many of the key factors driving democratic development in the transition region. They have been selected to highlight particular questions, such as why certain countries are less democratic than might be expected given their level of economic development.

BELARUS

At the start of the transition process, from 1991 to 1994, Belarus was classified as a democracy or a partial democracy. Following the collapse of the Soviet Union, Belarus put in place political institutions that constrained the executive and, in principle, respected democratic rights, with a strong legislature and no president at first.

However, many of the general prerequisites for a stable democracy were not in place. Belarus had weak political, economic and legal institutions, no sizeable middle class and an underdeveloped civil society. The adoption of a strong presidential system in the 1994 constitution may have further contributed to the country's tilt towards a more state-led development model. Belarus's path to democracy was not secure and it has, in some respects, stagnated or even regressed since then.

Today, however, the country has many of the attributes described in the preceding sections as key determinants for democratic transition and consolidation: the population is highly educated; per capita GDP, at nearly US$ 16,000 in purchasing power parity terms, is among the highest in eastern Europe and Central Asia; along with the neighbouring Baltic states, Belarus has the largest middle class (defined in terms of both education and income) in the former Soviet bloc;[24] petty corruption and inequality are low; the state has a comparatively high administrative capacity; and the country has several democratic neighbours along its northern and western borders.

Given these attributes, it would be reasonable to expect Belarus to have made greater progress with democracy after more than 20 years of transition. Why has socio-economic modernisation not led to better functioning democratic institutions? The following four factors have most likely played a role.

Rentier state

Although Belarus has limited natural resources of its own – primarily potash and wood – its socio-economic model fits the description of a rentier state. However, rather than tapping into its own natural resources, the Belarusian rentier state depends on large transfers from Russia in the form of heavily discounted oil and gas, as well as direct financial assistance. These rents, combined with the state's dominant role in the economy, allow the authorities to redistribute subsidies to the population, maintaining a relatively high standard of living. This, in turn, dampens bottom-up demand for political change.

Social contract

Under the Belarusian social contract, the authorities provide stability, order, modernity and low levels of income inequality. In return, the electorate remains politically quiescent – although there have been incidents of dissent, which the authorities have acted to contain. Media control (see below) reinforces this contract and shapes people's choices.

Nevertheless, independent surveys show that a large proportion of the population – although not a majority – values order over freedom. This is not because people are unfamiliar with the choices available in a free society. Belarus has the highest proportion of Schengen visas per capita of any country in the world, and Belarusians routinely travel to neighbouring Lithuania and Poland (both of which are EU Member States with democratic political orders). However, memories of the instability of the early 1990s remain strong, as does the belief that democratisation and market liberalisation led to dramatic increases in corruption and a decline in public governance in neighbouring Russia and Ukraine.

State control of the media

The third key reason that Belarus is not a well-functioning democracy is the lack of media freedom. The country has few independent newspapers, which have limited circulation figures, and no independent domestic television stations. With limited channels for critical opinion, the national political discourse is constrained. Belarusians do not actively engage in open debate on alternative political and economic policies, and demand for change is therefore muted.

State employment and higher education

The state's role in the economy and higher education can shape voters' preferences. Around 70 per cent of economic activity and employment are in public services or SOEs in Belarus. There is also only limited private provision of higher education, which gives the authorities in state-run higher education establishments significant influence over their students.

This can have two separate – but related – impacts on the continuity of the political system. First, employees of the state or state-owned firms may have a stronger interest in maintaining the status quo and the continued rule of the incumbent authorities. Second, managers in the state sector and university officials may use their authority over their employees and students to encourage loyalty and discipline in political behaviour.[25] These disincentives to political engagement effectively demobilise those segments of the population that in other contexts tend to be the most politically active and reform-minded.

RUSSIA

Russia's transition from communism started with Mikhail Gorbachev's reforms of the mid to late 1980s (glasnost, perestroika and "new thinking"). These gave rise to social

[24] See EBRD (2007).

[25] See Frye et.al. (2013).

movements challenging the Communist Party's monopoly on power, to the first contested elections in 1989, which elected a new legislature with real powers, and to the democratic election of President Boris Yeltsin in 1991.[26] Yeltsin was supported by the "Democratic Russia" party, which included liberals and democrats from the intelligentsia and representatives of the emerging entrepreneurial class.

However, democratic consolidation, which required public support for sustained reforms, did not ensue. Moreover, Democratic Russia's early reforms failed to deliver prosperity and opportunities to most Russians. A small group of politically connected oligarchs reaped the benefits of a flawed privatisation process, which in turn raised questions about the legitimacy of property rights and the rule of law.[27]

Yeltsin's commitment to democratic principles was called into question in 1993, when he used force against his opponents in the legislature and promoted a new constitution which created strong presidential powers, while offering weak checks and balances. By the mid-1990s Russia's political transition had been partially reversed, with the new political system dominated by powerful interest groups. The 1996 presidential elections were flawed and were followed by four more years of instability, lawlessness and economic collapse – including Russia's 1998 debt default.

It was therefore unsurprising that Yeltsin's handpicked successor, Vladimir Putin, was elected in 2000 on a "law and order" agenda. He succeeded in bringing about political stability and economic growth, based on a model of state capitalism, and he enjoyed consistently high public approval ratings. During his first two terms in office Russia's per capita GDP more than doubled, dramatically raising the prosperity of ordinary citizens.

Under the new "sovereign democracy" system, regular elections continued and parliament retained multi-party representation, but political pluralism was effectively curtailed. The state regained its dominant role in politics and the economy through the establishment of a "power vertical", entailing the growth of the United Russia party and powerful state companies.

Although Russia is classified as a democracy by Polity (albeit in the middle of the scale), it faces challenges in strengthening its democratic practices and values. At the same time, the country has grown rapidly over the past 15 years, has made progress in developing market institutions, and has a large middle class. Three structural factors help to explain why Russia's democratisation has not progressed as fast as the country's transition to a market economy: the nature of its middle class, its demographic structure and the role of oil and gas revenues.

State-dominated middle class

Most people assume that the middle class is the key bulwark of pluralistic political systems. However, it has not been a strong driver of democratisation in Russia. Since the mid-2000s the Russian middle class has increasingly comprised bureaucrats and employees of state-owned corporations.[28] This group tends to favour political stability, to support the ruling United Russia party and generally does not prioritise political competition or democratic values. The number of entrepreneurs within the Russian middle class has been declining in recent years, as many Russian small and medium-sized enterprises face a more challenging economic environment.

Socio-demographics

Russia's slow pace of democratisation may also be linked to its population structure, with four demographic categories displaying differing levels of support for democratic reform and responding to differing incentives.[29]

- Large cities with over one million inhabitants – including Moscow and 12 other cities: This category, which represents 21 per cent of the population, has progressed furthest towards acceptance of the market economy and has the largest share of entrepreneurs and members of the middle class. It is the most politically active sector of the population, with the highest levels of education and internet use. Large cities were at the centre of the 2011-12 political protests. However, it is important to note that their populations are ageing and include many employees of state-owned companies and public sector workers.
- Medium-sized industrial towns with between 100,000 and 250,000 inhabitants: This stratum represents 25 per cent of the population and underpins the political status quo. Dominated by the state sector and the Soviet industrial legacy, this category has a much smaller middle class. It is the one most likely to have been negatively affected by structural reforms and would only press for political change if the state subsidies decline. Backing for leftist and nationalist forces is high in these locations.
- Rural populations, small towns and settlements: This category has experienced a significant demographic decline in the last decade. However, it still represents 38 per cent of the population, spread across the entire country, and is especially representative of the central and north-western regions, the Urals, Siberia and the Caucasus. These people display minimal desire or potential for political mobilisation, even in the event of an economic crisis.
- Ethnic republics – mostly in the northern Caucasus and southern Siberia: This segment cuts across all three previous categories. These regions, which have large grey economies and high levels of unemployment and corruption, depend mostly on federal budget transfers. The state has been unable to improve their economic situation, but will continue to subsidise them even in the event of an economic crisis, as they provide the highest level of support for the ruling party, which received over 90 per cent support in many republics in the 2011 elections

[26] See Brown (2001).
[27] Opinion polls indicate that only 8 per cent of Russians are prepared to fully accept the results of the privatisation of the 1990s, while 22 per cent want to fully reconsider the results of that privatisation, regardless of how private companies perform now (www.levada.ru/archive/gosudarstvennye-instituty/vlast-i-biznes/s-kakoi-iz-sleduyushchikh-tochek-zreniya-v-otnoshen).
[28] State-owned enterprises still account for 50 per cent of the Russian economy.
[29] See Zubarevich (2012).

Rentier state

A third barrier to Russia's further democratisation may be the country's dependence on natural resources. This presents opportunities for corruption and reduces incentives for administrative transparency. It also reduces electoral pressure to keep government accountable, because hydrocarbons – rather than tax revenues – represent at least half of the state's budget revenues. This enables the authorities to maintain public support through higher social benefit payments and the subsidisation of state-sector employment – especially in the more dependent demographic categories.

TUNISIA

Although democracy spread widely during the "third wave" from the mid-1970s to the early 1990s, not one Arab country made the transition. Explanations for this exception to the global trend include the natural resource wealth of the Gulf states, a weak civil society, the absence of a democratic culture, the relative lack of democratic neighbours, and the ability of autocratic states to deter people from pressing for change through coercion and selective repressive tactics.[30]

The revolution in Tunisia in December 2010/January 2011 broke the mould. Many of the precursors for a democratic breakthrough were already in place, but they needed a trigger. That trigger was the self-immolation of a young small-business entrepreneur, who was living in an increasingly urbanised environment with virtually no access to the state-controlled social support system. Mohammed Bouazizi was emblematic of trends that had been developing in Tunisian society for years.

Private sector growth

Over the last decade, the private sector's contribution to national investment has increased to around 60 per cent. Over 70 per cent of Tunisians work in this sector. The economy is diversifying, with tourism in gradual decline at 14.3 per cent of GDP in 2011. New service industries are emerging, whose revenue streams do not depend on the state or the patronage of a political elite. Entrepreneurial spirit has seen conspicuous growth – particularly in financial services and, to a lesser extent, in the retail and hospitality industries.

Private sector growth has revitalised Tunisia's civil society. Several business associations sprang up in the years prior to the uprising, which in turn strengthened other representative organisations, such as labour unions. Similar trends were evident in higher education institutions, especially within student unions. With a national literacy rate of 80 per cent and close cultural links to Europe, the Tunisian education system has been one of the best performers in the Arab world for decades.

Relative to many other Arab countries, Tunisia also has a much better gender balance in the educational system, the labour force and civil society, reflecting the statutory protection of women's personal rights since the 1950s.

Impact of demographics

Demographics have been central to the country's socio-political change, given that 40 per cent of the country's population of 10.5 million are under 25 years of age. With internet and mobile phone penetration standing at 36.8 and 91.6 per cent respectively in 2011, young Tunisians are rapidly becoming exposed to the world in a way that no previous generation has ever been. These technologies also provided young activist groups with innovative means of eluding the security apparatus of former President Ben Ali's regime. Although mainstream media faced severe restrictions in the two decades leading up to 2011, the emergence of pan-Arab and international satellite channels that could bypass state control helped to revitalise the Tunisian political environment.

Tunisia's economy grew steadily at an average annual rate of 4.4 per cent between 2005 and 2010. However, widespread corruption and consistent predatory economic behaviour by key centres of power led to a concentration of asset ownership and an acute rise in inequality in terms of personal income, access to jobs and infrastructure – particularly between the urbanised northern coastal zone and the rest of the country. At the same time, acute youth unemployment (which averaged 29 per cent between 2006 and 2010) and internal migration exacerbated social tensions and inequality in the larger cities.

Perhaps most importantly, President Ben Ali increasingly withdrew from decision-making because of ill health prior to 2011. This resulted in conflicts of interest between the security establishment and new aspiring centres of power (made up of Ben Ali's family). The security establishment became increasingly detached from the top echelons of the regime, who were preparing to inherit power from the ailing president.

Several historical and political factors relating to the structure of the state, the solidity of state institutions and the lack of political legitimacy were crucial in creating the momentum for the events of January 2011 and the wave of transformations that the Arab world has undergone over the past two and a half years. Nevertheless, one fundamental contributory factor in Tunisia was the rise of the middle class. This almost doubled in size between 2005 and 2010 and increasingly cemented its influence as a new generation voiced political discontent using new technologies. Against this backdrop, the control mechanisms used by the Ben Ali regime slowly disintegrated.

Tunisia's transition process is far from complete and faces considerable challenges. However, the underlying steady growth of the private sector and the middle class, combined with the empowerment of both civil society and young people, illustrates the wider aspiration in Arab countries for political systems with governmental accountability and respect for political and civil rights. Arab countries and their partners in the international community should focus on ways to address the obstacles blocking their transition to well-functioning markets and democracy.

[30] See Bellin (2004) and Diamond (2010).

CONCLUSION

Debate continues over the most relevant factors leading to sustainable democracy. However, support for modernisation theory – the notion that economic development over time leads to democracy, albeit with some exceptions – has received strong empirical support in recent studies that cover long time series and control for several factors.

This chapter provides some further support for modernisation theory by extending the analysis of the relationship between economic and political factors in development to the transition region. Increasing per capita GDP leads to more democracy – with the exception of oil-exporting countries, which are less democratic than their level of income would otherwise predict. Market reform appears to benefit democratisation, not only through its effect on growth, but also directly – perhaps because it prevents the entrenchment of anti-democratic political and economic elites.

The development of a broad middle class is also strongly correlated with the level of democracy, again with the proviso that in resource-rich states the middle class seems – thus far, at least – to play a less significant role in creating a strong demand for democracy.

It is evident that education is the main driver of support for democratisation from the bottom up, and that state employees in less democratic countries tend to oppose democratisation – although less so if they are highly educated. Since state employees tend to outnumber their private sector counterparts in such countries, this may dampen electoral demand for more pluralistic political systems.

These results are not surprising, as they generally match worldwide trends and the main strands of the theoretical literature. However, they do have implications for the development of more effective democratic governance in the transition region.

- Continued support for market-based reform and private sector-led growth is likely, over time, to lead to higher levels of democracy in less democratic countries and to prevent erosion of democratic systems in established democracies.
- Interventions that support the growth of the middle class and a strong civil society will reinforce demand for democratic change.
- Investment in private-sector companies and generation of private-sector employment may create a workforce with a stronger focus on democratic governance.
- In countries that are rich in natural resources the promotion of economic diversification and specifically support for the private sector could foster an electorate with higher expectations in terms of public sector accountability.
- Individual countries will themselves ultimately decide on their preferred form of political governance. The international development community will have to exercise patience and persistence in supporting long-term transition objectives and the underlying institutions that are most conducive to achieving them.

Box 2.1
The role of the middle class

What is the role of the middle class in promoting democratic transition? In much of the literature on modernisation, starting with Lipset (1959), there is a strong belief that the middle class – once it reaches a certain size – is a bulwark of both open markets and democracy.[31]

Middle class people, defined in terms of their income, education and profession, are thought more likely to support fundamental market values, such as the protection of property rights and the even-handed application of laws governing regulation of the economy. They are also assumed to derive from their income and social position a growing preference for democratic government and competitive elections, a limited and accountable state, and guarantees of universal human rights and freedoms. In addition, those with sufficient income and social status should have the resources to organise and engage in political activity to promote their collective interests.

Is there any evidence for the hypothesis that economic development leads to the emergence of a middle class, which in turn has the socio-economic influence and organisational capacity necessary to demand increased accountability from its leaders?

Using data on household income and expenditure compiled by researchers at the World Bank,[32] we have undertaken a regression analysis relating the level of democratisation (measured, as previously, by the Polity2 variable) to the size of the middle class, defined as the percentage of individuals that have an income of between US$ 10 and US$ 50 per day. As this is an income variable and therefore correlated with per capita GDP, the model omits the latter. The same regression technique is used as in Table 2.2.

As Table 2.1.1 shows, the size of the middle class is very strongly correlated with the lagged level of democracy in both non-transition and transition countries. However, the middle class becomes insignificant in the transition region when inequality is also taken into account, while its role in the rest of the world becomes even more important when inequality is included.

Table 2.1.1
Role of the middle class in democracy, 1989-2012

	Countries outside transition region		Countries in transition region	
Dependent variable: Polity	**(1)**	**(2)**	**(3)**	**(4)**
Polity at *t*-5	0.753***	0.716***	0.776***	0.760***
Size of middle class at *t*-5	2.064**	3.019***	2.000**	1.644
Natural resource rents at *t*-5	-0.019	-0.017	-0.046***	-0.051***
Inequality at *t*-5		0.025		-0.014
Observations	243	231	57	56
Countries	92	90	27	27
Wald chi²	835.16	650.41	392.53	380.11
Prob>chi²	0.000	0.000	0.000	0.000

Source: Loayza et al. (2012) for the size of the middle class; sources in Table 2.2 for remaining variables.
Notes: See notes on Table 2.2 for details of the methodology.

[31] See Lipset (1959), Moore (1966), Huber et al. (1993), Barro (1999), Birdsall et al. (2000), Easterly (2001) and Loayza et al. (2012).
[32] See Loayza et al. (2012).

Annex 2.1

REGRESSION ANALYSIS OF PREFERENCES FOR DEMOCRACY

Table A.2.1.1
Support for democracy by regime type[32]

Dependent variable: Support for democracy	Established democracies	Less democratic regimes
Baseline category: Household moved down the income ladder between 2006 and 2010		
Household moved up the income ladder between 2006 and 2010	1.319**	1.137
	(0.01)	(0.64)
Household's income ladder position was unchanged	1.142*	1.070
	(0.10)	(0.42)
Baseline category: Private sector employee		
Employee of state-owned enterprise	0.555	0.667**
	(0.13)	(0.03)
Public service employment	0.847	0.734
	(0.88)	(0.17)
Baseline category: No degree/no education		
Primary education	0.895	
	(0.84)	
Lower secondary education	0.892	0.283
	(0.83)	(0.25)
Upper secondary education	1.270	0.252
	(0.65)	(0.20)
Post-secondary non-tertiary education	1.365	0.208*
	(0.54)	(0.07)
Bachelor's degree	1.695	0.229
	(0.33)	(0.19)
Master's degree or PhD	2.354	0.372
	(0.11)	(0.42)
Employee of state-owned enterprise with		
Primary education	1.799	
	(0.20)	
Lower secondary education	2.574**	1.016
	(0.03)	(0.98)
Upper secondary education	2.046	1.972***
	(0.10)	(0.01)
Post-secondary non-tertiary education	1.389	1.525
	(0.45)	(0.37)
Bachelor's degree	2.294**	1.579
	(0.02)	(0.30)
Master's degree or PhD	1.000	1.000
	(.)	(.)
Baseline category: Age 18-24		
Age: 25-34	0.960	0.861
	(0.72)	(0.41)
Age: 35-44	0.904	0.807
	(0.44)	(0.11)
Age: 45-54	0.954	0.843
	(0.70)	(0.15)
Age: 55-64	0.958	0.624*
	(0.71)	(0.06)
Age: 65+	1.365*	0.313**
	(0.10)	(0.04)
Male	1.164**	1.271**
	(0.02)	(0.05)
Baseline	0.670	3.956
	(0.46)	(0.23)
N	7571	2698

Source: Source: LiTS (2010).
Notes: The table reports the result of a logit regression, in which the baseline category is an 18 to 24-year-old woman working in the private sector with no education. The coefficients are exponentiated and reported as odds ratios. An odds ratio greater than 1 means that a variable or group is more favourable to democracy than the baseline category, while a coefficient of less than 1 means that support for democracy is lower than in the baseline category. P-values are reported in parentheses; * = p<0.10; ** = p<0.05; *** = p<0.01.

[32] For the purposes of this analysis, "established democracies" are countries with a score of 5 or more on the Polity2 index in 2012, and "less democratic regimes" are those with a score of less than 5.

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CHAPTER 3

Economic institutions

How can countries improve their economic institutions? Cross-country analysis shows that institutional quality depends not only on a country's level of democracy, but also on many other factors. Some of these are fixed or difficult to change, such as history, geography, natural resource endowments or eligibility for EU accession. But there is potential to support improvements to institutions through international integration, political reform and greater transparency, particularly at the local level.

FACTS AT A GLANCE

ALMOST

25

years after the start of the transition process, economic institutions in the transition region are, on average, still weaker than in other countries with comparable levels of income.

0.5

The correlation between measures of democracy and regulatory quality in a global sample of countries.

THE

3

-year period prior to accession saw a peak in terms of institutional improvements in EU accession countries.

OVER

33%

of Kyrgyz SMEs say that unofficial payments are required in everyday business.

Building better economic institutions

Economic and political institutions play a key role in defining a country's long-term growth potential. Countries with a stronger institutional environment – effective rule of law, a good business climate, more secure property rights and market-friendly social norms – are better positioned to attract investment, to participate in trade and to utilise physical and human capital more efficiently.

And yet, as discussed in Chapter 1, the pace of economic reform in countries in the transition region has slowed. Is this because, on average, their economic institutions have caught up with those elsewhere? Or is the slow-down linked to limitations on political transition considered in Chapter 2? What other factors can explain the significant institutional differences seen across these countries which shared a broadly similar starting point? Do better economic institutions require more democratic political institutions? Or could countries improve them even in the absence of further democratisation?

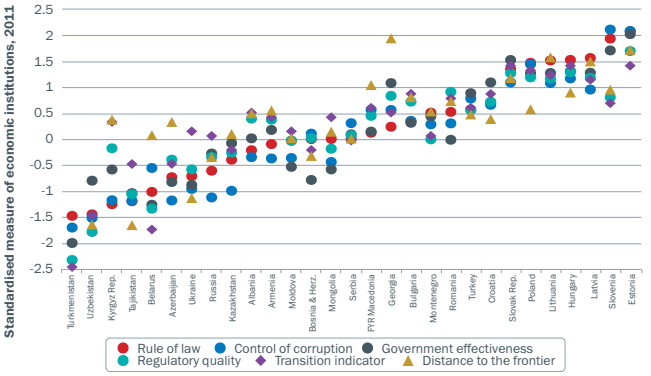
This chapter addresses these questions, drawing on both cross-country analysis and case studies from a number of countries in the transition region.

Economic institutions are measured using a range of indicators, such as the World Bank's Worldwide Governance Indicators (WGIs) for government effectiveness, regulatory quality, the rule of law and control of corruption (as well as a simple average of all four). These indicators are based on data sources that include expert judgement and surveys of households and businesses. They therefore reflect the quality of institutions as perceived by users and professional opinion, rather than just the laws on the books. The WGIs are available annually from 1996 to 2011 for a large number of countries. They typically range from about -2.5 to +2.5, with higher values corresponding to better institutions.[1]

The analysis also uses the EBRD's transition indicators. These look at the period since 1989 and reflect cumulative reforms, as assessed by EBRD economists, in the areas of privatisation, liberalisation of prices, trade and exchange rates, enterprise restructuring, corporate governance and competition policy (see the methodological notes in the online version of this *Transition Report*). Hence, they are primarily a measure of structural policies – economic liberalisation and privatisation – which are typically undertaken in the early stages of transition. Only two indicators – governance and enterprise restructuring, and competition policy – have an institutional flavour.

Lastly, the analysis uses the World Bank *Doing Business* reports, as well as two surveys conducted by the EBRD and the World Bank: the Business Environment and Enterprise Performance Survey (BEEPS) and the *Life in Transition Survey* (LiTS). The *Doing Business* reports, in particular, complement both the WGIs and the EBRD transition indicators by focusing on practical measures of the business environment – such as the number of days needed to obtain approval for a start-up or the cost of opening a bank account. An economy's performance is summed up by the "distance to the frontier" – that is to say, the difference between it and the best performer in each category.[2] The distance to the frontier is indicated on a scale of 0 to 100, where higher scores correspond to a better business environment.

Chart 3.1. Measures of economic institutions are correlated across countries



Source: World Bank and EBRD.
Note: Transition indicators and the distance to the frontier measures have been rescaled to express them in the same units as the Worldwide Governance Indicators (WGIs). Countries are shown in ascending order of their "rule of law" score.

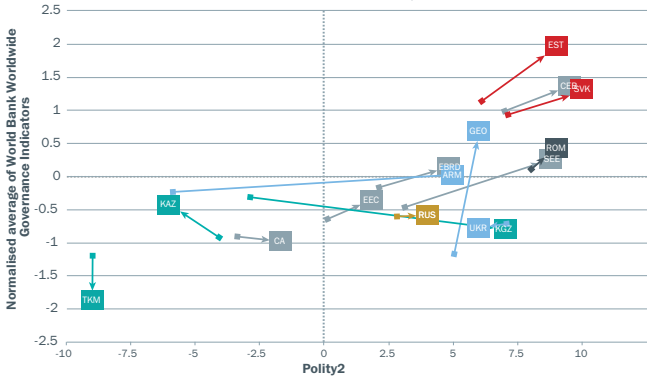
One aspect that is largely absent from these datasets is the quality of private economic institutions, such as corporate governance in specific sectors. This arises from the interplay between the state – through its legal frameworks and their enforcement – and company practices. The quality of corporate governance is rarely measured, although one example, focusing on the corporate governance of banks in the transition region, is considered in Annex 3.1.

Chart 3.1 plots the main measures – the four WGIs, the average transition indicator and the distance to the frontier – for countries in the transition region (after rescaling to express all indicators in the same units as the WGIs). The measures are correlated across countries, but also reveal some interesting differences.

With some exceptions (such as Belarus and Turkmenistan), the countries on the left-hand side of the chart – those with scores for the rule of law that are below the median rule – tend to have transition indicator scores that are higher than their WGI ratings. This indicates that it is fairly easy, even for countries with weak economic institutions, to undertake first-generation market reforms that move them up the transition indicator scale.

[1] See Kaufmann et al. (2009) and the methodology and sources described at http://info.worldbank.org/governance/wgi/index.aspx#doc-sources.
[2] For example, New Zealand represents the frontier when it comes to starting a business, while the Hong Kong Special Administrative Region represents the frontier for dealing with construction permits. For each country, the distances to the best performers in each category are aggregated to form a composite measure of the distance to best practices and rescaled. See World Bank (2013) for details.

Chart 3.2. In the transition region, economic and political institutions have tended to move in the same direction, but not in all countries



Source: World Bank and Polity IV.
Note: Arrows show changes between 1996 and 2011. Regional averages are shown in grey and labelled with the following acronyms: transition region (EBRD); central Europe and the Baltic states (CEB); south-eastern Europe (SEE); eastern Europe and the Caucasus (EEC); and Central Asia (CA).

Table 3.1
Determinants of economic institutions in a worldwide sample

Dependent variable	Average of four Worldwide Governance Indicators				Distance to the frontier	
	Panel OLS	GMM	Panel OLS	Panel OLS	OLS	OLS
Polity2	0.025***	0.023*	0.034***	0.030**	0.166	0.275
	(0.007)	*(0.013)*	*(0.007)*	*(0.011)*	*(0.130)*	*(0.184)*
Natural resources	-0.004**	-0.009***	-0.004**	-0.003	-0.054**	-0.060**
	(0.002)	*(0.002)*	*(0.002)*	*(0.002)*	*(0.023)*	*(0.024)*
Low Polity*Natural resources				-0.002		0.136**
				(0.002)		*(0.053)*
Trade openness	0.205***	0.213	0.183**	0.142***	2.564**	2.564**
	(0.054)	*(0.129)*	*(0.087)*	*(0.049)*	*(1.072)*	*(1.137)*
Low Polity*Trade openness				0.178		-3.221
				(0.149)		*(5.417)*
Financial openness	0.124***	0.129**	0.185***	0.095***	1.385**	1.529**
	(0.022)	*(0.056)*	*(0.035)*	*(0.026)*	*(0.580)*	*(0.612)*
Low Polity*Financial openness				0.119**		-3.121
				(0.058)		*(2.709)*
Income	0.380***	0.417***		0.393***	5.353***	5.054***
	(0.055)	*(0.065)*		*(0.049)*	*(1.125)*	*(1.197)*
Ethnic fractionalisation	-0.197		-0.464**	-0.247	1.455	1.878
	(0.165)		*(0.221)*	*(0.187)*	*(3.465)*	*(3.724)*
Low Polity*Ethnic fractionalisation				0.276		-16.173*
				(0.210)		*(9.360)*
Distance from the equator	0.007		0.013**	0.009*	0.082	0.062
	(0.005)		(0.006)	(0.005)	(0.087)	(0.091)
Landlocked	-0.070		-0.197**	-0.026	-1.679	-2.444
	(0.083)		*(0.094)*	*(0.080)*	*(1.607)*	*(1.737)*
Ruggedness	0.009		-0.016	0.009	0.676	0.751
	(0.030)		(0.039)	(0.029)	(0.641)	(0.656)
State antiquity index	0.003**		0.003**	0.003**	0.036	0.044
	(0.001)		*(0.001)*	*(0.001)*	*(0.028)*	*(0.030)*
Transition country indicator	-0.256		-0.549*	-0.304	-2.875	-2.476
	(0.236)		(0.300)	(0.236)	(3.569)	(3.730)
Observations	601	603	601	488	120	120
Countries	122	122	122	122	120	120
R-squared	0.836		0.769	0.858	0.728	0.734
Adjusted R-squared	0.830		0.761	0.851	0.683	0.677
F-value	56.028	32.553	49.176	54.014	26.810	24.463

Source: See Annex 3.2.
Note: The table shows coefficient estimates from panel regressions, based on three-year averages. Regressions include region and time fixed effects (not reported). Standard errors are clustered by country and shown in parentheses. Polity2, trade openness, financial openness, income and the interaction terms are lagged by one period in the panel OLS regressions (columns 1 and 3). Column 2 is estimated using the GMM system (Blundell and Bond, 1998), with ethnic fractionalisation, the distance from the equator, a landlocked dummy, ruggedness and the state antiquity index included as additional instruments. The cross-sectional regressions for the distance to the frontier are based on the latest values and include regional fixed effects. "Low Polity" denotes a Polity score below -5. *p<=0.10; **p<=0.05; *** p<=0.01.

Towards the other end of the chart, Slovenia has very good economic institutions according to its WGI scores. However, its transition indicator score is less impressive. This reflects its continued relatively high level of state ownership and involvement in the economy.

The chart also shows that the correlation between the distance to the frontier and the WGIs or transition indicators is lower than that between the WGIs and the transition indicators.[3] This reflects the fact that the distance to the frontier can, to some extent, be lowered by rolling back and simplifying business regulations, although this may not improve other aspects of economic institutions (such as the rule of law). Several countries – such as Azerbaijan, Belarus and Georgia – undertook such efforts towards the end of the last decade.

FORCES SHAPING ECONOMIC INSTITUTIONS

DEMOCRACY

Chapters 1 and 2 showed that democratic political institutions – as measured by the Polity2 indicator, which ranges from -10 to +10 – are correlated with the transition indicators. Similar correlations apply when the WGIs or the distance to the frontier are used to measure economic institutions – from about 0.34 in the case of the distance to the frontier up to 0.51 in the case of the indicator of regulatory quality, based on 2011 data for a large cross-section of countries.

There are several ways to interpret these correlations, which are not mutually exclusive. Consistent with the findings of Chapter 2, better economic institutions might foster economic development – and thus, over time, democracy. Alternatively (or in addition), the causality might run in the other direction. Political competition and the checks and balances that are characteristic of democracy might restrict the government's ability to engage in expropriation and rent-seeking and lead to more business-friendly rules and regulations.[4]

Democratic regimes are also more likely to have an independent judiciary and regulatory bodies that serve a particular mandate, rather than the interests of ruling elites. The fact that the correlations between democracy and economic institutions are lower when the latter are measured using the distance to the frontier may reflect the fact that even less democratic countries can successfully improve aspects of the business environment when there is a political will to do so.

Chart 3.2 confirms that improvements in political and economic institutions have often gone hand in hand. With the exception of Central Asia, all transition regions (shown in grey) have moved upwards and rightwards on the chart, which shows the Polity2 measure on the horizontal axis and the average WGI on the vertical axis. That said, there are countries in which the development of economic institutions has far outpaced democratisation (Georgia), or vice versa (Armenia). There are also countries that have improved their political institutions, but not their economic ones (for instance, the Kyrgyz Republic). The opposite – improvements in economic institutions, but a decline in the level of democracy – appears to have happened in Kazakhstan.

The country experiences shown in Chart 3.2, as well as the fact that the correlations between democracy and economic institutions rarely exceed 0.5, suggest that there must be other factors shaping the quality of economic institutions. Understanding the potential influence of these other factors – and confirming that democracy remains a statistically significant influence on economic institutions even in their presence – requires a multivariate analysis.

Tables 3.1 and 3.2 contain the results of such analysis for a worldwide sample of 121 countries and 25 countries in the transition region respectively. Each column represents the result of one regression, which relates a measure of economic institutions to a set of potential explanatory factors. These factors include the Polity2 democracy measure, as well as measures of trade and financial openness, resource endowments, ethnic diversity, historical and geographical variables and (in some columns) per capita income. Table 3.1 focuses on either average WGIs (columns 1, 2 and 3) or the distance to the frontier (columns 4, 5 and 6), while Table 3.2 considers WGIs and transition indicators.[5]

One important concern in these regressions is to ensure that the coefficient for the Polity2 variable can be interpreted as the impact of democracy on economic institutions, rather than the other way around. The regressions aim to ensure this in two ways.

- First, most specifications include per capita income as a proxy for economic development.[6] Hence, the coefficient for the Polity2 variable expresses the correlation between democracy and economic institutions for countries at comparable stages of development. This means that this correlation cannot be interpreted as reflecting the impact of economic institutions on democracy working through higher income.
- Second, the possibility of feedback from economic institutions to both democracy and per capita income is minimised through the regression techniques used. In the panel regressions, Polity2 (and all other time-varying variables) always enters with a one-period lag – that is to say, the average for the preceding three-year period is used. As an additional check, an alternative technique is used ("GMM"; see second column of Table 3.1) that effectively estimates the relationship in terms of changes, rather than the levels of the main variables, and rules out contemporaneous feedback.

The tables confirm that democracy appears to lead to better economic institutions, and that the effect is generally statistically significant in both the world and transition region samples.

When the distance to the frontier is used, the relationship loses its statistical significance, perhaps because this

[3] The correlation between the average transition indicators and the average of the four WGIs shown in Chart 3.1 is 0.88. The correlation between the latter and the distance to the frontier is 0.80; and the correlation between the transition indicators and the distance to the frontier is 0.70.

[4] See Olson (2000), North (1990) and North and Weingast (1989).

[5] Because the WGIs and the distance to the frontier are available for different time periods (the latter only having been available since 2006), the regressions refer to different time periods. Furthermore, the short period of availability of the distance to the frontier implies that it can only be analysed using a cross-sectional regression. Because of the low number of transition countries, the distance to the frontier can only be analysed in the world sample.

[6] To confirm the robustness of the results, each set of regressions contains one specification in which per capita income is not included.

Table 3.2
Determinants of economic institutions in a transition country sample

Dependent variable	Average of four Worldwide Governance Indicators			Average of six transition indicators		
	Panel OLS			Panel OLS		
Polity2	0.022*	0.019	0.032***	0.023*	0.023*	0.012
	(0.011)	*(0.013)*	*(0.010)*	*(0.013)*	*(0.013)*	*(0.009)*
Natural resources	-0.007**	-0.008***	-0.006**	-0.007**	-0.008***	-0.007***
	(0.003)	*(0.003)*	*(0.002)*	*(0.003)*	*(0.003)*	*(0.002)*
Low Polity*Natural resources			0.001			0.003
			(0.002)			*(0.002)*
Trade openness	0.282***	0.296***	0.269***	0.125**	0.128**	0.059
	(0.077)	*(0.093)*	*(0.069)*	*(0.055)*	*(0.053)*	*(0.039)*
Low Polity*Trade openness			0.233			0.616*
			(0.250)			*(0.341)*
Financial openness	0.109***	0.099**	0.106***	0.077**	0.076**	0.070**
	(0.034)	*(0.041)*	*(0.035)*	*(0.037)*	*(0.037)*	*(0.033)*
Low Polity*Financial openness			0.167			0.240
			(0.119)			*(0.151)*
Income	0.269***		0.283***	0.042		0.130*
	(0.092)		*(0.087)*	*(0.089)*		*(0.070)*
Ethnic fractionalisation	-0.295	-0.577	-0.264	0.230	0.182	0.343
	(0.348)	*(0.354)*	*(0.358)*	*(0.468)*	*(0.400)*	*(0.382)*
Low Polity*Ethnic fractionalisation			0.990*			-0.502
			(0.499)			*(0.460)*
Distance from the equator	0.010	0.015	0.008	0.010	0.011	-0.000
	(0.014)	*(0.015)*	*(0.015)*	*(0.019)*	*(0.019)*	*(0.016)*
Landlocked	0.136	0.120	0.105	0.320***	0.316***	0.282***
	(0.113)	*(0.148)*	*(0.101)*	*(0.113)*	*(0.112)*	*(0.100)*
Ruggedness	0.051	0.018	0.061	0.090**	0.085*	0.028
	(0.040)	*(0.048)*	*(0.047)*	*(0.041)*	*(0.042)*	*(0.038)*
State antiquity index	0.003	0.004	0.002	0.010***	0.010***	0.007**
	(0.002)	*(0.003)*	*(0.002)*	*(0.003)*	*(0.003)*	*(0.003)*
EU dummy	0.262**	0.403***	0.273**	0.195*	0.217**	0.196**
	(0.107)	*(0.120)*	*(0.108)*	*(0.098)*	*(0.092)*	*(0.084)*
Observations	122	122	122	118	118	118
Countries	25	25	25	25	25	25
R-squared	0.834	0.804	0.847	0.788	0.787	0.837
Adjusted R-squared	0.810	0.779	0.818	0.757	0.758	0.806
F-value	77.529	61.433	55.313	17.077	19.716	68.257

Source: See Annex 3.2.
Note: The table shows coefficient estimates from panel regressions, based on three-year averages. Regressions include time fixed effects (not reported). Standard errors are clustered by country and shown in parentheses. Polity2, trade openness, financial openness, income and the interaction terms are lagged by one period. Standard errors are clustered by country. "Low Polity" denotes a Polity score below -5. * p<=0.10; **p<=0.05; *** p<=0.01.

institutional measure only covers a six-year period. Moreover, the distance to the frontier index captures a narrower aspect of economic institutions, which is less closely related to democracy than broad WGI measures such as government effectiveness or the rule of law.

To interpret the size of the effect that democracy has on economic institutions, let us consider some countries with low scores on the Polity2 scale, such as Turkmenistan and Uzbekistan (rated -9 on the Polity2 scale), and others with very high scores, such as Poland, Lithuania, the Slovak Republic and Slovenia (all rated 10). The average WGI for the latter group is about 1.4, but it is -1.6 for the former – a three-point difference. The coefficient in the panel regressions (about 0.03) implies that the 19 point difference on the Polity2 scale explains almost 0.60 point – about 20 per cent – of the difference in quality between the economic institutions in the two sets of countries.

Importantly, this merely captures the direct effect of democracy on economic institutions, keeping everything else constant. In particular, it does not reflect any effects through per capita income levels (with democratic institutions likely to lead to faster growth) or trade and financial openness, which are captured separately in the regression.

