



European Bank  
for Reconstruction and Development

# TRANSITION REPORT 2019-20



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BETTER ECONOMIES

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# ABOUT THIS REPORT

The EBRD seeks to foster the transition to an open market-oriented economy and to promote entrepreneurship in the economies where it invests. 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.

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 in the online country assessments are based on information as of late October 2019.

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# EXECUTIVE SUMMARY

The *Transition Report 2019-20* is dedicated to the issue of governance. At its core, governance – which spans all aspects of authority, decision-making and accountability – is about the quality of institutions, which establish the rules of the game in a society. This report examines recent trends in governance at country level, at the level of subnational regions and municipalities, and at firm level (with particular attention being paid to firms' green governance).

The report draws on a number of rich sources of data, including the sixth round of Enterprise Surveys in the EBRD regions conducted by the EBRD, the European Investment Bank and the World Bank Group, which includes special modules looking at the green economy and management practices. The report also draws on data taken from the Gallup World Poll (a representative household survey), as well as a survey of municipal financing arrangements, the EBRD's assessments of corporate governance, detailed data on the location of bank branches across the EBRD regions, information on banks' balance sheets and emissions data for more than 1,800 industrial facilities in emerging Europe.

The economies where the EBRD invests began the 1990s with much weaker governance than advanced market economies. While the improvements in governance that those countries have achieved over the last two decades or so have been larger than those seen in other economies with comparable income levels, the "governance gap" relative to advanced economies remains sizeable. Narrowing this gap would yield a substantial growth dividend – not only at country level, but also at the

level of subnational regions and individual firms. At firm level, analysis shows that improvements in corporate governance contribute to stronger productivity growth. There is, in particular, significant scope for improving firm-level governance as regards energy efficiency and green management. Financing constraints can hamper green investment and have tangible negative effects on firms' ability to reduce greenhouse gas emissions. However, for many firms the root cause of their reluctance to implement energy-saving measures is the low priority that managers assign to such investment in the first place.

As in previous years, this report also presents an assessment of developments in the area of structural reform, measuring the progress made across the EBRD regions in terms of the six key qualities of sustainable market economies.



## THE GOVERNANCE DIVIDEND

Analysis of governance at economy level points to a significant governance gap in the EBRD regions in the mid-1990s, which contrasted with the regions' strong endowments in terms of human capital. Since then, many of the economies in those regions have achieved substantial improvements in the quality of economic institutions on the back of transition reforms and accession to the European Union. Overall, institution building in the EBRD regions has outpaced that seen in other emerging market economies.

At the same time, the pace of such improvements in governance has slowed markedly in recent years. Moreover, households across the EBRD regions continue to regard current levels of governance as insufficient. Such governance gaps matter, as they hinder investment and prevent the efficient allocation of resources within the economy (with resource allocation being shaped by personal connections rather than price signals).

Improving governance would yield a sizeable growth dividend. This growth dividend can be traced back to improvements in firm-level performance, with a meaningful reduction in firms' exposure to corruption being associated with an extra 1.4 percentage points a year in terms of sales growth. Moreover, in a country such as Ukraine, closing half of the governance gap relative to the G7 average will significantly boost satisfaction with life, eliminating 8 per cent of the "happiness gap" relative to the G7 (in addition to the impact of higher income per capita).

Consequently, improvements in governance will also reduce the likelihood of people reporting an intention to emigrate. In Albania, for instance, a newly acquired belief in the government's ability to fight corruption will reduce the likelihood of an individual intending to emigrate by as much as a wage increase of US\$ 400 a month.

While strengthening governance at economy level is notoriously difficult, a number of countries have achieved major improvements in the quality of their economic institutions in relatively short periods of time. Their experiences can teach us important lessons about the ways in which technological improvements, external anchors and independent media can be leveraged to strengthen governance.

<https://2019.tr-ebrd.com/governance-dividend>



## GOVERNANCE AT MUNICIPAL AND REGIONAL LEVEL

The quality of governance varies significantly within countries, resulting in large differences in the quality of municipal services (with municipal administrations in the EBRD regions typically being responsible for services such as waste collection, wastewater treatment, the water supply and pre-school education). Some of that variation stems from differences in the implementation of nationwide regulations.

Intra-country disparities in terms of quality of governance are on the rise in most countries, partly reflecting increased devolution of expenditure responsibilities to lower levels of government and the growing disparities between prosperous and struggling cities. In areas that are lagging behind, relatively poor governance, weak economic growth and outward migration by skilled workers can reinforce one another in a vicious circle.

Improving subnational governance can produce large payoffs in terms of regional growth, which can be traced back to the performance of individual firms. For instance, improving the level of governance from that observed in Romania's worst-performing region (Sud-Est) to that of its best-performing region (Sud-Muntenia) would boost regional growth by an average of 1.7 percentage points a year.

Improvements in governance at subnational level are also associated with greater well-being of residents, in addition to any impact on income levels. In terms of inter-regional competition for resources, better-governed regions attract more greenfield foreign investment projects, and those projects tend to be larger, while people living in those regions are less likely to emigrate.

Benchmarking the performance of regions and municipalities could strengthen incentives to improve governance and provide opportunities to disseminate best practices more widely. Meanwhile, case studies involving major improvements in municipal governance point to the importance of stakeholder participation in decision-making. At country level, such policies could be supported by fostering better coordination across municipalities and ensuring that municipal-level investment projects with high economic rates of return are able to secure financing.

<https://2019.tr-ebrd.com/subnational-level-governance>



## FIRM-LEVEL GOVERNANCE

Governance at firm level is all about the rules, practices and processes that determine the relationships between shareholders, the board of directors, senior managers and other employees. Recent thinking in the area of corporate governance suggests that firms should also look beyond shareholders and take account of the broader interests of stakeholders such as customers, helping to create more sustainable and inclusive economies.

The various aspects of firm-level governance are closely related, as confirmed by the most recent round of Enterprise Surveys, which included special modules on the quality of management and the use of senior managers' time. In particular, those surveys examined firms' business practices as regards operations, monitoring, targets and incentives. The chapter finds that in countries that score more highly in terms of the EBRD's Corporate Governance Sector Assessment, firms tend to have better management practices.

Differences in firm-level performance are, to a significant extent, driven by differences in firm-level governance. Improving corporate governance and management practices enables firms to combine human capital, physical capital and material inputs more efficiently. Across the EBRD regions, affiliates of multinational companies and listed companies tend to be better managed than family-owned firms. Furthermore, professional managers at family-owned firms tend to make better use of their time than managers who are members of the family. At the same time, weak governance at national level hampers owners' ability to delegate the running of their firms to professionals. Indeed, only 17 per cent of family-owned firms in the EBRD regions are run by professional managers.

Businesses that face strong competition in product markets tend to be better managed, with competition encouraging shareholders and managers to adopt sound governance practices. Less onerous labour market regulations also appear to be conducive to firms adopting better management practices. At the same time, businesses can also learn about better governance practices from interaction with their peers and from managers who have experience of working for other companies or in other sectors.

<https://2019.tr-ebd.com/firm-level-governance>



## FIRMS' GREEN GOVERNANCE

Greenhouse gas emissions in the EBRD regions have fallen substantially since the 1990s. However, if the regions' economies are to fulfil their commitments under the Paris Agreement, firms will need to continue to improve their green credentials. The green economy module included in the latest round of Enterprise Surveys indicates that only a small number of firms in the EBRD regions and comparator economies exhibit high-quality green management practices, with the majority of firms continuing to perform poorly in this regard.

This chapter shows that credit constraints hamper all investment by firms, including investment with environmental benefits. Indeed, industrial facilities in areas where firms are more credit-constrained emit around 5 per cent more greenhouse gases than similar facilities in areas without binding credit constraints. However, financial constraints are not the key determinant here, with the question of whether firms undertake green investment projects depending primarily on the strength of their existing green management practices.

While many firms are, in principle, keen to reduce their environmental impact, managers often prioritise other types of investment in the face of financial and time constraints, even in situations where green investment projects would produce positive returns. In line with this interpretation, green management scores at the 10 per cent of firms that have recently been exposed to extreme weather events are, on average, significantly higher than those of other firms. Similarly, companies tend to invest more in green projects when they face external pollution or pressure from customers.

Thus, improving the availability of credit is just one element of the broad policy mix that is necessary to improve firms' green credentials. Governments may also have to compel firms to produce in a more energy efficient manner using environmental standards or other regulations, or via subsidies that are contingent on the use of specific green technologies. Targeted green credit lines can also encourage firms to prioritise green investment. In addition, voluntary environmental standards may help to harness the power of public pressure and consumer awareness in order to further reduce firms' environmental footprints.

<https://2019.tr-ebd.com/firms-green-governance>



## MACROECONOMIC OVERVIEW

Growth in the EBRD regions has been slowing since the middle of 2018. This deceleration has been driven by a very sharp slowdown in Turkey and weaker export growth across the EBRD regions, mirroring the global slowdown in trade. Economic growth is expected to moderate further in 2019, in line with less favourable external conditions, before picking up somewhat in 2020 as the recovery in Turkey takes hold.

GDP per capita at purchasing power parity is still less than 60 per cent of G7 levels in three-quarters of the EBRD regions' economies. Indeed, in some countries it remains less than one-tenth of the G7 average. If countries were to reap the benefits of improved governance, convergence with G7 income levels could be achieved about 26 years earlier than is currently expected on the basis of average growth rates for the period 2010-18, given the governance dividend that is estimated in Chapters 1 and 2. In other words, that governance dividend could potentially result in the rate of income convergence returning to something close to pre-crisis levels.

<https://2019.tr-ebd.com/overview>



## STRUCTURAL REFORM

This final section of the report presents updated transition scores for all of the economies where the EBRD invests and discusses major reform initiatives across the EBRD regions.

Changes to competitiveness scores largely reflect gradual improvements in the business environment, for instance, in Azerbaijan, Georgia, Morocco and Turkey. Meanwhile, Albania, Armenia, Hungary and Uzbekistan have all embarked on major reforms of their tax regimes, and new mechanisms supporting access to finance for small and medium-sized enterprises have been introduced in Belarus, Georgia, Ukraine and Uzbekistan. Several countries (including Cyprus, Greece, Ukraine and Uzbekistan) have also made further efforts to restructure state-owned enterprises and banks. In contrast, Romania's business environment has deteriorated, resulting in a modest decline in that country's competitiveness score.

A number of countries (including Azerbaijan, Cyprus, Georgia and Kazakhstan) have recently embarked on judicial reforms and introduced alternative dispute resolution mechanisms.

Green scores have been revised upwards in several countries (including Egypt, Ukraine and Uzbekistan) on the back of progress with the introduction of carbon-pricing mechanisms. In addition, Montenegro, North Macedonia and Russia have now ratified the Paris Agreement on climate change. In the area of inclusion, various countries (including Russia, Tunisia and Uzbekistan) have adopted new laws and regulations aimed at strengthening gender equality in the workplace.

Changes to resilience scores have been driven largely by declines in levels of non-performing loans (with Cyprus and Greece making particular progress in this area), as well as improvements to the regulatory environment and standards of governance in the financial sector.

A number of countries (including Albania, Greece, Kazakhstan, the Kyrgyz Republic, Serbia, Ukraine and Uzbekistan) have adopted measures aimed at reducing barriers to cross-border trade and improving air connectivity, which have been reflected in their respective integration scores.