GEOGRAPHY AND HISTORY

To what extent might the quality of institutions be predetermined by geography or history? Tables 3.1 and 3.2 include a number of geographical variables that have been discussed in the literature on economic growth. Countries that are further away from the equator may have stronger economic institutions (for given levels of democracy) because temperate climates are more conducive to economic specialisation, the development of trade and industrial growth. Characteristics of the terrain – captured by a measure of the ruggedness of the territory – and access to the sea may also matter.[7] Being landlocked or having more difficult terrain increases the cost of trade and investment, but may, at the same time, encourage the development of institutions to compensate for this.

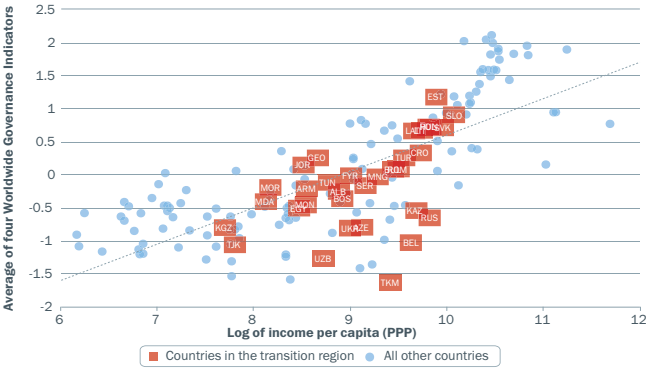
For the most part, these variables do not appear to be statistically significant in the regressions. Neither is the average distance to other countries weighted by their GDPs (a measure of a country's remoteness).

A country's history is a more important factor. Several recent studies indicate that economic institutions exhibit a strong degree of path dependence that may stretch back centuries[8] – in other words, colonial powers and empires can have a long-lasting impact on societies that come under their rule. Box 3.1 shows that there are large differences in terms of the average level of EBRD transition indicators between countries that used to be under the control of the Russian, Habsburg, Prussian and Ottoman empires. In particular, imperial history appears to influence the impact that natural resources have on transition trajectories. These effects diminish over time, but only slowly.

One significant historical factor is the length of time that a country has been an independent state. In Tables 3.1 and 3.2 this is captured by a "state antiquity index".[9] This appears to have an impact on the WGI average, and even more so on the transition indicators (see Table 3.2). All else being equal, the transition performance of "old" countries, such as Poland and Russia, appears to have been better than that of countries with shorter histories as independent states, which includes most Central Asian countries, the Baltic states and the Slovak Republic.

The influence of history is also visible in the fact that, more than 20 years after the start of the transition process, countries in the transition region still appear to have weaker economic institutions, on average, than other nations. Chart 3.3 shows that the quality of economic institutions in countries in the transition region tends to be below the levels observed in other countries with comparable levels of per capita income. However, as Table 3.1 shows, this effect is not generally statistically significant,

Chart 3.3. Economic institutions tend to be weaker in the transition region for comparable levels of per capita income



Source: World Bank and IMF.
Note: The vertical axis shows the average of the four WGIs related to economic institutions. The trend line is for all countries worldwide.

suggesting that the influence of the communist period on today's institutions in these countries mostly occurs through – rather than in addition to – its effect on other variables that are independently accounted for in the regressions. Comparing the outliers on both sides of the trend line in Chart 3.3 suggests that it is mainly some eastern European and Central Asian countries with weaker political institutions that are driving this effect.

FRACTIONALISATION OF SOCIETY

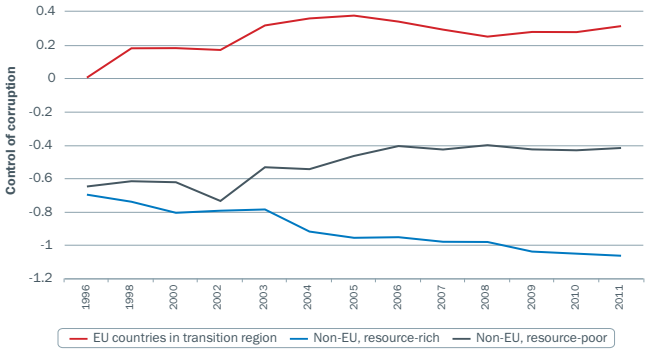
Another country characteristic that can affect the success of reforms is the extent to which a society divides along ethnic lines or in other ways.[10] In divided societies different groups may struggle to agree on the direction of reforms, or they may have little trust in each other or in government institutions more generally.[11] One commonly used indicator of such divisions is the index of ethnic fractionalisation.[12] This shows the probability of two randomly chosen individuals in a country belonging to different ethnic groups.

Tables 3.1 and 3.2 investigate whether ethnic fractionalisation has had an adverse impact on reforms and economic institutions for given levels of democracy, and whether this effect is blunted in the least democratic systems, which may be able to repress ethnic tensions (see the interaction term between a Polity2 score of below -5 and fractionalisation). They do not find strong support for either of these effects.

At the same time, anecdotal evidence suggests that ethnic divisions may have played an important role in some

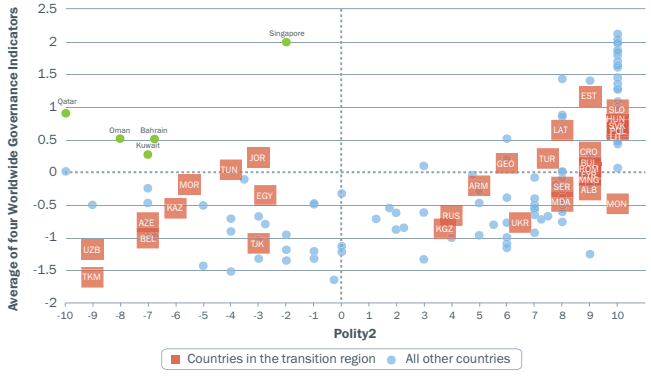
[7] See Nunn and Puga (2012).
[8] See Grosjean (2011a, 2011b) and Grosfeld and Zhuravskaya (2013), as well as the additional references in Box 3.1.
[9] See Chanda and Putterman (2007).
[10] See Alesina et al. (1999).
[11] See Putnam et al. (1994).
[12] See Wacziarg et al. (2003).

Chart 3.4. Corruption has become more widespread in resource-rich countries



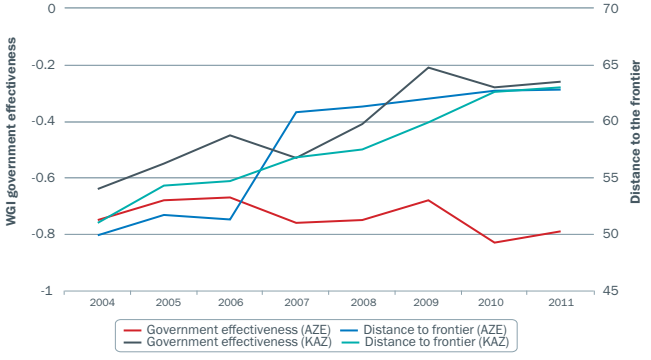
Source: World Bank.
Note: Countries are classified as "resource-rich" if natural resource rents amount to 10 per cent of GDP or more, based on World Bank data. In this chart the EU countries in the transition region are: Bulgaria, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia.

Chart 3.5. Democracy is associated with better economic institutions, but there are significant outliers among less democratic countries



Source: World Bank and Polity IV.
Note: The chart plots the average of the four Worldwide Governance Indicators (WGIs) (rule of law, regulatory quality, control of corruption and government effectiveness) for 2011 against 2011 Polity2 scores.

Chart 3.6. Azerbaijan and Kazakhstan have improved some economic institutions



Source: World Bank.
Note: The WGI government effectiveness indicator is shown on the left-hand axis; the *Doing Business* measure of the distance to the frontier is shown on the right-hand axis.

countries, such as the Kyrgyz Republic, where ethnic fractionalisation may have cut both ways. On the one hand, it may have contributed to the development of democratic institutions; but on the other hand, it may have reduced their ability to implement effective reforms (see Box 3.2).

NATURAL RESOURCE ENDOWMENTS

As shown in Chapter 2, an abundance of natural resources – reflected in high natural resource rents (revenues net of extraction costs) as a share of GDP, or a large share of commodities in total exports – can lead to a weakening of democratic institutions.[13] One interpretation for this is that stronger political institutions impose checks and balances on the ruling elites and make it more difficult to appropriate natural resource rents. These elites will therefore be particularly opposed to democratisation and political reform.

For the same reasons, an abundance of natural resources would make improvements in economic institutions, such as the rule of law or control of corruption, less likely.[14] Chart 3.4 shows that resource-rich and resource-poor countries in the transition region (excluding the future EU members) had similar average scores for control of corruption in the mid-1990s. However, these levels have been steadily diverging, particularly during the period of high commodity prices from 2003 onwards.

Tables 3.1 and 3.2 confirm that an abundance of resources has a negative effect on economic institutions over and above its effect through weaker political institutions (which itself constrains economic reform). This effect is statistically significant regardless of which measure of economic institutions is used, in both the world and transition samples.

At the same time, there are important differences between the experiences of individual countries. Some Gulf countries, for example, have much stronger economic institutions than their political institutions would predict (see Chart 3.5). In the transition region this also seems to be true for Azerbaijan and Kazakhstan for some measures, such as the distance to the frontier measures in the World Bank *Doing Business* reports. Government effectiveness has also been improving in Kazakhstan (see Chart 3.6).

These improvements could reflect the use of natural resource wealth to strengthen the implementation capacity of governments, pursue basic business environment reforms and reduce petty corruption by raising the pay of officials, regulators and inspectors. In addition, countries with natural resource wealth may have an incentive to engage in such policies in order to attract the foreign investment and expertise needed for the exploitation of natural resources.[15] Similarly, the presence of multinational oil or mining companies can facilitate the transfer of skills and the adoption of international business practices, which may, over time, lead to improvements in some economic institutions.

Table 3.1 (last column) shows that, in a subset of countries with low Polity scores (less than -5), an abundance of natural

[13] See also EBRD (2009) and Boix (2003).
[14] See Karl (1997).
[15] See Nikolova (2012)

resources is positively and significantly associated with the distance to the frontier.[16] However, for broader measures of economic institutions – such as control of corruption or the rule of law, which are reflected in the average WGI score – the effect of natural resources generally remains negative, even for countries with low Polity2 scores. This is also true for regressions involving the transition indicators (see last column of Table 3.2).

ECONOMIC OPENNESS AND THE EU "ANCHOR"

Openness in terms of trade flows (measured by the trade intensity index, which compares a country's share of world trade with its share of world output)[17] and finance (measured by the Chinn-Ito index of capital account openness) is significantly associated with better economic institutions in both the world and transition region samples (see Tables 3.1 and 3.2).[18]

The regression results suggest that a one standard deviation increase in the index of trade openness is associated with an improvement of around one-eighth of a standard deviation in the average of the four WGIs. The effect of financial openness is larger: a one standard deviation change in the Chinn-Ito index is associated with an improvement equivalent to 40 per cent of a standard deviation in the quality of institutions (roughly equivalent to the difference between the average WGIs of Morocco and those of Georgia). Interestingly, these effects appear to be particularly strong in countries with low Polity2 scores.

Not surprisingly, the influence of EU membership on economic institutions is positive and statistically significant in all regressions involving the transition region sample. EU membership is captured by a variable that takes the value 1 as of two years before EU accession, as pre-accession reforms usually peak at this time (the following section investigates this effect in the context of case studies.) Note that the effect occurs over and above the influence of democracy, economic openness and per capita income, all of which are correlated with (and, to some extent, induced by) EU membership. Hence, the regressions indicate that, given two equally open, democratic and wealthy countries, where one is in the European Union and the other is not, the EU member would be expected to have better economic institutions.

POLITICAL SYSTEMS IN MULTI-PARTY DEMOCRACIES

Chart 3.5 shows that the quality of economic institutions varies widely among countries with Polity2 scores of between 8 and 10. In addition to the reasons considered so far, another possible explanation might be differences in the design of democratic political systems.

One relevant factor is the electoral system, which determines how votes translate into seats in parliament. This affects both the distribution of power within a government and the extent to which politicians are accountable to voters. In the absence of clear evidence, it is impossible to say which electoral system is most conducive to sustained economic reform. While majoritarian democracies usually lead to the emergence of single-party governments, proportional representation is more often associated with coalition cabinets, as it gives more weight to minority parties and independent candidates. Multi-party cabinets may be more representative, but they may also be more unstable, owing to internal ideological divisions. Similarly, countries with proportional systems may have higher spending and budget deficits.[19]

Another factor is the distribution of power across branches of government. Parliamentary democracies lack the strong leadership of a president, which may be crucial for pushing through essential but unpopular reform agendas. At the same time, they constrain the scope for abusing presidential power. Presidential systems may be particularly susceptible to corruption and clientelistic spending in the transition region, which had extensive experience of concentration of political power during communism.

Table 3.3 explores the link between a country's political system and its economic institutions by adding political variables to the first regression model in Table 3.1 and the first and third regression models in Table 3.2 (see the first four columns). It uses data on (i) the degree of proportionality of the electoral system (where 0 indicates a proportional system, 1 indicates a mixed proportional-majoritarian system, and 2 indicates a majoritarian system) and (ii) the distribution of power between the president and parliament (where 0 indicates a parliamentary system, 1 indicates a semi-presidential system dominated by parliament, 2 indicates a semi-presidential system dominated by the president, and 3 indicates a presidential system) from Comparative Political Dataset II.

The regression results show that countries with more proportional systems tend to have better economic institutions. The effect is slightly stronger for the transition region than for the worldwide sample. Perhaps surprisingly, the link between proportionality and economic institutions does not seem to be modified by the quality of the political regime, suggesting that broad political representation has a positive impact on economic institutions even in imperfect democracies. Presidential systems also appear to be associated with better economic institutions, but the effect is typically statistically insignificant.

The ideologies and relative strength of the main political parties may also affect the quality of economic institutions. Strong differences between the parties in parliament may slow down economic reform, not only because divided parliaments may find it difficult to agree on the design of economic institutions, but also because of the threat of policy reversals should the opposition gain power.

One way of expressing these divisions that has been proposed for the transition region is the use of an index of political polarisation. This measures the representation in parliament of the largest former communist faction when an anti-communist party controls the executive, and vice versa.[20] For example, in Bulgaria in 1994 the anti-communist Union of Democratic Forces won 29 per cent of the seats in parliament and was

[16] The total effect for these countries is the sum of the coefficient for the commodity share of exports and the interaction term between the commodity share of exports and a dummy variable for countries with low Polity scores (that is to say, scores below -5).
[17] More precisely, the index is a residual in a regression of the volume of trade on a country's GDP and a number of other characteristics that are commonly used to explain trade flows. See Pritchett (1996) and Chapter 1 of this report.
[18] See Chinn and Ito (2006) and Chapter 1 of this report.
[19] See Persson and Tabellini (2005) for a review of the literature on the economic effects of constitutions and EBRD (1999).
[20] See Frye (2010).

the largest party in opposition, with the government being formed by the former communist Bulgarian Socialist Party. Bulgaria's polarisation score in that year was therefore 29.

The last two columns of Table 3.3 show that political polarisation is indeed associated with lower-quality economic institutions in the transition region. The interaction term with the Polity variable indicates that the effect can only be felt in relatively democratic regimes, as one would expect. The next section explores some examples of how polarisation can undermine reform.

LOCAL AND REGIONAL VARIATION IN INSTITUTIONAL QUALITY

There can be large differences in the quality of local and regional institutions. An analysis using data from the most recent (2010) LiTS found that only about 20 per cent of the variation in the performance of local governments, as perceived by households across the transition region, was due to variation across countries; 80 per cent was due to intra-country variation. Similarly, only 31 per cent of the local variation in perceived corruption in administrative systems could be explained by differences across countries. At the regional level, the variation attributable to country-level effects totalled 57 per cent (for local government performance) and 47 per cent (for corruption).[21]

Even greater diversity across regional business environments is suggested by the World Bank 2012 *Doing Business* report undertaken in 30 regions of Russia. This subnational survey covered the four aspects where region-specific regulations or practices matter most: starting a business, dealing with construction permits, registering property and securing an electricity supply.

The survey revealed a surprising amount of cross-regional diversity in the Russian business environment. With the possible exception of Ulyanovsk, no area scored well on all four aspects, and virtually all areas featured among the top performers for one aspect while ranking poorly in others. For example, while it may be relatively easy to conduct business in Mordovia, North Ossetia and Rostov, it appears to be difficult to start a business there.[22] A 2012 BEEPS survey conducted by the EBRD and the World Bank in 37 regions of Russia with statistically representative regional samples painted a similar picture.[23]

Regional and local differences in business environment quality and related economic institutions could be due to similar factors influencing the country-level differences analysed in Tables 3.1 and 3.2. For example, local or regional histories may matter (with historical national borders often not coinciding with current national borders, as shown in Box 3.1), and ethnic composition, natural resource dependence and degrees of international integration may also vary within a country. As at the national level, some of these factors can be influenced by policies, others less so. Importantly, local political institutions may be easier to reform than those at the national level, particularly in less democratic countries. This point is considered further in the concluding section of the chapter.

CRITICAL JUNCTURES: A COMPARISON

The above analysis confirms the strong (and probably causal) effect of democracy on economic institutions and the likely relevance of several other factors: history, geography, per capita income levels, the presence of natural resources, political, ethnic and economic polarisation, international integration and the design of political institutions.

However, even accounting for all of these factors, at least 20 to 30 per cent of cross-country variation in the quality of economic institutions remains unexplained. This may relate to factors that are difficult to capture in a regression. For instance, trajectories of economic reform can depend on pivotal moments in history and the way in which they develop. This section examines some of these episodes to see if they confirm the relevance of the factors identified so far, and to see whether they hold lessons for successful institutional reform.

All transition economies went through a critical period at the beginning of the transition process – roughly between 1988 and 1993. Countries emerged from this period with vastly different political systems and at different stages of reform and institution building.[24]

The following analysis highlights further critical junctures after this period in countries that missed their initial chance to establish full democracies and gain a head start with economic reforms. Within this group, the focus is on reform opportunities triggered by political change in imperfect democracies, which have been far more frequent than transitions from dictatorships to democratic regimes.

From among a dozen or so candidates affecting 10 countries,[25] four episodes were chosen because they represented diverse experiences and were viewed as important windows of opportunity at the time they occurred: Romania in 1996, the Slovak Republic in 1998, Georgia in 2004 and Ukraine in 2005.[26] The first two relate to changes in government triggered by elections, and the last two relate to popular uprisings – the "Rose" and "Orange" Revolutions respectively.

- After the overthrow of Nicolae Ceauşescu's regime in December 1989, **Romania**'s former communist elite, led by President Ion Iliescu, managed to retain political power for the first half of the 1990s. With the exception of price and trade liberalisation, market-oriented reforms proceeded slowly, and Romania also lagged behind in terms of international integration. Parliamentary elections in November 1996 led to the formation of a centre right government led by Victor Ciorbea, backed by a 60 per cent majority in the lower house of parliament. Ciorbea announced his intention to break with Romania's communist past and fight corruption.
- Following Czechoslovakia's "velvet divorce" in 1992, the **Slovak Republic** went through a difficult period under Prime Minister Vladimír Mečiar, which involved non-transparent privatisations and high-level corruption. Of the 10 European countries in the transition region that applied for EU

[21] The analysis was based on answers to questions 6.20a ("Please rate the overall performance of local government") and 6.04 ("Did you or any member of your household make an unofficial payment or gift when using these [administrative] services over the past 12 months?"). The contributions cited are based on the decomposition of the R2 of a regression of these variables – average responses for all primary sampling units (PSUs; about 1,700 observations) and administrative regions (about 200 observations) – on a number of local level explanatory variables and a full set of country dummy variables.

[22] See World Bank (2012a).

[23] See EBRD (2012a).

[24] For analysis of these differences, see EBRD (1999), Frye (2007) and Aslund (2013).

[25] These were identified as improvements of at least one notch in the Polity IV democracy measure in countries with initial levels of democracy of between 1 and 7. These included episodes in Albania (2002 and 2005), Estonia (1999 2000), FYR Macedonia (2002), Georgia (1995 and 2004), Kyrgyz Republic

Table 3.3
Exploring the influence of the political system on economic institutions

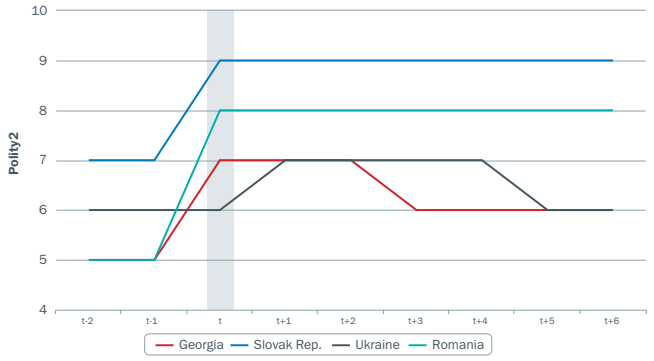
Dependent variable	World sample		Transition region sample					
	WGI average	WGI average	WGI average	Transition indicator average	WGI average	Transition indicator average	WGI average	Transition indicator average
Polity2	0.032**	0.083***	0.036*	-0.003	0.080**	0.054	0.058***	0.079***
	(0.015)	*(0.027)*	*(0.020)*	*(0.023)*	*(0.029)*	*(0.046)*	*(0.017)*	*(0.026)*
Majoritarian system	-0.201**		-0.229**	-0.407**				
	(0.084)		*(0.085)*	*(0.159)*				
Polity2*Majoritarian system	-0.002		-0.002	0.021				
	(0.010)		*(0.011)*	*(0.018)*				
Presidential system		0.156			0.158*	0.075		
		(0.094)			*(0.090)*	*(0.126)*		
Polity2*Presidential system		-0.016			-0.018	-0.009		
		(0.011)			*(0.011)*	*(0.016)*		
Polarisation index							-0.006	0.010
							(0.006)	*(0.008)*
Polity2*Polarisation index							-0.002*	-0.003**
							(0.001)	*(0.001)*
Natural resources	0.000	-0.001	0.002	-0.002	-0.003	-0.005	-0.001	-0.001
	(0.002)	*(0.002)*	*(0.002)*	*(0.003)*	*(0.003)*	*(0.005)*	*(0.003)*	*(0.004)*
Trade openness	0.374***	0.345***	0.511***	0.216	0.453***	0.184	0.418**	0.120
	(0.110)	*(0.111)*	*(0.110)*	*(0.179)*	*(0.148)*	*(0.215)*	*(0.151)*	*(0.169)*
Financial openness	0.139***	0.114***	0.153***	0.110***	0.131***	0.086**	0.088***	0.056
	(0.031)	*(0.038)*	*(0.029)*	*(0.031)*	*(0.036)*	*(0.040)*	*(0.031)*	*(0.037)*
Income	0.338***	0.359***	0.371***	0.081	0.354***	0.044	0.309***	-0.027
	(0.068)	*(0.069)*	*(0.068)*	*(0.079)*	*(0.080)*	*(0.111)*	*(0.058)*	*(0.083)*
Observations	184	184	96	96	96	96	92	92
R-squared	0.941	0.935	0.923	0.886	0.907	0.834	0.925	0.889
Adjusted R-squared	0.934	0.928	0.907	0.863	0.888	0.801	0.909	0.865
F-value	180.771	145.444	363.096	23.075	101.457	10.810	67.188	16.479

Source: See Annex 3.2.
Note: The table shows coefficient estimates from panel regressions, based on three-year averages. Standard errors are clustered by country and shown in parentheses. All regressions include the same controls as in Tables 3.1 and 3.2: ethnic fractionalisation, state antiquity, landlocked, ruggedness, EU membership (for transition region regressions), and time fixed effects (not reported). Polity2, trade openness, financial openness, income, electoral systems, political systems, polarisation and the interaction terms are lagged by one period. Standard errors are clustered by country. *p<=0.10; **p<=0.05; *** p<=0.01.

(2010), Moldova (2001), Romania (1996), Russia (2000), Slovak Republic (1998) and Ukraine (1994 and 2006).

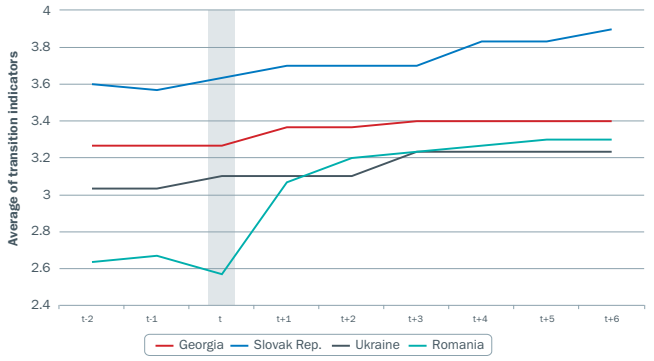
[26] The case studies that follow are based on past issues of the EBRD's *Transition Report* and the following additional sources: for Romania, Boia (2007) and Cviić and Sanfey (2010); for Georgia, World Bank (2012b) and Papava (2013); for the Slovak Republic, Eperjesiova (1999); and for Ukraine, Pivovarsky (2013).

Chart 3.7. Political improvements at critical junctures were not always sustained



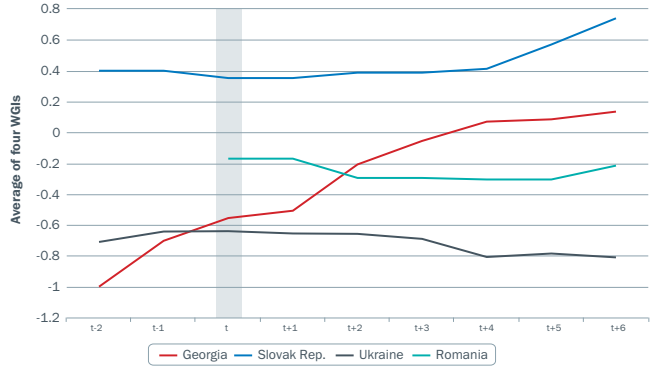
Source: Polity IV.
Note: This democracy index uses a scale of -10 to 10, where 10 is the most democratic.

Chart 3.8. All critical junctures were associated with a pick-up in economic reform



Source: EBRD.
Note: The chart shows the average of the EBRD's country-level transition indicators.

Chart 3.9. Two of the four critical juncture episodes failed to improve economic institutions



Source: World Bank.
Note: The chart shows the average of the four WGIs related to economic institutions: government effectiveness, regulatory quality, law and order, and control of corruption.

membership in 1994-96, the Slovak Republic was the only one deemed not to comply with the political requirements in the accession criteria. Parliamentary elections in 1998 led to a strong mandate for change from the electorate, which enabled the pro reform Slovak Democratic Coalition (SDK) led by Mikuláš Dzurinda to build a broad majority coalition. The timing of the elections – which were held in the immediate aftermath of the Russian financial crisis – may have influenced this outcome.

- As in Romania, **Georgia**'s early transition was dominated by elites affiliated with the former communist regime. Rampant corruption and crime, an erratic electricity supply and poorly managed state finances contributed to a popular insurrection following a disputed election in November 2003. This brought Mikheil Saakashvili, a young Western-educated lawyer, to power in January 2004.
- **Ukraine**'s first post-Soviet decade was marked by the presidency of Leonid Kuchma, a member of the former communist elite, who was first elected in 1994. Kuchma's government undertook first-generation economic reforms, but property rights, contract enforcement and competition policy remained weak, and corruption was widespread. A disputed election in November 2004 led to mass protests, which culminated in a second run-off in December 2004 – deemed free and fair by international observers – and the inauguration of Viktor Yushchenko as president.

Charts 3.7, 3.8 and 3.9 show measures of political institutions, economic reform and economic institutions two years before and six years after the critical juncture, which is labelled "t" in the charts. According to the Polity database, three of the four episodes were associated with at least a two-notch improvement on the -10 to 10 democracy scale. Ukraine recorded a one-notch rise one year into the Yushchenko presidency (see Chart 3.7).

Furthermore, all episodes were associated with a pick-up in economic reforms, as reflected in the EBRD transition indicators for privatisation, enterprise restructuring and market liberalisation – a modest pick-up in Georgia, the Slovak Republic and Ukraine, and stronger improvements in Romania, although this probably reflected the country's less advanced starting point (see Chart 3.8).

However, a different and more diverse picture arises from the broader WGI measures of economic institutions. Chart 3.9 shows the average of the same four indicators – government effectiveness, regulatory quality, law and order, and control of corruption – that have formed the basis for most of the previous analysis in this chapter.

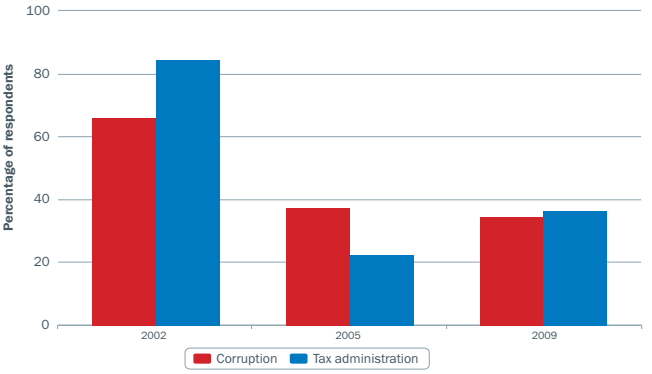
Of the four episodes, only the Georgian Rose Revolution was followed by sustained improvements in economic institutions according to the World Bank data. Institutions in the Slovak Republic improved only marginally, on average, in the first four years of Dzurinda's government (although from a much higher level than in the other three countries), and picked up only after

Dzurinda's re-election in 2002. In Romania and Ukraine, however, institutions deteriorated from what were already low levels. In Romania the downward trend continued from 1996 until 2002, while in Ukraine it continued until the end of Yushchenko's presidency in 2010 and has yet to be reversed.

This remarkable difference in performance reflects the different policy priorities of – and the constraints on – the governments that assumed responsibility at the beginning of each episode.

- In Romania Victor Ciorbea's government devised an ambitious IMF-supported stabilisation and reform programme in early 1997. However, after some initial successes – including the creation of a competition authority, the establishment of currency convertibility and acceleration of the privatisation programme – reforms stalled. In critical areas such as restructuring, privatisation of large enterprises and corporate governance, there was little further progress. Having lost support within his own party, Ciorbea resigned in March 1997. Two ineffective centre-right governments followed, bogged down by internal dissent and a confrontation with mineworkers in 1999. Iliescu and the former communists returned to power in November 2000.
- In the Slovak Republic the broad nature of Dzurinda's anti-Mečiar coalition – which included former communists, environmentalists, other left-wing parties, liberals and Christian democrats – precluded decisive reforms (with the notable exception of the successful sale of a number of state-owned companies previously deemed "strategic" to foreign investors in 1999 and some other measures to attract foreign direct investment). However, following Dzurinda's re-election at the head of a narrower coalition in 2002, there were further efforts to attract foreign direct investment. Reforms included a comprehensive review of the tax regime, amendments to the commercial and criminal codes and significant improvements in the business environment.
- In Georgia the new government under Mikheil Saakashvili – which had considerable parliamentary backing – focused on reforms of public revenue management, simpler and lower taxes, large-scale privatisation and an aggressive anti-corruption campaign that included eastern Europe's first law holding businesses legally liable for bribery. Perceptions of the business environment improved dramatically (see Chart 3.10). The same period, however, also saw increased government control over the media and a number of prosecutions that appeared to be politically motivated. Furthermore, the desire to limit state involvement in the economy led to a weak competition policy and market concentration in a number of industries. Income inequality (and inequality of opportunity; see Chapter 5) also remained high, prompting questions about the sustainability of Saakashvili's reform model.

Chart 3.10. Corruption and tax administration became less of an obstacle to business in post-revolution Georgia



Source: BEEPS.
Note: The chart shows businesses which stated, in each survey year, that corruption or tax administration were a "major" or "moderate" obstacle to business.

- With the exception of its accession to the World Trade Organization (WTO) in May 2008, Ukraine made no significant progress in terms of economic reforms under Yushchenko's presidency. Attempts to revitalise privatisation were marred by infighting within the government coalition. After the global financial crisis in late 2008, the government attempted to revive reform in the context of an IMF-supported programme. A number of laws were passed in 2009 to make it easier to set up new businesses, reduce regulatory burdens, improve public procurement and initiate gas sector reform. However, their implementation and follow-up was weak owing to opposition from vested interests and a deteriorating relationship between the president and his prime minister. The 2010 presidential elections handed power to Viktor Yanukovich, whose contested victory in November 2004 had triggered the Orange Revolution.

To summarise, the governments of Saakashvili in Georgia and (eventually) Dzurinda in the Slovak Republic managed to transform their countries' economic institutions for the better, while the Romanian and Ukrainian governments that assumed power in 1996 and 2005, respectively, failed. The remainder of this section discusses factors that may have played a role in generating these differences in outcomes.

EARLY TRANSITION HISTORIES AND VESTED INTERESTS

In Romania and Ukraine resistance to reform developed among strong vested interests following the collapse of central planning, although for rather different reasons.[27]

In Romania the former communist elites initially retained power, controlling a still largely state-run economy and opposing further enterprise restructuring and privatisation. In Ukraine industrial assets which survived the early transition recession were based primarily in the steel-producing east of the country and depended on access to cheap natural resources and energy, tax preferences and the protection of the domestic market. Their new owners permeated government and the media and amassed significant influence and financial resources. The leaders of the Orange Revolution sought to tap some of those resources in order to contest the elections, and the price was most likely an agreement to respect the status quo in terms of the business environment, ownership and business practices.

The Slovak Republic underwent a similar early period of privatisation, benefiting an anti-reform elite, but this was cut short by the 1998 election. Georgia was similar to Romania in that the former communist elites were able to consolidate their power. Unlike Romania and Ukraine, however, Georgia did not have heavy industries. Its surviving economic sectors were highly decentralised and there were no Georgian oligarchs. Furthermore, the old elites mismanaged the country so badly that they lost popular support to a much greater extent than the incumbents in Ukraine. Unlike the run-off election that followed the November 2004 Orange Revolution, the January 2004 election that brought Saakashvili to power was uncontested, and less than 4 per cent of the electorate voted against him.

POLITICAL POLARISATION

Political polarisation is defined in the transition context as the strength, in terms of the number of parliamentary seats, of the largest post-communist faction when an anti-communist faction is in power, and vice versa (see previous section). Between 1990 and 2004 Romania and Ukraine were among the three or four countries in the transition region with the highest degree of political polarisation (the others being Bulgaria and, depending on the methodology, either Albania or the Kyrgyz Republic).[28]

Political polarisation makes it more difficult for reformist groups to initiate and sustain change for two reasons. It is obviously harder to pass and implement reforms in the face of strong parliamentary opposition. More subtly, polarisation increases the likelihood of changes of government and changes to policies, so reformers can count on less support from the presumed beneficiaries of change – for example, new businesses – and their chances of defeating incumbent interest groups are lower.

It may therefore be costlier and riskier – not just for reformist politicians, but also for public officials and civil servants – to take on vested interests in a polarised political environment. This may explain why reforms in Romania between 1996 and 2000 were hesitant and undermined by dissent within the governing party, and why the Yushchenko administration in Ukraine was reluctant to reform the energy sector to the detriment of established industrial interests.

PRIORITIES OF GOVERNMENT LEADERS AND THEIR ADVISERS

Although observers of the Rose Revolution and its aftermath in Georgia disagree on Mikheil Saakashvili's overall presidential record, there can be little doubt that the success with institutional reforms reflected his priorities. In turn, these were influenced by his experience of training and living in the United States and France, with their accountable public institutions and comparatively low corruption.

In contrast, the leaders of the Orange Revolution were trained and made their careers exclusively in Ukraine during the Soviet and Kuchma eras, when they worked in government or industry. Institutional reform was not their main preoccupation, and that would probably have remained the case even in the absence of opposition from vested interests. The reasons for this may have included a limited understanding of the importance of institutions for well-functioning market economies, but also different priorities, such as nation-building through the promotion of the Ukrainian language and the rebuilding of various religious and cultural landmarks.

Reformist ideas and priorities also differed outside the inner circle of leaders and their closest associates. Saakashvili recruited many young, reform-minded Georgians who had trained abroad (and some foreign advisers), and who were keen to contribute to the post-revolution rebuilding of Georgian institutions. In contrast, there was no discernible increase in the number of Western-trained Ukrainians in government after the Orange Revolution.

Differences in leadership priorities were also apparent in the way in which post revolution governments approached the problem of corruption. Links between corruption and powerful vested interests may have made it even harder to tackle corruption in Ukraine than in Georgia. Nonetheless, in the immediate aftermath of the Orange Revolution, Ukraine's leaders had the opportunity to set an example – by cracking down on any signs of corruption within the new government – which could have changed public expectations and redefined standards of tolerance. Instead, examples of nepotism and corruption among the new authorities emerged soon after the elections, sending a clear signal to society that nothing had really changed.

EXTERNAL ANCHORS AND EXTERNAL SUPPORT

According to several authors, the prospect of EU accession created incentives for reform in many transition countries, particularly after they had submitted membership applications, and most directly during the membership negotiation phase,

[27] The general argument underlying this section – the argument that partial reforms and lack of initial political competition can create vested interests which oppose further reform – has been made by a number of authors, including Hellman (1998), EBRD (1999), Shleifer and Treisman (2000), and Aslund et al. (2001). See Aslund (2013) for additional references.
[28] See Frye (2010).

when the EU pressed for specific reforms.[29] Chart 3.11 shows that, in fact, reforms in the EU members that joined in 2004 and 2007 (the EU-10) peaked between one and three years prior to accession.

EU membership negotiations with Romania, the Slovak Republic and a number of other candidate countries started in early 2000. This was fortuitous for the Slovak reformers who had come to power in late 1998. Although both Romania and the Slovak Republic became EU candidates in the mid-1990s, the prospects of EU accession were clearer and stronger in late 1998 than they were in 1996, when Romania's window of opportunity opened under the new centre-right coalition government. Following the broad change in policy direction by the Slovak reformers who had come to power in 1998, the republic re-opened negotiations to join the first wave of EU accession, while Romania, alongside Bulgaria, was kept in the second wave.[30]

Both Georgia and Ukraine lacked this EU anchor. However, the objective of joining NATO, which received unanimous support from Georgia's parliament in 2006, may have provided an additional motive for Western-oriented economic reform, particularly prior to the country's 2008 conflict with Russia. Similar calls for NATO membership in Ukraine might have provided some initial impetus for institutional reforms, but these ceased after a negative reaction from neighbouring Russia.

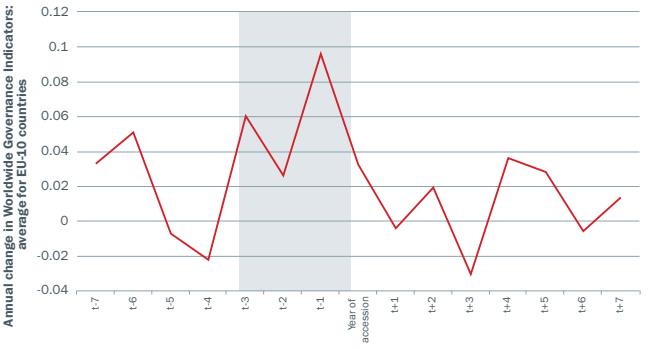
Western intellectual and financial support during and after the Rose Revolution may have also contributed to the success of some reforms in Georgia. According to World Bank data, net official development assistance and official aid received by Georgia from the United States and other partners fluctuated between 4.6 and 8.4 per cent of GDP per year between 2005 and 2009, compared with 0.3-0.6 per cent of GDP for Ukraine.