<https://2019.tr-ebd.com/reform>

# FOREWORD

The title of this year's report – *“Better Governance, Better Economies”* – summarises its message well. Good governance matters. It matters at the level of countries, subnational regions and firms, and it also matters for people's well-being. That is why the EBRD's transition concept emphasises the importance of strong governance as one of the six key qualities of a well-functioning market economy, in addition to looking at whether economies are competitive, green, inclusive, resilient and integrated.

Governance is a concept that eludes easy definition. In its working definition of the term, the Institute on Governance says that governance “determines who has power, who makes decisions, how other players make their voice heard and how account is rendered”. Governance can be thought of as the rules of the game, determining the constraints and incentives that economic and political actors are subject to. Governance dictates the manner in which people organise themselves, whether at the level of small groups or entire societies.

Poor governance is detrimental for three reasons. First, it creates uncertainty. When the rules of the game lack clarity, outcomes become unpredictable. Thus, uncertainty discourages investment, be it inflows of foreign direct investment, firm-level decisions about the expansion of operations or entrepreneurs' decisions on whether or not to set up new businesses. People dislike uncertainty in their daily lives, regarding it as a cause of stress, and uncertainty regarding governance discourages people from investing in their futures.

Second, poor governance damages competitiveness. Corruption, the twin brother of poor governance, necessitates additional payments, increasing the cost of running a business, gaining an education or accessing medical services. While the nominal cost of living or running a business in a given location may be low, the effective cost – once bribes and delays have been taken into account – may cause firms to fail or prompt residents to leave.

Third, poor governance creates an uneven playing field. It gives advantages to firms and individuals with links to ruling elites, while disadvantaging others, leading to inequality of outcomes, inequality of opportunities and inefficient allocation of resources. It also gives rise to a general sense of injustice and disillusionment with politics.

This year's *Transition Report* documents patterns and trends in governance at country, region and firm level, showing that

governance matters for economic growth, the perceived quality of life and the natural environment.

The first part of the report focuses on governance at country level. It shows that although the EBRD regions have achieved substantial improvements in governance since the 1990s, those gains have tended to slow in recent years and the “governance gap” relative to advanced economies remains virtually unchanged. There are, however, notable exceptions to this trend. Georgia, for instance, has closed almost 70 per cent of its governance gap relative to the G7 average since 1996, while Estonia has closed around 90 per cent of its gap.

A persistent governance gap will be very costly over time. The analysis presented in this report suggests that closing half of the gap between the quality of economic institutions in the EBRD regions and the G7 average would boost income growth per capita by an average of around 0.9 percentage point a year across the EBRD regions as a whole. Moreover, governance deficits may be particularly detrimental for upper-middle-income economies, where innovation and entrepreneurship matter more for growth than cheap labour, economies of scale and imported technology. This is because innovation and entrepreneurship are particularly sensitive to the quality of governance.

Governance also matters at the level of individuals. People in the EBRD regions are much more likely to report an intention to emigrate within the next year if they regard the quality of governance as poor. In a country such as Albania, for instance, a newly acquired belief in the government's desire and ability to tackle corruption will have the same effect in terms of reducing the likelihood of an individual intending to emigrate as a wage increase of about US\$ 400 a month.

This report also looks at governance at regional level, showing that intra-country differences in the quality of governance are large relative to cross-country differences. In Hungary, for instance, the quality of governance in the country's worst-performing region is comparable to the average level seen in Romania, while the country's best-performing region is comparable to the worst-performing region in Spain. Moreover, countries with lower average levels of governance tend to exhibit larger regional disparities. Worryingly, such regional disparities also seem to be increasing over time, which is likely to exacerbate regional differences in income.

The report then goes on to consider developments at firm level, focusing on corporate governance. The EBRD



conducts regular assessments looking at the quality of corporate governance in the economies where it invests. The last such assessment, which was carried out in 2016-17, found significant variation across the EBRD regions in terms of the quality of legislation and practices in this area. Common weaknesses include inadequate non-financial disclosure by listed companies, a lack of clarity regarding the responsibilities and composition of boards of directors and the role of independent directors, and a lack of diversity at board level. Analysis of firm-level surveys shows that the quality of management tends to vary more across firms within individual countries than it does across countries.

The final part of the report focuses on the issue of green governance, showing that firms and countries differ significantly in terms of the quality of green management practices: the ways in which firms set targets for energy consumption, structure their operations to achieve those targets and monitor their progress. In most of the economies where the EBRD invests, there is a lack of green leaders and the majority of firms perform poorly in terms of their green credentials. Foreign-owned firms and exporters (which, as the report shows, tend to have better overall management practices) also tend to perform better in terms of green management, investing more in order to reduce pollution and save energy. Although green investment can be hampered by financing constraints, many firms shy away from such investment for the simple reason that it is regarded as a low priority by managers.

The overall message that emerges from this report is that there is a significant economic and social dividend to be reaped from improvements in governance at country, region and firm level. Securing that dividend will require resolve, vision and leadership on the part of national governments, regional leaders, managers and entrepreneurs alike.

*Beata Javorcik*

**Beata Javorcik**  
Chief Economist  
EBRD



The economies where the EBRD invests began the 1990s with a relative abundance of human capital, but much weaker governance than advanced economies. The substantial improvements in governance that have been achieved since then can be tracked using country-level indicators, as well as responses to household and firm-level surveys. Despite these gains, the “governance gap” relative to advanced economies remains large.

Weak governance distorts markets and results in inefficient allocation of capital and labour within the economy, leading to reduced investment and weaker income growth. Narrowing the governance gap would yield a large growth dividend for economies and individual firms alike and improve the well-being of residents.



## Introduction

### Defining governance

Governance is a concept that eludes easy definition. In the 18th century Adam Smith referred to the market forces of supply and demand as the “invisible hand” that drives the economy.<sup>1</sup> However, the effective functioning of a market is also dependent on another invisible hand – the quality of rules and regulations at both market and firm level. In this sense, governance can be regarded as the invisible hand of oversight that allows the forces of supply and demand to work their wonders of efficiency.

Governance spans all aspects of authority, decision-making and accountability. At its core, governance is about the quality of institutions. Institutions are the rules of the game in a society,<sup>2</sup> determining the constraints and incentives that economic and political actors are subject to. Institutions underpin governance at all levels of government, from central government to regional and municipal administrations. Institutions, broadly defined, also underpin governance and management practices within firms, from the treatment of minority shareholders to attitudes towards the environment and workers’ welfare. Such institutions are often informal, rooted in cultural norms and customs,<sup>3</sup> as evidenced by the fact that traffic rules tend to be similar across countries, but that is not necessarily true of people’s driving styles. Likewise, economies may have similar legal frameworks, yet differences in the way that regulations are implemented may lead to very different economic outcomes.<sup>4</sup>

This report examines the issue of governance at various different levels. In so doing, it builds on the analysis contained in the *Transition Report 2017-18*, which found that the quality of economic and political institutions was a major factor when it came to explaining long periods of strong economic performance, as well as spells of consistently weak growth.<sup>5</sup>

*The Transition Report 2019-20* looks at the various layers of governance in turn, starting with this chapter, which focuses on governance at national level. Chapter 2 of the report looks at regional and municipal governance; Chapter 3 examines the issue of governance within individual firms; and Chapter 4 focuses on environmental aspects of firm-level governance.

### Governance as experienced by firms and individuals

In order to present an up-to-date and highly nuanced picture of the economic institutions that govern economies worldwide, the analysis in this report uses data on more than 18,000 firms taken from the latest round of Enterprise Surveys conducted by the World Bank Group, the EBRD and the European Investment Bank (EIB). This round was in the process of being conducted as this year’s *Transition Report* went to print, so the analysis in this report is based on preliminary data, which are subject to change. The respondents taking part in those surveys, who are all senior managers or owners of firms, answer a wide range of questions about their firms’ activities, as well as sharing their views on the business environment and key obstacles facing their firms.

**BY THE TIME THIS  
REPORT WENT TO  
PRINT, MORE THAN  
18,000  
FIRMS IN THE EBRD  
REGIONS HAD  
PARTICIPATED IN THE  
2018-19 WAVE OF  
ENTERPRISE SURVEYS**

<sup>1</sup> See Smith (1776).

<sup>2</sup> See North (1990).

<sup>3</sup> See Tabellini (2008, 2010).

<sup>4</sup> See World Bank (2017) for a comprehensive discussion of issues relating to governance.

<sup>5</sup> See EBRD (2017) and McKinsey Global Institute (2018).

This chapter also looks at the results of Gallup World Polls – representative household surveys that include multiple questions about confidence in governance and individuals' satisfaction with life and public amenities. The analysis in this chapter also incorporates various other cross-country measures of institutional quality, such as the Worldwide Governance Indicators and the World Bank's Doing Business reports. The discussion here focuses on the quality of economic institutions; for a discussion of the role of political institutions, readers should refer to the *Transition Report 2013*.<sup>6</sup>

## Summary of the key findings of this chapter

This chapter begins by documenting the significant “governance gap” that was seen in the EBRD regions in the mid-1990s, which contrasted with those economies' strong endowments in terms of human capital. It then shows the substantial improvements that those economies have achieved over time as regards the quality of institutions, which can be tracked using country-level indicators, measures of business regulations such as *Doing Business* reports and firms' perceptions of the business environment. For example, firms in the EBRD regions no longer regard corruption as one of the top three constraints on their business, which contrasts with the results of similar surveys conducted in Latin American economies with similar per capita incomes. However, improvements in the quality of institutions have slowed in recent years, and they have gone into reverse in some cases. Moreover, household surveys suggest that residents tend, on average, to take a more critical view of the improvements in governance that have been achieved to date. Overall, the governance gap relative to advanced economies remains large, despite the income gap having narrowed. Improving governance is also a major challenge for middle-income economies outside the EBRD regions, where the governance gap has in fact widened over time.

This governance gap matters. Weak governance makes investment riskier. It leads to an increased reliance on political and personal connections, which in turn distorts market signals and results in suboptimal allocation of capital and labour within the economy. Poor governance is especially costly for middle-income economies, where growth becomes increasingly reliant on innovation and entrepreneurship, rather than the importing of existing technologies and the leveraging of economies of scale.<sup>7</sup> Innovation and high-quality human capital, in particular, are reliant on good governance. (As this chapter confirms, poor governance is a major driver of people's decisions to emigrate.) As a result, economic performance becomes increasingly sensitive to the quality of governance in middle-income economies.<sup>8</sup> Against that background, this chapter acknowledges the difficulty of strengthening country-level institutions and looks at the lessons that can be learned from recent experiences in Ukraine and other countries.