MACROECONOMIC ENVIRONMENT

The above episodes took place under very different macroeconomic conditions, which may have had an impact on demand for reform and its implementation. In the Slovak Republic Dzurinda's tenure began in a low-growth environment, from which the economy recovered as reforms began to attract foreign investment. In Romania the government's 1997 reform programme coincided with a macroeconomic crisis that reflected the mismanagement of previous years. This highlighted the need for adjustment and reform, but the resulting collapse in output (which fell by a cumulative 11 per cent of GDP during 1997-98) made implementation even more difficult.

Ukraine found itself in the opposite situation, as the aftermath of the Orange Revolution coincided with a boom in capital flows to emerging markets. This allowed Ukraine to grow quickly during 2006-07, even in the absence of reform. The fact that the Rose Revolution happened prior to this boom may have benefited reforms in Georgia.

Chart 3.11. Institutional improvements in EU accession countries tended to peak one to three years prior to accession



Source: World Bank.
Note: The chart shows the average change in the WGIs of the EU-10 countries in the seven years before and after EU accession. The EU-10 countries are: Bulgaria, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia.

[29] See Roland (2000), Vachudova (2005) and Plümper et al. (2006).
[30] See Berglöf and Roland (2000).

CONCLUSION

Reform-oriented policy-makers can attempt to improve economic institutions by "just doing it": by passing an anti-corruption law, by changing the management and accountability relationships of a customs agency, by abolishing licensing requirements, by giving more independence to a competition authority, and so on. However, when faced with systemic obstacles, such as low levels of democracy, political polarisation or market aversion, their efforts could be unsuccessful. They may well encounter opposition from government, parliament or vested interest groups, and even if they do manage to pass legislation, its implementation could be undermined by corrupt officials.

What options could be available to policy-makers who wish to promote good economic institutions and help to implement economic reforms? This section concludes by outlining possible answers to that question, building on the evidence presented earlier.

INTERNATIONAL INTEGRATION

Unlike most other variables considered in the cross-country analysis, economic openness supports institutional quality and is achievable across a wide range of political systems. Such diverse countries as Azerbaijan, Estonia, Kazakhstan and the Slovak Republic have all, with at least some success, tied their development strategies to openness.

International integration may help institutions through several channels. The increased presence of international firms helps to disseminate international business practices and standards. It may also put pressure on national and local authorities to improve the quality of government services. Dual listing of company shares may contribute to improved corporate governance.

Such passive strategies for improving institutions through openness to trade and foreign direct investment can also be supplemented by more active policies.

First, even if a country does not have the option of joining the European Union, it may be possible to exploit international integration or external benchmarks to anchor reform. For instance, since 2008 Russia has sought to turn Moscow into a leading international financial centre. This has resulted in reforms within and beyond the financial sector that will help Russia regardless of whether its ambition is fully realised.

Compliance with the principles of the WTO or the Organisation for Economic Co-operation and Development (OECD) in the course of accession to these organisations can help to anchor economic reforms. Unlike the European Union, membership of these organisations is not restricted by geography. Russia joined the WTO in 2012, having made important adjustments to its laws and regulations on issues such as the protection of intellectual property rights. Tajikistan joined in 2013, and Kazakhstan is in the process of concluding its accession negotiations. Russia has also been negotiating membership of the OECD.

Another useful external benchmark is the World Bank *Doing Business* report. This may even help countries with weak political systems. Belarus is one of the four countries that have improved their *Doing Business* ratings the most since 2005 (along with Georgia, FYR Macedonia and Kazakhstan). Russia has recently adopted a *Doing Business* target. *Doing Business* is often publicised as a relative ranking of countries, comparing economic policies and achievements with those of a peer group – which is known to play a role in shaping economic policies.[31]

Second, international integration can take the form of institutional integration, as in the case of the EU. There is evidence that the quality of economic institutions tends to converge within regional economic blocs with deeper integration. Countries with weaker institutions tend to catch up (albeit slowly) with those that have stronger institutions, particularly in areas such as regulatory quality.

In some cases institutional integration may help even when countries have similar levels of institutional quality – as in the case of the Eurasian Economic Union that was recently established by Belarus, Kazakhstan and Russia – if it involves the transfer of certain competencies to the supranational institutions of the union. This provides an opportunity to build institutions from scratch.[32] The challenge is to make those supranational institutions stronger than the national institutions of the individual member countries.[33]

Lastly, international integration can facilitate the transfer of skills and ideas. Faced with severe skills shortages in a rapidly growing economy, Kazakhstan has adopted various policies to promote the overseas training of its workforce and to leverage the transfer of skills from multinational corporations operating in the country. In addition, as early as 1993, Kazakhstan launched its Bolashak scholarship programme, which is modelled on successful schemes in Singapore, Thailand and a number of other countries. This scholarship provides full funding for studies abroad to Kazakh students selected on a competitive basis. Recipients are obliged to return to Kazakhstan to work for a minimum of five years. Many of the returning scholars have taken up positions in government, state agencies and state-owned companies, strengthening the technical capacity of the civil service and helping to design and implement technocratic economic reforms.

TRANSPARENCY AND ACCOUNTABILITY AT REGIONAL AND LOCAL LEVEL

Reform-minded policy-makers in weak political systems may face a conundrum. On the one hand, economic reforms may be essential to improve the business environment and generate growth because they offer a channel for improving weak political institutions (see Chapter 2). On the other hand, the implementation of such reforms may be undermined precisely because political institutions are weak and impeded by vested interests.

[31] See Besley and Case (1995) for evidence from the United States.
[32] See Tarr (2012).
[33] See EBRD (2012b).

Reform of political institutions at the local and regional level offers a potential solution to this dilemma. The local business environment is particularly important for small and medium-sized enterprises (SMEs) and varies considerably within countries (as described previously). Local political institutions are critical to the quality of this environment. And, unlike at the national level, reform of local or regional institutions – for example, forcing local authorities into greater transparency – may be easier to achieve politically.

Russia offers an example of the importance of local and regional institutions for the success of economic reform. Between 2001 and 2004 several new laws limited business inspections, exempted many activities from licensing requirements and introduced a notification-based system for firm registration, eliminating the need to wait for authorisation from various government agencies. While this resulted in improvements, these differed widely across regions. Subsequent surveys found that, in some regions, firms were in fact inspected more frequently than was legally permitted, licences were still necessary for activities that were no longer subject to them and authorisation was still required from various agencies for firms to start operations.

Such anomalies occurred in those regions that had less transparent governance.[34] This suggests that governance reforms aimed at greater transparency and accountability at the local level could be a crucial complement to business environment reform at the national level.

A key instrument in achieving greater transparency is the media. Research suggests that independent media are a necessary safeguard against corruption, including at the local level. For example, there is evidence that the electoral effects of exposing corruption are stronger in places with local radio stations, and that the exposure of fraud improves corporate governance.[35] There is also evidence that social media can exert an important disciplining influence, both in local authorities and in state companies.[36] This suggests that social media may well become an important force supporting reform efforts in a wide range of political environments.

POLITICAL REFORM

In countries that are already democracies (even imperfect ones), there may be scope for top-down political reform. What kind of reform is needed will depend on the nature of the political problem. If the problem is unstable coalitions that give smaller parties, or the interest groups behind them, too much power, the answer may lie in a more presidential system or a less proportional electoral approach. Where there is a stalemate between two major groupings, with one blocking reform, there may be a need for wider proportional representation.

Estonia's creation of a pluralistic political system is one successful example of a power shift from president to parliament. A proportional electoral system with a 5 per cent threshold for parties' entry into parliament was implemented in the first few years of transition, preserving representation for minority parties. Also, the creation of a decentralised bargaining system between the state, employers and employees gave losers in the reform process a voice, without giving them the power to block the process entirely. Estonia's parliamentary democracy therefore helped to unite the population behind the early reform programme.[37]

The Kyrgyz Republic offers another example. In June 2010 the country adopted a new constitution introducing a parliamentary form of government and imposing an unusual limit preventing any one party from holding more than 65 of the 120 seats in parliament. While it is too early to assess how this political change will affect economic institutions, it will surely contribute to preventing abuse of power by any president or any party, which could undermine economic reform.

Electoral reform is clearly not a panacea. Political polarisation may emerge even in representative political systems. While proportional representation prevents the concentration of power in a single political party, the survival of strong former communist factions may produce strongly polarised political systems regardless of the electoral arrangements in place. For example, although Bulgaria uses proportional representation, it is one of the most polarised transition countries, as the Bulgarian Socialist Party (the successor to the pre-1989 Communist Party) is usually strongly represented in parliament.

Furthermore, it may be very hard to pursue electoral reform from a polarised starting point. That said, as the Kyrgyz example demonstrates, opportunities may arise where the balance of support for reform shifts in a new direction. It may be possible to lock in that support if leaders treat that moment as an opportunity to overhaul both political and economic institutions.

[34] See Yakovlev and Zhuravskaya (2011 and 2012).
[35] See Brunetti and Weder (2003), Ferraz and Finnan (2008) and Dyck et al. (2008).
[36] See Qin (2013) and Enikolopov et al. (2013).
[37] See Aslund and Dombrovskis (2011) for a comparison of Estonia and its Baltic neighbours.

Box 3.1
The legacy of former empires

For better or worse, empires and colonial powers may leave a long-lasting legacy in terms of economic and political institutions.

Ottoman rule, in particular, has had persistent negative effects on financial development and social norms relating to trust in south-eastern Europe.[38] Habsburg rule, in contrast, has had a positive legacy in terms of a lack of corruption.[39] Those areas of Poland that used to be under Prussian or Austrian rule tend to vote for more liberal parties today compared with areas that were once part of the Russian empire.[40] Such persistence could reflect the influence of long-lasting historical episodes on social norms, which have subsequently been transmitted from generation to generation.

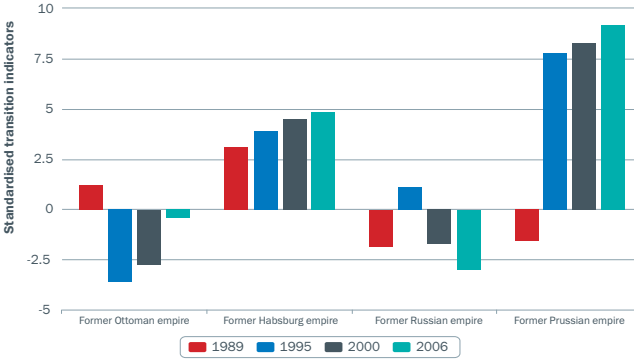
Chart 3.1.1 shows how the EBRD transition indicators differ according to old imperial boundaries. The level of transition is markedly higher in countries that formed part of the Habsburg and Prussian empires compared with those that were under Ottoman and Russian control. However, a country's history does not tell the whole story. Within the boundaries of former empires there is considerable diversity across countries, as shown in Chart 3.1.2.

As discussed elsewhere in this chapter, this diversity may reflect other elements, such as initial factor endowments and their distribution in society.[41] But even then, inherited institutions or social norms might have continued to make their effects felt by modifying the way in which conditions at the beginning of the transition process shaped reform outcomes. For example, the failure of early privatisations is often attributed to control of the political process being seized by special interest groups which opposed reforms that would erode their rents. Yet their propensity, and ability, to oppose such reforms may have depended on the quality of contemporary economic institutions, whose foundations go back centuries.

A regression analysis was used to investigate this possibility with regard to natural resources. It transpires that the concentration of economic activity in the natural resource sector at the start of the transition process is not significantly associated with transition scores today for the transition region as a whole.[42] However, in the former Ottoman and Russian empires, this association is negative, significant and sizeable. On average, the effect of going from zero concentration in natural resources in 1989 to the average concentration for the sample, combined with Ottoman heritage, is associated with a reduction in the quality of economic institutions that is equivalent to the difference between the transition scores of Bulgaria and Estonia today. The combined effect of natural resource wealth and the legacy of the Russian empire is even larger.

On a more optimistic note, the same regressions suggest that although institutions are deeply rooted in history, they do change over time. This can be shown by repeating the analysis for different vintages of the EBRD transition indicators and plotting the effects of natural resource concentration over time for each empire. The gap between the average quality of institutions in the various former empires appears to be narrowing (see Chart 3.1.3).

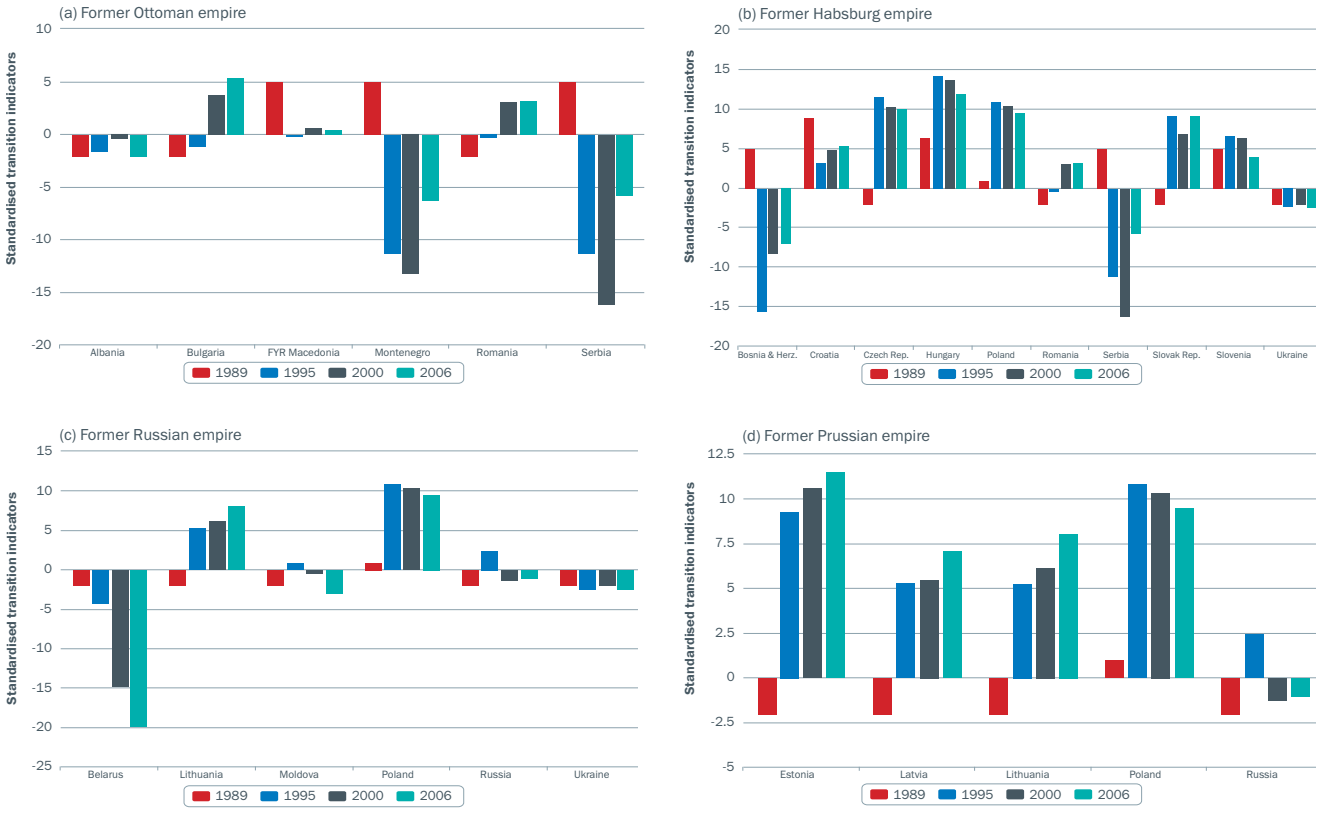
Chart 3.1.1. EBRD transition indicators vary significantly across former empires



Source: EBRD and authors' calculations.
Note: The chart shows the sum of standardised individual scores for large-scale privatisation, small-scale privatisation, enterprise restructuring, price liberalisation, reform of the trade and foreign exchange system, competition policy and overall infrastructure reform. Standardised scores are obtained by subtracting the mean and dividing by the standard deviation.

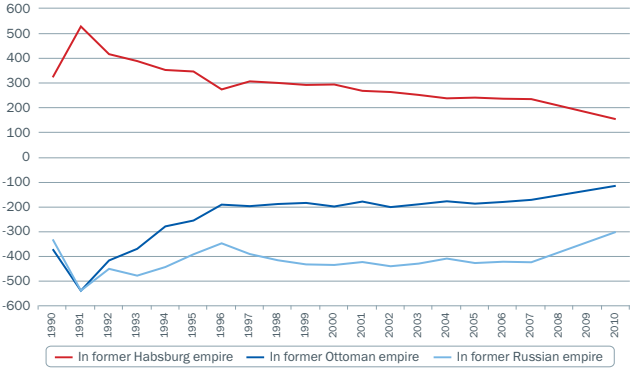
[38] See Grosjean (2011a and 2011b).
[39] See Becker et al. (2011).
[40] See Grosfeld and Zhuravskaya (2013).
[41] See Engerman and Sokoloff (2000) for evidence for the Americas.
[42] The concentration of economic activity in natural resources in 1989 is measured by the self-reported shares of employment in mining based on the 2006 LiTS.

Chart 3.1.2. There are large variations in transition indicators within former empires



Source: LiTS (2006) and authors' calculations.
Note: See note on Chart 3.1.1.

Chart 3.1.3. The influence of history on transition indicators has declined over time



Source: LiTS (2006) and authors' calculations.
Note: The chart plots the estimated combined impact of the share of the population employed in mining in 1989 and the imperial legacy on the standardised transition indicators, based on coefficients from regressions estimated separately for every year between 1990 and 2006.

Box 3.2
Ethnic divisions in the Kyrgyz Republic

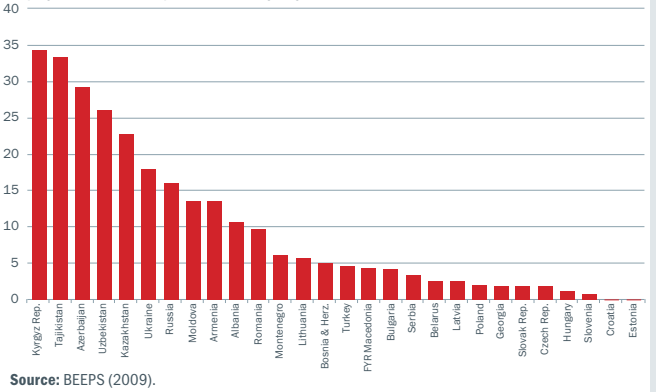
The Kyrgyz Republic was the first Central Asian country to adopt market-oriented reforms, proceeding faster and further than neighbouring countries with privatisation and the liberalisation of prices and foreign exchange. It joined the WTO in 1997, ahead of all of its neighbours – including China, which joined in 2001. As a result, the country scored higher than its Central Asian peers in terms of its average transition indicator score.

The Kyrgyz Republic has also generally been more democratic than all other Central Asian countries except Mongolia. In 2010 it adopted a new constitution introducing a parliamentary form of government. It is currently rated 7 on the Polity2 scale – at the same level as Georgia, and almost as high as the Czech Republic and Latvia.

However, neither early reform efforts nor democracy have so far translated into good economic institutions. With respect to governance, in particular, Kyrgyz economic institutions have generally performed significantly worse than its political institutions scores would have predicted. Petty corruption is considered pervasive. In fact, according to the BEEPS conducted in 2008-09, Kyrgyz businesses complained about this more than those of any other country covered by the survey (see Chart 3.2.1). This places a large burden on economic activity, particularly in a country where cross-border trade and SMEs dominate the economy.

Ethnic fractionalisation is greater in the Kyrgyz Republic than in any other country in the transition region for which data are available. This may have been a factor in both the Kyrgyz Republic's high level of democracy and its comparatively weak economic institutions. Ethnic divisions may have encouraged the development of democratic institutions that are able to mediate between different interests, find compromises and build coalitions. At the same time, economic reform efforts have been frustrated by the divisions within Kyrgyz society.

Chart 3.2.1. Over one-third of Kyrgyz SMEs say that unofficial payments are required in everyday business



Source: BEEPS (2009).
Note: This chart shows the percentage of SMEs responding to the BEEPS survey who reported that unofficial payments were expected in everyday business situations.

Successive governments have lacked an economic reform and modernisation agenda that commands broad support. They have had to operate in an environment of political instability, exacerbated by ethnic tensions and regional divisions – primarily between the more industrialised north of the country and the more agrarian south. For example, reform of the business environment has taken a back seat to a row over an investment agreement governing the operations of Kumtor, a large foreign-owned gold mine. This issue has been much politicised by competing political parties amid rising nationalist sentiment over control of the country's resources.

Annex 3.1

A NEW DATASET ON THE CORPORATE GOVERNANCE OF BANKS

Table A.3.1.1 shows the main findings of an assessment of the corporate governance of banks in 16 countries in eastern Europe and Central Asia conducted by the EBRD's Legal Transition Team. The assessment focused mainly on internal corporate governance arrangements, particularly the role and composition of boards. It analysed the legal and regulatory framework, its implementation by supervisors and the practices developed by the systemically important banks in each country. All data relate to 2011.

The assessment was based on questionnaires completed by banks, regulators, banking associations and law firms, complemented by additional research on relevant legislation and banks' disclosures, as well as face-to-face interviews in some countries.

The table grades each aspect considered in the assessment using a colour system:

- dark green: fit for purpose and close to best practices;
- pale green: generally adequate, but would benefit from further reform;
- yellow: some positive elements, but in need of overall reform;
- red: needing significant reform.

Major shortcomings include a lack of transparency in succession and nomination processes, the unclear role of independent directors on boards and boards' committees, and the poor non-financial disclosure offered by banks.

A detailed description of the study and its findings will soon be presented by the EBRD.

Table A.3.1.1
Assessment of the corporate governance of banks

Issues	Albania	Armenia	Azerbaijan	Bosnia & Herz.	Bulgaria	Croatia	FYR Macedonia	Georgia	Hungary	Kazakhstan	Moldova	Romania	Russia	Serbia	Tajikistan	Turkey
The strategic and governance role of the board																
Strategic role of the board																
Does the legal framework establish a coherent governance system for banks?																
Do boards have a sufficiently active role in developing and approving the strategic objectives and the budgets of their banks?																
Do boards effectively review and evaluate management performance against agreed budgetary targets?																
Governance role of the board																
Do boards effectively shape the governance framework and corporate values throughout their organisation?																
Are boards of subsidiaries in a position to effectively control the operation of their banks?			n/a								n/a		n/a		n/a	n/a
Is there adequate transfer of good practice between parents and subsidiaries?			n/a								n/a		n/a		n/a	n/a
Boards' composition and functioning																
Size, composition and qualification																
Is the size of boards adequate?																
Is the board sufficiently independent from management and controlling shareholders?																
Are the duties of directors to their banks, shareholders and stakeholders clearly set out?																
Do boards provide adequate inductions and professional development to their members?																
Is the process for directors' succession and nomination sufficiently transparent?																
Functioning and evaluation																
Are the responsibilities, powers and terms of reference of boards and boards' committees clearly defined and documented?																
Are boards and boards' committees supported by a senior company secretary?																
Do boards evaluate their performance and discuss the outcomes of such evaluation?																
Risk governance																
Are boards and their risk committees sufficiently involved in setting the risk appetite and monitoring the risk profile of banks?																
Do banks appoint and empower senior chief risk officers?																
Do senior executives have a sufficiently integrated firm-wide perspective on risk?																
Are boards in a position to effectively review risk management?																
Internal control																
Internal control framework																
Does the organisational structure of banks include clearly defined and segregated duties for key officers and effective delegation of authority?																
Are there enough checks and balances to ensure the independence and integrity of financial reporting?																
Are conflicts of interest (including related party transactions) effectively managed?																
Have banks established effective and independent internal audit departments?																
Do banks establish effective compliance departments to ensure that they comply with regulatory obligations?																
Do boards and their audit committees effectively oversee and regularly review the effectiveness of the internal control systems?																
Audit committee																
Do boards establish audit committees?																
Are audit committees fully independent?																
Do audit committees include at least one member with substantial auditing or accounting experience?																
External auditor																
Is external auditor independence upheld by boards and their audit committees?																
Incentives and compensation																
Remuneration policy																
Do boards and their remuneration committees have a sufficient role in shaping the compensation systems of their banks?																
Is remuneration meritocratic and linked to firm and individual performance?																
Is senior executive compensation aligned with prudent risk management?																
Transparency																
IFRS																
Is IFRS required by law or regulation?																
Corporate governance reporting																
Do banks report regularly on corporate governance matters?																
Do banks publish key governance information on their websites?																
Do listed banks report and explain their compliance with a corporate governance code?	n/a		n/a							n/a					n/a	
Is disclosure proportionate to the size, complexity, ownership structures and risk profiles of banks?																

Source: EBRD survey of corporate governance of banks.
Note: Colours correspond to the degree of compliance with the best practice. Dark green corresponds to practices that are fit for purpose; pale green indicates practices where some reform is needed; yellow indicates practices that contain some elements of best practice but are in need of overall reform; red corresponds to practices that are in need of significant reform.

Annex 3.2

Table A.3.2.1
Sources and definitions of variables for cross-country regressions

Variable	Source	Description
WGI average	World Bank, 2012	Average of four Worldwide Governance Indicators: rule of law, government effectiveness, control of corruption and regulatory quality. Each index is on a scale of -2.5 (lowest rank) to 2.5 (highest rank).
Distance to the frontier	World Bank, 2013	This measures an economy's distance to the frontier on a scale of 0 to 100, where 0 represents the lowest performance and 100 denotes the frontier (that is to say, the most business-friendly regulations) in the *Doing Business* report.
Transition indicator average	EBRD, 2013	Average of six country-level transition indicators (large-scale privatisation, small-scale privatisation, enterprise restructuring, price liberalisation, reform of the trade and foreign exchange system, and competition policy). The measurement scale for the indicators ranges from 1 to 4.33, where 1 represents little or no change relative to a rigid centrally planned economy and 4.33 represents the standards of an industrialised market economy.
Polity2	Polity IV, 2013	The "Polity score" captures a regime's level of democratisation on a 21-point scale ranging from -10 to +10, where +10 denotes the highest score for democratisation.
Natural resources	EBRD calculations, based on WTO data	Mining as a percentage of exports.
Trade openness	EBRD calculations	Trade openness is structurally adjusted following the adjusted trade intensity approach used by Pritchett (1996). Values in the sample range from -1.2 to 3.4.
Financial openness	Chinn-Ito index	Index measuring a country's degree of capital account openness. The index ranges from -1.86 to 2.44.
Income	Penn World Tables 8.0	Log of GDP per capita in 2005 US dollars at purchasing power parity.
Ethnic fractionalisation	Wacziarg et al., 2012	Measures the probability that two randomly selected individuals in a given community belong to different ethnic groups.
Distance from the equator	CEPII	Absolute latitude.
Landlocked	CEPII	Dummy variable.
Ruggedness	Nunn and Puga, 2012	This index quantifies topographic heterogeneity (small-scale irregularities) in a country. Values in the sample range from 0 to 6.2.
State antiquity index	Chanda and Putterman, 2007	The state antiquity index (version 3) measures the extent of each country's experience with nationhood and is based on the following criteria for each country: (1) the existence of a government at the tribal level; (2) whether the government is local or foreign-based; (3) how much of the territory of the modern country was ruled by this government.
Majoritarian system	Comparative Political Dataset II	Discrete variable that takes the following values: 0 - proportional representation; 1 - parallel system (the chamber is elected using both majoritarian and proportional representation systems, and each is allocated a fixed number of seats); 1 - compensatory system; 1 - modified proportional representation; 2 - majoritarian system.
Presidential system	Comparative Political Dataset II	Discrete variable that takes the following values: 0 - parliamentary system; 1 - semi-presidential system, dominated by parliament; 2 - semi-presidential system, dominated by president; 3 - presidential system; 4 - other system.
Polarisation index	Frye, 2010	Political polarisation is defined on the basis of the number of seats in parliament held by the largest opposition party.

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CHAPTER 4

Human capital

While many countries in the transition region perform well with respect to primary and secondary education, they are weaker when it comes to training and retaining highly skilled people. In addition, the financial returns to university education vary substantially across countries. This reflects weak university systems, as well as a mismatch between supply and demand. To address this, countries must improve the quality of higher education and their economic, legal and political institutions.

FACTS AT A GLANCE

AROUND
37%
The proportion of the population aged 25 and over in the transition region that had completed at least secondary education in 1990 (compared with 35% in advanced economies).

10
The number of universities in the transition region among the top 500 universities in the 2013 Shanghai ARWU league table.

IN
14
transition countries, having an inadequately educated workforce was among the top three (out of 14) business environment obstacles.

ALMOST
75%
of migrants from countries in the transition region emigrated to other countries in the region.

Education, institutions and human capital

This chapter examines the state of human capital and education in the transition region and in southern and eastern Mediterranean (SEMED) countries.[1] There is substantial evidence that human capital – defined as the accumulated stock of education, knowledge and skills – is important for economic development and growth.[2] Some economists believe that this is the most important factor.[3] Human capital may affect growth not only directly, but also through its interaction with other factors, particularly economic, legal and political institutions (the "institutional environment"). Education may lead to improvements in those institutions which are conducive to growth. Conversely, the accumulation of human capital is influenced by the institutional environment. Furthermore, institutions may have an important impact on how human capital is used.[4]

Modern economies tend to provide significant returns to those with the most talent.[5] This chapter argues that for transition economies to converge towards their mature economy counterparts, their returns need to be comparable to – or even greater than – those available in advanced economies. High returns not only provide incentives to invest in graduate or postgraduate education, but also help to retain the country's most talented people. This is important because brain drain has proven to be an obstacle to development.

The following analysis shows that returns to tertiary education – the increase in lifetime income, relative to the income associated with secondary schooling, which an individual can expect as a result of obtaining a tertiary degree – differ greatly across transition economies. It highlights a strong correlation between these returns and the quality of institutional factors – such as the business environment, governance, the rule of law and political freedom. Where returns are low, the gap relative to advanced economies may widen because of the consequent under-investment in education, erosion of the education system and brain drain.

While most transition economies are ahead of their emerging market peers at similar levels of development, convergence with the most advanced economies in the European Union (EU) is not improving, and may slow down in the future. By providing comparative evidence on three key aspects critical to the accumulation of human capital – quality of education, retention of talented people and returns to tertiary education – this chapter can help policy-makers to identify critical weaknesses that require attention in order to close that gap.

Chart 4.1. Percentage of the population aged 25 and over who have completed secondary and tertiary education

Source: Educational attainment dataset in Barro and Lee (2013).

Note: "Other" refers to the rest of the world – that is to say, other emerging market and developing economies.

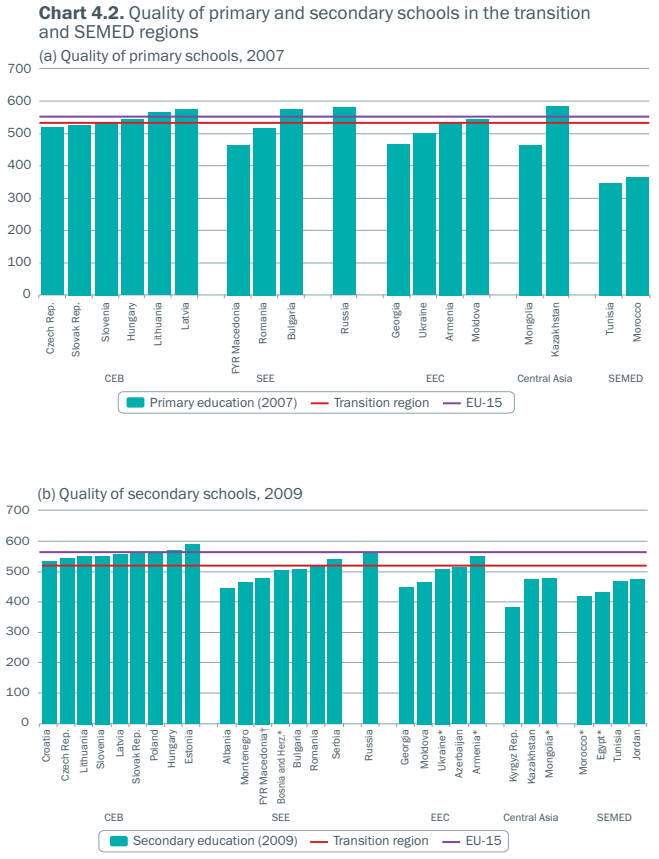
EDUCATION AND HUMAN CAPITAL IN TRANSITION AND SEMED COUNTRIES

At the beginning of the transition process the stock of human capital in the former communist economies was equivalent to – and even above – that in most advanced economies. The proportion of the population aged 25 and over that had completed at least secondary education stood at 36.6 per cent in 1990, compared with 34.9 per cent in advanced economies (see Chart 4.1a).[6] In 2010 the figures were 51.8 per cent and 49.4 per cent, respectively.

However, most countries in the transition region lag behind at tertiary level. In 1990, 8.1 per cent of the population had completed tertiary education, compared with 10.3 per cent in advanced economies (see Chart 4.1b). The gap had widened by 2010, with figures of 11.0 per cent and 16.6 per cent respectively. Nevertheless, several countries – Estonia, Lithuania, Russia

[1] In this chapter, the term "transition region" refers to Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, FYR Macedonia, Georgia, Hungary, Kazakhstan, Kosovo, Kyrgyz Republic, Latvia, Lithuania, Moldova, Mongolia, Montenegro, Poland, Romania, Russia, Serbia, Slovak Republic, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. SEMED refers to Egypt, Jordan, Morocco and Tunisia.
[2] See Sianesi and Van Reenen (2003) and Eichengreen et al. (2013).
[3] See Gennaioli et al. (2013).
[4] See Easterly (2002) and Natkhov and Polishchuk (2013).
[5] See Kaplan and Rauh (2013), Katz and Murphy (1992), Garicano and Rossi-Hansberg (2006), Autor et al. (2006), Garicano and Hubbard (2009), Terviö (2008) and Gabaix and Landier (2008).
[6] See Barro and Lee (2013). Advanced economies consist of high-income countries according to the World Bank's July 2013 classification, excluding transition countries.

Chart 4.2. Quality of primary and secondary schools in the transition and SEMED regions



Source: Authors' calculations based on Altinok et al. (2013).
Note: * – data refer to 2007; † – data refer to 2003. Hong Kong achieved the highest primary education score (649.0), while Taiwan achieved the highest secondary education score (661.4).

and Ukraine – are now close to or above the average for advanced economies. The transition region as a whole is also significantly ahead of the SEMED countries and other emerging market and developing economies.

On the basis of educational attainment data of this type, many governments and international organisations assumed after the collapse of communism that transition to a market economy would be "promoted by a valuable and transferable stock of human capital".[7] However, some observers warned that there was a significant gap between technical and business-related skills.[8] It was nevertheless hoped that the gap could be closed quickly, at least in some countries, by providing and improving higher education in "key subjects such as economics, administration, and Western languages".[9]

However, several researchers found evidence suggesting that the skills of older cohorts of educated workers depreciated significantly after the start of the transition process, and that their productivity and wages did not increase.[10] More recently, concerns about the quality of management skills have emerged from surveys[11] and annual census-type data.[12] In addition, large-scale brain drain has deprived a number of countries of skilled workers. The fact that in some countries migrant remittances account for more than 10 per cent of GDP illustrates the scale of the problem.[13]

Such findings suggest that focusing on educational attainment is not enough. Building a stock of human capital that will promote development requires an emphasis on the quality – rather than just the quantity – of education.[14]

QUALITY OF EDUCATION AND HUMAN CAPITAL

Primary and secondary education

Since 2000, 16 countries in the transition region have participated in international assessments of students in primary education and 25 have taken part in assessments of secondary students. Prior to this, participation was limited to a handful of countries. Charts 4.2a and b show the latest available scores.[15]

On average, primary school students in the transition region achieved slightly lower scores than those in advanced economies in 2007, although Bulgaria, Kazakhstan, Latvia, Lithuania and Russia were above the EU-15 average. Armenia, Kazakhstan, Latvia, Moldova, Russia and Slovenia have all seen improvements in primary school scores over time, while scores have deteriorated in the more mature economies of the Czech Republic, Hungary, Lithuania, Romania and Slovak Republic.

Larger differences emerge at the secondary level, partly owing to the increased number of countries participating. In 2009 the leading transition country was Estonia, which was also ahead of all EU countries and only trailed South Korea, Taiwan, Hong Kong, Japan, Liechtenstein and Switzerland. Hungary, Poland and Slovak Republic also surpassed the EU-15 average, while Latvia and Russia were comparable to the EU-15.

SEMED countries are lagging significantly behind most

[7] See Kertesi and Köllő (2002).
[8] See Kertesi and Köllő (2002).
[9] See Svejnar (1990).
[10] See Kertesi and Köllő (2002), Rutkowski (1996), Puhani (1997), Večerník (1995), Flanagan (1995), Chase (1998), Krueger and Pischke (1995), Burda and Schmidt (1997) and Guriev and Zhuravskaya (2009).
[11] See Bloom et al. (2012) and Schweiger and Friebel (2013).

countries in the transition region, particularly in terms of the quality of primary education. This can lead to problems later on, such as students dropping out or a failure to cover the secondary school curriculum. However, the case of Kazakhstan shows that even when primary education is of relatively high quality, the quality of secondary education can still be low.

Tertiary education

The communist bloc's restricted access to cutting-edge research prior to the 1990s (the former Yugoslavia being an exception in some respects) meant that transition challenges were particularly likely at tertiary level. Science and engineering (S&E) may have been an exception, as these were promoted under communism because of their military relevance, but the resulting research knowledge and expertise did not necessarily spill over into the broader university system.[16]

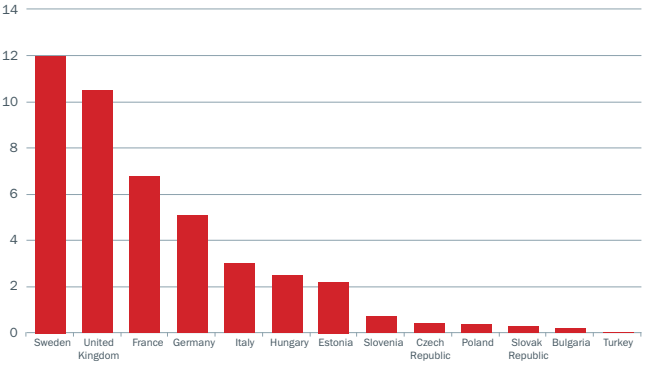
There are no international student assessments at tertiary level. However, the quality of tertiary education can be gauged from university rankings, the citation of academic publications, applications for European Research Council (ERC) grants and recipients of S&E doctorates at universities in the United States. Although a few countries in the transition region – the Czech Republic, Estonia, Hungary, Poland and Slovenia – excel in this respect, they do not match Western counterparts such as Germany, the Scandinavian nations, Switzerland or the United Kingdom (see Annex 4.1).