In the case of Ukraine, for example, closing half of the gap between the quality of the country's economic institutions and

**CLOSING HALF OF THE GAP BETWEEN UKRAINE AND THE G7 IN TERMS OF THE QUALITY OF ECONOMIC INSTITUTIONS WOULD LIFT INCOME GROWTH PER CAPITA BY AN AVERAGE OF**

**1.2 PERCENTAGE POINTS A YEAR**

**IN UKRAINE, CLOSING HALF OF THE GOVERNANCE GAP RELATIVE TO THE G7 WILL REDUCE THE CORRESPONDING GAP IN TERMS OF SATISFACTION WITH LIFE BY**

**8%**

**IN ADDITION TO THE POSITIVE IMPACT ON INCOME LEVELS**

the corresponding G7 average would lift income growth per capita by an average of 1.2 percentage points a year – mainly through faster accumulation of physical and human capital, as well as improvements in the efficiency with which human and physical capital are combined.<sup>9</sup>

This growth dividend also manifests itself at firm level, as stronger sales growth in firms that are less exposed to corruption. A 1 standard deviation reduction in firms' exposure to corruption is associated with an additional 1.4 percentage points a year in terms of sales growth. Contrary to a commonly held belief, Enterprise Surveys provide no evidence of firms systematically benefiting from corruption as a way of circumventing onerous regulations.

Better governance is also associated with a large improvement in people's general satisfaction with life, in addition to the benefit that is derived from higher levels of income. In a country such as Ukraine, closing half of the governance gap relative to the G7 will significantly boost satisfaction with life, reducing the “happiness gap” relative to the G7 by 8 per cent (in addition to the impact that improved governance will have on income per capita).

<sup>6</sup> See EBRD (2013).

<sup>7</sup> See Acemoğlu et al. (2006) and Aghion and Bircan (2017) for a discussion of the Neo-Schumpeterian development framework.

<sup>8</sup> See EBRD (2019).

<sup>9</sup> The G7 comprises Canada, France, Germany, Italy, Japan, the United Kingdom and the United States of America.

## The governance gap

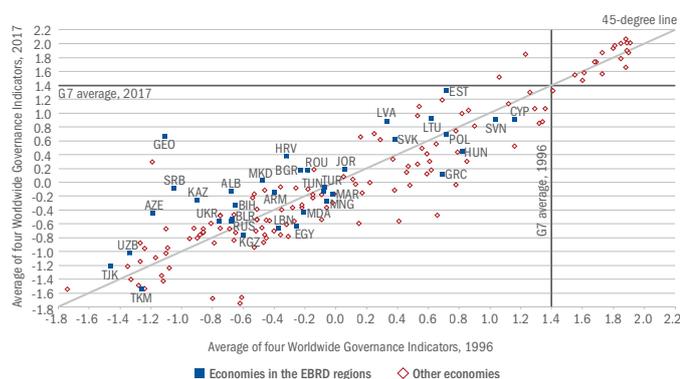
### Countries in the EBRD regions have improved the quality of their institutions

Economies in the EBRD regions have made significant progress since the 1990s in terms of the quality of their economic institutions, as measured, for instance, by the average of the Worldwide Governance Indicators for control of corruption (where corruption is understood to mean the abuse of public office for personal gain), the rule of law (encompassing, for instance, the enforcement of contracts and the strength of property rights), government effectiveness (assessing the quality of public services and the civil service's independence from political pressure) and regulatory quality (encompassing, for instance, competition law and its enforcement).<sup>10</sup> These indicators, which range from -2.5 to 2.5, measure governance in relative terms, such that the simple average of the quality of governance worldwide stays constant (at zero) over time, with a cross-country standard deviation normalised to 1 every year. Across the EBRD regions, Worldwide Governance Indicators tend to be higher in 2017 than they were in 1996 (see Chart 1.1).

Transition reforms aimed at establishing well-functioning markets have played an important role in this regard. Moreover, for many economies in emerging Europe, that reform momentum has been supported by the prospect of accession to the European Union (EU) or the conclusion of a deep and comprehensive free trade agreement with the EU.<sup>11</sup>

**CHART 1.1.**

**Economies in the EBRD regions have improved the quality of their institutions since the 1990s**



**Source:** World Bank and authors' calculations.  
**Note:** The quality of economic institutions is captured by a simple average of the Worldwide Governance Indicators for control of corruption, the rule of law, regulatory quality and government effectiveness.

### The starting position in terms of governance was weak

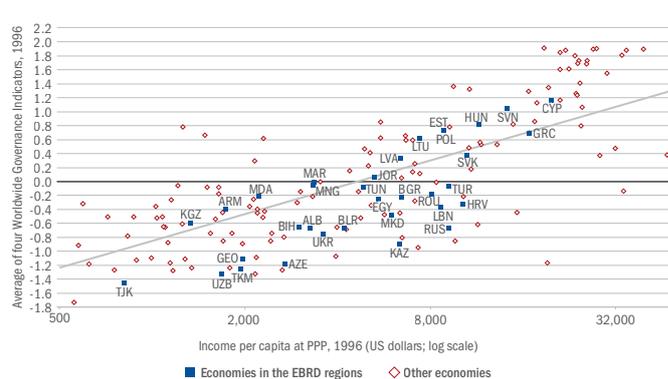
Central planning left a legacy of weak economic institutions. However, in many economies weak governance actually predated central planning (see the discussion of European empires in Chapter 2). Opportunities for cash-based bribery were more limited under central planning, with exchanges of favours often taking the form of privileged access to rationed goods and services such as second homes and seaside holidays, as well as job placements. In the early years of transition, a combination of legal ambiguities, an absence of market institutions and mass privatisation exacerbated existing weaknesses in terms of governance, creating fertile ground for the spread of corruption.<sup>12</sup>

In 1996 the average quality of the economic institutions in the EBRD regions (as measured using Worldwide Governance Indicators) was lower than the levels seen in other economies with similar per capita incomes, and significantly lower than those seen in advanced economies (see Chart 1.2, in which the dots corresponding to the EBRD regions tend to lie well below the trend line).