League tables of top universities are a popular measure of the quality of tertiary education institutions, although they tend to reflect research performance more accurately than teaching quality. The top 500 universities in the 2013 edition of the Shanghai Academic Ranking of World Universities (ARWU) include 10 universities from countries in the transition region – Croatia, Czech Republic, Hungary, Poland, Russia, Serbia and Slovenia – and one (in Egypt) from the SEMED region. By comparison, there are 38 UK universities, 37 from Germany and 20 from France, while among the smaller Western countries, Sweden has 11, the Netherlands 13, and Belgium and Switzerland seven each.

Citations of academic publications are a research-focused measure of the quality of tertiary education. The number of citable documents remains about five times greater in advanced market economies than in the transition region, although there were impressive increases between 1997 and 2011 in places such as Serbia, Turkey and the SEMED region (especially Tunisia). Articles by authors in the transition region also tend to be cited less often (4.5 times per article on average, compared with almost 10 for those of authors from advanced economies), and they also trail in terms of the "h-index", which reflects the productivity and impact of the published work of a scholar.[17] Egypt leads the SEMED region in this regard, with an h-index that is about 55 per cent of the average for an author in an advanced economy.

ERC grants support top researchers of any nationality or age who wish to pursue their cutting-edge research in an EU member state or an associated country or organisation. These long-term grants are almost entirely based on the assessment of researchers' abilities, as shown by their publication records, and should therefore be a good proxy for the quality of an individual researcher's tertiary education. Chart 4.3 shows ERC grant recipients per million people of working age (15 to 64-year-olds) in the country of the host institution in the period 2007-12. The list features only seven countries in the transition region and Turkey (out of 18 eligible countries). Hungary and Estonia are the leading countries in the transition region (and Hungary is also ahead of Western counterparts Greece and Portugal).

Chart 4.3. ERC grant recipients per million people of working age in the country of the host institution, 2007-12



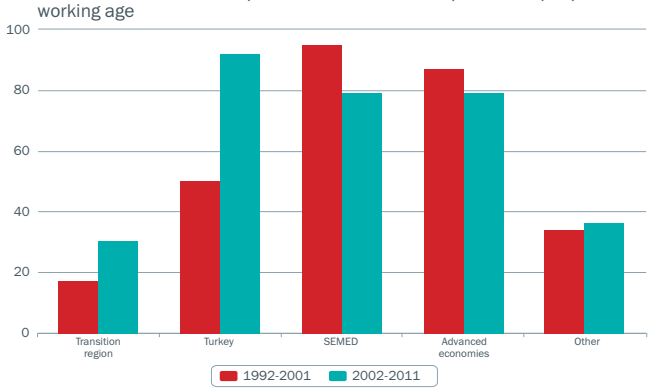
Source: European Research Council.

The quality of an education system is also reflected in the number of students from that country who successfully complete doctoral degrees in the United States. Between 2002 and 2011 the average number of recipients of S&E doctorates at US universities per million people of working age was 79.5 in advanced economies, compared with 30.5 in transition countries (see Chart 4.4). Nonetheless, there has been a significant improvement over time, mostly owing to students from Bulgaria, Croatia, FYR Macedonia, Romania, Serbia and Slovenia. This may indicate improvements in the dissemination of information among students regarding universities and job options abroad, the influence of networks established over time or the increased affordability of application fees given increases in average incomes.

Among the SEMED countries, Jordan stands out with 278.1 recipients of S&E doctorates from US universities per million people of working age in the period 2002-11. However, all countries have experienced a downward trend.

[12] See Brown et al. (2006).
[13] According to the World Bank (2011), Tajikistan (47%), the Kyrgyz Republic (29%), Moldova (23%), Armenia (13%), Jordan (12%) and Bosnia and Herzegovina (11%) were among the countries with the largest remittance inflows as a share of GDP in 2011.
[14] See Pritchett (2001).
[15] See Altinok et al. (2013).
[16] In the former Soviet Union basic research was concentrated in science cities, "closed" cities and academic cities. Funding for these cities has been hit hard post-1990. See Schweiger and Zacchia (2013).
[17] The h-index is based on a scientist's most-cited papers and the number of times that these are cited in other publications.

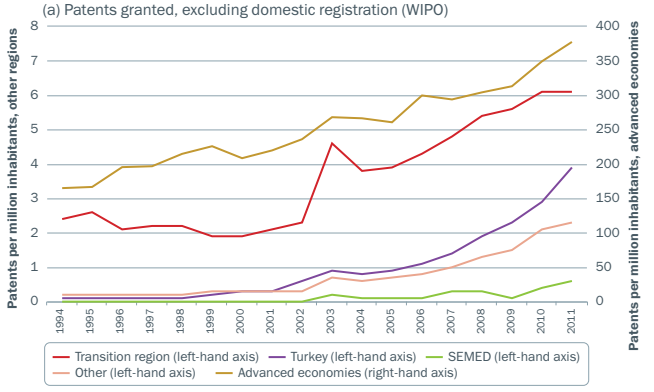
Chart 4.4. Number of recipients of S&E doctorates per million people of working age



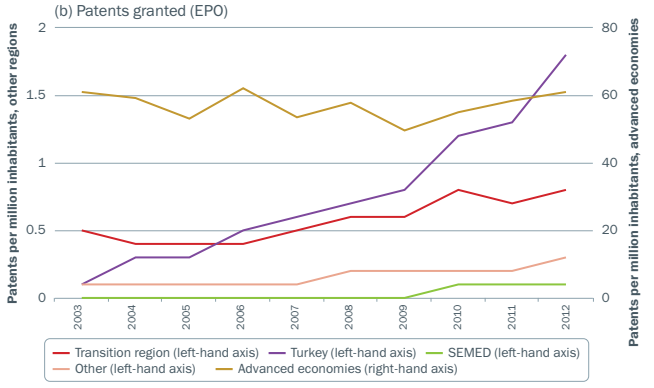
Source: Survey of Earned Doctorates, National Science Foundation (2013).

Chart 4.5. Patents per million inhabitants: EPO and WIPO

(a) Patents granted, excluding domestic registration (WIPO)



(b) Patents granted (EPO)



Source: EPO and WIPO.
Note: The right-hand axes relate to patents in advanced economies; the left-hand axes relate to all other regions. Patents that are registered in the country of origin only are excluded from the WIPO data.

WORKFORCE SKILLS AND PATENTS GRANTED

A high-quality education at primary, secondary or tertiary level may not generate faster economic growth if the skills acquired during formal schooling do not match the demands of employers or the needs of the economy. According to some estimates, up to one-third of people in employment are either under- or over-qualified for the work that they do, and skills mismatches are increasing.[18] Highly educated people in many countries cannot find good jobs – or any jobs at all.

The Business Environment and Enterprise Performance Survey (BEEPS) conducted by the EBRD and the World Bank, which focuses mainly on small and medium-sized enterprises in most countries in the transition region, is one source of employer perceptions. In the 2008-09 survey round, having an inadequately educated workforce was judged the main business environment obstacle in Estonia, Kazakhstan, Romania and Uzbekistan, the second largest obstacle in Belarus, Croatia, Lithuania, Russia, Slovak Republic and Tajikistan, and the third largest in Latvia, Moldova, Montenegro and Poland. Across the 30 countries, having an inadequately educated workforce was, on average, the third largest business environment obstacle (out of 14), after informal sector competition and electricity.[19]

The fact that private sector firms in Estonia – the transition country with the best secondary schools in terms of quality – viewed workforce skills as the main obstacle appears puzzling. This could indicate that skills obtained during education are not meeting the requirements of businesses or that businesses are not willing to offer sufficient remuneration to attract workers with the skills they need.

Another indicator of the quality of human capital is innovation, coupled with intellectual property rights and access to finance. Patenting activity in transition countries has accelerated on average in the last decade, but it remains significantly behind that seen in advanced economies[20] (see Charts 4.5a and b, which are based on World Intellectual Property Organization (WIPO) and European Patent Office (EPO) data).[21] SEMED countries trail other regions.

Among the countries in the transition region, Slovenia is the best performer on a population-adjusted basis (18.5 and 87.7 patents per million inhabitants according to the WIPO and EPO respectively), followed by the Czech Republic, Hungary, Estonia and Latvia. Jordan is the best performer among the SEMED countries according to both EPO (0.2 patents per million) and WIPO (3.7 patents per million) data.

BRAIN DRAIN OR BRAIN GAIN?

Building high-quality human capital stock depends not only on the high quality of education, but also on a country's ability to attract and retain skilled people. This section focuses on emigration and brain drain, using data on international bilateral migration for Organisation for Economic Co-operation and Development

[18] See World Bank (2012).
[19] For details of the methodology behind these figures, see EBRD (2010), Chapter 5. The analysis controls for the characteristics of companies and respondents.
[20] The top 10 countries and territories are dominated by those commonly regarded as tax havens (such as Barbados, Bermuda, the Cayman Islands, Liechtenstein and Luxembourg) and those with low tax rates (such as Switzerland). The EPO list includes Germany and Sweden, while the WIPO list includes Japan, Finland and the Netherlands. The data need to be interpreted with caution.

Table 4.1
Share of emigration stock by origin, destination and skill level: 1990 and 2000

		2000			1990		
Origin	Destination	Total	Low skill	High skill	Total	Low skill	High skill
Transition region	Transition region	72.3	75.3	64.1	73.6	76.6	57.4
Transition region	Turkey	1.9	2.1	1.2	2.1	2.2	1.3
Transition region	SEMED	0.0	0.0	0.1	0.0	0.0	0.0
Transition region	Advanced economies	21.7	19.2	28.9	20.7	17.8	36.9
Transition region	Other	4.1	3.4	5.8	3.6	3.5	4.4
Turkey	Transition region	1.4	1.3	2.9	0.9	0.8	2.0
Turkey	SEMED	0.1	0.1	0.1	0.0	0.0	0.0
Turkey	Advanced economies	93.3	93.7	89.3	92.2	92.4	90.5
Turkey	Other	5.2	4.9	7.7	6.9	6.8	7.4
SEMED	Transition region	0.2	0.1	0.5	0.1	0.1	0.3
SEMED	Turkey	0.0	0.0	0.1	0.0	0.0	0.1
SEMED	SEMED	2.6	2.4	3.5	2.9	2.6	4.2
SEMED	Advanced economies	43.0	40.8	53.2	40.2	37.9	54.0
SEMED	Other	54.2	56.7	42.7	56.8	59.4	41.4
Advanced economies	Transition region	2.6	3.1	1.8	2.4	2.9	1.2
Advanced economies	Turkey	0.8	0.9	0.7	0.4	0.5	0.2
Advanced economies	SEMED	0.3	0.3	0.3	0.2	0.2	0.1
Advanced economies	Advanced economies	84.9	83.0	88.3	87.4	85.9	91.2
Advanced economies	Other	11.4	12.9	8.8	9.5	10.4	7.2
Other	Transition countries	0.5	0.5	0.6	0.2	0.2	0.4
Other	Turkey	0.0	0.0	0.1	0.0	0.0	0.1
Other	SEMED	0.5	0.6	0.5	0.5	0.5	0.3
Other	Advanced economies	50.5	41.1	81.5	38.4	30.0	79.0
Other	Other	48.4	57.9	17.4	60.8	69.3	20.2

Source: Author's calculations based on Artuç et al. (2013).
Note: As a percentage of total stock of emigration from the region of origin for the year shown.

(OECD) and non-OECD countries of origin and destination, based on census data for 100 countries in 2000 and 60 countries in 1990.[22] An aggregated group-level breakdown is presented in Table 4.1.

Almost 75 per cent of migrants from countries in the transition region emigrated to other countries in the transition region. Migration from countries that were formerly part of the Soviet Union – primarily to Russia, but also to Kazakhstan and Ukraine – played a major role, alongside migration between former Yugoslav countries (partly owing to the wars of the 1990s). The percentage of migration within the former Soviet Union and the former Yugoslavia was lower for high-skilled emigrants, indicating that more developed transition countries became a more attractive destination for high-skilled emigrants from less developed countries.

The United States, Germany, Canada and Australia were among the top advanced economy destinations for emigrants from the transition region in both 1990 and 2000. There are also some interesting patterns involving neighbouring countries. The majority of Albanian emigrants moved to Greece and Italy, while Bulgarian emigrants favoured Turkey. Finland had the second largest stock of Estonian emigrants (after Russia), while Poland was the most popular choice for emigrants from Lithuania. Slovak emigrants mainly chose the Czech Republic. In virtually all countries in the transition region, emigration to a neighbouring country tended to be more popular for the less educated than for their high-skilled counterparts.[23]

The majority of emigrants from Turkey moved to Germany and the United States. Germany was particularly attractive for low-skilled workers. The top destinations for emigrants from Egypt were Saudi Arabia and Libya, while Jordanians opted for Palestine, Kuwait and Saudi Arabia. Moroccans favoured France, Israel and Spain, and Tunisians chose France, Israel and Libya. The differences in terms of destinations between less and more educated emigrants were more pronounced in the SEMED region than in transition countries, particularly for emigration to the United States and Canada.

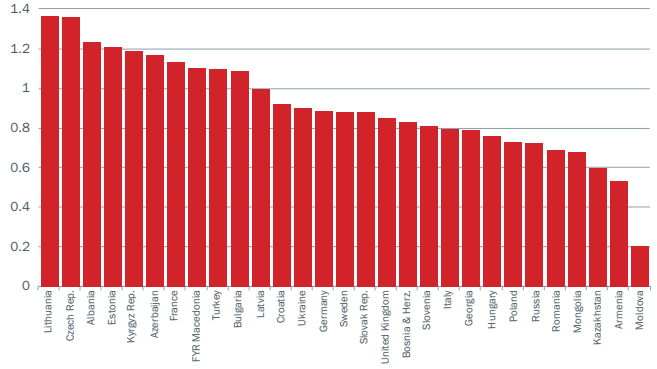
The migration patterns shown in Table 4.1 are important

[21] The EPO data are better in terms of comparability, but proximity and country-specific interests clearly play an important part.
[22] See Artuç et al. (2013).
[23] See Artuç et al. (2013) and Docquier and Rapoport (2012). The exceptions in 2000 were migrants moving from Bosnia and Herzegovina to Serbia and Montenegro, from Georgia to Armenia, from Turkmenistan to Kazakhstan, from Poland to Germany, from Moldova to Romania and from Russia to Kazakhstan, but the differences were small.

Chart 4.6. High-skilled net emigration rates (brain drain) in transition and SEMED regions

Source: Authors' calculations based on Artuç et al. (2013).
Note: The high-skilled net emigration rate is calculated as net emigration from the country (that is to say, the stock of the country's emigrants abroad minus the stock of foreign-born immigrants in the country) as a percentage of the country's native labour force.

Chart 4.7. Income ladder returns to tertiary education (adjusted for supply and demand factors); employed heads of households



Source: Authors' calculations using the EBRD/World Bank Life in Transition Survey (2006 and 2010).

because destination countries can have a substantial impact on migrants' countries of origin through remittances, return migration and the creation of trade and business networks.[24] That said, the first-order effect of emigration on the human capital stock of the country of origin is the loss of skilled labour – the classic brain drain problem.

Chart 4.6 illustrates this loss by showing high-skilled net emigration stock rates (net emigration as a share of the country's native labour force) for transition and SEMED countries. All countries experienced emigration by their high-skilled workers, but also received high-skilled immigrants from other countries. Several former Yugoslav countries suffered the worst brain drain, owing to the wars in the early 1990s.

In most countries net emigration rates were higher in 2000 than they had been in 1990. Estonia seems to have benefited the most. Its gross emigration rate was relatively high in both 1990 and 2000, but immigrants to Estonia were also highly skilled. Latvia, Kazakhstan, Moldova and Russia also appear to have been net "winners" in recent years.

While complete data are not yet available, it is likely that brain drain accelerated after 2000 with the accession to the EU of eight transition countries in 2004, followed by Bulgaria and Romania in 2007 and Croatia in 2013. There is some evidence that substantial numbers of high-skilled workers have emigrated from some of these countries to incumbent EU countries. This trend may have been reinforced by the global economic crisis seen since 2008, as social and political problems associated with recessions (such as poverty, unemployment, discrimination and repression) tend to increase emigration, particularly emigration by high-skilled workers.[25]

RETURNS TO TERTIARY EDUCATION IN THE TRANSITION REGION

People with tertiary schooling typically earn higher incomes than those who start work after completing secondary schooling, with the difference between the two representing returns to tertiary education. More precisely, returns to tertiary education are the increase in lifetime income, relative to the income associated with secondary schooling, which an individual can expect as a result of obtaining a tertiary degree. This is a critical factor both in an individual's decision to pursue higher education and, consequently, in the development of a country's human capital stock.

Returns depend on the supply of, and demand for, tertiary-educated workers.[26] It is not a problem when returns are comparatively low because of an abundant supply of highly educated graduates. However, when returns are low because of weak demand, this raises concerns. One reason for such a scenario could be the poor quality of tertiary education. Another could be that highly educated people are not being matched with the appropriate jobs and cannot use their skills effectively. A third reason could be that even though well-trained graduates

[24] See Docquier and Rapoport (2012) and Burchardi and Hassan (2013).
[25] See Docquier and Rapoport (2012).
[26] See Montenegro and Patrinos (2013).

are being matched with the right jobs, they are being under-paid. The last two interpretations imply that while a good education system is necessary to build an effective stock of human capital, this is not sufficient for growth if that stock is not used effectively or if there are inadequate incentives for an individual to invest in tertiary education.

Regression analysis can be used to identify the share of returns to tertiary education that is not explained by either the supply of and demand for tertiary graduates or the quality of the education system. This is illustrated in the first two columns of Table 4.2. Returns are estimated as average country-level differences in terms of the subjective income ladder between employed heads of households who have a university degree and those with just a secondary school diploma. The data used are taken from the Life in Transition Survey (LiTS) conducted by the EBRD and the World Bank in 2006 and 2010.[27] On the supply side, returns depend on the proportion of people with a university degree and brain drain, measured as a high-skilled net emigration stock rate.[28] Demand for tertiary graduates, on the other hand, is influenced by the quality of universities in the given country (measured by the number of S&E students originating from each country who later obtain a doctorate in the United States), as well as the average quality of secondary schooling (measured by the number of undergraduate students in the United States per million people of working age and by international assessment tests for secondary schools). In addition, the regressions use either the share of high-technology exports or GDP per capita as proxies for the degree to which the economic structure is likely to require (and value) tertiary education graduates.[29]

Chart 4.7 shows income ladder returns to tertiary education by country, adjusted for basic supply and demand forces, using the residuals from the first regression in Table 4.2.[30] Assuming that raw returns and supply and demand factors are measured correctly, these adjusted returns reflect differences in the extent to which human capital is used and remunerated across countries. The chart shows a high degree of heterogeneity across countries. For instance, in Lithuania and the Czech Republic university graduates are, on average, almost 1.4 income ladder steps above secondary school graduates, while the difference in the perceived ladder position in Moldova is only 0.2 of a ladder step. The adjusted returns ranking in the chart is likely to be imprecise owing to measurement errors, the relatively small sample, the subjective nature of the relative income measure used in the analysis and the fact that the self-reported position on the income ladder may not reflect informal payments or gifts. Therefore, while a country's broad position in the ranking – that is, whether it is near the top, at the bottom or in the middle – should be informative, the exact order need not be.

The remaining columns of Table 4.2 explore the correlation between returns to education and variables describing the quality of the institutional environment, while controlling for supply and demand. For example, Sweden's level of government effectiveness is associated with returns about one income ladder step above the levels seen in the Kyrgyz Republic and Moldova (column 3). Similarly, the rule of law in Germany and Sweden is associated with returns that are about two-thirds of an income ladder step higher than those seen in Albania, Azerbaijan, Kazakhstan, Kyrgyz Republic, Russia and Ukraine (column 4).

For the same sets of countries, the difference between the minimum and maximum levels of court impartiality is estimated to be associated with a difference in returns of about half an income ladder step (column 5). Levels of contract viability in EU countries (excluding Bulgaria, Poland and Romania) are associated with returns about half a ladder step above those seen in Armenia, Moldova and Russia (column 6). Lastly, the level of transition progress in Estonia – as measured by the EBRD transition indicator – is associated with returns about three-quarters of an income ladder step above those seen in Azerbaijan (column 7).

There are several reasons why the institutional environment could (directly or indirectly) affect the level of returns to education.

- Institutions affect implicit decisions by highly educated people to engage in rent-seeking or socially productive activities.[31] Improvements in government effectiveness reduce the returns to rent-seeking, which is consistent with the regression results. The country-specific legal setting is also crucial, with a stronger rule of law, more impartial courts and a greater level of contract viability all reducing the cost of productive activities (for example, entrepreneurship). Greater progress with transition to a market economy also increases the potential benefits of entrepreneurship, while reducing the relative attractiveness of rent-seeking.
- Market development, government effectiveness and country-specific legal characteristics also affect the allocation of highly educated people across the economy and within particular firms, in terms of both their positions and their actual effectiveness. Better institutions lead to more efficient matching of talented people with demanding jobs, leading to more efficient use of such people and, ultimately, greater productivity.
- By reducing various risks that affect people and firms, a better institutional environment – particularly the legal aspects – directly or indirectly encourages the highly educated to further improve their knowledge and skills, which in turn enhances the quality of human capital stock, even after the completion of formal schooling.

To sum up, a better institutional environment increases the productivity of highly educated people and – by fostering higher returns to schooling – encourages more talented people to complete tertiary education. This, in turn, creates momentum for human capital accumulation and, consequently, for growth.

[27] The data and the estimation method are described in more detail in Box 4.1

[28] Brain drain will reduce the number of tertiary-educated workers competing for jobs and therefore increase returns to tertiary education. At the same time, brain drain could have a downward impact on the returns to education if the human capital of workers who emigrate is higher than that of workers who stay in the country. The regression results suggest that the first channel generally prevails, although the net effect is not statistically different from zero.

[29] See Goldin and Katz (2010).

[30] Chart 4.7 shows the country-specific residuals from the regression (contained in column 1 of Table 4.2).

[31] See Natkhov and Polishchuk (2013).

Table 4.2
Income ladder returns to tertiary education in terms of human capital supply and demand and the institutional environment

	Dependent variable: income ladder return to tertiary education						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Determinants of supply							
Percentage of people with tertiary education	-0.024**	-0.013	-0.015	-0.017	-0.025**	-0.006	-0.014
	(0.011)	(0.011)	(0.010)	(0.011)	(0.011)	(0.011)	(0.013)
Brain drain	0.487	-0.031	0.180	0.268	0.206	0.436	0.008
	(0.599)	(0.572)	(0.485)	(0.562)	(0.616)	(0.599)	(0.626)
Determinants of demand							
Recipients of US S&E doctorates	0.023	0.014	0.014	0.018	0.020	0.023	0.009
	(0.022)	(0.018)	(0.020)	(0.022)	(0.022)	(0.017)	(0.021)
Undergraduates in the United States	-0.001**	-0.001**	-0.001***	-0.001***	-0.001**	-0.001***	-0.001
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)
Secondary school test scores	-0.000	-0.003	-0.003**	-0.003*	-0.001	-0.002	-0.003*
	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)
High-technology exports	0.015**	0.009	0.004	0.009	0.010	0.014*	0.003
	(0.007)	(0.007)	(0.006)	(0.007)	(0.008)	(0.008)	(0.010)
GDP per capita		0.039					
		(0.024)					
Institutional environment							
Effectiveness of government			0.186**				
			(0.072)				
Rule of law				0.127**			
				(0.057)			
Impartial courts					0.090*		
					(0.052)		
Contract viability						0.175***	
						(0.049)	
Transition progress							0.185*
							(0.100)
Transition country indicator	-0.075	0.463	0.143	0.107	0.108	0.110	
	(0.138)	(0.391)	(0.152)	(0.160)	(0.154)	(0.161)	
Intercept	0.912	1.434**	1.329**	1.382**	0.815	0.050	0.826
	(0.813)	(0.570)	(0.505)	(0.659)	(0.728)	(1.217)	(0.580)
Observations	29	29	29	29	29	25	24
R-squared	0.405	0.556	0.587	0.495	0.463	0.648	0.452
Adjusted R-squared	0.207	0.379	0.422	0.294	0.248	0.472	0.212
F	3.383	3.510	4.652	3.983	4.670	5.642	2.079

Source: Barro and Lee (2013), US National Science Foundation, Institute of International Education, Altinok et al. (2013), World Bank (World Development Indicators and Worldwide Governance Indicators), Fraser Institute (Economic Freedom of the World index), International Country Risk Guide and EBRD.
Note: Robust standard errors in parentheses. ***, ** and * denote statistical significance at the 1, 5 and 10 per cent levels respectively. Transition country indicator is a variable equal to 1 if the country is a transition country and 0 otherwise.

Note on variable definitions in Table 4.2 (sources in brackets): "Percentage of people with tertiary education" refers to share of population aged 25 and over who had completed tertiary schooling in 2005 (based on Barro and Lee, 2013, and own calculations); "recipients of US S&E doctorates" refers to average number of recipients in the United States in 2007-11 per million people of working age (National Science Foundation); "undergraduates in the United States" refers to average number of undergraduate students in United States in 2007-11 per million people of working age (Institute of International Education); "secondary school test scores" refers to average score in tests in 1995-2010 (Altinok et al. 2013); "GDP per capita" refers to 2006 GDP per capita at purchasing power parity in thousands of constant 2005 international dollars (World Development Indicators); "high-technology exports" refers to high-technology exports as a percentage of manufactured exports in 2006 (World Development Indicators); "effectiveness of government" refers to an effectiveness indicator for 2006 (Worldwide Governance Indicators); "rule of law" refers to a rule of law indicator for 2006 (Worldwide Governance Indicators); "impartial courts" refers to the variable measuring efficiency, transparency and neutrality of the legal framework with respect to dispute settlements and challenging government actions and or regulations in 2006 (Economic Freedom of the World); "contract viability" refers to the viability of contracts in 2006 (International Country Risk Guide); and "transition progress" refers to the average EBRD transition indicator score in 2006 (EBRD).

CONCLUSION

In many transition countries the stock of human capital educated to secondary level or higher is nominally on a par with, or above, most mature market economies. However, there are large differences in the quality of human capital across the transition region. A few countries (such as Estonia, Hungary, Poland and Slovenia) appear to be relatively close to the mature market economies, while others (including most countries in Central Asia) lag far behind. Countries in the SEMED region tend to be somewhere in the middle. Thus, many transition and SEMED countries risk being left behind. Only a few transition and SEMED countries – and also Turkey – have increased their international competitiveness in terms of education and research.

How can more countries catch up in this respect? This chapter has presented a number of measures that policy-makers can use to benchmark primary, secondary and tertiary education in their countries. At the same time, the regressions suggest that the quantity and quality of education are not all that matter when building an effective stock of human capital. Economies with better economic and legal institutions which are open to new ideas and global markets use their human capital in a more efficient way. This also means that they can provide high-skilled workers with higher returns and therefore deter brain drain.

Governments must provide a good regulatory framework to ensure excellence in the fields of research and teaching. They also need to recognise the relevance of specific skills, particularly at secondary and vocational levels.

A higher proportion of educated people does not necessarily lead to faster economic growth if the skills acquired during schooling do not match employers' needs. Better communication and cooperation between the private sector and universities would be beneficial and should be encouraged. Similarly, governments should not subject universities to political interference, which may deter creativity and trigger brain drain. They should provide adequate funding.

Policy-makers must also realise that having weak economic institutions and lagging behind in terms of economic reform will impede the development of human capital. Improved institutional environments are necessary to develop, attract and retain high-skilled people who will innovate, adapt to global technological changes and promote economic growth.

The stock of human capital tends to improve slowly, while brain drain may rapidly reduce it. Nevertheless, institutions can sometimes change quickly for the better through political or economic reform. They can influence the creation of human capital because they determine what returns to education people can expect. Institutions can also affect growth by determining how the existing human capital stock is used and by influencing migration flows. Developing human capital and improving institutions in transition economies are therefore complementary strategies. They reinforce each other, and should therefore be pursued in parallel.

Box 4.1
Estimating returns to tertiary schooling

Investigating the determinants of returns to tertiary schooling, as summarised in Table 4.2, is a two-stage process. The first involves estimating returns at the country level. The following equation is estimated for each country using the pooled sample of wage-earning heads of households in the first and second LiTS surveys:[32]

$$y_{i,c}=\beta_{0,c}+\beta_{PrimEduc,c}PrimEduc_{i,c}+\beta_{TertEduc,c}TertEduc_{i,c}+\beta_{Exp,c}Experience_{i,c}+\beta_{Exp2,c}Experience^2_{i,c}+\beta_{Wave,c}Wave_{i,c}+u_i$$

where i and c denote household i in country c and $y_{i,c}$ denotes the household's subjective income ladder position, measured on a scale of 1 to 10 (where 10 means that the head of the household considers the household to be in the highest income decile).[33] $PrimEduc_{i,c}$ is an indicator that takes the value 1 if the head of the household has completed only primary education and 0 otherwise, $TertEduc_{i,c}$ is a similar indicator for tertiary education, and $Experience_{i,c}$ denotes the work experience of the head of household i in country c, which is assumed to be equal to the length of the individual's post-school life.[34] $Wave_{i,c}$ indicates the LiTS survey round to which the data correspond. $\beta_{TertEduc,c}$ is the coefficient of interest, capturing the added value of attaining a tertiary degree compared with completing only secondary schooling in country c.

It is important to point out two potential limitations of this regression.

- A crucial assumption is that the experience and educational achievements of the *head* of the household contribute to his or her perception of the subjective income of the entire household. Since that income may also reflect the spouse's income, for example, or other sources of income, this may not always hold.
- The subjective income position may not be a reliable predictor of objective economic outcomes.[35] As a result, it is important to consider the true nature of the subjective variable when interpreting the results.

In the second stage, the estimated country-level returns to tertiary education ($\beta_{TertEduc,c}$) are regressed on supply and demand factors, as well as institutional environment variables, as follows:

$$\beta_{TertEduc,c}=a_0+a_{Supply}Supply_c+a_{Demand}Demand_c+a_{InstEnvir}InstEnvir_c+\varepsilon_c$$

where $Supply_c$ and $Demand_c$ represent country-specific factors (or proxies for such factors) affecting the supply and demand channels in country c, as described in the main text.[36] $InstEnvir_c$ denotes a particular aspect of the institutional environment. Table 4.1.1 shows that the institutional variables used in the analysis are highly correlated with each other.[37] For this reason, only one is included at any given time (see Table 4.2).

Table 4.1.1
Correlation between institutional environment variables in the context of returns to schooling

	Effectiveness of government	Rule of law	Impartial courts	Contract viability
Rule of law	0.951			
Impartial courts	0.724	0.696		
Contract viability	0.792	0.796	0.510	
Reforms	0.909	0.887	0.602	0.687

For sources and notes, see Table 4.2.

Annex 4.1

MEASURING THE QUALITY OF EDUCATION

PRIMARY AND SECONDARY EDUCATION: PISA, TIMSS AND PIRLS

The rankings for primary and secondary education shown in Charts 4.2a and 4.2b in the main text are based on the combined average country scores in three international student assessments: the Progress in International Reading Literacy Study (PIRLS), the Trends in International Mathematics and Science Study (TIMSS) and the Programme for International Student Assessment (PISA).[38] Of the transition countries, only Belarus, Kosovo, Tajikistan, Turkmenistan and Uzbekistan have yet to participate in any of these three assessments.

Reading literacy in the fourth grade (PIRLS) is reasonably good in most transition countries. Russia shared the second place with Finland in 2011 (after Hong Kong). However, Azerbaijan and Georgia lagged significantly behind other transition countries.

Proficiency in mathematics in the eighth grade lags only slightly behind the average for advanced economies. Russia was the best performer of the 10 countries in the transition region that participated in the mathematics TIMSS in 2011. It was also ahead of all western European countries, but trailed South Korea, Singapore, Taiwan, Hong Kong and Japan. Countries in the SEMED region lagged behind other transition countries, although Tunisia was roughly on a par with FYR Macedonia and Georgia in 2011.

Transition countries' average level of attainment in science in the eighth grade was roughly the same as that seen in the advanced economies in 2011. The leading countries were

[32] This follows the standard "Mincerian" regression approach to estimate the determinants of wages or earnings. The LiTS survey is split into two parts, with two possible respondents. The first respondent is the head of the household or a knowledgeable family member, while the second is selected randomly from among the members of the household using the Kish grid method (a pre-assigned table of random numbers). The subjective income variable and the education level variable are included in the second part of the survey, where the respondent is chosen at random.

[33] The exact wording is as follows: "Please imagine a ten-step ladder where on the bottom, the first step, stand the poorest people and on the highest step, the tenth, stand the richest. On which step of the ten is your household today?"

[34] Specifically, $Experience_{i,c}=age_i-6-YrsEduc_i$, where *YrsEduc* is six years of schooling for primary education, 12 years for secondary education and 16 years for tertiary education.

[35] See Cojocaru and Diagne (2013).

[36] The percentage of the population aged 25 and over who had completed tertiary education in 2005 (which is the year closest to the base year) was calculated on the basis of the widely used Barro-Lee

Table A.4.1.1
PISA, TIMSS and PIRLS scores

Country	PISA						PIRLS (fourth grade)		TIMSS (eighth grade)			
	Reading (2000)	Maths (2006)	Science (2006)	Reading (2009)	Maths (2009)	Science (2009)	2001	2011	Maths (1999)	Science (1999)	Maths (2011)	Science (2011)
Transition region and Turkey												
Albania	348.8			384.8								
Armenia									478[b]	461[b]	467	437
Azerbaijan	352.9[c]	476.0	382.3	361.5	431.0	373.2	462					
Bosnia and Herzegovina											456[d]	
Bulgaria	430.4	413.4	434.1	429.1	428.1	439.3	550	532	540[a]	565[a]	464[d]	479[b]
Croatia	477.4[c]	467.2	493.2	475.7	459.9	486.4	553					
Czech Republic	491.6	516.5[b]	512.9	478.2	492.8	500.5	537	545	564[a]	574[a]	504[d]	539
Estonia	500.7[c]	514.6	531.4	501.0	512.1	527.8			531[b]	552[b]		
FYR Macedonia							442	442[c]	447	458	426	407
Georgia							471[c]	488	410[d]		431	420
Hungary	480.0	490.0[b]	503.9	494.2	490.2	502.6	543	539	537[a]	554[a]	505	522
Kazakhstan											487	490
Kyrgyz Republic	284.7[c]	310.6	322.0	314.0	331.2	329.5						
Latvia	458.1	483.4[b]	489.5	484.0	482.0	493.9	545	541[c]	493[a]	485[a]	508	512[b]
Lithuania	470.1[c]	486.4	488.0	468.4	476.6	491.4		557[c]	477[a]	476[a]	502	514
Moldova							492	500[c]	469	459	460	472[b]
Montenegro	392.0[c]	399.3	411.8	407.5	402.5	401.3						
Poland	479.1	490.2[b]	497.8	500.5	494.8	508.1	519[c]	526				
Romania	427.9	414.8	418.4	424.5	427.1	428.2	512	502	482[a]	486[a]	458	465
Russia	461.8	468.4[b]	479.5	459.4	467.8	478.3	528	568	535[a]	538[a]	539	542
Serbia	411.7[b]	436.9[b]	435.6	442.0	442.4	442.8			477[b]	468[b]	486[d]	
Slovak Republic	469.2[b]	498.2[b]	488.4	477.4	496.7	490.3	518	535	547[a]	544[a]	508	517[b]
Slovenia	494.4[c]	504.5	518.8	483.1	501.5	511.8	502	530	541[a]	560[a]	505	543
Turkey	441.0[b]	423.4[b]	423.8	464.2	445.5	453.9	449		429	433	452	483
Ukraine									462[d]		479	501
SEMED countries												
Egypt									406[b]	421[b]	391[d]	
Jordan	400.6[c]	384.0	422.0	405.0	386.7	415.4			428	450	406	449
Morocco							350	310	337	323	371	376
Tunisia	374.6[b]	358.7[b]	385.5	403.6	371.5	400.7			448	430	425	439

Source: PISA, PIRLS and TIMSS.
Note: a – 1995; b – 2003; c – 2006; d – 2007.

Slovenia and Russia, which performed better than the United States and all EU countries except Finland.

More countries from the transition region participated in the 2006 and 2009 rounds of the PISA programme, which pointed to an increase in the gap between those countries and advanced economies. The order of countries in terms of the achievements of 15-year-old school pupils was similar to that seen for fourth grade pupils. Estonia performed the best in reading, mathematics and science in 2009 – on a par with Switzerland in reading, Germany and Belgium in mathematics and sixth out of all participating countries in science.

TERTIARY EDUCATION

This annex presents more detailed information and data on some of the proxies for the quality of tertiary education presented in the main text.

League tables of top universities typically rank the world's top 500 universities (out of a total of approximately 17,000 universities worldwide). The Academic Ranking of World Universities (ARWU) was first published in 2003 by the Shanghai Jiao Tong University. That was followed by the Times Higher Education (THE) World University Rankings, which were first produced in cooperation with Quacquarelli Symonds (QS) in 2004. In 2010 THE partnered Thomson Reuters in producing new rankings, while QS continued using the same methodology as before in partnership with US News & World Report.

A purely research-based ranking, the Performance Ranking of Scientific Papers for World Universities – also known as the Higher Education Evaluation and Accreditation Council of Taiwan Ranking (HEEACT Ranking) – was first published in 2007. Since 2012 the ranking has been known as the National Taiwan University Ranking (NTU Ranking).[39]

dataset, augmented with additional census-based and survey-based data used to impute figures for the missing countries. For the countries missing from the Barro-Lee dataset, the percentage of people having completed tertiary education in 2005 was imputed using census data, IIASA/VID imputations and data from the UNESCO Global Education Digest (GED; 2008 and 2011). Where data for people over the age of 25 were not available, data for people over the age of 15 were linearly interpolated using the assumption that the percentage of people between the ages of 15 and 24 who have completed tertiary education is equal to the percentage of all people over the age of 15 who have such an educational level. In Kosovo there were no census data available prior to 2011, so the Demographic and Health Survey from 2003 was used for the purposes of interpolation. Further adjustments were made to reflect the fact that unlike the Barro-Lee dataset, the IIASA/VID and GED datasets include non-university education in the tertiary category.

[37] To improve the comparability of the institutional factors, all of the institutional indices were adjusted to fit a scale between 0 and 10.

[38] See Altinok et al. (2013) for details. PIRLS and TIMSS are conducted by the International Association for

Table A.4.1.2
Number of top 500 universities in league tables by region

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transition region										
ARWU	8	8	7	8	8	8	8	9	10	10
QS		15						12	11	
NTU									7	
Turkey										
ARWU	0	2	0	1	1	1	1	1	1	1
QS		4						5	2	
NTU									0	
SEMED										
ARWU	0	0	1	1	0	0	0	1	1	1
QS		1						1	1	
NTU									0	
Advanced economies										
ARWU	465	459	461	462	451	448	443	439	432	432
QS		429						435	427	
NTU									455	
Other										
ARWU	29	31	31	38	43	44	48	50	56	56
QS		51						47	60	
NTU									38	

Source: Authors' calculations based on ARWU, QS World University Ranking and NTU Ranking.

Table A.4.1.3
Number of citable documents published in the three previous years, average h-index and average number of citations per document

	Transition region	Turkey	SEMED	Advanced economies	Other
Number of citable documents published in three previous years (thousands)					
1997	72.1	5.6	4.7	883.4	90.9
1998	72.9	6.1	4.9	886.1	99.5
1999	72.8	7.1	5.1	887.9	105.3
2000	75.2	7.2	5.4	904.5	113.8
2001	76.6	8.6	5.7	883.3	128.1
2002	79.5	11.1	6.1	921.9	136.2
2003	86.4	13.8	7.0	1,024.0	161.7
2004	90.7	16.4	7.8	1,061.7	203.3
2005	104.0	18.7	8.5	1,213.8	274.7
2006	105.7	21.1	9.8	1,343.4	332.9
2007	112.5	23.1	11.1	1,375.0	372.9
2008	120.8	23.4	12.6	1,382.6	429.5
2009	123.7	26.8	15.2	1,414.8	496.7
2010	137.1	29.5	16.9	1,557.7	570.7
2011	142.5	30.2	19.0	1,588.9	644.6
Average number of citations per document (excluding self-citations)					
1996-2011	4.6	4.5	4.3	9.8	7.6
Average h-index					
1996-2011	100.6	193.0	91.0	223.3	59.7

Source: Authors' calculations based on the SCImago Journal and Country Rank portal (www.scimagojr.com).

Table A.4.1.2 shows the number of top 500 universities by region according to the ARWU, QS and NTU rankings, respectively. The number of universities from transition and SEMED countries in the top 500 varies across the rankings; universities from the Czech Republic, Poland and Russia are included in the latest available versions of each ranking.

The 2013 ARWU includes 10 universities from seven transition countries (Croatia, Czech Republic, Hungary, Poland, Russia, Serbia and Slovenia) and one from Turkey. The 2013 ranking also included a university from one SEMED country – Egypt. The 2012 QS ranking contained 11 universities from four countries in the transition region (the Czech Republic, Kazakhstan, Poland and Russia) and two from Turkey, while the SEMED region was again represented by a single Egyptian university. Turkey and the SEMED countries are missing from the 2012 NTU ranking, which features seven universities from six countries in the transition region (Croatia, Czech Republic, Hungary, Poland, Russia and Slovenia).

Table A.4.1.3 shows, for each year, the number of citable articles published by academic journals in the three previous years, the average h-index for the period 1996-2011 and the number of citations (excluding self-citations) per document. The number of citable documents has increased across the world, particularly in Turkey and the SEMED countries (especially Tunisia). In the transition region, Serbia and Bosnia and Herzegovina have also recorded large rises. This could be due to increases in the number of peer-reviewed journals over time; unfortunately, the aggregate data do not provide any information about this, nor about the quality of journals.

Advanced economies lead in terms of the average number of citations per document (excluding self-citations), with 9.8 between 1996 and 2011, followed by the transition region,

the Evaluation of Educational Achievement (IEA), while PISA is conducted by the OECD. PIRLS is designed to measure reading literacy in the fourth grade and is a successor to the IEA's Reading Literacy Study, which ran from 1970 to 1991. Since 2001 PIRLS has been conducted every five years. TIMSS measures trends in achievement levels for mathematics and science in the fourth and eighth grades. It has been conducted at regular four-year intervals since 1995. PISA has measured the reading, mathematics and science achievements of 15-year-old school pupils at regular three-year intervals since 2000.

[39] See Rauhvargers (2011) for an excellent overview of the existing university rankings.

Turkey and SEMED countries with around 4.5. Hungary and Estonia are the two countries that are closest to the advanced economies' average, with 8.8 and 8.6 citations per document respectively.

The United States leads in terms of the average h-index (with 1,305), followed by the United Kingdom, Germany, France and Canada. Turkish scholars follow relatively closely behind, with an average of 193.0 (similar to the level in Chile), while academics in the transition and SEMED regions trail some way behind with averages of 100.6 and 91.0 respectively. Among the transition countries, the best performers are Russia, Poland and Hungary, while Egypt leads in the SEMED region.

Table A.4.1.4 shows the number of recipients of S&E doctorates at US universities for the period 1982-2011.[40] More than half of all doctoral degrees in the United States are awarded in the field of S&E. This yardstick does not take into account recipients of doctorates in other advanced economies, nor the attractiveness of doctoral training in recipients' home countries. However, it is still likely to be a reasonable proxy for the quality of undergraduate education in recipients' countries of origin, given the high ranking positions of US universities (which account for half of the world's top 100 universities and almost half of the world's top 200 universities according to ARWU). Also, US universities typically offer paid graduate assistantships to the majority of graduate students accepted, making doctoral studies more attractive there than in other countries.

With the exception of students from the former Yugoslavia, S&E doctorate recipients at US universities from the transition region were rare prior to the collapse of communism. This was probably a reflection of restrictions on travel, rather than the quality of tertiary education in those countries. The following two decades saw large increases, due mainly to recipients from Bulgaria, Romania, Serbia, Croatia and Slovenia. Moreover, between 2002 and 2011 Bulgaria was among the top three sources of undergraduate students from transition countries. The number of doctorate recipients from Turkey also increased sharply, while the number of Jordanian recipients declined (albeit from a high level).

Table A.4.1.4

Number of S&E doctorate recipients, undergraduate students and graduate students in the United States per million people of working age in the country of origin

	Recipients of S&E doctorates			Undergraduate students	Graduate students
Country of origin	**1982-91**	**1992-2001**	**2002-11**	**2002-11**	**2002-11**
Transition region					
Albania	n/a	10.57	50.74	253.22	128.00
Bulgaria	1.52	53.12	107.97	339.83	219.30
Czech Republic	2.08	21.10	24.60	68.33	46.77
Hungary	6.16	40.81	35.45	52.77	59.09
Mongolia	n/a	n/a	28.00	369.91	123.88
Poland	10.69	17.22	17.56	55.82	31.36
Romania	1.54	38.01	103.84	59.03	118.42
Slovak Republic		13.32	26.86	80.10	52.55
Former Soviet Union	0.38				
Armenia		13.89	60.00	66.25	109.69
Azerbaijan		1.65	4.39	22.75	24.79
Belarus		2.82	12.44	32.23	25.13
Estonia		22.28	35.23	173.71	91.15
Georgia		8.30	19.92	50.30	66.37
Kazakhstan		1.71	7.21	61.27	29.49
Kyrgyz Republic		0.00	6.27	31.49	28.98
Latvia		7.36	26.69	155.82	69.97
Lithuania		14.75	27.46	143.17	71.48
Moldova		3.35	14.65	78.70	47.53
Russia		11.89	18.91	20.98	24.76
Tajikistan		6.13	1.45	27.34	12.53
Turkmenistan		n/a	2.58	24.22	16.68
Ukraine		5.05	19.97	21.50	29.22
Uzbekistan		0.98	2.99	14.42	11.54
Former Yugoslavia	32.57				
Bosnia and Herzegovina		12.27	25.13	105.03	43.25
Croatia		52.61	65.80	111.41	91.10
FYR Macedonia		17.85	38.42	116.43	85.90
Kosovo			n/a	392.01	124.56
Serbia and Montenegro (figures for 2002-2006)		67.25	55.85	55.03	59.43
Montenegro			16.67	123.33	55.24
Serbia			44.08	105.48	90.97
Slovenia		36.85	46.08	73.24	63.95
Turkey	30.38	50.44	92.18	85.48	149.43
SEMED countries					
Egypt	42.47	24.87	24.53	11.75	26.30
Jordan	419.65	302.02	278.11	191.01	342.79
Morocco	12.58	11.24	5.43	43.82	23.05
Tunisia	26.46	41.92	8.50	21.59	20.85

Source: Authors' calculations based on National Science Foundation (2013) and Institute of International Education (2002-11).
Note: "n/a" stands for "not available". Data for countries with fewer than five recipients of S&E doctorates in a given time period are not disclosed owing to confidentiality concerns.

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CHAPTER 5

Economic inclusion

Economic inclusion is essential for development. This chapter analyses the inclusiveness of economic systems in the transition region, and finds large differences both across countries and across dimensions of inclusion. Inequality of opportunity is highest in the Western Balkans and some eastern European and Central Asian countries. This partly reflects a failure to provide young people with relevant education and job opportunities. Inclusion gaps also exist with regard to gender, particularly in the SEMED region.

FACTS AT A GLANCE

OVER
35%
of variation in wealth in some transition countries is explained by circumstances at birth.

PLACE OF BIRTH
is the main driver of inequality with regard to wealth.

PARENTAL EDUCATION
is the main driver of inequality of opportunity with regard to tertiary education.

GENDER GAPS
are greatest in the areas of employment, firm ownership and management across most countries observed.

RIGID LABOUR MARKET STRUCTURES
and weak education systems restrict opportunities for young people.

Economic inclusion in transition

Economic inclusion, defined as broad access to economic opportunity, has come to be regarded as integral to economic development. Besides the intrinsic appeal of spreading opportunities and benefits widely, inclusion generates good incentives: if people are given a chance to succeed, they are more likely to pursue education, participate in the workforce and invest or engage in activities that lead to economic growth and prosperity.[1]

A related argument focuses on the sustainability of reform. Market reforms that fail to benefit the population as a whole will not enjoy public support for long. Popular demand for subsidies and state employment to make up for a lack of opportunities has, in several instances, prevented governments from pushing reforms further. For example, reforms pursued by previous administrations in Egypt and Tunisia failed to broaden economic opportunity sufficiently. This contributed initially to resistance to those reforms, which were viewed as mainly benefiting the elite, and ultimately to the popular uprisings of 2011.[2]

Economic inclusion is important in the context of this *Transition Report* for two reasons. First, as in the case of Egypt, a lack of inclusion might help to explain why populations turn against market-oriented reform and why countries can become "stuck" in transition. Second, inclusion is a specific and critical dimension of the quality of economic and social systems and institutions. The analysis in the previous three chapters touches on this dimension, but does not fully capture it.

- In market-based systems economic inclusion is usually associated with democratic forms of government. Democracies generally look at the welfare of the majority, while autocratic regimes tend to favour politically powerful elites. That said, even in democracies it may be difficult for minorities (and in some cases even for poor majorities) to access high-quality education and employment; and some countries without pluralistic political systems may well provide economic opportunities to large segments of the population as long as there is no challenge to the existing political order.
- The measures of economic institutions used in Chapter 3 are closely related to economic inclusion. Law and order, government effectiveness and a lack of corruption should all impact positively on economic opportunity. However, they may not benefit all groups in the same way. This may reflect discrimination, lack of education or regional variation in the quality of institutions. The excellent economic institutions in the United States, for example, did not prevent the US economy from providing only limited and inferior opportunities to women and African Americans, even through most of the 20th century.
- Good education is a key condition for broad access to opportunity. Countries with stronger publicly funded education systems are more likely to even out disadvantages linked to social backgrounds. Variations in the quality and quantity of human capital described in Chapter 4 are therefore likely to be correlated with differences in economic inclusion. Nevertheless, the correlation will be far from perfect. Chapter 4 considered quality and quantity, rather than access to education, and disregarded differences within countries in terms of educational quality.

The purpose of this last chapter is to supplement the analysis in previous chapters by providing direct evidence of the state of economic inclusion in the transition region. Equality of opportunity – where a person's social background, place of birth, gender and other factors (other than innate talent) are not predictors of individual economic success – is the benchmark against which countries are measured.[3]

Two complementary approaches are employed, which we can broadly describe as *bottom-up* and *top-down*.

The *bottom-up* approach focuses on the individual or household level. Building on a new body of research on equality of opportunity,[4] it measures the extent to which differences in wealth or education across households are attributable to circumstances at birth. The stronger the relationship between circumstances and outcomes, the further a country is from the ideal of equality of opportunity.

The *top-down* approach attempts to rate the institutions, markets and education systems of most countries in the transition region in terms of their capacity to extend economic opportunity to individuals regardless of people's specific circumstances or attributes. The analysis focuses on gender, place of birth and the situation of young adults. Although the last of those does not reflect a circumstance at birth, it is used to show the opportunities for people from non-privileged social backgrounds at a critical stage of their lives.

Because these approaches focus on equality of opportunity across various groups in society (as opposed to the level or quantity of opportunities on offer to members of these groups), economic inclusion as defined in this chapter is a relative concept. In principle, a society can be poor and lacking in opportunities, but still be fair in how it distributes those opportunities between the various groups. Hence, the measures presented in the following analysis do not cover prosperity. They are intended to complement standard measures of human and institutional development, capturing a dimension that is usually overlooked.

[1] See Acemoğlu and Robinson (2012) and Marrero and Rodríguez (2013).
[2] See Galal and Selim (2012) and Diwan (2012).
[3] This concept follows the approach adopted in Roemer (1998) and Rawls (1971).
[4] See Bourguignon et al. (2007), Checchi et al. (2010), Belhaj Hassine (2012), Salehi-Isfahani et al. (2011) and Ferreira et al. (2011).

INEQUALITY OF OPPORTUNITY AT THE HOUSEHOLD LEVEL

To what extent do circumstances at birth explain household wealth and individual educational attainment in the transition region?

To answer this question consistently for as many countries as possible, the analysis in this chapter is based on the 2010 round of the *Life in Transition Survey* (LiTS). This contains data for 38,864 households from 35 countries – 29 transition countries in Europe and Central Asia (but excluding Turkmenistan), as well as Turkey and the five western European comparator countries.[5] The data were collected by interviewing randomly selected household members, of whom about 39 per cent (15,106 individuals) identified themselves as the head of the household.

For each outcome variable – either an index of household wealth[6] or a variable indicating whether the respondent had obtained a tertiary degree[7] – an econometric model is estimated that establishes the extent to which circumstances at birth contribute to the variation in outcomes (see Annex 5.1 for details). This contribution, which in the case of the wealth index is simply the "fit" of the regression, is referred to as the (estimated) inequality of opportunity (IOp) with regard to either household assets (IOp^{wealth}) or educational attainment (IOp^{edu}).

A complication arises from the fact that the LiTS contains only information about the circumstances of the respondent member of the household, not those of other household members. By contrast, the asset index refers to the household as a whole. This is addressed by conducting the analysis of IOp^{wealth} using a subsample of households for which the respondent was the head of the household. Consequently, this analysis looks at whether the circumstances of the head of the household explain inequality in household wealth. Because spouses, domestic partners and other adult household members are often from similar backgrounds[8], IOp^{wealth} should be a good proxy for overall inequality of opportunity with regard to household assets and adequate for the purposes of cross-country comparison.

One important limitation applies: because spouses or domestic partners are usually of a different gender, it makes no sense to measure the influence of gender on household wealth. While gender is always a characteristic, or "circumstance", of the head of the household, it is rarely a circumstance of the household. Hence, it is not considered in the statistical analysis estimating IOp^{wealth}.

Gender is, however, considered in the estimates of IOp^{edu}, because these address a different question – whether an individual's circumstances or characteristics explain inequality in his or her educational attainment at tertiary level. In this context, gender is a potentially relevant circumstance. In addition, the analysis of IOp^{wealth} is undertaken separately for male and female-headed households to see if this affects the results.

Besides gender (for IOp^{edu} only), the analysis also considers the following circumstances.

- *Whether a person was born in an urban or rural area:* This investigates a possible source of inequality of opportunity due, for example, to geographically-determined differences in the quality of schooling or – since a person's place of birth and place of residence as an adult are highly correlated[9] – differences in job opportunities. It can also reflect access to basic services, such as roads, waste removal, indoor plumbing and electricity, which can directly and indirectly impact an individual's economic opportunity.
- *The level of educational attainment of the respondent's father and mother:* This may capture the influence of parental education on the quality and extent of a child's education and act as a proxy for the individual's social background and/or parental networks, which can provide opportunities for a child later on.
- *Whether the individual's parents were members of the communist party:* In former communist countries party membership was often required for admission to specific schools and professions. In many cases, people serving in such professions received payment in assets in addition to income, which may have had an impact on the distribution of assets for the older generation.[10] In addition, a parent's membership of the communist party may act as a proxy for parental networks.

Other circumstances and characteristics, such as ethnicity, mother tongue, sexual orientation, religious background or physical disability, were not considered, either because of data constraints or because the categories in which these variables would have to be expressed vary greatly across countries. For example, most of the transition and Western countries studied in this chapter have no single ethnicity or mother tongue.

To illustrate how the circumstances considered affect the two outcome variables (household assets and tertiary education) in transition and comparator economies, Charts 5.1 to 5.4 plot a set of intra-country correlations. In Charts 5.1 to 5.3 the length of the left-hand bar (or axis) in each pairing represents the effect of a specific circumstance – being born in an urban (rather than rural) area, being born to parents with a level of educational attainment that is one notch higher,[11] or having a parent who was a communist party member – on the household asset index.[12] The right-hand bar denotes the impact of each circumstance on the probability of having completed tertiary education.[13] Chart 5.4 shows how being male affects that probability.

As expected, the impact of parental education on the assets

[5] Unfortunately, such data are not yet available for the SEMED countries, although a few studies have looked at inequality of opportunity in the SEMED region: see El Enbaby (2012), Belhaj Hassine (2012) and Salehi-Isfahani et al. (2011).

[6] The analysis focuses on household wealth because the LiTS lacks reliable income data. An asset index was constructed using principal components analysis, which yields a weighted average of the assets owned by a household. The technique is used extensively in the literature to capture "wealth"; see Filmer and Pritchett (2001), McKenzie (2005), Sahn and Stifel (2003), Vyas and Kumaranayake (2006) and Ferreira et al. (2011). LiTS-based inequality is correlated positively, although far from perfectly, with measures of income inequality (the coefficient of cross-country correlation with Gini coefficients taken from the Standardized World Income Inequality Database is about 0.25)

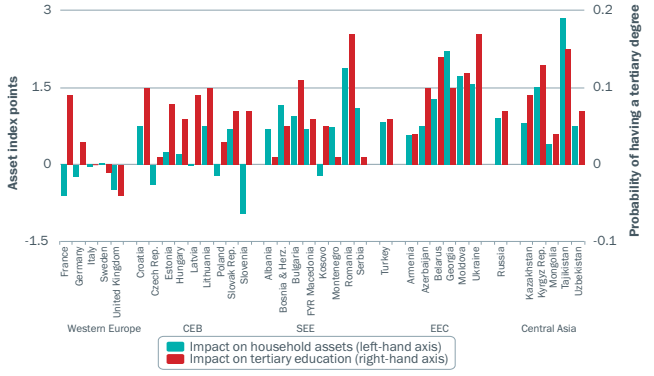
[7] Consistent with Chapter 4 of this *Transition Report*, this refers to university education only. Note that although studies in other regions use educational attainment at secondary level as a measure of economic advantage, this is not as meaningful in the transition region because virtually every transition country has achieved high rates of secondary school completion, comparable to rates achieved in advanced economies. In contrast, the completion rates for tertiary education in the LiTS range from 5.4 per cent in Kosovo to 38.5 per cent in Belarus. The median completion rate is 18.2 per cent.

[8] In particular, parental wealth is highly correlated within households. This relationship holds when parental wealth is instrumented using parental education. See Charles et al. (2013).

[9] The correlation in our dataset is 0.63, which is significant at the 1 per cent level.

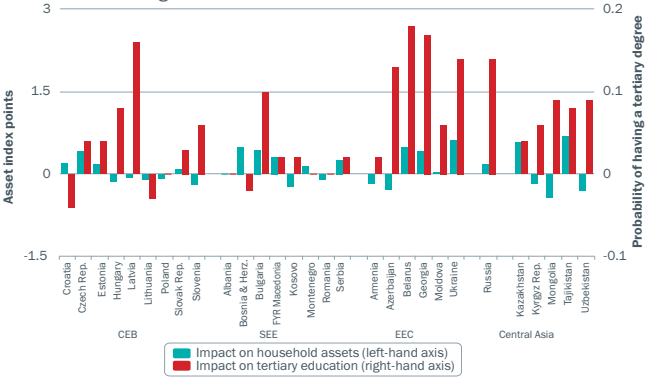
[10] See Heyns (2005).

Chart 5.1. The effect of being born in an urban area is most positive in less advanced transition economies



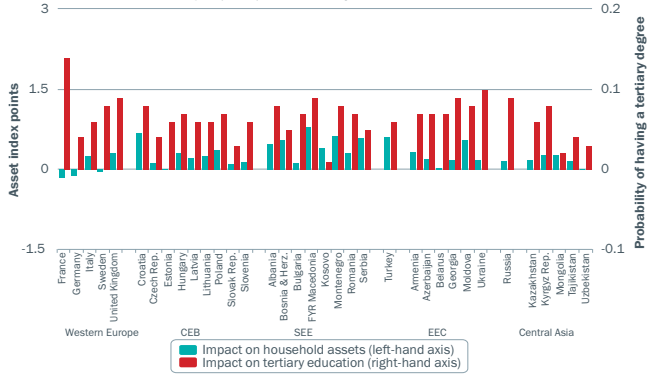
Source: LiTS (2010).
Note: The chart shows coefficients for an urban birthplace, based on household-level regressions of either an asset index or an indicator of tertiary education on individual circumstances (see Annex 5.1).

Chart 5.3. The effects of a parent's communist party membership are still being felt[14]



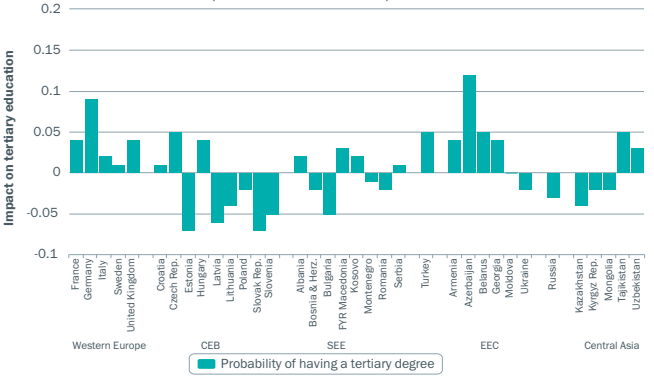
Source: LiTS (2010).
Note: The chart shows coefficients for an indicator of parental membership of the communist party, based on household-level regressions of either an asset index or an indicator of tertiary education on individual circumstances (see Annex 5.1).

Chart 5.2. Parental education matters, particularly in southern and eastern Europe (SEE) and Turkey



Source: LiTS (2010).
Note: The chart shows coefficients for an indicator of parental education (one variable capturing the highest degree achieved between both parents), based on household-level regressions of either an asset index or an indicator of tertiary education on individual circumstances (see Annex 5.1).

Chart 5.4. Men are more likely to have a tertiary degree in certain countries (and women in others)



Source: LiTS (2010).
Note: The chart shows coefficients for a variable indicating male gender, based on household-level regressions of an indicator of tertiary education on individual circumstances (see Annex 5.1). The vertical height of the bar shows how much more likely a man is to have a tertiary degree than a woman. If the bar goes below the axis, it shows how much less likely a man is to have the degree than a woman.

and tertiary education of children is positive almost everywhere, with particularly large impacts on the asset index in south-eastern Europe. The effect of an individual's birthplace is more heterogeneous: being born in an urban area is generally a predictor of superior wealth and education. There are exceptions, however, particularly with regard to wealth; in France, Slovenia and the United Kingdom a rural birthplace is a statistically significant predictor of *higher* levels of household assets.

Having a parent who was a communist party member generally puts individuals in transition economies at an advantage. In regard to household assets, the effect is small and generally statistically insignificant, but for tertiary education it can be

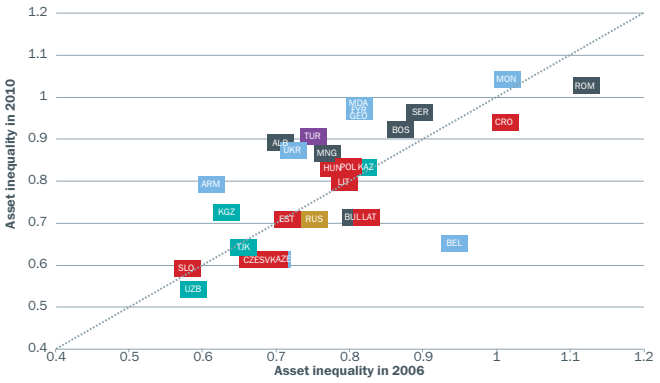
[11] Parents' educational attainment is measured as a discrete, ordered variable. A mother or father with no degree is given a value of 1 for this variable, and one who has completed primary education is given a value of 2. Secondary and post-secondary degrees are counted separately. Postgraduate tertiary education is assigned a value of 6.

[12] The asset index is centred on 0. Its distribution varies from country to country, but it typically runs from about -4 to +4, with a standard deviation of about 2.

[13] The impact on assets is based on country-by-country ordinary least squares (OLS) regressions of the asset index on circumstances; the impact on tertiary education is based on an analogous set of probit regressions. The impact on assets is measured in terms of index points, whereas educational impact is measured in terms of the probability of having completed a tertiary degree. For example, a coefficient estimate of 0.6 on the urban/rural variable in the asset regressions means that a person born in an urban area will, on average, have an asset index 0.6 points higher than someone born in a rural area. In the education regressions, the 0.6 coefficient on urban/rural means that a person born in an urban area is 60 per cent more likely to have completed tertiary education. Note that since the impacts on assets and education are measured in different units, they should not be directly compared with each other. However, impacts on assets and education can be compared (separately) across countries within each chart and across charts. (In light of possible omitted variable bias, the bar heights should only be taken as a rough guide.)

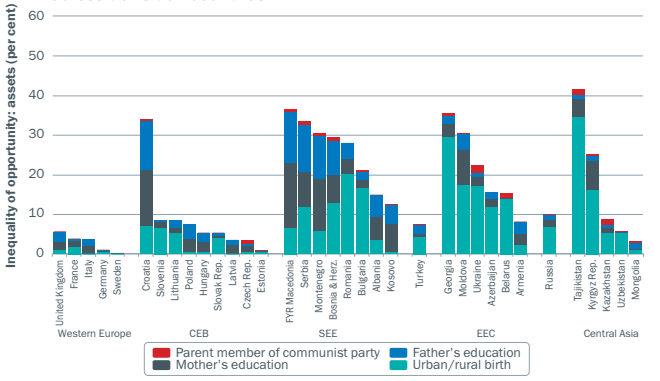
[14] This variable was omitted for regressions involving the western European comparator countries and Turkey. Including it for Germany does not make a qualitative difference to the results.

Chart 5.5. Inequality of household wealth was fairly stable between 2006 and 2010



Source: LiTS (2006 and 2010).
Note: The chart shows the standard deviation of the household asset index values for each country relative to variance in the distribution of household assets across all countries (see McKenzie, 2005), for 2006 and 2010.

Chart 5.6. Inequality of opportunity with respect to wealth varies greatly across transition countries



Source: LiTS (2010).
Note: The chart indicates the percentage of the variation in each country's household asset index that is explained by the place of birth, parental education and parental membership of the communist party. For each country, the total height of each bar is calculated as the R^2 of an ordinary least squares regression of the asset index on the four variables indicated in the chart's legend (see Annex 5.1). The variation explained by each circumstance is calculated as a Shapley decomposition. The authors used the Stata command "iop" for the calculations.

quite large (comparable to that of an urban birthplace) and is often statistically significant. In addition, men are more likely than women to have a tertiary degree in western Europe and most countries in eastern Europe and the Caucasus (EEC), while the reverse is true in most central European and Baltic (CEB) countries.

Having described country-level correlations between individual circumstances and outcomes, the next step in the analysis is to examine the extent to which circumstances at birth explain variations in household assets and tertiary education in transition countries.

INEQUALITY OF OPPORTUNITY WITH REGARD TO HOUSEHOLD WEALTH

Chart 5.5 shows actual inequality of household wealth for each country, using a measure of inequality that is comparable across countries and over time.[15] The measure is shown for two rounds of the LiTS – 2006 and 2010 – to give a sense of its stability. With a few exceptions (such as Belarus, where inequality declined, and Albania, where it increased) asset inequality appears to be very stable – that is, there is a high correlation between country-level asset inequality in 2006 and 2010. In both years, Romania turns out to be the most unequal transition country with respect to household assets, while inequality is lowest in Uzbekistan, Tajikistan and the Kyrgyz Republic.[16]

To what extent is asset inequality in each country attributable to inequality of opportunity based on the circumstances identified above, rather than individual effort or luck? Chart 5.6 gives the answer. For each country the height of the bar shows IOp^{wealth} – the extent to which the four circumstance-related variables explain total variation in the asset index across households – while the subdivisions in each bar indicate the contributions of each individual circumstance to IOp^{wealth}. Like the previous charts, the chart is organised in terms of geographical groups of countries; within each group, countries are shown in declining order of IOp^{wealth}.

Inequality of opportunity with regard to wealth varies substantially across and within most regions. Circumstances at birth explain less than 1 per cent of total variation in the LiTS-based household asset index in some countries (Estonia, Germany and Sweden), but over 35 per cent in others (FYR Macedonia, Georgia and Tajikistan). On average, IOp^{wealth} is lowest in western Europe, but is almost as low in CEB countries (except Croatia) and Turkey. Most Central Asian, EEC and SEE countries have much higher IOp^{wealth}, although with significant variation. For example, IOp^{wealth} levels in Armenia, Mongolia and Uzbekistan are no higher than in CEB countries.

The relative contributions made by circumstances to IOp^{wealth} also vary greatly across regions and countries. In most Central Asian and EEC countries, together with Bulgaria, Lithuania, Romania, the Slovak Republic, Slovenia and Turkey, the most important driver of IOp^{wealth} is the place of birth.

[15] Namely, the standard deviation of the index for each country divided by variance in the index for households across all countries; see McKenzie (2005). This measure is used because Gini coefficients cannot be calculated for the asset index as it contains negative values.
[16] Based on the correlation between LiTS-based inequality of household assets for 2010 and the most recent Gini coefficients of income inequality (source: SWIID).

In western European countries, the place of birth does not noticeably contribute to IOp^{wealth}, except in France (where a rural birthplace tends to *increase* household wealth). By contrast, in Hungary, Latvia and Poland, and particularly in the Western Balkans, IOp^{wealth} seems to be driven predominantly by parental education.

Chart 5.7(a) and (b) shows IOp^{wealth} for male and female-headed households respectively.[17] Although there are some differences across countries, the regional ranking (and that of most countries within each region) is the same as in Chart 5.6. However, IOp^{wealth} is higher in the male-headed sample than the female-headed sample – that is to say, circumstances are better able to explain variation in outcomes among men than among women. In Bulgaria, FYR Macedonia, Romania and Tajikistan the difference exceeds 10 percentage points.

In addition, the two samples differ somewhat in terms of the circumstances that tend to account for inequality of opportunity, particularly in Central Asian, EEC and SEE countries, where IOp^{wealth} is highest. Compared with male-headed households, IOp^{wealth} in female-headed households appears to depend less on whether a birthplace is urban or rural and more on parental education. This may reflect the fact that differences in wealth between urban and rural households tend to be greater in these regions when the households are headed by men, rather than women. A possible explanatory factor may be remittances, which are significant in many of these countries and may have the effect of narrowing the asset gap between urban and rural households headed by females.

INEQUALITY OF OPPORTUNITY WITH REGARD TO TERTIARY EDUCATION

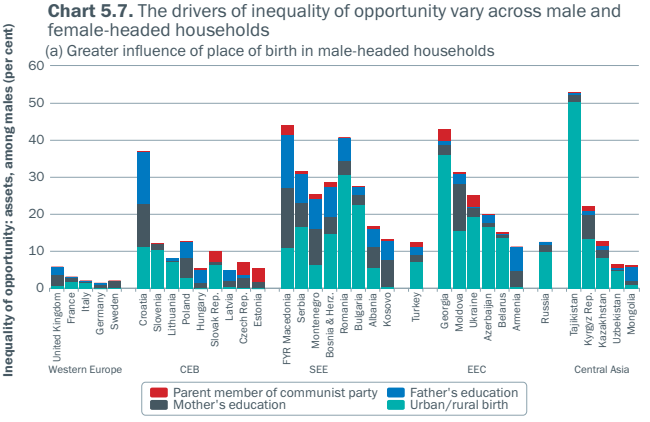
Chart 5.8 shows inequality of opportunity across countries with regard to tertiary education and breaks it down into the contributions of individual circumstances. Unlike Chart 5.6, gender is included as a circumstance, and the measure of inequality is different.

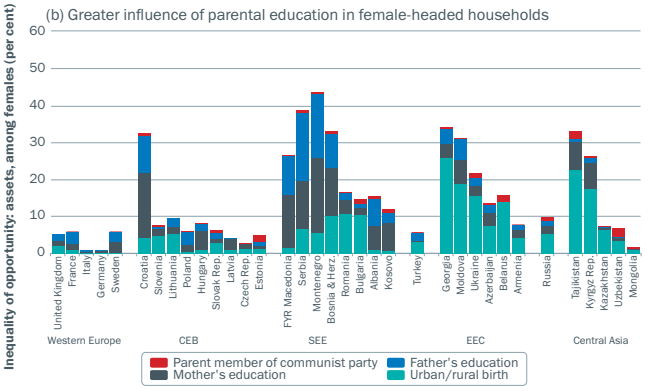
Reflecting the binary outcome variable, a "dissimilarity index" (D-index) is used. This is calculated as the average distance (the average absolute value of the difference) between the country mean and the circumstance-based prediction of whether an individual is likely to obtain a tertiary education, multiplied by 2 in order to fit it to the 0-1 scale. For example, a 10 per cent D-index indicates that, on average, the predicted propensity of individuals to obtain a tertiary education is just 5 per cent away from the average in that country.

IOp^{edu} turns out to be fairly similar across regions. The EEC region and France have the highest IOp^{edu} (but it exceeds 25 per cent in only three transition countries – Georgia, Russia and Ukraine).

The chart also shows that – unlike IOp^{wealth} – IOp^{edu} appears to be driven far more by parental education than by the place of birth. In addition, gender seems to play a role in Azerbaijan, Germany, the Slovak Republic and Turkey

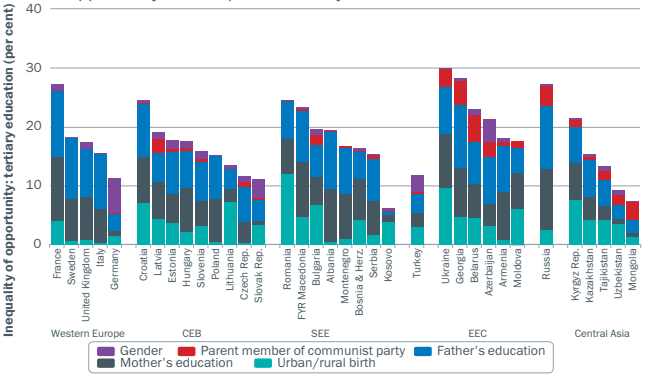
Chart 5.7. The drivers of inequality of opportunity vary across male and female-headed households





Source: LiTS (2010).
Note: The chart indicates the percentage of the variation in each country's household asset index that is explained by the place of birth, parental education and parental membership of the communist party. See also the note on Chart 5.6.

Chart 5.8. Parental education is the main driver of inequality of opportunity with respect to tertiary education



Source: LiTS (2010).
Note: The chart indicates, for each country, the average distance between tertiary education as predicted by circumstances (the place of birth, parental education, parental membership of the communist party and gender) and the mean. For each country, each bar is calculated as a D-index, based on a probit regression of the variable indicating the completion of tertiary education on the four variables indicated in the chart's legend (see Annex 5.1).

[17] Overall, 53 per cent of the heads of households in the 2010 LiTS are female and 47 per cent are male. The male share falls between 40 and 60 per cent in 21 of the 35 countries.

(reflecting a significantly greater likelihood that men will obtain tertiary degrees, except in the Slovak Republic). In Azerbaijan, Belarus, Georgia, Mongolia, Russia and Ukraine – and, to a lesser extent, Bulgaria – parental membership of the communist party is a significant contributor (both statistically and in a qualitative sense).

Separate analysis was also undertaken for younger (37 and under) and older (38 and over) sections of the population. The cohorts were defined in that way so that the older group would have reached adulthood by the time the Soviet Union was dissolved in 1991. The question is whether inequality of opportunity with regard to tertiary education is lower in the group that was raised under the (generally) more egalitarian communist system than in the younger generation. The analysis finds some support for this: in 21 of the 29 transition countries, IOp^{edu} is higher in the younger group. However, the differences are generally small and are statistically significant in only eight cases.

RATING THE INCLUSIVENESS OF ECONOMIC SYSTEMS AND INSTITUTIONS

In the previous section, equality of opportunity was inferred by comparing individual outcomes, in terms of wealth and education, with characteristics of those individuals that should ideally be unrelated to such outcomes, but in fact are not. While this can represent an objective, data-based gauge of the "inclusiveness" of economic, political and social systems, it suffers from two drawbacks.

- Because all the data were based on a survey of the adult population, some of the conditions that created the observed inequality of opportunity may be 10, 20 or even 30 years old. Economic and political systems may have changed in the meantime – for example, by providing better and more widespread primary and secondary education opportunities, or by treating young entrants to the labour market differently. It may take another generation for these improvements to be reflected in data about economic outcomes.
- The results of the analysis presented in the previous section give few hints as to what policy-makers can do to make societies more inclusive. For example, the fact that inequality is high in Western Balkan countries and this relates to parental education points to the importance of the education system in evening out opportunity, but provides no further clues. Similarly, the finding that in most of EEC, Central Asia and some SEE countries a rural birthplace puts individuals at a critical disadvantage suggests a need to examine the quality of institutions, access to services, infrastructure and education in rural areas, but offers no further help in identifying what is amiss.

This section attempts to rate the existing (or recent) institutional environment in transition countries in terms of its propensity to create or impede equality of opportunity. This is done from the perspective of three "target groups", namely women, residents of regions that are lagging behind economically and young people (15 to 24-year-olds).[18] While the last group obviously does not reflect a circumstance at birth, it is used here as shorthand for a combination of circumstances and outcomes at a particular stage in life – namely, a non-privileged social background and access to education and initial job opportunities – that is of particular importance for society. Research has shown that young people who do not have sufficient access to education or work experience have substantially lower lifetime earnings and career opportunities.[19]

For each target group, the objective is to define "inclusion gaps" analogous to the EBRD's sector-level assessments, which describe transition gaps for each sector and country of operations (see the section of this report entitled "Progress in transition: structural reform"). This involves the following four steps.

- First, we need to identify dimensions of the economic system that are essential for reducing the inequality of opportunity suffered by members of particular groups. These generally include access to education, labour markets, finance and public services – which are important for any individual, almost regardless of circumstances. The aspect within each of these dimensions that is the most relevant will depend on the target group.
- Second, we need to collect data on each of the dimensions. The extent of the available data is sometimes the limiting factor, particularly when trying to establish inclusion gaps across regions within countries.
- Third, a benchmark needs to be set that defines what an inclusive structure should look like, and there needs to be a rule on how to rate distance from the benchmark. In the case of gender gaps, the benchmark is economic parity between men and women. In other cases – for example, when comparing the opportunities of young entrants to the labour market with those of experienced workers – the benchmark can be defined by best practices in advanced economies. The distance from the benchmark is expressed on the 10-point scale – from 1 (indicating the largest possible gap) through 2-, 2, 2+, 3-, 3, 3+, 4- and 4 to 4+ (indicating a negligible gap) – used for the EBRD's transition indicators.
- Lastly, we need to average ratings based on individual data series to arrive at an inclusion gap for each dimension, target group and country (a gender gap for access to finance in Romania, for instance). When data series with overlapping content are used, a "principal components" approach is employed that in effect weights each series according to how much new information it contributes. In most cases simple averages are used, occasionally giving a series that is deemed to be more important a higher weighting.