This initial governance gap contrasts sharply with the large stock of human capital that was inherited from central planning. The ratio of the average duration of schooling in the EBRD regions to that of the G7 has been fairly stable since the 1990s at 95 per cent. Moreover, the EBRD regions also compare well in terms of educational quality, as measured using quality-adjusted years of schooling.<sup>13</sup> The same is true if one looks at survey-based measures of adult skills, as discussed in the *Transition Report 2018-19*, albeit the economies of the southern and eastern Mediterranean (SEMED) and Turkey have weaker skills bases than one would expect on the basis of their per capita incomes.<sup>14</sup>

**CHART 1.2.**

**Economies in the EBRD regions had relatively weak governance in the mid-1990s**



**Source:** International Monetary Fund (IMF), World Bank and authors' calculations.  
**Note:** The quality of economic institutions is captured by a simple average of the Worldwide Governance Indicators for control of corruption, the rule of law, regulatory quality and government effectiveness. Income per capita is measured at purchasing power parity (PPP).

<sup>10</sup> See Kaufmann et al. (2009) for a discussion of these indicators. See also EBRD (2013), for instance, which finds that these measures are also strongly correlated with various alternative measures of institutional quality.  
<sup>11</sup> See EBRD (2013) and IMF (2017).

<sup>12</sup> See Kaufmann and Siegelbaum (1997).  
<sup>13</sup> See World Bank (2018).  
<sup>14</sup> See EBRD (2018).

## The governance gap remains large today

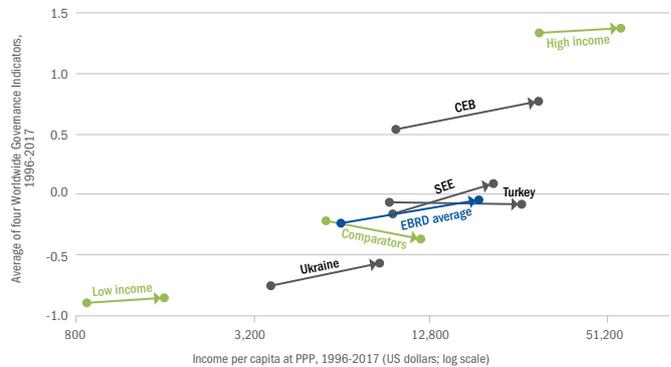
On balance, the EBRD regions' governance gap relative to advanced economies remains large today, despite the income gap having narrowed considerably (see Chart 1.3). The economies of the EBRD regions have achieved the greatest improvements in the area of regulatory quality, making somewhat less progress as regards control of corruption, the rule of law and government effectiveness.

## EBRD regions have outperformed other emerging markets

This failure to catch up with advanced economies has occurred despite the fact that institutional improvements in the EBRD regions have, on average, progressed faster than those seen in other emerging markets that had comparable levels of income in 1996 (see Chart 1.4). It follows, therefore, that for middle-income economies overall the governance gap relative to advanced economies has been widening even as the income gap has narrowed.

**CHART 1.4.**

Economies in the EBRD regions have strengthened the quality of institutions faster than other emerging markets with comparable income levels

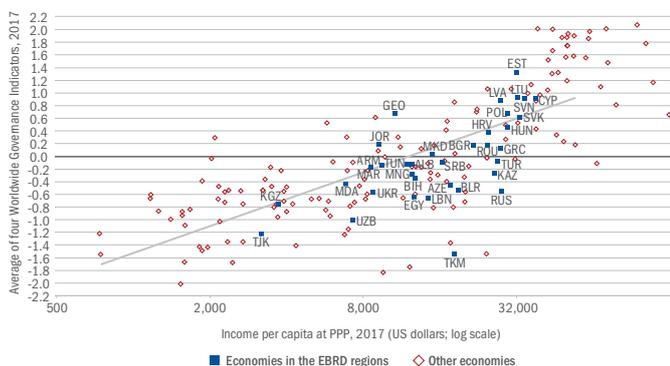


Source: IMF, World Bank and authors' calculations.

Note: The quality of economic institutions is captured by a simple average of the Worldwide Governance Indicators for control of corruption, the rule of law, regulatory quality and government effectiveness. "Low-income" economies are those with per capita incomes below the lowest value observed in the EBRD regions in 2017; "high-income" economies are those with per capita incomes above the highest value observed in the EBRD regions. Gross domestic product (GDP) per capita in comparator economies lies between the lowest and highest values observed in the EBRD regions. "CEB" denotes central Europe and the Baltic states; "SEE" refers to south-eastern Europe.

**CHART 1.3.**

The governance gap relative to advanced economies remains large



Source: IMF, World Bank and authors' calculations.

Note: The quality of economic institutions is captured by a simple average of the Worldwide Governance Indicators for control of corruption, the rule of law, regulatory quality and government effectiveness. Based on 2017 data or the latest observations available.

THE RATIO OF THE AVERAGE DURATION OF SCHOOLING IN THE EBRD REGIONS TO THAT OF THE G7 HAS BEEN BROADLY STABLE SINCE THE 1990S AT

**95%**



## An improved business environment: evidence from Enterprise Surveys

Firms' perceptions of the business environment have also shown signs of improvement, on the basis of evidence from the latest round of Enterprise Surveys conducted by the EBRD, the EIB and the World Bank in 2018-19. All firms participating in those surveys operate in the formal sector and have at least five employees, and none are fully owned by the state. Previous survey rounds were conducted in 2008-09 and 2011-14.

As part of the survey, respondents (who are all either senior managers or owners of firms) evaluate various aspects of the business environment in terms of the extent to which they are regarded as constraints on the firm's operations. For instance, licensing requirements could be regarded as "no obstacle", a "minor obstacle", a "moderate obstacle", a "major obstacle" or a "severe obstacle", resulting in a score ranging from zero to four. The survey covers more than 15 different aspects of the business environment, as well as including questions about firms' performance.