[18] This analysis could be extended to include other groups defined by ethnicity, disability or sexual orientation.

[19] See Gregg and Tominey (2005). Macmillan (2012) calculates that a year of youth unemployment reduces earnings 10 years on by an average of about 6 per cent and means that, on average, individuals spend an extra month unemployed every year up to their mid-30s.

Table 5.1
Gender inclusion gaps – dimensions and indicators

Dimension	Indicators	Sources
Legal and social regulations	Addressing violence against women	Economist Intelligence Unit –Women's Economic Opportunity (EIU-WEO) Index, based on International Labour Organization (ILO), 2010 or latest
	Property ownership rights	
	Inheritance laws in favour of male heirs	OECD Social Institutions and Gender Index 2009
Access to health services	Sex at birth; female-to-male (f/m) ratio	World Bank World Development Indicators (WDI), 2010
	Contraceptive prevalence (percentage of women aged 15-49)	
	Maternal mortality ratio (maternal deaths per 100,000 live births)	UNICEF, 2010
Education and training	Literacy rate; f/m ratio	UN Social Indicators, UNICEF, census, 2010 or latest
	Primary school completion rate; f/m ratio	
	Gender parity index for net enrolment rate in secondary education	World Bank Education Statistics, 2010 or latest
	Percentage of female graduates in tertiary education	
	Gender parity index for enrolment in tertiary education	
Labour policy	Equal pay policy	EIU-WEO based on ILO, 2010 or latest
	Non-discrimination policy	
	Policy on maternity and paternity leave and its provision	
	Policy on legal restrictions on types of job for women	
	Differential retirement age policy	
	CEDAW (Convention on the Ratification of all forms of Discrimination Against Women) ratification	
Assessment of labour practices	Equal pay	EIU-WEO based on ILO, 2010 or latest
	Non-discrimination	
	Access to childcare	
	Female top managers	BEEPS, 2009
	Gender pay gap	United Nations Economic Commission for Europe2011
Employment and firm ownership	Female participation in firm ownership	BEEPS, 2009
	Share of women in non-agricultural employment	World Bank WDI, 2010 or latest
	Labour force participation rate; f/m ratio (age 15+)	World Bank Gender Indicators, UNICEF, census, 2010 or latest
	Unemployment with tertiary education; f/m ratio	
	Unemployment rate; f/m ratio	Key Indicators of the Labour Market-ILO, 2010 or latest
Access to finance	Account at a formal financial institution; f/m ratio (age 15+)	Global Financial Inclusion (Global Findex) Database, 2011
	Account used for business purposes; f/m ratio (age 15+)	
	Credit card; f/m ratio (age 15+)	
	Debit card; f/m ratio (age 15+)	
	Mobile phone used to receive money; f/m ratio (age 15+)	
	Mobile phone used to send money; f/m ratio (age 15+)	
	Saved at a financial institution in the past year; f/m ratio (age 15+)	
	Loans rejected for firms with female versus male ownership	BEEPS, 2009

Note that under this approach, inclusion gaps measure differences in opportunities – across regions, between women and men, or between 15 to 24-year-olds and older workers – rather than opportunity levels. If both men and women, or all regions within a country, do poorly, there is no inclusion gap, even though there may be large gaps in terms of transition or development. For example, a small gap in access to finance does not necessarily mean that women have easy access, only that they do not have significantly greater difficulties than men.

The remainder of this section summarises the dimensions and data used to calculate the inclusion gaps and presents the main results for each target group. Methodological details on the third and fourth steps above – particularly the question of how gaps were defined for each data series – are available in Annex 5.2.

GENDER GAPS

Gender inclusion gaps aim to capture the extent to which economic systems favour men over women. Seven dimensions are examined here (see Table 5.1):

- legal and social regulations, such as inheritance laws and ownership rights;
- health indicators that relate to female participation in economic life or reflect gender bias;
- labour policies regulating pay and access to certain professions;
- labour practices, such as non-discrimination and equal pay;
- educational attainment comparisons;
- female participation in employment, management and firm ownership;
- access to finance.

Table 5.2
Inclusion gaps for gender

Country	Legal regulations	Health services	Education	Labour policy	Labour practices	Employment and firm ownership	Access to finance
Central Europe and the Baltic states							
Croatia	Negligible	Small	Negligible	Medium	Large	Medium	Small
Estonia	Negligible	Small	Negligible	Small	Large	Medium	Medium
Hungary	Negligible	Small	Negligible	Negligible	Large	Medium	Large
Latvia	Small	Medium	Negligible	Small	Large	Medium	Small
Lithuania	Negligible	Small	Negligible	Small	Medium	Medium	Medium
Poland	Small	Small	Negligible	Small	Large	Medium	Medium
Slovak Republic	Negligible	Small	Negligible	Small	Large	Large	Medium
Slovenia	Negligible	Small	Negligible	Small	Large	Medium	Medium
South-eastern Europe							
Albania	Negligible	Medium	Small	Small	Large	Large	Large
Bosnia and Herzegovina	Negligible	Medium	Negligible	Medium	Large	Large	Large
Bulgaria	Negligible	Small	Negligible	Small	Large	Medium	Medium
FYR Macedonia	Small	Medium	Small	Small	Large	Medium	Medium
Kosovo	not available	not available	not available	not available	not available	not available	Large
Montenegro	Small	Medium	Negligible	Medium	Large	Medium	Medium
Romania	Negligible	Medium	Negligible	Small	Large	Medium	Medium
Serbia	Small	Medium	Negligible	Medium	Large	Large	Small
Turkey	Small	Small	Medium	Small	Large	Large	Large
Eastern Europe and the Caucasus							
Armenia	Medium	Medium	Negligible	Small	Large	Large	Small
Azerbaijan	Negligible	Medium	Small	Medium	Large	Medium	Large
Belarus	Small	Small	Small	Medium	Large	Small	Medium
Georgia	Small	Large	Negligible	Small	Large	Medium	Small
Moldova	Small	Medium	Negligible	Small	Large	Negligible	Medium
Ukraine	Negligible	Medium	Negligible	Small	Large	Medium	Large
Russia	Small	Medium	Negligible	Medium	Large	Medium	Medium
Central Asia							
Kazakhstan	Small	Large	Negligible	Medium	Large	Large	Medium
Kyrgyz Republic	Medium	Large	Negligible	Medium	Large	Medium	Small
Mongolia	Small	Large	Negligible	Medium	Large	Negligible	Small
Tajikistan	Medium	Large	Medium	Small	Large	Medium	Large
Turkmenistan	Large	Large	Small	Medium	Large	Large	Large
Uzbekistan	Medium	Medium	Medium	Medium	Large	Large	Large
Southern and eastern Mediterranean							
Egypt	Medium	Large	Medium	Medium	Large	Large	Large
Jordan	Medium	Large	Negligible	Medium	Large	Large	Large
Morocco	Medium	Large	Medium	Medium	Large	Large	Large
Tunisia	Small	Medium	Small	Small	Large	Large	Large
Comparator countries							
France	Negligible	Small	Negligible	Small	Medium	Medium	Medium
Germany	Negligible	Small	Negligible	Negligible	Medium	Medium	Medium
Italy	Negligible	Small	Negligible	Small	Medium	Medium	Large
Sweden	Negligible	Negligible	Negligible	Negligible	Medium	Small	Medium
United Kingdom	Negligible	Small	Negligible	Small	Medium	Medium	Medium

Source: See Table 5.1.
Note: See Annex 5.2 for methodology.

Table 5.3
Youth inclusion gaps – dimensions and indicators

Dimension	Indicators	Sources
Labour market structure	Hiring and firing flexibility	Global Competitiveness Index, World Economic Forum 2012-13
	Redundancy costs	
	Wage-setting flexibility	
Productive opportunities for young people	Difference between unemployment rate at age 15-24 and age 25-65	ILO, World Bank, 2010 or latest
	Percentage of youths who are "not in education, employment or training" (NEET)	Eurostat 2012, Silatech 2009
Quantity of education	Average years of education of 25 to 29-year-olds	Barro-Lee (2010), Human Development Index 2012
	Percentage of 15 to 24-year-olds with no schooling	
Quality of education	Test performance relative to highest possible score	Programme for International Student Assessment (PISA) 2009 or Trends in International Mathematics and Science Study (TIMSS) 2011
	Schools' accountability (achievement data tracked over time)	
	Teacher/instruction material shortages	
	Employers' perception of quality of education system	World Economic Forum 2012-13
	Households' perception of quality of education system	LiTS 2010
	Universities in top 500 (cumulatively over ten years)	Academic Ranking of World Universities (ARWU) 2003-12
Financial inclusion	Percentage of youths (15 to 24-year-olds) with bank accounts compared to adults	Global Findex 2011
	Percentage of youths (15 to 24-year-olds) with debit cards compared to adults	

Two main types of indicator were collected to rate these dimensions: policy indices constructed by other organisations, such as the International Labour Organization (ILO) and the World Bank,[20] and female-to-male ratios (for example, female-to-male labour force participation rates).

Data on female-to-male ratios were translated into percentage gaps and converted to the 1 to 4+ transition scale. An average score for each category was then calculated and transformed into the four-point gap scale. Gaps classified as "large", "medium", "small" and "negligible" correspond to percentage differences in gender indicators of more than 20 per cent, from 6 to 20 per cent, from 1 to 6 per cent and less than 1 per cent respectively (see Annex 5.2).

Table 5.2 suggests that there is considerable variation in gender gaps – not just across countries, but also across institutional dimensions. Gaps are generally "small" as regards education and legal regulations.[21] With the exception of some SEMED countries, laws that overtly put women at a disadvantage in terms of property and inheritance laws are rare.

Primary and secondary school participation and completion rates are similar for males and females. With a few exceptions (most notably Tajikistan), recent tertiary enrolment rates actually tend to be higher for females in most countries. Significant gaps (visible in about a dozen countries) exist only with regard to literacy rates, which are a much more backward-looking indicator.

Gaps tend to be larger in dimensions related to employment, firm ownership and management – and particularly labour practices. As regards anti-discrimination practices, access to childcare, women in senior management and gender pay differentials, there are "large" gaps in most countries, and even "medium" gaps in Western comparator countries.

Table 5.2 also confirms expectations that gender gaps are often "negligible" or "small" in CEB countries – although not in employment-related areas – while "large" and "medium" gaps tend to be most apparent in the SEMED region (although less so in Tunisia) and some Central Asian countries (such as Tajikistan, Turkmenistan and Uzbekistan). Kazakhstan and Turkey are not far behind.

In the SEMED region decades of investment in social sectors have improved women's access to health care and education, reduced illiteracy and brought down fertility rates. However, this has not (yet) translated into higher female labour force participation rates or female empowerment. This is partly due to persistent institutional barriers that limit women's access to economic opportunities.[22]

[20] For example, indices using a scale of 1 to 5, with 5 indicating full compliance with the ideal of gender equality and 1 showing a large gap.
[21] The former reflects the fact that the series used in the analysis of the education gap mostly represents the current state of education systems, as measured by female-to-male ratios for primary, secondary and tertiary completion rates.
[22] See World Bank (2012a).

YOUTH GAPS

The assessment of youth inclusion gaps used indicators of labour market flexibility (since labour market rigidity particularly harms new entrants),[23] youth unemployment and idleness rates, as well as measures of education and financial inclusion.

The quality and length of education are considered separate dimensions: while quality is essential, there is also evidence that extending the length of secondary education affects careers and lifetime earnings.[24] Financial inclusion focuses on the use of bank accounts and debit cards (rather than access to credit), reflecting research that suggests that the early use of financial products and the early establishment of savings habits increase the quality of financial decision-making in later life.[25] Table 5.3 lists the indicators and data sources used.

As in the case of the gender gaps, some of the underlying data consist of indices compiled by other institutions (such as the World Economic Forum's indicators of labour market flexibility and the quality of education as perceived by employers), as well as comparative information on the reference group, which in this case consists of adults aged 25 and over. The latter is used to rate financial inclusion, as well as youth unemployment. Unlike gender gaps, however, youth and adult rates are compared in terms of absolute differences (expressed in percentage points), rather than as ratios or percentage differences.[26] Furthermore, the benchmark for calibrating a "negligible" gap is not zero (that is to say, parity between youth and adults), but a positive difference that is sufficiently low to be viewed as "normal" even in a very inclusive economic structure. For youth unemployment this is set at 6 percentage points, based on the low end of globally observed differences between youth and adult unemployment rates between 1991 and 2012, while a difference of 10 percentage points or less is still considered a "small" gap.[27]

In several cases – including the percentage of youths who are not in education, employment or training (NEET) and all data series related to the quality and quantity of education – gaps were assessed without a direct comparison with the adult reference group. There are no series that would correspond to the NEET category among adults, and the quality and quantity of education are no longer relevant for most adult workers.[28] Hence, gaps for these data series are calibrated on the basis of international best practices (see Annex 5.2).

Table 5.4 shows interesting variation, both across dimensions (columns) and countries (rows). The quantity of education in most countries in the transition region compares well with international standards (11 years of schooling being the OECD average). SEMED countries, particularly Morocco, are an exception.

However, opportunities for young people – reflecting youth unemployment relative to adult unemployment, as well as the NEET category – are unsatisfactory in most countries, including most Western comparators. There are exceptions, though: the Baltic states, Germany, Slovenia and, thanks to a surprisingly low NEET rating, Ukraine. With the exception of Hungary and Slovenia, available data also suggest that quality gaps in education remain "medium" or "large" in the transition region and in SEMED countries.

The chart also shows that there is a degree of correlation between the level of rigidity in labour market structures, the quality of education and the availability of opportunities for young people. Most countries that experience "medium" or "large" gaps in the first two categories also have at least a "medium" gap in the third.

The best-performing country in the transition region appears to be Slovenia, with mainly "small" or "negligible" gaps. However, eight countries – Albania, Azerbaijan, Montenegro, Serbia and the four SEMED countries – have "large" gaps in opportunities for young people and one or both educational dimensions.

Between these extremes, common patterns across countries can be observed within the CEB and, to a lesser extent, EEC regions. In the latter region the typical pattern involves "medium" gaps for labour market structure, "medium" or "large" gaps for opportunities for young people and the quality of education, and "small" or "negligible" gaps for the quantity of education. CEB countries do better on quality of education and opportunities for the young.

[23] See Lindbeck and Snower (1989) and, for SEMED countries, World Bank (2013).
[24] See Meghir and Palme (2005).
[25] See Reinsch (2012).
[26] This reflects the judgement that, at low rates of overall unemployment, a given ratio between youth and adult unemployment indicates a smaller inclusion problem than when overall unemployment is high. For example, a 10 per cent youth unemployment rate might be acceptable if adult unemployment is just 5 per cent, but a 30 per cent youth unemployment rate with adult unemployment at 15 per cent is far less acceptable.
[27] Youth unemployment rates are almost always higher than unemployment rates for older cohorts (see International Labour Organization, 2012), partly for undesirable reasons such as insufficient numbers of entry-level jobs and labour market rigidities, but also for efficient reasons such as job-switching among the young. Young people are also more likely to be idle (see O'Higgins, 2003 and World Bank, 2012b).

Table 5.4
Inclusion gaps for youth

Country	Labour market structure	Opportunities for youth	Quantity of education	Quality of education	Financial inclusion
Central Europe and the Baltic states					
Croatia	Medium	Large	Small	Medium	Medium
Estonia	Medium	Small	Negligible	Medium	Negligible
Hungary	Large	Medium	Negligible	Small	Large
Latvia	Small	Small	Small	Medium	Large
Lithuania	Medium	Small	Small	Medium	Small
Poland	Medium	Medium	Small	Medium	Large
Slovak Republic	Medium	Medium	Small	Large	Large
Slovenia	Medium	Small	Small	Small	Negligible
South-eastern Europe					
Albania	Medium	Large	Small	Large	Negligible
Bosnia and Herzegovina	Small	Medium	Medium	not available	Small
Bulgaria	Small	Medium	Small	Medium	Small
FYR Macedonia	not available	Medium	not available	Large	Medium
Kosovo	not available	not available	not available	not available	not available
Montenegro	Medium	Large	Small	Large	Large
Romania	Negligible	Medium	Small	Medium	not available
Serbia	Small	Large	Large	Medium	Large
Turkey	Medium	Medium	Large	Medium	Large
Eastern Europe and the Caucasus					
Armenia	Medium	Large	Small	Medium	Negligible
Azerbaijan	Medium	Large	Negligible	Large	Medium
Belarus	not available	not available	Negligible	not available	Large
Georgia	Negligible	Large	Negligible	Medium	Negligible
Moldova	Medium	Medium	Small	Large	Negligible
Ukraine	Medium	Small	Small	Large	Negligible
Russia	Medium	Medium	Negligible	Medium	Medium
Central Asia					
Kazakhstan	Small	Medium	Small	Large	not available
Kyrgyz Republic	Medium	Medium	Medium	Large	Small
Mongolia	Small	Medium	Medium	not available	Negligible
Tajikistan	Medium	Large	Small	not available	Negligible
Turkmenistan	not available	not available	Small	not available	Negligible
Uzbekistan	not available	not available	Small	not available	Small
Southern and eastern Mediterranean					
Egypt	Medium	Large	Large	not available	Negligible
Jordan	Negligible	Large	Large	Medium	Large
Morocco	Medium	Large	Large	Large	Medium
Tunisia	not available	Large	Large	Large	Small
Comparator countries					
France	Medium	Large	Negligible	Small	Medium
Germany	Medium	Negligible	Small	Small	Negligible
Italy	Small	Large	Negligible	Medium	Large
Sweden	Large	Medium	Small	Small	Negligible
United Kingdom	Small	Medium	Small	Small	Negligible

Source: See Table 5.3.
Note: See Annex 5.2 for methodology.

[28] While current education indicators could be compared with past indicators that would have been relevant for the current adult population, this would amount to comparing opportunities afforded to young people at two points in time, rather than comparing the opportunities of those who are currently young with those who are currently adults.

REGIONAL GAPS

The final stage of the analysis attempts to measure regional inequality in terms of institutions, education and services, which probably reflects inequality of opportunity linked to people's place of birth and place of residence within a country. This involves addressing the following two complications.

- First, internationally comparable data on institutions, education and services are rarely available at the regional level.
- Second, where such data exist, indices of intra-country inequality will depend on the definition of administrative regions, which may differ widely across countries. Consider two countries with identical intra-country inequality at the level of local institutions. These will appear to have very different levels of internal inequality if one country is divided into 10 regions, while the other is divided into just three. The level of inequality measured in the latter will be lower, because inequality within a region is not recorded.

To circumvent these problems, the next analysis is based primarily on LiTS (2010) data at the level of primary sampling units (PSUs). Imagine PSUs as micro-regions, each numbering about 20 respondent households, which are spread across a country to give a representative impression of the country as a whole. The fact that the PSUs are collectively representative and of equal size solves the problem that comparing administrative regions of different sizes may create spurious differences in inequality.

In addition, the LiTS contains plenty of information on households' perceptions of local institutions and services, which is internationally comparable. The main disadvantage, though, is that it does not contain data for the SEMED countries.

The analysis focuses on four dimensions: differences in the quality of local institutions; access to, and quality of, services (such as utilities or health care); labour markets (local unemployment and the extent of informal employment); and education (quantity and perceived quality). With the exception of the quantity of education, which is drawn from an extensive regional-level dataset – see Gennaioli et al. (2013) – all data are drawn from the 2010 LiTS (see Table 5.5).

Regional inequality is measured in two ways: a Gini coefficient based on means for PSU (regional-level) data; and the difference between the mean of the top quintile of regions (that is to say, the 20 per cent at the top of the regional distribution for an indicator) and that of the bottom quintile. For the LiTS data, which comprise 50 PSUs in most countries, this means comparing the top ten PSUs (ranked according to a specific indicator) with the bottom ten. For the Gennaioli et al. (2013) data, the top and bottom regions were combined in artificial regions representing about 20 per cent of the population at both ends; means were then calculated and compared for these combined regions.

Although conceptually the benchmark against which inequality is measured is perfect equality, regions may be different as a result, for example, of geography and resource endowments. Therefore, the benchmarks against which gaps are measured are set empirically, based on the lower end of the observed distributions for the top-to-bottom difference and the Gini coefficient of each indicator (see Annex 5.2). The two resulting gap measures per indicator are subsequently averaged.

Table 5.6 shows the results. Across institutional dimensions regional gaps are largest in relation to labour markets, particularly in SEE countries, the Caucasus, Tajikistan and Uzbekistan. Gaps for access to local services are "medium" to "large" across most EBRD countries of operations – except for Belarus and Slovenia, where they are "negligible". Regional gaps with regard to the quality of local institutions are mostly "medium" – with the exception of Bosnia and Herzegovina, Serbia and Uzbekistan, where they are "large".

There are "small" education gaps in most CEB countries and about half of the SEE region, but Egypt, FYR Macedonia, Georgia, Moldova, Morocco, Serbia, Turkey and Uzbekistan all have "large" gaps.

Table 5.5
Regional inclusion gaps – dimensions and indicators

Dimension	Indicators	Source
Quality of, and trust in, local institutions	Corruption in administrative, health and education systems	LiTS (2010)
	Quality of administrative, health and education systems	
	Trust in local government	
	Satisfaction with local government	
Access to services	Access to water	LiTS (2010)
	Access to heating	
	Perception of quality of health care system	
Labour markets	Unemployment	LiTS (2010)
	Formal or informal job?	
Education	Years of education	Gennaioli et al. (2013)
	Perception of quality of education system	LiTS (2010)

Table 5.6
Inclusion gaps for regions

Country	Institutions	Access for services	Labour markets	Education
Central Europe and the Baltic states				
Croatia	Medium	Medium	Small	Medium
Estonia	Small	Medium	Negligible	Small
Hungary	Medium	Small	Large	Small
Latvia	Small	Medium	Small	Medium
Lithuania	Medium	Large	Small	Small
Poland	Medium	Medium	Medium	Small
Slovak Republic	Medium	Small	Medium	Small
Slovenia	Small	Negligible	Small	Small
South-eastern Europe				
Albania	Medium	Medium	Large	Small
Bosnia and Herzegovina	Large	Large	Large	Small
Bulgaria	Medium	Medium	Medium	Medium
FYR Macedonia	Small	Medium	Large	Large
Kosovo	Medium	Large	Large	Small
Montenegro	Medium	Medium	Large	Small
Romania	Medium	Large	Medium	Medium
Serbia	Large	Medium	Large	Large
Turkey	Medium	Medium	Medium	Large
Eastern Europe and the Caucasus				
Armenia	Medium	Medium	Large	Medium
Azerbaijan	Medium	Small	Large	Small
Belarus	Medium	Negligible	Small	Negligible
Georgia	Negligible	Large	Large	Medium
Moldova	Medium	Large	Large	Large
Ukraine	Medium	Medium	Medium	Small
Russia	Medium	Small	Small	Medium
Central Asia				
Kazakhstan	Small	Small	Medium	Medium
Kyrgyz Republic	Medium	Large	Medium	Small
Mongolia	Negligible	Medium	Medium	Medium
Tajikistan	Medium	Large	Large	Small
Turkmenistan	not available	not available	not available	not available
Uzbekistan	Large	Medium	Large	Large
Southern and eastern Mediterranean				
Egypt	not available	not available	not available	Large
Jordan	not available	not available	not available	Small
Morocco	not available	not available	not available	Large
Tunisia	not available	not available	not available	not available
Comparator countries				
France	Small	Medium	Medium	Medium
Germany	Negligible	Large	Negligible	Medium
Italy	Large	Medium	Negligible	Small
Sweden	Medium	Small	Small	Small
United Kingdom	Medium	Small	Small	Large

Source: See Table 5.5.
Note: See Annex 5.2 for methodology.

CONCLUSION

This chapter has assessed inequality of opportunity in the transition region using two complementary approaches. First, "bottom-up" econometric analysis established the extent to which differences in household assets and tertiary education within countries can be attributed to different circumstances at birth, such as parental education and place of birth. Second, a combination of policy indices and data on outcomes was used to assess the capacity of the economic system in each country to create opportunities regardless of gender and place of birth and to equip young people with skills and jobs regardless of their social background ("top-down" analysis).

The analysis has significant limitations, due mostly to gaps in the data. Inequality of opportunity was assessed with respect to household assets, rather than income or earnings. A number of potential determinants of inequality of opportunity – including ethnicity, sexual orientation and physical disability – were not considered. The bottom-up analysis of gender is incomplete, focusing only on its effect on tertiary education. In addition, the SEMED countries were covered only in the top-down analysis (primarily for gender and youth-related gaps). Subject to these caveats, several conclusions emerge.

First, according to the bottom-up analysis, there is significant inequality of opportunity with regard to economic success – proxied by household assets – in a number of transition countries. The drivers of these are place of birth (with birth in rural areas putting individuals at a disadvantage) and parental education. Inequality of opportunity with regard to these circumstances is particularly high in the Western Balkans and some eastern European and Central Asian countries.

Second, according to the top-down analysis, the same group of countries also tend to have less inclusive institutions and economic systems. High inequality of opportunity in these countries could be due to regional variation in the quality of local institutions, employment opportunities and public services. It could also reflect a failure to provide young people with relevant education and job opportunities, which implies that disadvantages at birth persist in later life. Similar inclusion gaps, particularly in relation to youth, seem to be present in the SEMED countries (which are not included in the bottom-up analysis).

Third, an analysis of labour policies and practices, education, access to finance and related aspects of the economic system suggests that "large" inclusion gaps with regard to gender exist in most Central Asian and SEMED countries, and also in Turkey. In addition, there are "large" gender gaps in specific dimensions – particularly labour practices, and female participation in management and business ownership – in virtually all transition countries.

Lastly, with the exception of Egypt, Morocco, Tajikistan, Turkey and Uzbekistan, education is not a major factor in the inequality of opportunity suffered by women. At the same time, in most countries gender does not seem to play a role in explaining differences in tertiary education. That said, the analysis also confirms the existence of "large" gaps in terms of the quality and relevance of education in many transition countries. The SEMED region also has "large" gaps in relation to the typical length of education. Therefore, education – and particularly its quality – is likely to be an important factor contributing to inequality of opportunity as regards people's social or geographical origins.

The analysis in this chapter raises warning flags about the presence of inclusion gaps and household-level inequality of opportunity in some of the countries that are in greatest need of continued market-oriented reform. It also points to the aspects of the economic system that appear to be the most problematic in those countries. However, this is only a first step. Additional analysis will be needed to explore how reform and economic performance are influenced by country-level inclusion gaps and household-level inequality of opportunity as identified in this chapter. Key to this will be a better understanding of how actual inequality, inequality of opportunity and the inclusiveness of economic systems influence beliefs about markets and democracy in the transition region.

Annex 5.1

ESTIMATING AND DECOMPOSING INEQUALITY OF OPPORTUNITY

IOp^{wealth} and IOp^{edu} measure the degree to which variations in wealth and tertiary education respectively can be attributed to the four circumstances at birth that are the focus of analysis. The vehicle for estimating IOp^{wealth} and IOp^{edu} is a reduced form regression of the type:[29]

$$y_i = C_i\psi + \varepsilon_i \qquad (*)$$

where y_i denotes an outcome variable (that is to say, a household wealth index or an indicator variable that takes the value 1 if individual i has a university degree and 0 if not) and C_i is a vector of circumstances that includes parental education, the person's place of birth, parental membership of the communist party and (in the case of the education regression) gender.

The coefficient vector ψ captures both direct and indirect effects of circumstances on economic outcomes. For example, parental education may influence an individual's skills and effort, which affect household assets – but it may also influence future earnings for given levels of skill and effort through, for instance, social connections or inherited assets. Coefficient estimates for ψ, based on running one wealth index regression and one education regression for each country, are reported graphically in Charts 5.1 to 5.4.

Because the wealth outcome variable (the asset index) is continuous, while the university education indicator is a binary variable (0 or 1), IOp^{wealth} and IOp^{edu} each require a different inequality index. IOp^{wealth} is simply the R^2 from the regression outlined above – that is to say, the percentage of the variation in the outcome variable which is explained by the variables on the right-hand side (in this case, the circumstances in question).

$$R^2 = \frac{\sum_{i=1}^{N}(\hat{y}_i - \bar{y})^2}{\sum_{i=1}^{N}(y_i - \bar{y})^2}$$

For the regression with the university-level education indicator as the dependent variable (IOp^{edu}), the appropriate analogous measure is a dissimilarity index (D-index) – broadly, the average distance between predicted outcomes and the actual mean of outcomes. Higher predicted outcomes, based on favourable circumstances, will lead to a higher D-index, as will predicted outcomes that are much lower than the mean (due to unfavourable circumstances). The larger the distance between predicted values and the mean, the more dissimilarity there is in how different sets of circumstances contribute to outcomes in the sample. A modified version of the D-index is used:[30]

$$D^*(y) = \frac{2}{N}\sum_{i=1}^{N}|y_i - \bar{y}|$$

Note that estimates from the regressions are probably biased, owing to circumstances missing from the analysis (for example, people's mother tongue). Because the aim is not to interpret the coefficients for individual circumstances, but rather to see how well the set of circumstances considered accounts for inequality in wealth accumulation and university-level educational attainment, this bias is not a first-order concern, as long as omitted circumstances either have similar effects across countries or are not correlated with the circumstances included.

However, omitted variables will undermine the comparability of country-specific estimates of IOp^{wealth} and IOp^{edu} if they affect some countries differently (by explaining more or less variation in outcome) or if their correlation with the circumstances included varies by country.

Aside from presenting levels of inequality of opportunity, this chapter reports on the extent to which individual circumstances at birth contribute to IOp^{edu} and IOp^{wealth} respectively. For such estimations, a "Shapley decomposition technique" is employed. This approach, which is adapted from cooperative game theory, decomposes an outcome that reflects the contributions of several factors into shares attributable to each (in the present context, individuals' specific circumstances), such that these shares sum to one.[31] Charts 5.6 to 5.8 present these decompositions graphically for each country.

The effect of these circumstances on economic and educational outcomes will depend on the characteristics of the economy and the education system, which change slowly over time. For this reason analysis of the type described above would ideally be undertaken by age cohort, that is to say, running regression (*) shown at the start of this annex and calculating IOp^{edu} and IOp^{wealth} separately for groups of individuals within an age bracket – for example, 15 to 24-year-olds, 25 to 34-year-olds, and so on.

Unfortunately, the limited sample sizes preclude this approach, with the exception of the education regressions (where the analysis was conducted separately for cohorts of workers aged 37 and under and 38 and over). As a robustness check on results, however, age and age^2 were added to the regression (*) as controls. While these controls tend to be significant, they do not explain much additional variation in outcomes, and the R^2 and D-indices are essentially unchanged.

[29] The methodology described in this annex draws on Bourguignon et al. (2007), Paes de Barros et al. (2009) and Ferreira et al. (2011).
[30] See Chávez Juárez and Soloaga (2013).
[31] See Shorrocks (2013). The Shapley decomposition was implemented in Stata using the "IOp" command written by Chávez Juárez and Soloaga (2013).

Annex 5.2

ASSUMPTIONS UNDERLYING INCLUSION GAP CALCULATIONS

This annex provides further background information on how the indicators described in Tables 5.1, 5.3 and 5.5 were translated into gender, youth and regional inclusion gaps. Full details and the underlying data are available online in downloadable Excel files.

For the **gender and youth gaps**, the data took three forms:

policy indices constructed by organisations such as the EIU, the World Bank, the International Labour Organization and the World Economic Forum;

plain data – for example, test score data from PISA (the Programme for International Student Assessment) or, for countries where PISA data are not available, TIMSS (the Trends in International Mathematics and Science Study);[32]

data expressing a ratio, percentage difference or absolute difference (in percentage points) between the target group (women or 15 to 24-year-olds) and a comparator group (men or 25 to 64-year-olds respectively).

Policy indices incorporate a normative interpretation, typically running from a worst value of n to a best value of N in integer steps. The data analysis underlying the gap calculations generally sought to maintain that interpretation. Hence, the only manipulation of these data was their mapping to the transition indicator scale, which starts with a jump from 1 (the lowest possible value, equivalent to a country before the beginning of transition) to 2- ($1^{2}/_{3}$) and subsequently increases linearly until it reaches 4+ ($4^{1}/_{3}$). If k denotes the index value, assumed to be an integer, $n \le k \le N$, and x denotes the transformed index on the transition indicator scale, the following formulas were used:[33]

$$x = 3\frac{1}{3} \cdot \frac{k-n}{N-n} + 1, \quad for\ N-n \le 5$$

$$x = 2\frac{2}{3} \cdot \frac{k-n-1}{N-n-1} + 1\frac{2}{3}, \quad for\ N-n > 5$$

These formulas ensure that the transition indicator value assigned to the lowest index value is always 1 and that the next value is at least 2-. The remainder of the index values are mapped proportionally to the interval between 2- and 4+.

Plain data and data expressing differences were mapped into the transition indicator scale in discrete ($^{1}/_{3}$) steps, using the cut-offs defined in Table A.5.2.1. The cut-offs were set either in relation to international best and worst practices, or using some combination of best or worst practices and a normative judgement – as in the case of gender gaps, where only parity between males and females was good enough to earn the highest possible score of 4+ on the transition indicator scale, a situation that exists internationally for some indicators (for example, access to education), but not for many others at present for example, gender pay gaps continue to exist everywhere.

After expressing all data on the 1 to 4+ transition scale, the transformed data were averaged within each category. In the gender gap analysis, which in some categories involved a large number of series with overlapping information content, this was done using a principal components methodology that assigns weights in relation to the new information carried by each series. In the youth gap analysis, simple averages were used – except in the case of the quality of education dimension, where a weighted average was applied.[34]

The **regional gap** analysis was based on two measures: Gini coefficients based on means of PSU (regional-level) data, and the percentage difference between the top and bottom quintiles of regions. Hence, both measures are defined as continuous indices between 0 and 1. For each of these indices, a lower (n) and upper cut-off (N) were chosen, based on international comparisons. Between these extremes, the following formula was used:

$$x = 3\frac{1}{3} \cdot \frac{N-I}{N-n} + 1$$

The lower and upper bounds are defined in Table A.5.2.2.

[32] Gaps in the PISA scores were filled by running a linear regression of PISA scores on TIMSS scores using data from countries where both are available, and using the estimated regression coefficients to fit PISA scores for countries where only TIMSS data were available.

[33] An exception was made in the case of three indices (for labour market flexibility and perceptions of educational quality) produced by the World Economic Forum (see Table 5.2). Those indices run from 1 to 7, but no country was rated higher than a 6. In this case, the scale was truncated from 7 to 6 to allow a more generous definition of a "negligible" gap.

[34] First, a combined "school reliability" score was calculated as a simple average of the teacher shortage, material shortage and school accountability scores. Second, a weighted average was calculated with weights in the following proportions: test scores 1, school reliability 1, business executives' perception of quality World Economic Forum (WEF) 1.5, households' perception of quality (LiTS) 0.5, and university rankings 1.5.

Table A.5.2.1
Translating percentage gaps into transition scores and qualitative gaps

	Gap and transition scores									
Concept/indicator	Negligible	Small			Medium			Large		
	4.33	4.00	3.67	3.33	3.00	2.67	2.33	2.00	1.67	1.00
Gender gap (percentage difference)	0	1 to >0	3 to >1	6 to >3	10 to >6	15 to >10	20 to >15	25 to >20	35 to > 25	>35
Unemployment (youth rate in per cent minus adult rate in per cent)	≤6.0	6.0-7.5	7.5-9.0	9.0-10.5	10.5-12.5	12.5-14.5	14.5-16.5	16.5-18.5	18.5-20.5	>20.5
NEET (per cent)	<10.0	10.0-12.5	12.5-15.0	15.0-17.5	17.5-20.0	20.0-22.5	22.5-25.0	25.0-27.5	27.5-30.0	>30
Years of education	≥11.0 years	10.5-11.0	10.0-10.5	9.5-10.0	9.0-9.5	8.5-9.0	8.0-8.5	7.5-8.0	7.0-7.5	6.5-7.0
No education (per cent)	0	0-0.5	0.5-1.0	1.0-1.5	1.5-2.0	2.0-2.5	2.5-3.0	3.0-3.5	3.5-4.0	>5.0
Quality of education (PISA/ TIMSS score (normalised between 0 and 1) minus highest possible score (=1))	≥-0.24	[-0.26,-0.24]	[-0.28,-0.26]	[-0.30,-0.28]	[-0.32,-0.30]	[-0.34,-0.32]	[-0.36,-0.34]	[-0.38,-0.36]	[-0.40,-0.38]	[-0.42,-0.40]
Teacher shortage (average country response; 0 is best, 1 is worst)	<0.10	0.14	0.18	0.22	0.26	0.30	0.34	0.38	0.42	>0.46
Material shortage (average country response; 0 is best, 1 is worst)	<0.25	0.25	0.333	0.416	0.5	0.58	0.66	0.75	0.83	>0.91
School accountability (average country response; 1 is best, 0 is worst)	1	0.95-0.99	0.90-0.95	0.85-0.90	0.80-0.85	0.75-0.80	0.70-0.75	0.65-0.70	0.60-0.65	<0.60
Quality of education (LiTS average country response; 0 is best, 1 is worst)	<0.050	0.050-0.075	0.075-0.100	0.100-0.125	0.125-0.150	0.150-0.175	0.175-0.200	0.200-0.225	0.225-0.250	>0.250
Top universities (cumulative number of country's universities mentioned in top 500 during 2003-12 per million of population)	>2.00	1.66-2.00	1.34-1.66	1.00-1.33	0.66-1.00	0.34-0.66	0.00-0.33	0	0	0
Youths with bank accounts (youth rate in per cent minus adult rate in per cent)	≤6.0	6.0-7.5	7.5-9.0	9.0-10.5	10.5-12.0	12.0-13.5	13.5-15.0	15.0-16.5	16.5-18.0	>18.0
Youths with debit cards (youth rate in per cent minus adult rate in per cent)	≤10.0	10.0-12.0	12.0-14.0	14.0-16.0	16.0-18.0	18.0-20.0	20.0-22.0	22.0-24.0	24.0-26.0	>26.0

Table A.5.2.2
Upper (worst) and lower (best) bounds (*N*, *n*) for regional indices

Dimension		***n***	***N***
Institutions	Top/bottom	0.2	0.467
	Gini	0.14	0.22
Access to services	Top/bottom	0.2	0.467
	Gini	0.2	0.33
Formality of labour	Top/bottom	0.35	0.7
	Gini	0.1	0.233
Unemployment	Top/bottom	0.3	0.45
	Gini	0.25	0.35
Years of education	Top/bottom	1	3.67
	Gini	0.01	0.09
Perception of education	Top/bottom	0.2	0.467
	Gini	0.35	0.43

Note: For each dimension, the resulting two indices were subsequently averaged and translated into "negligible", "small", "medium" or "large" gaps.

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Macroeconomic overview

Growth in the transition region slowed significantly in 2012 and has failed to recover in 2013. While the effects of the eurozone crisis on trade and capital flows have gradually abated, there has been a downturn in key emerging markets and in the three largest economies of the transition region: Russia, Turkey and Poland. As a result, countries initially less exposed to the crisis have suffered weaker trade and remittances and declining growth.

FACTS AT A GLANCE

IN
27
countries out of 34 in the transition region GDP growth slowed in 2012.

ABOVE
20%
Remittances as a share of GDP in Tajikistan, Kyrgyz Republic, and Moldova.

ABOVE
50%
Youth unemployment rates in parts of south-eastern Europe.

ABOVE
15%
Loss of foreign bank funding as a share of GDP in countries most affected by deleveraging since the third quarter of 2011.

Macroeconomic developments and outlook

Economic activity remains weak across most of the transition region. The current slow-down started in the second half of 2011 as the eurozone crisis intensified. Growth continued to decelerate in 2012, reaching low single-digit levels everywhere except in Central Asia (CA), where growth remained resilient, and in south-eastern Europe (SEE), where it contracted (see Chart M.1). Other than a modest recovery in SEE and Turkey, growth across the transition region was flat or even lower in the first half of 2013.

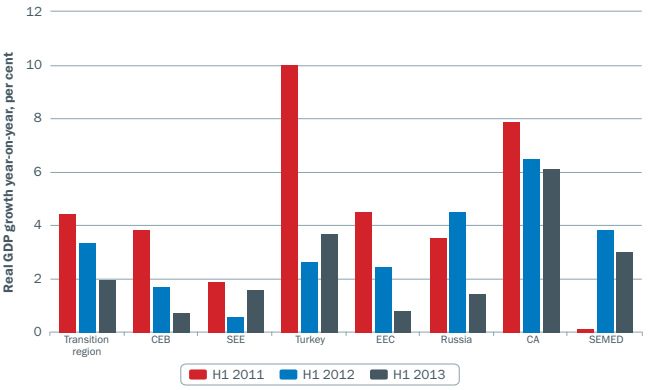
Compared to last year, the external drivers, composition and regional distribution of growth have shifted. Economic weakness has spread eastwards from the western transition countries and has shifted from external to domestic factors. Although the eurozone recession ended in the second quarter of 2013, there has been a slow-down in key emerging markets, including China and India. The largest transition economies – Russia, Turkey and Poland – have similarly slowed, with wider regional repercussions. In Central European and Baltic (CEB) and SEE countries, exports have recovered and cross-border deleveraging has moderated. Yet growth in these economies has continued to decelerate as domestic consumption and investment have weakened.

SLOW-DOWN IN DOMESTIC DEMAND

Most transition economies – 27 out of 34 – saw lower growth in 2012 than in 2011 (see Chart M.2). This slow-down encompassed all regions, with the exception of the southern and eastern Mediterranean (SEMED) countries, where a slight increase reflected weak growth during the political turmoil of 2011, rather than any significant acceleration. In the majority of countries this decline can be attributed to weaker domestic demand. Consumption stalled across the region and contracted in real terms in the recession-hit economies of Bosnia and Herzegovina, Croatia, FYR Macedonia, Hungary and Slovenia. The end of the credit boom in Turkey triggered a sharp reduction in consumption, which played a significant role in the deceleration of the economy in 2012.

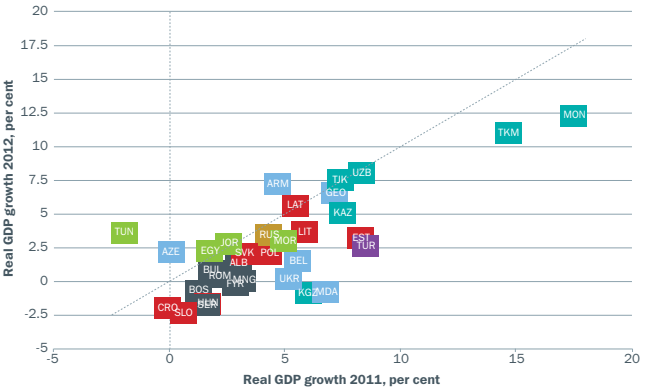
The weakening of investment has also been a major factor in the slow-down (see Chart M.3). In the CEB countries 2012 was the fifth successive year of weak or negative investment growth, due to fiscal austerity (which constrains public investment), low foreign direct investment (FDI) and investor uncertainty amid the eurozone crisis. In Russia fixed investment had come to a standstill by the end of 2012. This was due, in part, to faltering global commodity prices and the ensuing stagnation of export revenues. Weaker domestic demand and supply-side

Chart M.1. Growth in transition countries has slowed since 2011



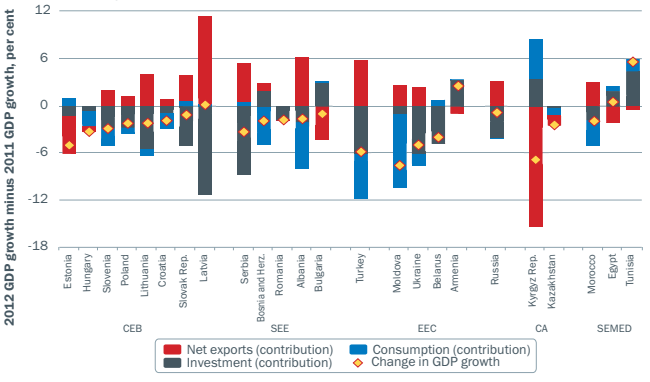
Source: National authorities via CEIC Data.
Note: The chart shows year-on-year growth rates. Regional averages are weighted by nominal US dollar GDP in 2011.

Chart M.2. In 2012 growth slowed in 27 countries in the transition region



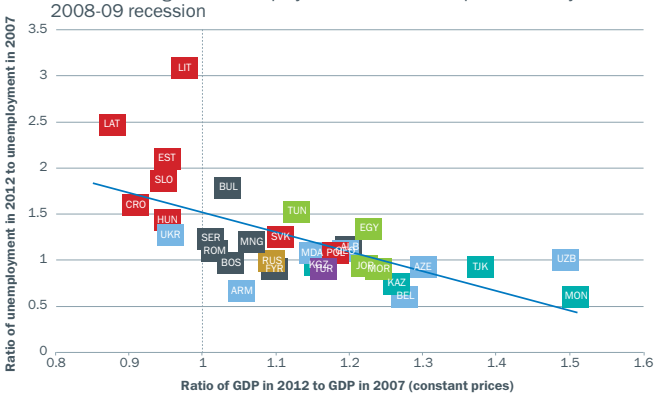
Source: International Monetary Fund World Economic Outlook (IMF WEO) database.
Note: The chart plots annual growth rates of real GDP in the years 2011 and 2012. Countries below the 45-degree line experienced a slow-down in 2012.

Chart M.3. The slow-down in 2012 was driven by weaker consumption and investment



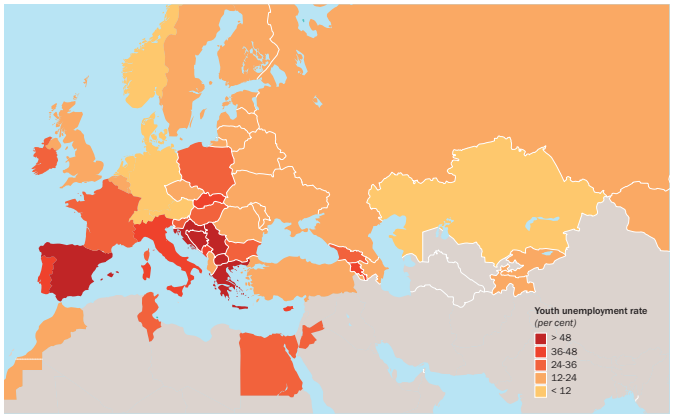
Source: IMF WEO database.
Note: The chart shows changes in annual GDP growth rates from 2011 to 2012. Contributions are calculated as changes in the various components' growth rates weighted by their respective shares in 2011 GDP.

Chart M.4. High CEB unemployment reflects incomplete recovery from the 2008-09 recession



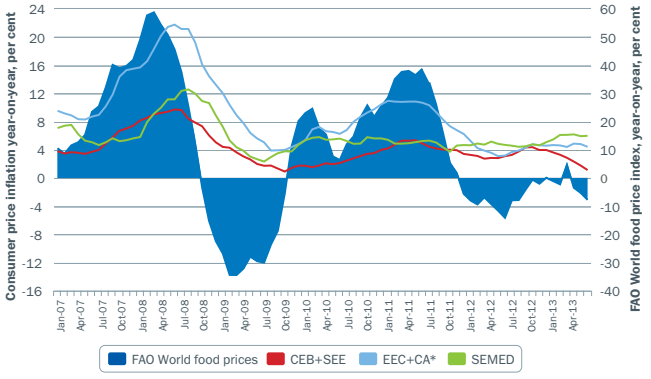
Source: National authorities via CEIC Data and IMF WEO database.
Note: The chart shows the ratio of real GDP in 2012 to real GDP in 2007 and the ratio of the unemployment rate in 2012 to the unemployment rate in 2007. Unemployment rates are end-of-period.

Chart M.5. Youth unemployment in SEE, the Caucasus, SEMED and the eurozone periphery



Source: National authorities, Eurostat, World Bank Development Indicators and International Labour Organization.
Note: The chart is based on the latest data for the youth unemployment rate, defined as unemployment among individuals aged 15 to 24. No estimates are available for Turkmenistan or Uzbekistan. For country legends see the regional map in the Country Assessments section of the online *Transition Report*, at www.tr.ebrd.com.

Chart M.6. Inflation low as world food prices stabilise



Source: National authorities via CEIC Data, and the Food and Agriculture Organization of the United Nations (FAO).
Note: The chart shows year-on-year growth rates for the FAO world food price index and consumer price indices. Regional averages are unweighted. *The EEC+CA average excludes Belarus, which saw inflation exceed 100 per cent in 2011.

constraints – high capacity utilisation and low unemployment – have resulted in a rapid deceleration of growth. Investment has also been the principal driver behind the slow-down in Ukraine, contracting by over 10 per cent in real terms.

PERSISTENT HIGH UNEMPLOYMENT

Continuing high rates of unemployment – in double digits in most CEB and SEE countries – are mostly a legacy of deep recessions in 2008-09. Output remains below pre-crisis levels in six CEB countries (as well as in Ukraine) and the persistence of high unemployment reflects this incomplete recovery (see Chart M.4). As a consequence, long-term unemployment has risen steadily in all CEB countries, Bulgaria and Romania – potentially resulting in declining labour-force participation and a loss of skills. Unemployment has been falling in the Baltic states – albeit from very high levels – but has increased in Croatia and Slovenia as their economies have re-entered recession, and has also risen in Egypt, Jordan and Morocco. Insufficient job creation is a long-term structural problem in SEMED countries that has become particularly pressing amid political unrest in recent years.

Most transition countries continue to see high levels of youth unemployment. In several Western Balkan states youth unemployment rates are in the region of 50 per cent or higher, comparable with the most extreme cases in the eurozone periphery (namely Greece and Spain; see Chart M.5). Youth unemployment is also a concern in some CEB and SEMED countries, as well as in Armenia and Georgia. In the SEMED region the problem is magnified by demographics, as young people account for a large and rising share of the population (see Box S.1).

STABLE INFLATION

Consistent with an environment of depressed demand, inflation has continued to fall in most CEB and SEE countries, dipping below two per cent in the first half of 2013. The exception was Serbia, where prices spiked due to a poor harvest, pre-election fiscal loosening and an increase in value-added tax. Inflation also edged up in some countries in eastern Europe and the Caucasus (EEC) and Central Asia – particularly Armenia and the Kyrgyz Republic – but remains low by historical standards. Supply shortages and the removal of subsidies have contributed to rising inflation in the SEMED region. Egypt, in particular, experienced a sharp increase in prices in the first half of 2013 as the depreciation of its currency continued to raise the cost of imports.

World food prices have been an important determinant of headline inflation in many transition countries in recent years (see Chart M.6). The recent moderation of inflation in EEC and Central Asian economies, where food constitutes a large share of the consumer price index (CPI) basket, is partly attributable to relative stability in global prices.

TRADE REVERSAL

After the eurozone crisis intensified in late 2011 and the first half of 2012, exports from CEB and SEE countries fell significantly. This trend has reversed over the past year, as exports grew in all countries apart from Estonia. This recovery has lost some momentum in the CEB region in 2013, but has accelerated in certain SEE countries, notably Albania, Bosnia and Herzegovina, Montenegro and Serbia.

Countries further east in the transition region are less exposed to the eurozone, but are more vulnerable to developments in Russia. Weakening domestic demand in Russia has depressed exports from some EEC countries. Similarly, Central Asian economies have been impacted by the Russian slow-down, and also by China's deceleration, which has particularly affected Mongolia and Tajikistan. Exports from these countries still grew in the past year, but at a slower pace than they had previously.

By the first half of 2013, improving supply prospects and weak demand in emerging markets had led to falls in the prices of all major commodities. Azerbaijan, Kazakhstan and Russia experienced a dip in export revenues as the oil price dropped in early 2013 (oil production also declined in Azerbaijan). Prolonged stagnation in global commodity prices could constrain growth in Russia and other commodity exporting nations, while also endangering the recovery in transition economies that depend on Russia.

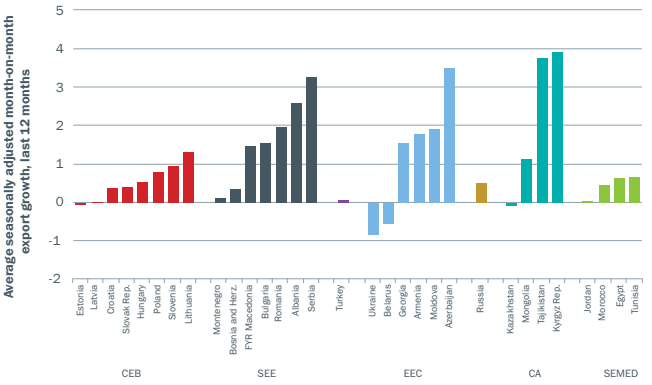
CAPITAL FLOWS BELOW PRE-CRISIS LEVELS

Private capital has continued to flow into the transition region, but at modest rates. Emerging markets globally received significant inflows in the second half of 2012 and the first quarter of 2013, as low interest rates in advanced economies prompted investors to seek higher yields elsewhere. However, with the exception of Turkey, these inflows largely bypassed emerging Europe and Central Asia (see Chart M.8). The level of net flows into CEB and SEE countries – mainly FDI flows – was only about one-third of the levels seen prior to the crisis of 2008-09. Croatia, Hungary, Slovak Republic and Slovenia all experienced net outflows in the second half of 2012 and the first quarter of 2013. In Russia outflows slowed during the second half of 2012, but picked up again in early 2013, coinciding with the slow-down in the economy and the Cypriot banking crisis.[1]

Chart M.8 shows that net capital flows to the SEMED region remain very low. In part, this is a reflection of developments in Egypt, where the ongoing political crisis has prompted net outflows for that country. However, weak investor confidence has also affected foreign investment across the SEMED region, as FDI remained stagnant in all countries apart from Morocco.

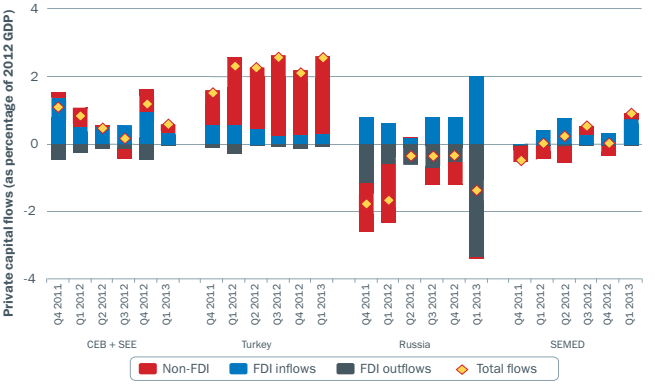
In May and June of 2013, concerns over the eventual tapering of quantitative easing in the United States sparked a period of heightened volatility in financial markets. Emerging markets in particular were hit by falling equity prices, rising yields and capital outflows.[2] Markets have since calmed, but future US monetary

Chart M.7. Export recovery in CEB and SEE since mid-2012



Source: National authorities via CEIC Data, and IMF International Financial Statistics (IFS).
Note: The chart shows the average of seasonally adjusted month-on-month export growth in the last 12 months. Exports are in US dollar values, adjusted using a US export deflator to correct for exchange rate movements.

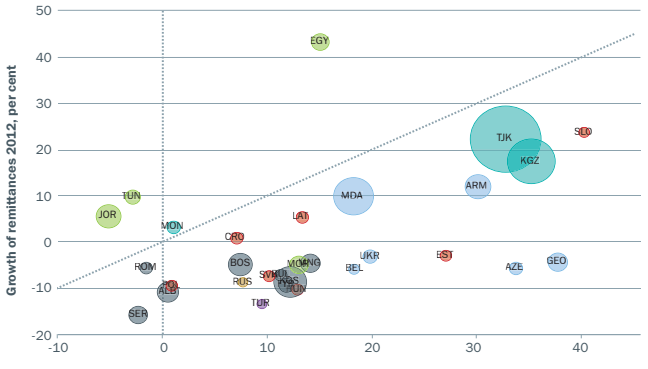
Chart M.8. Weak capital flows to CEB, SEE and SEMED



Source: National authorities via CEIC Data.
Note: Data are from the capital and financial accounts of individual EBRD countries. Private non-FDI flows are the sum of the capital account, portfolio investment, other investment and net errors and omissions. Net errors and omissions are included as this can be a significant channel for current account deficit financing or a major channel for capital flight in some countries.

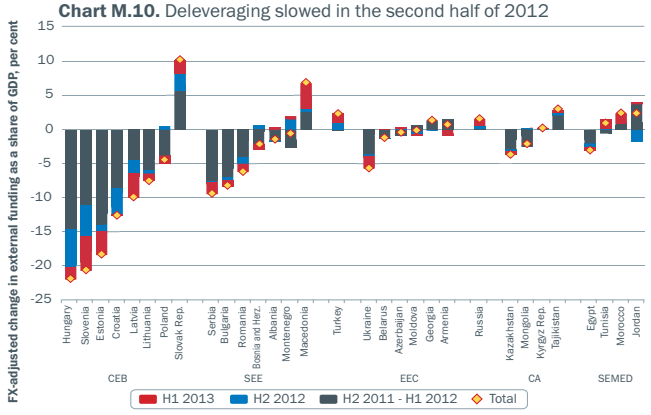
[1] The exceptionally large outflows and inflows of FDI for Russia in the first quarter of 2013 reflect transactions related to Rosneft's takeover of TNK-BP. From the perspective of the balance of payments, these transactions broadly offset each other and are unlikely to have significantly affected net capital flows.
[2] As measured by EPFR Global fund flows (www.epfr.com).

Chart M.9. Remittance growth has slowed



Source: World Bank.
Note: The chart plots the annual growth of remittance inflows in 2011 and 2012. The size of the bubble indicates the share of remittances in GDP.

Chart M.10. Deleveraging slowed in the second half of 2012



Source: Bank for International Settlements (BIS).
Note: The chart shows foreign exchange (FX)-adjusted changes in BIS reporting banks' external positions in relation to all sectors, as a percentage of 2012 GDP.

policy will remain an important determinant of capital flows for emerging economies. The transition region may be less exposed to these developments, due to the lack of more volatile non-FDI inflows in recent years. Turkey, however, is vulnerable to a reversal, given that portfolio inflows financed 85 per cent of its current account deficit in 2012.

SLOWING REMITTANCE GROWTH

Remittances are the single largest source of international payments for several Central Asian, SEE and SEMED countries. However, in 2012 the annual growth rate of remittances declined in all but four countries (see Chart M.9). Egypt, Jordan and Tunisia were among the exceptions, which is consistent with past evidence that migrants from SEMED countries remit more in times of economic hardship.[3]

Remittances are most important for the economies of Tajikistan, Kyrgyz Republic and Moldova, where their shares of GDP are 46 per cent, 29 per cent and 23 per cent respectively. Remittance growth slowed in all three countries in 2012, but still remained relatively high. The collapse of remittances from Russia was one of the principal channels through which the 2008-09 crisis affected these and other EEC and Central Asian countries. Consequently, a Russian economic slow-down poses a significant risk. However, higher-frequency data show no evidence that remittances from Russia to EEC and Central Asian countries weakened in the first half of 2013.[4]

In the SEE region remittances have yet to return to pre-crisis levels and the year to mid-2013 saw further contractions. The negative growth in all SEE countries reflects the large percentage of remittances which come from the eurozone periphery. Outflows from Greece, Italy and Spain have dropped substantially since their economies went into recession. Albania has been especially vulnerable, given its dependence on remittances from Greece, which saw a 19 per cent decline in 2012 alone.

CROSS-BORDER DELEVERAGING CONSTRAINS CREDIT

Foreign banks have continued to withdraw funding from the transition region, but the pace of deleveraging has moderated. The eurozone crisis triggered a sharp reduction in international bank claims in the second half of 2011. Outflows slowed in 2012 as ample global liquidity and the European Central Bank's monetary policy helped to improve funding conditions for banks, although they picked up temporarily in the first quarter of 2013.[5] According to a Bank for International Settlements (BIS) study,[6] the main reason for the withdrawal of cross-border funding has been pressure on parent banks. It has also increasingly reflected domestic factors, as the reduction of exposures has been largely confined to countries in recession. Hungary, Slovenia and Ukraine have seen no respite from outflows, while deleveraging has abated elsewhere (see Chart M.10). Compared to the first wave of funding withdrawals that followed the global financial

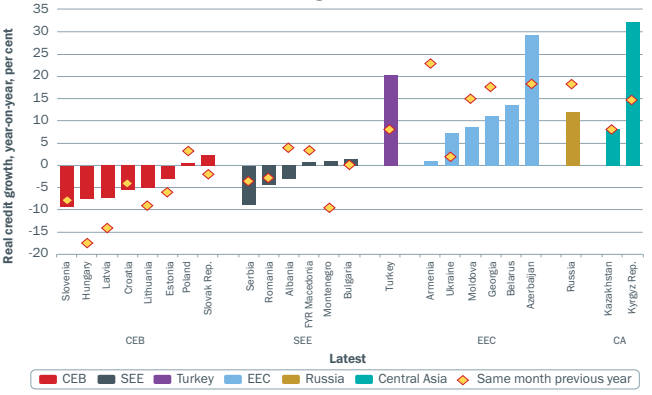
[3] See Bouhga-Hagbe (2006).
[4] Based on bilateral data from the Central Bank of Russia on remittances from Russia to EEC and Central Asian countries through money transfer operators.
[5] See Vienna Initiative 2.0, Deleveraging Monitor, 24 July 2013 (www.vienna-initiative.com).
[6] See Avdjiev et al. (2012).

crisis in 2008-09, foreign banks appear to have adopted a more discriminating approach to deleveraging, as funding reductions have been more closely aligned with domestic vulnerabilities. In Ukraine international banking groups are not just reducing their exposures, but are exiting the country entirely, which may make the banking system more vulnerable to external shocks in the future.

Accumulated external funding losses continue to affect credit conditions in transition economies, even though banks have made significant efforts to raise domestic deposits. Real credit growth remains depressed in virtually all CEB and SEE countries (see Chart M.11). In the SEE countries a significant drop in credit growth has coincided with an increase in non-performing loans (NPLs). By mid-2013 credit was contracting in real terms in Albania, Romania and Serbia, and continued to contract in Croatia, Hungary and Slovenia. In countries less affected by foreign banks' deleveraging, the expansion of credit has slowed, in line with weakening domestic demand. Armenia, Georgia, Moldova and Russia have all seen decelerations of between 5 and 20 percentage points. Credit growth has accelerated in Turkey, but remains well below the rates seen in the boom years of 2010 and 2011.

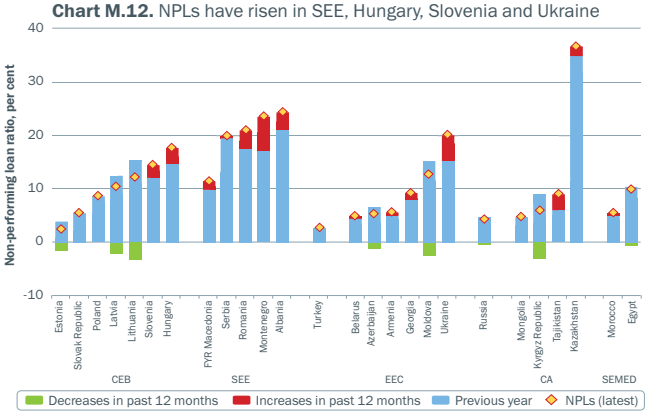
In a number of transition economies credit growth remains dampened by balance sheet constraints – an ongoing legacy of the 2008-09 financial crisis. The share of NPLs remains above pre-crisis levels across most of the region, including all CEB and SEE countries. Efforts to resolve bad loans are showing success in the Baltic states and the Kyrgyz Republic, where NPL ratios have declined steadily since 2010. However, they have continued to rise in many of the countries most affected by the downturn, including Hungary, Slovenia and Ukraine, as well as in the SEE region where the average NPL ratio has risen continually since 2007 and now exceeds 17 per cent. Kazakhstan has the highest reported share of NPLs, as continued attempts at resolution have so far failed to address balance sheet weaknesses in one of its largest banks.

Chart M.11. Credit is contracting in much of CEB and SEE



Source: National authorities via CEIC Data
Note: The chart shows the year-on-year growth rate of credit adjusted for foreign exchange movements and inflation.

Chart M.12. NPLs have risen in SEE, Hungary, Slovenia and Ukraine



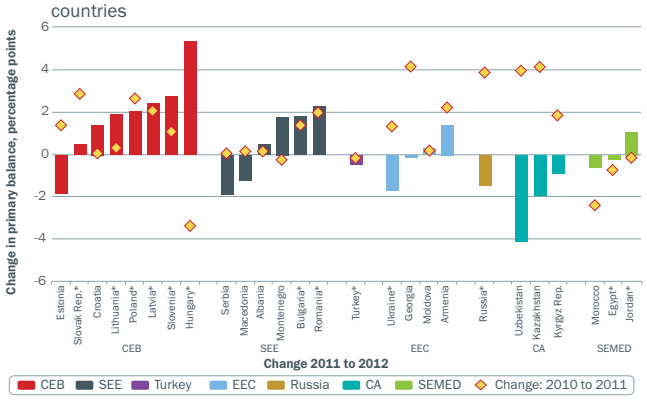
Source: National authorities via CEIC Data.
Note: The definition of non-performing loans can vary across countries. As a result, the levels shown in the chart are comparable across time, but may not be perfectly comparable across countries.

MACROECONOMIC POLICY

Monetary policy has remained accommodative in much of the transition region, reflecting the economic downturn and the relative lack of inflationary pressures. Central banks in the CEB and SEE regions have continued to cut interest rates, which have dropped to historic lows in the majority of countries.[7] Hungary has also tried to use unconventional monetary policy tools to revive credit to the private sector. By early 2013 monetary policy had begun to ease in Serbia, after a sharp rise in inflation prompted a tightening in the second half of 2012. Monetary policy was also broadly accommodative in EEC countries, with the exception of Belarus and Ukraine, where private sector credit conditions remain restrictive due to latent exchange rate pressures. The Central Bank of Russia has resisted calls to provide monetary stimulus to the weakening economy while inflation remains above the target range of 5 to 6 per cent.

[7] In the CEB and SEE regions interest rates have reached all-time lows in Albania, Bulgaria, Hungary, Latvia, Lithuania, Poland and Romania.

Chart M.13. Fiscal balances have deteriorated in most non-EU transition countries



Source: IMF IFS.
Note: Data from IFS only include cyclically adjusted balances for some countries (denoted with a *). Where the data are available, the chart shows the change in the cyclically adjusted balance.

In the SEMED region, interest rates rose in Egypt, Jordan and Tunisia in response to rising pressure on prices and exchange rates, but stayed low in Morocco where inflation remains low and stable.

Fiscal consolidation efforts continue in virtually all EU member countries, with the aim of achieving deficit and debt targets. However, an increasing number of transition economies have seen their primary balances deteriorate as the economic slowdown has hit revenues.

Fiscal policy tightened in all CEB countries in 2012 – except in Estonia, which has low public debt and registered a small deficit, after running a surplus in the previous two years.[8] This consolidation has contributed to the downturn. Poland, in particular, has been unable to maintain government investment, given its constitutional debt limits[9] and the EU fiscal rules. Fiscal policies have varied in other regions, with primary balances worsening in a number of countries (see Chart M.13). In Azerbaijan, Serbia and Ukraine this has partially reflected higher expenditure in the run-up to elections. In Russia and the commodity exporting nations of Central Asia the economic slowdown and weakening global commodity prices have led to slower growth in revenues.

There was a further widening of deficits across the SEMED region in 2012 as governments continued to increase spending on wages, social benefits and subsidies. Ongoing attempts to reform subsidies, in addition to budget support from the Gulf Cooperation Council for Egypt and Jordan, have contributed to a slower rate of fiscal deterioration compared with 2011.

OUTLOOK AND RISKS

Growth in the transition region is expected to slow, from 2.7 per cent in 2012 to 2 per cent in 2013 as a whole. This reflects continued deceleration – of the Russian economy in particular – in the first half of the year. However, coinciding with the return to growth of the eurozone, early signs of recovery had begun to emerge by mid-2013.

CEB and SEE countries have seen gradual export growth and a pick-up in consumer and investor confidence. On a quarterly basis, Hungary, Croatia and Ukraine are expected to exit their recessions by the end of the year, although the latter two will still see contractions in annual terms. The majority of CEB, SEE and EEC countries will record weak growth – below 2 per cent – in 2013. Exceptions include Latvia and Lithuania, where gains in competitiveness continue to support a faster rate of expansion, and Azerbaijan, which has benefited from an increase in oil production. Growth also remains higher in Turkey and parts of the SEMED region, as well as in Central Asian countries, which continue to see significantly faster growth, ranging from 5 to 13 per cent.

In 2014 the region is expected to face a moderately improved, but still weak, external environment. Recovery in the eurozone is likely to be slow and uneven, and may be offset by the continued

[8] Slovenia's fiscal deficit has widened significantly in 2013, mainly reflecting the recapitalisation of ailing state-owned banks.
[9] Until this year, public expenditure in Poland was constrained by a law prohibiting increases in the budget deficit while public debt exceeds 50 per cent of GDP (and according to the domestic definition, it reached 52.7 per cent in 2012). However, this limit was suspended in July 2013, leading to a revision of the 2013 budget.

deceleration of major emerging economies. Market volatility in recent months has shown that the possible tightening of monetary policy in the United States could have significant consequences for the more vulnerable economies, including some countries in the transition region.

As a result of the gradual improvement of external demand – and in some countries, domestic demand – regional growth is projected to accelerate modestly in 2014, to 2.8 per cent. While better than the previous two years, this would mark the first time since the mid-1990s that the transition region had grown by less than 3 per cent in three consecutive years.

The recovery is expected to gain momentum slowly in most CEB and SEE countries, with only Slovenia remaining in recession. Supported by more accommodative fiscal policy, including increased spending on public infrastructure projects, Russian growth is expected to increase from 1.3 per cent in 2013 to 2.5 per cent in 2014. This partial recovery will benefit countries in the EEC region and Central Asia, whose economies have been negatively affected by weak Russian demand and slow remittance growth. In the absence of renewed political turmoil, the SEMED region is also expected to see somewhat faster growth in the coming year.

Downside risks to this outlook stem mainly from external sources. The most significant risk to growth in the CEB and SEE regions remains a return to crisis in the eurozone. In the worst scenario, a eurozone crisis would engulf larger members of the single currency area, leading to the insolvencies of several major banks in Europe. In response to such events, parent banks would accelerate withdrawal of funding from the region, exacerbating the contraction of credit and triggering recession in much of eastern Europe.

While the likelihood of this scenario has receded in recent quarters, other risks have increased. A faster deceleration of growth in China, or emerging markets more generally, would have substantial negative spillovers for the global economy. As yet unresolved disagreements over the extent and composition of fiscal adjustment in the United States pose a further risk. Given the global importance of US Treasury securities, a fiscal impasse could have a profound effect on world financial markets.

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Vienna Initiative 2.0
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Structural reform

Structural reforms continue to face serious obstacles. 2013 has seen a relatively high number of downgrades in sector and country-level indicators. At the sector level, reversals occurred in a few countries where the economic downturn has eroded popular support for reforms. However, positive trends are evident in certain sectors where restructuring efforts continue and regulatory reforms have been implemented. At the country level, transition indicator downgrades outnumber upgrades for the first time.

FACTS AT A GLANCE

18
sector-level transition indicator upgrades in 2013.

AS THE 159th
member to join the WTO, Tajikistan has taken an important step towards integration in the global economy.

20
countries in the region face large transition gaps in the electric power sector.

OVER 50%
of employed Egyptians still work in agriculture or the public sector.

Progress in transition: structural reform

The reform assessments in the *Transition Report* have become increasingly subdued in recent years. The EBRD measures reform progress in two ways: one is a long-standing review of country-level reforms (such as privatisation, price liberalisation or competition policy) which affect enterprises and markets more generally; the other is a disaggregated sector-level assessment. Both assign scores to express reform progress or reversal. At the country level downgrades have outnumbered upgrades in 2013, for the first time since the transition indicators were introduced in 1994. At the sector level upgrades have continued to exceed downgrades[1], but in 2010, 2011 and 2012 downgrades increased each year relative to the previous year. This was driven mainly by European Union (EU) countries, but also by Belarus, Kazakhstan, Turkey and Ukraine. Downgrades have receded only slightly in 2013.

As in previous years, upgrades and downgrades have been more frequent in central Europe and the Baltic states (CEB) and south-eastern Europe (SEE) than elsewhere. In EBRD countries of operations in the southern and eastern Mediterranean (SEMED), where transition challenges were assessed for the first time in 2012, there have been very few changes, most of them in the financial sector. This is a result of the continued political uncertainty and unrest in the region, which has either made reforms difficult to implement or sidelined them entirely. Resuming sector-level reforms is important for many reasons, including stimulating structural change that will create better-quality jobs (see Box S.1).

For the first time the *Transition Report* presents a set of scores for Kosovo, which became a member of the EBRD in December 2012.

Transition indicators at sector and country level are reported as numerical scores, ranging from 1 (indicating little or no progress with reform relative to the initial position) to 4+ (indicating that standards match those of an advanced market economy; for an interpretation, see the methodological notes in the online *Transition Report*, at www.tr.ebrd.com).

SECTOR-LEVEL TRANSITION INDICATORS

Table S.1 shows the transition scores for 16 sectors in all EBRD countries of operations.[2] The methodology is broadly unchanged from previous years (see Chapter 1 of the *Transition Report 2010*). Tables S.2 and S.3 contain the component ratings for market structure and market-supporting institutions and policies respectively, which together make up the overall sector-level assessment.[3] There have been 18 upgrades and seven downgrades – indicated by upward and downward arrows respectively – the reasons for which are outlined below (see also the Country Assessments in the online version of this report: www.tr.ebrd.com).

ENERGY: FURTHER REFORM REVERSALS

Energy sector policy has emerged as one of the toughest policy areas in the transition region. The need for enhanced energy efficiency, investment in renewable energy and cost-reflective tariffs is well recognised, but politically difficult to implement, particularly under economic and social pressures. As a result, political interference in the energy sector and reform reversal has become more common. In 2012 there were three downgrades in the ***electric power sector***; in 2013 there have been a further three downgrades – in *Albania, Bulgaria* and *Hungary* – and no upgrades.

Albania has been downgraded from 3 to 2+. The country has a history of severe electricity supply problems, including major distribution losses, and the local power company, Korporata Elektroenergjitike Shqiptare sh.a. (KESH), has a poor debt collection record. In 2009 the Czech company CEZ Group acquired a majority stake in KESH with the aim of introducing fresh investment and know-how and tackling these deep-rooted problems. In January 2013 the regulator revoked CEZ's licence on the grounds that the company had caused major power and water shortages in certain regions. CEZ blamed unpaid bills and the prospect of losses due to high import costs and low regulated consumer prices. As of mid-2013 the case has been the subject of arbitration, but this may already have deterred other potential investors.

Bulgaria has been downgraded for the second year in a row, from 3+ to 3. Its energy prices are the lowest in the European Union, but the country is also the poorest EU member in terms of GDP per capita. Price increases introduced in January 2013 led to widespread protests and, ultimately, the removal of the government.[4] As a result of this pressure, the regulator reduced tariffs by 7 per cent in March 2013 and by a further 5 per cent in August. However, this has compounded the problems of electricity distributors, which were already making significant losses, due in part to adverse changes in the way they are compensated for the obligatory purchasing of renewable energy. Overall, there has been a lack of liberalisation and unbundling in the power sector, which has deterred much-needed private investment in energy distribution.

Hungary's downgrade from 4 to 3+ reflects increased government interference, abrupt policy changes and significant tax levies. Under a "Robin Hood tax", some energy companies face a special levy of up to 30 per cent, implying a final corporate tax rate of up to 50 per cent. These measures have seriously affected existing energy companies and may have discouraged international investors.

In the ***natural resources sector***, the transition gap for market-supporting institutions in *Montenegro* has been lowered from medium to small. This reflects progress in creating the legal framework for the development of a gas market. This is an important step for Montenegro, which has significant potential and is capable of becoming a major regional energy hub in the medium term.[5]

[1] This applies to upgrades and downgrades of numerical scores, not the sector-level transition gaps.
[2] Owing to limited data availability and other reasons, the scores for sustainable energy are updated every two years, so the scores for 2013 are the same as those for 2012.
[3] Some sector-level scores differ from those reported last year, not because of upgrades or downgrades, but because of historical revisions to reflect information that was either not available or not fully taken into account in 2012.
[4] For further analysis, see the EBRD blog entitled "Bulgaria – energy sector economics behind the political turmoil" (March 2013).

INFRASTRUCTURE: MODERATE PROGRESS

As with energy, reforms in the infrastructure sectors are complicated, given that tariff adjustments can impact widely on the various sections of the population. Railway reforms, for example, have proven to be a particular challenge. There is often scope, however, to improve service delivery by bringing in private sector finance and expertise, while also easing the fiscal burden on the state. Experience suggests that reforms at municipal level – which tend to be less politicised – are often more successful than those at national level.

There were one-notch transition upgrades in the ***roads sector*** for *Kazakhstan* and the *Slovak Republic*.

In Kazakhstan a road agency was formally established in 2013 and steps towards the introduction of performance-based contracts have been initiated. Amendments to legislation on public-private partnerships (PPPs) were approved by parliament in July 2013, and progress has already been made with a pilot PPP. In the Slovak Republic the commissioning and subsequent refinancing of the R1 motorway PPP is an indicator of the growing sophistication of the tool in that country, which has the potential to serve as a template for other countries in the region. By contrast, there was little progress in the ***railways sector*** across the transition region in 2013.