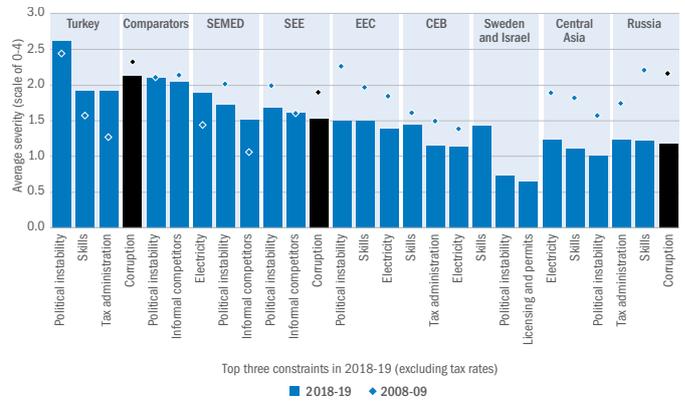
**OF THE 21 ECONOMIES THAT HAVE ACHIEVED THE LARGEST IMPROVEMENTS IN GOVERNANCE IN RECENT YEARS, 12 ARE IN THE EBRD REGIONS**

Firms surveyed in 2018-19 have tended to regard the various constraints on their operations as less severe than the firms surveyed in 2008-09 did. Chart 1.6 provides an overview of the top three constraints on firms' operations (excluding tax rates, which tend to be regarded as a major constraint in almost all countries).<sup>22</sup> The most common complaints in the EBRD regions relate to political instability, skills and the electricity supply. Tax administration, corruption and competition from the informal sector (implying deficiencies in the rule of law) also feature in the top three constraints in a number of economies. In these and other areas, improvements in the EBRD regions since 2008-09 are larger than those seen in comparator economies with similar per capita incomes where surveys have been conducted around the same time (most of which are middle-income economies in Latin America and the Caribbean, owing to survey coverage).<sup>23</sup>

In particular, in most of the EBRD regions corruption does not feature among the top three constraints as perceived by firms (with Russia and south-eastern Europe representing exceptions in this regard). This contrasts with the results of the 2008-09 survey (see Chart 1.7), as well as the results obtained for comparator economies, where corruption consistently features among the top three constraints on business. In advanced economies such as Sweden and Israel, on the other hand, skills are generally seen as the only constraint of any significance, highlighting the remaining governance gap as perceived by firms.

**CHART 1.6.**

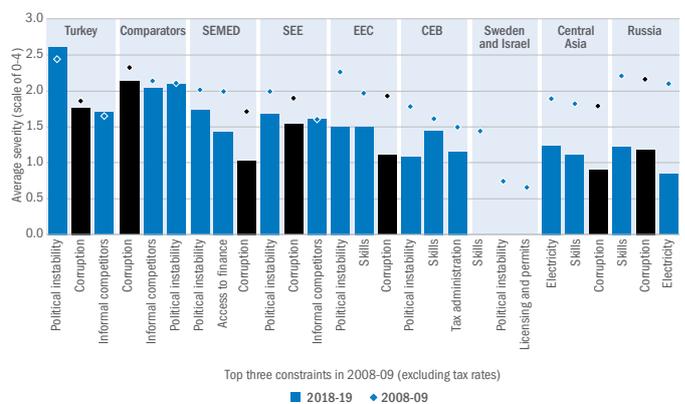
Governance-related constraints on business have become less severe over time



**Source:** Enterprise Surveys and authors' calculations.  
**Note:** Data are averages on a five-point scale, where "0" corresponds to "no obstacle" and "4" corresponds to "severe obstacle". "Comparators" are economies with similar per capita incomes where surveys were conducted both in 2006-10 (diamonds) and in 2016-19 (bars). Sweden and Israel were surveyed in 2013-14. Regions are sorted on the basis of the average severity of the top-rated constraint in 2018-19. "SEMED" refers to the southern and eastern Mediterranean; "SEE" denotes south-eastern Europe; "EEC" refers to eastern Europe and the Caucasus; "CEB" denotes central Europe and the Baltic states.

**CHART 1.7.**

Corruption was regarded as far more problematic in 2008-09



**Source:** Enterprise Surveys and authors' calculations.  
**Note:** Data are averages on a five-point scale, where "0" corresponds to "no obstacle" and "4" corresponds to "severe obstacle". "Comparators" are economies with similar per capita incomes where surveys were conducted both in 2006-10 (diamonds) and in 2016-19 (bars). Sweden and Israel were surveyed in 2013-14. Regions are sorted on the basis of the average severity of the top-rated constraint in 2018-19. "SEMED" refers to the southern and eastern Mediterranean; "SEE" denotes south-eastern Europe; "EEC" refers to eastern Europe and the Caucasus; "CEB" denotes central Europe and the Baltic states.

<sup>22</sup> As part of the 2011-14 survey, respondents in the EBRD regions were asked to estimate cost reductions in a range of scenarios (for instance, if corruption were no longer an obstacle). These clarifying questions resulted in respondents describing various elements of the business environment as lesser obstacles to their operations, thus making their responses difficult to compare with those of previous and subsequent surveys.  
<sup>23</sup> All comparators have per capita incomes (calculated in US dollars at market exchange rates) that are between the lowest and highest values observed in the EBRD regions.

## Improved regulations as measured by *Doing Business* surveys

The significant improvements in regulatory quality that can be seen in the Worldwide Governance Indicators are also visible in the World Bank's *Doing Business* reports. These reports use a methodology that is different from the approach employed by the Enterprise Surveys. In particular, *Doing Business* reports measure governance using case studies based on the laws on countries' statute books, as well as expert opinion. The reports document, for each country, the number of days it takes to start a firm, get a construction permit, obtain a licence or get connected to an electricity supply.