In ***urban transport*** the only change in 2013 has been a downgrade for one of the top performers – *Estonia* – from 4- to 3+ following the decision to introduce free travel for all residents of the capital, Tallinn. While less damaging than, for example, the under-pricing of energy or water, this is not an efficient approach to providing transport services.

In the ***water and wastewater sector*** there have been upgrades for the *Kyrgyz Republic* and *Romania*. Kyrgyz residential water and wastewater tariffs have been increased significantly towards cost-recovery levels in large cities. Also, a first public service contract (PSC) has been signed with the capital city, Bishkek. Other PSCs are in preparation in three other cities. Romania's upgrade reflects cumulative progress in regionalisation and restructuring of water utilities. The number of sector operators has fallen from 260 to 42, prompting greater efficiency and improved financial performance.

RESILIENCE IN FINANCIAL SECTOR REFORM

Despite the turbulence of the last five years, financial sector reforms have generally remained intact, although with notable exceptions. There is significant scope for further reform and development, especially in the insurance and other financial services sector and in private equity and capital markets. It is in these areas, rather than the ***banking sector***, that changes to scores and assessments have occurred recently.

Developments in the ***insurance and other financial services sector*** have warranted a downgrade for *Poland* from 4- to 3+ and upgrades from 3 to 3+ for both *Croatia* and *Slovenia*. Poland's downgrade was motivated by the government's decision to reform the pension system in a way that will marginalise the role of private pension funds and impair the multi-pillar pension system introduced in 1999. Croatia's improved score reflects an increase in competition in the insurance sector as the market shares of the top three insurance companies have fallen. In Slovenia the upgrade is due to long-awaited privatisation. The state-owned bank, Nova KBM, has completed the sale of a 51 per cent stake in the country's third-largest insurer, Zavarovalnica Maribor. This progress in the insurance and other financial services sector contrasts with continued challenges in the Slovenian banking sector, where the prolonged lack of progress towards resolution has highlighted weaknesses that are reflected in the increase of the market institutions gap from small to medium.

Progress has also been apparent in the structures and institutions used for ***financing micro, small and medium-sized enterprises (MSMEs)***. *Romania* and *Ukraine* have been upgraded on the issue of market-supporting institutions due to important changes to the legal framework governing security/collateral for moveable property. Ukraine has also improved for immoveable property. Meanwhile, in *Bulgaria* the share of SME lending in total lending has risen above a certain threshold, leading to a fall in the market structure gap from medium to small.

Transition gaps in ***private equity*** and ***capital markets*** mostly remain medium or large. The capital market in *Hungary* has suffered the virtual elimination of private pensions. Turnover and volumes for traded securities have declined in parallel. In *Turkey*, however, the capital market transition score has been raised from 4- to 4; the country has a well-developed capital market that has grown further in recent years. *Bosnia and Herzegovina's* capital market score has also risen – albeit from a modest base – due to a slight increase in market capitalisation and an improved turnover ratio.

Private equity transition scores have been raised in *Croatia* and *Estonia*. A key indicator in this sector is the effective number of fund managers per 1,000 companies, which has increased in both countries. Estonia has also seen an increase in active capital, which has contributed to a narrowing of the market structure gap from medium to small.

[5] Other rating changes in the natural resources sector have been prompted by a change in methodology which introduces a separate assessment for the oil and gas and mining sectors. Please refer to the methodological notes in the 2013 *Transition Report* online for further details.

Table S.1
Sector-level transition indicators 2013: overall scores

	Corporate sectors				Energy			Infrastructure				Financial sectors				
	Agribusiness	General industry	Real estate	ICT	Natural resources	Sustainable energy	Electric power	Water and wastewater	Urban transport	Roads	Railways	Banking	Insurance and other financial services	MSME finance	Private equity	Capital markets
Central Europe and the Baltic states																
Croatia	3	3+	3+	4	4-	3-	3	3+	3+	3+	3-	3+	3+↑	3-	3-↑	3
Estonia	3+	4+	4+	4	4	3-	4	4	3+↓	3	4	4-	3+	3+↑	3↑	3
Hungary	4	4-	4-	4	4-	3	3+↓	4	3+	4-	3+	3+	3	3	3	3↓
Latvia	3	4-	4-	3+	4-	3+	3+	3+	4-	3	4-	3+	3+	3	3-	3
Lithuania	3+	4↑	4-	4-	4-	3+	3+	3+	4-	3	3	3+	3+	3	2+	3
Poland	3+	4-	4-	4	3	3	3+	4-	4-	4-	4-	4-	3+↓	3	3+	4
Slovak Republic	3+	4+	4	4-	4-	3	4	3+	3+	3↑	3+	4-	3+	4-	2+	3
Slovenia	4-	3+	4	3+	3+	3+	3	3+	3+	3	3	3	3+↑	3-↓	3-	3
South-eastern Europe																
Albania	3-	2+	3-	3+	3-	3+	2+↓	2+	3-	3-	2	3-	2	2+	1	2-
Bosnia and Herzegovina	3-	2	2-	2+	2	2	2+	2	2+	3	3+	3-	2+	2+	2-	2↑
Bulgaria	3	3+	3+	4-	3+	3-	3↓	3	3+	3-	3+	3	3+	3↑	3-	3
FYR Macedonia	3-	3	3-	4-	2+	2+	3	2+	3-	3-	3-	3-	3-	3↑	1	2-
Kosovo	2+	2-	2-	2+	2	2-	2+	2+	2+	2+	3-	2+	2	2+	1	1
Montenegro	2+	2+	2+	3+	3+	2	2+	2	3	2+	2+	3-	2+	2+	1	2+
Romania	3	3+	3+	3+	4-	3+	3+	4-↑	3+	3	3+	3	3+	3↑	3-	3
Serbia	3-	3-	3-	3	2	2+	2+	2+	3-	3-	3	3-	3	3	2-	3-
Turkey	3-	3	3+	3+	3+	3	3+	3-	3	3-	3-	3+	3	3-	3-	4↑
Eastern Europe and Caucasus																
Armenia	3-	3	3-	3	2+	3-	3+	3-	2+	3-	2+	2+	2	2+	1	2
Azerbaijan	2+	2	2	2-	2+	2+	2+	2-	2	2+	2+	2	2	2	1	2-
Belarus	2+	2	2	2	1	2	1	2-	2	2	1	2	2	2	1	2-
Georgia	3-	3-	3-	3-	2	3-	3+	2	2+	2+	3	3-	2	3-	1	2-
Moldova	3-	2-	2+	3	3	2+	3	2	3-	3-	2	2+	2+	2	2-	2+
Ukraine	3-	2+	3-	3-	2-	2+	3	2+	3-	3-	2+	3-	2+	2+↑	2	3-
Russia	3-	3-	3-	3+	2	2	3+	3	3	3-	4-	3-	3-	2	2+	4-
Central Asia																
Kazakhstan	3-	2	3	3	2-	2-	3	2+	2+	3-↑	3	3-	2+	2	2-	3
Kyrgyz Republic	2+	2	2+	3	2-	2	2+	2↑	2	2-	1	2	2-	2-	1	2-
Mongolia	3-	2+	2	3	2	2	2+	2	2	2-	3-	2+	2	2+↑	2-	2+
Tajikistan	2	2-	2-	2+	1	2+	2	2	2	2-	1	2	2-	2-↑	1	1
Turkmenistan	1	1	1	2-	1	1	1	1	1	1	1	1	2-	1	1	1
Uzbekistan	2	1	2	2	1	2-	2+	2-	2	1	3-	1	2	1	1	1
SEMED																
Egypt	2	2	2+	3	1	2+	2+	1	2	2+	2-	2+	2+	2-	2	2+
Jordan	2	2+	3-	3+	2+	2+	3	2-	2+	3-	2	3	2+	2+	2	3-
Morocco	2+	3-	3-	3+	2-	3	2	2+	3	3-	2	3	3-	2+	2+	3-
Tunisia	3-	3+	3-	3	2	3-	2	2	2+	2+	2+	2+	2+	2	2-	2+

Source: EBRD.
Notes: The transition indicators range from 1 to 4+, with 1 representing little or no change relative to a rigid centrally-planned economy and 4+ representing the standards of an industrialised market economy. For a detailed breakdown of each of the areas of reform, see the methodological notes in the online version of this Transition Report. Upgrades and downgrades are highlighted by upward and downward arrows respectively. A colour code is used for ease of recognition: green indicates a sector that is at a fairly advanced stage of transition, scoring 3+ or higher. Conversely, dark red denotes sectors where transition has barely advanced and the score is 2 or lower.
There were 18 one-notch upgrades this year: general industry (Lithuania), water and wastewater (Kyrgyz Republic and Romania), roads (Kazakhstan and Slovak Republic), insurance and other financial services (Croatia and Slovenia), MSME finance (Bulgaria, Estonia, FYR Macedonia, Mongolia, Romania, Tajikistan and Ukraine), private equity (Croatia and Estonia) and capital markets (Bosnia and Herzegovina and Turkey). There were seven downgrades: electric power (Albania, Bulgaria and Hungary), urban transport (Estonia), insurance and other financial services (Poland), MSME finance (Slovenia) and capital markets (Hungary). In addition, there were historical revisions in the following cases to take account of new data or reflect a change in methodology (for example, for natural resources): natural resources (Armenia, Kyrgyz Republic, Latvia, Lithuania and Slovak Republic), water and wastewater (Turkey), railways (Poland), insurance and other financial services (Jordan and Tunisia) and MSME finance (Slovak Republic). A correction has also been made to the urban transport score for Turkey and the banking score for Morocco, which were misreported last year. Please note that the "telecommunications" sector has been renamed "ICT" to reflect methodological changes as of 2011, which have broadened its scope.

Table S.2
Sector-level transition indicators 2013: market structure

	Corporate sectors				Energy			Infrastructure				Financial sectors				
	Agribusiness	General industry	Real estate	ICT	Natural resources	Sustainable energy	Electric power	Water and wastewater	Urban transport	Roads	Railways	Banking	Insurance and other financial services	MSME finance	Private equity	Capital markets
Central Europe and the Baltic states																
Croatia	Small	Small	Medium	Small	Small	Medium	Large	Medium	Medium	Small	Medium	Small	Small	Medium	Medium	Medium
Estonia	Small	Negligible	Negligible	Small	Small	Medium	Small	Negligible	Small	Medium	Small	Small	Small	Small	Small	Medium
Hungary	Small	Small	Small	Small	Small	Medium	Medium	Small	Medium	Small	Small	Small	Small	Medium	Medium	Medium
Latvia	Small	Negligible	Small	Small	Medium	Medium	Medium	Small	Small	Medium	Small	Small	Small	Medium	Medium	Medium
Lithuania	Small	Negligible	Small	Small	Medium	Medium	Medium	Medium	Small	Medium	Medium	Small	Small	Medium	Medium	Medium
Poland	Small	Small	Small	Small	Medium	Medium	Medium	Small	Small	Small	Small	Small	Small	Medium	Small	Small
Slovak Republic	Small	Negligible	Small	Small	Small	Medium	Small	Medium	Medium	Medium	Small	Small	Small	Medium	Large	Medium
Slovenia	Small	Small	Negligible	Small	Small	Small	Medium	Small	Small	Medium	Medium	Medium	Small	Medium	Medium	Medium
South-eastern Europe																
Albania	Medium	Medium	Large	Medium	Medium	Small	Large	Large	Medium	Medium	Large	Medium	Large	Medium	Large	Large
Bosnia and Herzegovina	Medium	Large	Large	Medium	Large	Large	Large	Large	Medium	Medium	Medium	Medium	Medium	Medium	Large	Large
Bulgaria	Small	Small	Medium	Small	Small	Large	Large	Medium	Small	Medium	Small	Small	Small	Small	Medium	Medium
FYR Macedonia	Medium	Medium	Large	Small	Medium	Large	Medium	Large	Medium	Medium	Medium	Medium	Medium	Medium	Large	Large
Kosovo	Medium	Medium	Large	Medium	Medium	Large	Large	Large	Medium	Medium	Medium	Medium	Large	Medium	Large	Large
Montenegro	Medium	Medium	Medium	Small	Small	Large	Large	Large	Small	Medium	Medium	Medium	Medium	Medium	Large	Large
Romania	Small	Small	Medium	Small	Small	Medium	Medium	Small	Small	Small	Small	Small	Small	Medium	Medium	Medium
Serbia	Medium	Medium	Large	Medium	Medium	Large	Large	Large	Medium	Medium	Medium	Medium	Medium	Medium	Large	Large
Turkey	Medium	Small	Small	Medium	Medium	Medium	Medium	Large	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Negligible
Eastern Europe and Caucasus																
Armenia	Medium	Medium	Large	Medium	Medium	Medium	Medium	Medium	Large	Medium	Medium	Large	Large	Medium	Large	Large
Azerbaijan	Medium	Large	Large	Large	Large	Large	Large	Large	Large	Medium	Medium	Large	Large	Large	Large	Large
Belarus	Large	Large	Large	Medium	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large
Georgia	Medium	Medium	Large	Medium	Large	Medium	Medium	Large	Large	Large	Medium	Medium	Large	Medium	Large	Large
Moldova	Medium	Medium	Large	Medium	Medium	Large	Medium	Large	Medium	Medium	Large	Large	Large	Large	Large	Large
Ukraine	Medium	Medium	Large	Medium	Large	Large	Large	Large	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Large
Russia	Medium	Medium	Medium	Medium	Large	Large	Medium	Medium	Small	Medium	Small	Medium	Medium	Large	Medium	Small
Central Asia																
Kazakhstan	Medium	Large	Medium	Medium	Large	Large	Large	Large	Medium	Medium	Medium	Medium	Medium	Large	Large	Large
Kyrgyz Republic	Medium	Large	Large	Large	Large	Large	Medium	Large	Medium	Large	Large	Large	Large	Large	Large	Large
Mongolia	Medium	Large	Large	Large	Medium	Large	Large	Large	Large	Large	Medium	Large	Large	Medium	Large	Large
Tajikistan	Medium	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large
Turkmenistan	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large
Uzbekistan	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Medium	Large	Large	Large	Large	Large
SEMED																
Egypt	Large	Large	Medium	Medium	Large	Large	Large	Large	Large	Large	Large	Medium	Large	Large	Large	Medium
Jordan	Medium	Medium	Medium	Small	Medium	Large	Medium	Large	Medium	Medium	Large	Small	Medium	Medium	Medium	Medium
Morocco	Medium	Medium	Medium	Small	Large	Medium	Large	Medium	Medium	Medium	Large	Medium	Medium	Medium	Medium	Medium
Tunisia	Medium	Medium	Medium	Medium	Large	Large	Large	Large	Large	Medium	Large	Medium	Medium	Large	Medium	Medium

Source: EBRD.
Notes: "Large" indicates a major transition gap. "Negligible" indicates standards and performance that are typical of mature industrialised economies.

Table S.3
Sector-level transition indicators 2013: market-supporting institutions

	Corporate sectors				Energy			Infrastructure				Financial sectors				
	Agribusiness	General industry	Real estate	ICT	Natural resources	Sustainable energy	Electric power	Water and wastewater	Urban transport	Roads	Railways	Banking	Insurance and other financial services	MSME finance	Private equity	Capital markets
Central Europe and the Baltic states																
Croatia	Medium	Small	Small	Small	Small	Medium	Medium	Small	Small	Medium	Medium	Small	Small	Medium	Medium	Small
Estonia	Medium	Negligible	Negligible	Negligible	Negligible	Medium	Negligible	Small	Medium	Medium	Negligible	Small	Small	Small	Medium	Small
Hungary	Small	Small	Negligible	Negligible	Small	Small	Medium	Small	Small	Negligible	Small	Medium	Small	Small	Small	Small
Latvia	Medium	Small	Negligible	Negligible	Negligible	Small	Negligible	Small	Small	Medium	Negligible	Small	Small	Small	Medium	Small
Lithuania	Medium	Small	Negligible	Negligible	Negligible	Small	Small	Small	Small	Medium	Small	Small	Small	Small	Medium	Small
Poland	Small	Small	Small	Negligible	Medium	Small	Negligible	Small	Small	Small	Small	Small	Small	Small	Small	Negligible
Slovak Republic	Small	Negligible	Negligible	Small	Small	Small	Small	Small	Small	Medium	Medium	Small	Small	Negligible	Small	Small
Slovenia	Medium	Small	Negligible	Negligible	Small	Small	Small	Small	Small	Medium	Small	Medium	Small	Small	Medium	Small
South-eastern Europe																
Albania	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Large	Large	Medium	Large	Medium	Medium	Medium	Large	Large
Bosnia and Herzegovina	Medium	Medium	Large	Medium	Large	Large	Large	Large	Large	Medium	Small	Medium	Medium	Medium	Large	Large
Bulgaria	Medium	Small	Small	Small	Medium	Small	Medium	Small	Small	Medium	Medium	Medium	Small	Medium	Small	Small
FYR Macedonia	Medium	Medium	Medium	Small	Medium	Medium	Medium	Large	Large	Medium	Medium	Medium	Medium	Medium	Large	Large
Kosovo	Large	Large	Large	Medium	Large	Large	Large	Medium	Large	Large	Medium	Medium	Large	Large	Large	Large
Montenegro	Medium	Medium	Large	Medium	Small	Medium	Medium	Large	Large	Large	Medium	Medium	Medium	Medium	Large	Medium
Romania	Medium	Small	Small	Small	Small	Small	Medium	Small	Small	Medium	Small	Medium	Small	Small	Small	Small
Serbia	Medium	Medium	Medium	Medium	Large	Medium	Large	Large	Large	Medium	Small	Medium	Small	Medium	Medium	Medium
Turkey	Small	Medium	Medium	Small	Small	Medium	Medium	Medium	Medium	Medium	Medium	Small	Small	Medium	Small	Small
Eastern Europe and Caucasus																
Armenia	Medium	Small	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Large	Medium	Large	Medium	Large	Medium
Azerbaijan	Medium	Large	Large	Large	Medium	Large	Large	Large	Large	Medium	Large	Large	Medium	Large	Large	Large
Belarus	Medium	Large	Large	Large	Large	Medium	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large
Georgia	Medium	Medium	Small	Small	Large	Large	Medium	Large	Large	Medium	Medium	Medium	Medium	Medium	Large	Large
Moldova	Medium	Large	Medium	Medium	Medium	Small	Large	Large	Large	Medium	Large	Medium	Medium	Medium	Medium	Large
Ukraine	Medium	Large	Medium	Medium	Large	Small	Large	Large	Large	Medium	Large	Medium	Medium	Medium	Large	Medium
Russia	Medium	Medium	Medium	Medium	Large	Medium	Medium	Medium	Medium	Medium	Small	Medium	Medium	Large	Medium	Medium
Central Asia																
Kazakhstan	Medium	Large	Small	Medium	Large	Large	Medium	Large	Large	Medium	Medium	Medium	Medium	Large	Medium	Medium
Kyrgyz Republic	Medium	Medium	Medium	Medium	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large
Mongolia	Medium	Medium	Large	Medium	Large	Medium	Large	Large	Large	Large	Medium	Medium	Large	Large	Medium	Medium
Tajikistan	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large
Turkmenistan	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large
Uzbekistan	Large	Large	Large	Large	Large	Large	Large	Large	Large	Large	Medium	Large	Large	Large	Large	Large
SEMED																
Egypt	Large	Medium	Large	Medium	Large	Medium	Large	Large	Large	Medium	Large	Medium	Medium	Large	Medium	Medium
Jordan	Large	Large	Medium	Medium	Medium	Medium	Medium	Large	Large	Medium	Large	Medium	Medium	Large	Medium	Medium
Morocco	Medium	Medium	Medium	Medium	Large	Medium	Large	Large	Large	Medium	Medium	Medium	Medium	Large	Medium	Medium
Tunisia	Medium	Small	Medium	Medium	Large	Medium	Large	Large	Large	Large	Medium	Large	Medium	Large	Large	Large

Source: EBRD.
Notes: "Large" indicates a major transition gap. "Negligible" indicates standards and performance that are typical of mature industrialised economies.

Table S.4
Country-level transition indicators 2013

	Enterprises			Markets and trade		
	Large-scale privatisation	Small-scale privatisation	Governance and enterprise restructuring	Price liberalisation	Trade and foreign exchange system	Competition policy
Albania	4-	4	2+	4+	4+	2+
Armenia	4-	4	2+	4	4+	2+
Azerbaijan	2	4-	2	4	4	2-
Belarus	2-	2+	2-	3	2+	2
Bosnia and Herzegovina	3	3	2	4	4	2+
Bulgaria	4	4	3-	4+	4+	3
Croatia	4-↑	4+	3+	4	4+	3
Estonia	4	4+	4-	4+	4+	4-
FYR Macedonia	3+	4	3-	4+	4+	3-
Georgia	4	4	2+	4+	4+	2
Hungary	4	4+	4-	4↓	4↓	3+↓
Kazakhstan	3	4	2	4-	4-	2
Kosovo	2-	3+	2	4	4	2+
Kyrgyz Republic	4-	4	2	4+	4+	2
Latvia	4-	4+	3+	4+	4+	4-
Lithuania	4	4+	3	4+	4+	4-
Moldova	3	4	2	4	4+	2+
Mongolia	3+	4	2	4+	4+	3-
Montenegro	3+	4-	2+	4	4+	2
Poland	4-	4+	4-	4+	4+	4-
Romania	4-	4-	3-	4+	4+	3+
Russia	3	4	2+	4	4	3-
Serbia	3-	4-	2+	4	4	2+
Slovak Republic	4	4+	4-	4+	4↓	3+↓
Slovenia	3	4+	3	4	4+	3-
Tajikistan	2+	4	2	4	4-↑	2-
Turkey	3+	4	3-	4	4+	3
Turkmenistan	1	2+	1	3	2+	1
Ukraine	3	4	2+	4	4	2+
Uzbekistan	3-	3+	2-	3-	2-	2-
Egypt	3	4-	2	3+	4	2-
Jordan	3	4-	2+	4-	4+	2
Morocco	3+	4-	2+	4	4-	2
Tunisia	3	4-	2	4	4	3-

Source: EBRD.
Notes: The transition indicators range from 1 to 4+, with 1 representing little or no change relative to a rigid centrally planned economy and 4+ representing the standards of an industrialised market economy. For a detailed breakdown of each of the areas of reform, see the methodological notes in the 2013 *Transition Report* online. Upward and downward arrows indicate one-notch upgrades or downgrades relative to the previous year.

LOW GROWTH CONSTRAINS CORPORATE SECTOR REFORM

For the second year in a row, market structures and institutions in the corporate sector have remained largely unchanged, which probably reflects persistent weak growth. However, the overall business environment has remained stable.

In ***agribusiness***, some progress is evident in productivity, but difficulties in obtaining finance have inhibited modernisation. Governments are also struggling to ensure food security and low food prices for their populations, which deters politically risky moves towards further liberalisation.

There has been one upgrade in the *Slovak Republic* (for agribusiness), one in *Lithuania* (for ***general industries***) and one in *FYR Macedonia* (for ***ICT***). The Slovak Republic has made significant progress with ISO 22000 certification, resulting in better hygiene and food safety standards. In Lithuania there has been a notable improvement in the energy intensity of the economy, to the point where the country is now among the top performers in the region. FYR Macedonia's market structure upgrade for ICT reflects the increased competition in the fixed and mobile segments of the market.

KOSOVO

Kosovo became the 66th member of the EBRD in December 2012. The EBRD has been active in Kosovo since 1999, but the country faces a tough transition agenda as a result of its weak institutional structure and years of under-investment.

Table S.1 highlights the extent of the transition challenges facing Kosovo. Its scores typically range from 2- to 2+. Only the railways sector achieves a 3-. This reflects some regulatory progress, but there is no competition, and services operate in a non-commercial manner. Private equity and capital markets each score just 1, as both are at the earliest stage of development. The transition gaps for market structure and market-supporting institutions are all either medium or large.

[6] See the EBRD blog entitled "Competition policy in the EBRD region: why is it lagging behind?" (February 2013).

COUNTRY-LEVEL TRANSITION INDICATORS

The EBRD's country-level transition indicators have existed since 1994 and cover the period since 1989. Although some were due for modification in 2013, given the theme of this report – "Stuck in Transition?" – the Bank has decided to maintain its methodology for one more year to ensure comparability with previous years.

In some categories, such as price liberalisation or trade and foreign exchange, many countries have reached the maximum score of 4+, so any further progress cannot be reflected in the scoring system. Other categories, such as governance and enterprise reform or competition policy, lag behind. Reforms in these areas may be complex and difficult to implement.[6]

There are very few changes to record this year. For the first time downgrades (five in total – three in Hungary and two in the Slovak Republic) have outnumbered upgrades (one each in Croatia and Tajikistan) – see Table S.4 and Chart S.1.

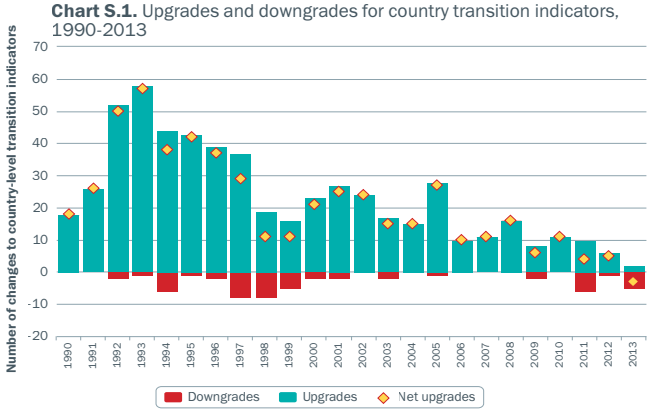
Tajikistan has been upgraded for trade and foreign exchange liberalisation in recognition of the country's accession to the World Trade Organization in March 2013.

Croatia has received an upgrade in the area of large-scale privatisation for restructuring and selling off a number of large shipyards. This was a significant achievement, as successive governments had grappled with this problem over many years. Progress in this area was one of the requirements of EU membership, which became effective on 1 July 2013.

In *Hungary*, the government has sought to solidify the country's position as an export-oriented investment platform through an increasing number of investor-specific 'strategic partnership agreements'. However, the use of firm-specific agreements weakens the role of the legislative and regulatory framework in creating a good business environment for all firms, and bears the risk that local or national authorities could discriminate in favour of firms that have signed an agreement. In that light, a downgrade in the transition indicator for trade and investment liberalisation is warranted. Heavy state intervention in the energy sector has also warranted a price liberalisation downgrade. The score for competition policy has been downgraded to reflect the government's 2012 decision to suspend the application of provisions on restrictive practices in the agriculture sector under certain circumstances.

In the *Slovak Republic* the abrogation of a bilateral investment treaty after the loss of an arbitration case involving an international investor and the state has warranted a downgrade for trade and foreign exchange liberalisation, as these types of treaty exist to provide crucial protection for foreign investors. A downgrade for competition policy reflects increasing state interference across several sectors and the marked decline in enforcement activities by the Slovak competition authority since 2010.

Chart S.1. Upgrades and downgrades for country transition indicators, 1990-2013



Source: EBRD.

Box S.1

Structural transformation and job creation in Egypt: a missing link

A key challenge facing Egypt is how to achieve more inclusive growth which both raises productivity and creates good jobs. High unemployment is a long-standing problem and has become increasingly urgent over the past two and a half years, rising to 13.2 per cent in 2013, up from 9 per cent in 2010. The economy needs to grow by around 6 to 7 per cent annually just to absorb the 700,000 new entrants to the labour market every year. Furthermore, many jobs created in recent years have been in low-wage sectors such as agriculture. Unless new opportunities become available to the growing numbers of jobless young Egyptians, social unrest may further undermine the likelihood of a stable transition.

Egypt's difficulties in creating high-quality jobs partly reflect an incomplete structural transformation. Low-productivity sectors continue to dominate job creation, while the employment shares of manufacturing and services remain low (see Chart S.1.1). This contrasts with the experiences of many emerging market economies, which have boosted per capita income and high-quality job creation by reallocating labour to more productive sectors.[7]

Charts S.1.2 and S.1.3 contrast Egypt's economic transformation with the experiences of Thailand and Turkey, which had levels of purchasing power parity-adjusted GDP per capita in the 1990s that were similar to those of Egypt in the 2000s. Those countries experienced large increases in the employment shares of relatively productive sectors – in particular, manufacturing and tourism – which offset large contractions in the employment shares of agriculture. This improved the distribution of jobs and allowed increases in wages and value added.

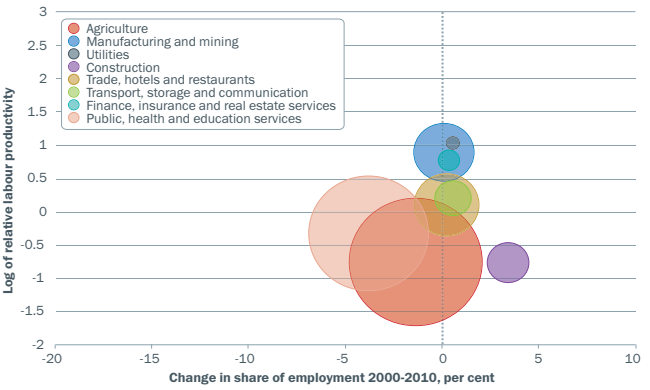
In Egypt the decline in the employment shares of low-productivity sectors has been slow. In 2010 over 50 per cent of employed Egyptians still worked in agriculture or the public sector. The largest increase in the share of jobs had been in construction, which was an unproductive sector burdened by a lack of modernisation and an abundance of unskilled workers. Meanwhile, the employment share of private sector services had almost stagnated, contrasting sharply with other emerging economies.

This experience underlines the need for structural and business environment reforms in Egypt to enhance the quality of job creation and boost potential growth. The agriculture sector is hindered by antiquated farming practices, a lack of skills and land fragmentation. Land consolidation and the modernisation of farming practices could improve productivity and allow a better reallocation of labour across economic activities. Similarly, public sector employment should be reined back in favour of a more dynamic labour market that is conducive to long-term growth and the accumulation of technical skills which are better aligned with private sector needs.

In particular, Egypt's manufacturing and private service sectors have the potential to create more jobs if key reforms are implemented. Businesses can be encouraged to invest and innovate by easing regulations, reducing discretionary enforcement and improving competition. Also, reducing the cost of labour in relation to other factors of production would help to increase employment. This will require the removal of distortionary energy subsidies and the adoption of more energy-efficient technologies, which could lead to the expansion of areas such as food processing, biotechnology and labour-intensive consumer electronics.

Further development of the tourism sector could foster job creation in hotels, transport and retail services, while developing modern processing, logistics, retail and distribution systems could promote the expansion of non-farm agribusiness jobs in rural areas.

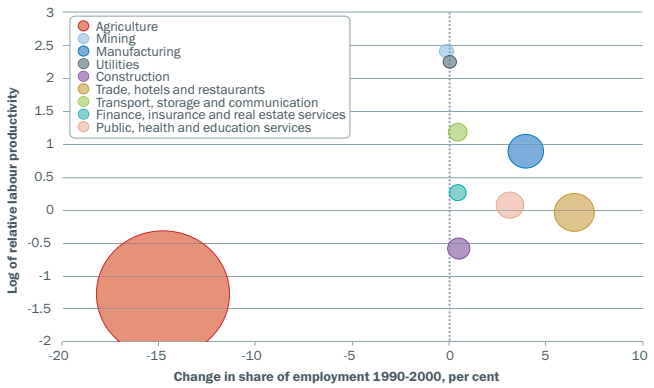
Chart S.1.1. Structural change in Egypt, 2000-2010



Source: EBRD Calculations with CAPMAS Annual Labour Force Survey and Ministry of Economic Development data.
Note: The chart shows the change in each sector's share of employment (on the x-axis) plotted against the sector's relative labour productivity (y-axis). Relative labour productivity is end-of-period sector GDP per capita as a share of the economy-wide GDP per capita. The size of the circle represents the share of employment in 2000.

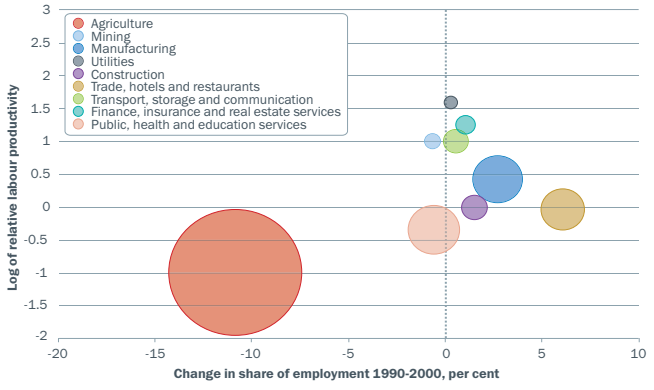
[7] See Hausmann, Hwang and Rodrik (2007) and Rodrik and Macmillan (2011).

Chart S.1.2. Structural change in Thailand, 1990-2000



Source: Based on Groningen Growth and Development Centre Ten-Sector Database.
Note: The chart shows the change in each sector's share of employment (on the x-axis) plotted against the sector's relative labour productivity (y-axis). Relative labour productivity is end-of-period sector GDP per capita as a share of the economy-wide GDP per capita. The size of the circle represents the share of employment in 1990.

Chart S.1.3. Structural change in Turkey, 1990-2000



Source: Based on McMillan and Rodrik 2011 dataset.
Note: The chart shows the change in each sector's share of employment (on the x-axis) plotted against the sector's relative labour productivity (y-axis). Relative labour productivity is end-of-period sector GDP per capita as a share of the economy-wide GDP per capita. The size of the circle represents the share of employment in 1990.

Annex S.1

EVALUATING READINESS FOR PUBLIC-PRIVATE PARTNERSHIPS IN THE TRANSITION REGION

The development of public-private partnerships (PPPs) for infrastructure investment in the transition region has had a mixed history. Progress has been slower than anticipated and has been influenced by external market conditions and political considerations which can mask the underlying readiness of a country to develop PPP projects. The EBRD, in collaboration with the Economist Intelligence Unit (EIU), has therefore developed a "readiness index" that measures the capacity of countries to carry out sustainable PPPs, trying to subtract from cyclical factors that could inhibit the successful implementation of PPPs.[8]

The index is based on a methodology developed by the EIU in 2009-10 for Latin America and the Caribbean and the Asia-Pacific region with the Inter-American Development Bank and Asian Development Bank, respectively. This makes it possible to compare countries both within and across different regions. The analysis looks at PPP policies and regulations, standards and practices, relevant country experiences and attitudes towards private participation in infrastructure provision.

Methodology

The index compares countries across six broad categories spanning the PPP project life-cycle, from inception through implementation and oversight to termination. The aim is to measure the quality of project implementation and the longer-term sustainability, quality and efficiency of such projects. There are 19 indicators, 15 of which are qualitative and four quantitative (see Table A.S.1.1).

Data for the quantitative indicators are drawn from the World Bank Public-Private Infrastructure Advisory Facility database and from the EIU's Risk Briefing service. Estimates have been made for data gaps. The scoring of qualitative indicators, ranging from 0 to 4, is based on a range of primary sources (legal texts, government web sites, press coverage and interviews), secondary reports and data. Scores for all indicators are normalised on a scale of 0 to 100. The index is calculated as a weighted sum of the six category scores, and expressed on an overall scale of 0 to 100 for a country, where 100 represents the ideal environment for PPP projects.

[8] The report, its unofficial Russian translation, and an Excel-based learning tool kit were published in July 2013 and can be downloaded from http://www.eiu.com/EECISInfrascope2012.
[9] Note that the study does not cover all EBRD countries of operations. It excluded those countries where PPPs are absent or where there is no political willingness to develop such projects (for example, Turkmenistan) and also new member countries (Kosovo and the SEMED region).

Table A.S.1.1
Scoring criteria for the PPP readiness index

1. Legal and regulatory framework (weighted 25%)
1.1 Consistency and quality of PPP regulations
1.2 Effective PPP selection and decision-making
1.3 Fairness/openness of bids, contract changes
1.4 Dispute-resolution mechanisms
2. Institutional framework (weighted 20%)
2.1 Quality of institutional design
2.2 PPP contract, hold-up and expropriation risk
3. Operational maturity (weighted 15%)
3.1 Public capacity to plan and oversee PPPs
3.2 Methods and criteria for awarding projects
3.3 Regulators' risk-allocation record
3.4 Experience in electricity, transport and water concessions
3.5 Quality of electricity, transport and water concessions
4. Investment climate (weighted 15%)
4.1 Political distortion
4.2 Business environment
4.3 Political will
5. Financial facilities (weighted 15%)
5.1 Government payment risk
5.2 Capital market: private infrastructure finance
5.3 Marketable debt
5.4 Government support for low-income users
6. Sub-national adjustment factor (weighted 10%)
6.1 Sub-national adjustment[1]

[1] This reflects the capacity to implement PPPs at the municipal level.

Source: EIU Infrascope.

Table A.S.1.2
PPP readiness scores for 25 transition countries

Rank	Country	Score	Level
1	Croatia	63.5	Developed
2	Lithuania	62.9	
3	Slovenia	61.8	
4	Latvia	54.4	Emerging
5	Hungary	53.8	
6	Poland	52	
7	FYR Macedonia	51.1	
8	Russia	51	
9	Albania	50.5	
10	Turkey	49.6	
11	Slovak Republic	47.6	
12	Romania	47.4	
13	Bulgaria	45.5	
14	Serbia	43	
15	Armenia	39.9	
16	Estonia	37.7	
17	Moldova	35.8	
18	Kazakhstan	35.6	
19	Montenegro	31.7	
20	Bosnia and Herzegovina	29.6	Nascent
21	Ukraine	28	
22	Georgia	27.8	
23	Kyrgyz Republic	25.6	
24	Mongolia	24.6	
25	Belarus	10.3	

Source: EIU Infrascope.

Results

Table A.S.1.2 shows the PPP readiness scores for 25 transition countries.[9] Overall, Croatia received the highest score, primarily due to its mature legal, environmental and institutional capacity. Lithuania and Slovenia are also in the "developed" group of countries – equivalent to Brazil and Mexico in Latin America and India and Japan in the Asia-Pacific region. The biggest group – from Latvia in fourth place to Montenegro in nineteenth – is classified as "emerging", while the bottom six countries are considered "nascent".

In general, CEB countries gained the highest rankings on account of their relatively strong legal frameworks and institutions, established procurement practices and the capacity of their governments to support low-income users. SEE countries were both above and below average, although most scored under 50 per cent, indicating the need to make the environment for PPP projects more business-friendly. EEC and Central Asian countries, apart from Russia (which ranked eighth), were below the regional average, as laws and institutions remain underdeveloped.

Room for improvement

Areas for improvement differ significantly by country. Those grouped in the "developed" category still require experience and a track record, as their laws and institutions, although in place formally, have not always been tested.

In contrast, countries in the "nascent" category need to focus on building their legal frameworks and institutions. Most countries in this group are relatively isolated from key markets and are therefore of less interest to investors. Extra effort is required to make the business environment more attractive. In the "emerging" group, countries need to continue to improve institutions and also to gain more transaction experience.

Across the whole transition region, consistent political will is essential to attract investors. All countries should pay more attention to domestic market factors, such as the development of local financial and capital markets, the expansion of local construction and the fostering of legal and advisory firms.

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