Enterprise Surveys put a similar set of questions to firms' managers. For instance, where firms have obtained a construction permit in the last three years, the survey asks how long the process took. The answers to these questions are based on firms' perceptions and their understanding of the relevant question. They provide a snapshot of firms' experiences, taking into account the enforcement of rules and the use of alternative channels and personal connections to resolve any issues that firms face when dealing with regulations. These questions are only answered by a small subset of firms who have, say, applied to be connected to an electricity supply within the last three years.

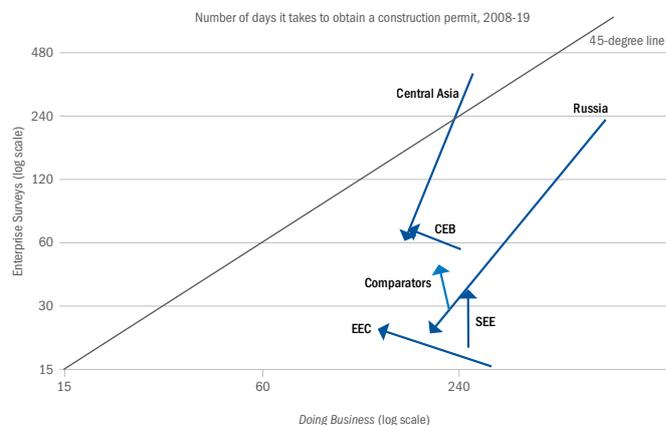
Firms' estimates of the average amount of time that various types of authorisation take tend to be much shorter than the laws on the statute books would suggest. Chart 1.8 looks specifically at construction permits, but a similar picture can be observed for the amount of time it takes to get connected to an electricity supply or obtain a licence.<sup>24</sup> That chart is based on the estimated experience of a firm that approximates the firm in a *Doing Business* case study. Firms' responses to Enterprise Surveys may also reflect selection bias: firms located in regions where it is more difficult to obtain a permit may decide not to apply for one in the first place.

It should be noted that the experiences of individual firms in Enterprise Surveys differ significantly. Moreover, such differences appear to be idiosyncratic. In particular, the differences between firms' answers and the duration of the approval process according to *Doing Business* reports cannot be effectively explained by observed firm-level characteristics such as size, sector, age, informal payments that firms report having made, or firms' perceptions of corruption.

As regulations improve, firms' experiences may or may not improve in parallel (see Chart 1.8). In Central Asia and Russia, for instance, large improvements in the amount of time it takes to obtain construction permits according to *Doing Business* reports have been accompanied by commensurate improvements in firms' experiences. In many other economies, however, firms' experiences have changed relatively little – and not always in the direction that *Doing Business* case studies would suggest.

**CHART 1.8.**

Improvements in regulations as implied by *Doing Business* case studies and firms' experiences

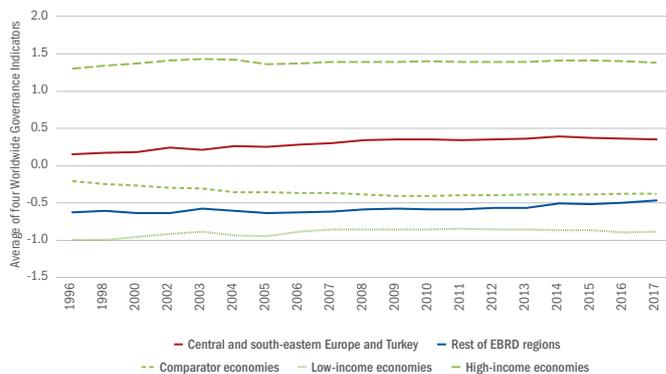


Source: World Bank *Doing Business* reports, Enterprise Surveys and authors' calculations.

Note: Values for Enterprise Surveys are estimated for a firm approximating the firm in a *Doing Business* case study on the basis of a linear regression of firms' answers on firm-level characteristics, with the logarithm of the number of days as the dependent variable. GDP per capita in comparator economies lies between the lowest and highest values observed in the EBRD regions. "SEE" denotes south-eastern Europe; "EEC" refers to eastern Europe and the Caucasus; "CEB" denotes central Europe and the Baltic states.

**CHART 1.9.**

Improvements in the quality of economic institutions have slowed down in central and south-eastern Europe



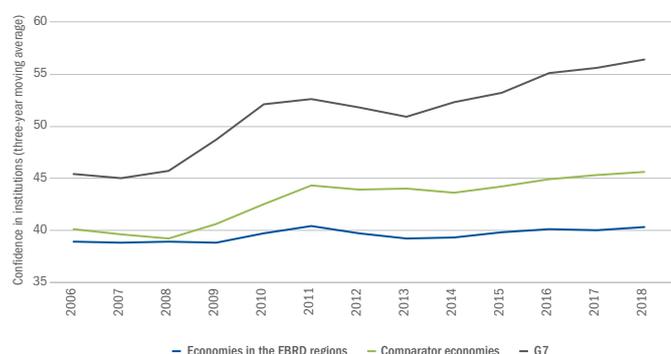
Source: World Bank and authors' calculations.

Note: The quality of economic institutions is captured by a simple average of the Worldwide Governance Indicators for control of corruption, the rule of law, regulatory quality and government effectiveness. "Low-income" economies are those with per capita incomes below the lowest value observed in the EBRD regions at market exchange rates in 2017; "high-income" economies are those with per capita incomes above the highest value observed in the EBRD regions. GDP per capita in comparator economies lies between the lowest and highest values observed in the EBRD regions.

<sup>24</sup> See also Hallward-Driemeier and Pritchett (2015) for a discussion of this issue.

**CHART 1.10.**

A widening governance gap as perceived by residents



Source: Gallup World Poll and authors' calculations.

Note: This index ranges from 0 to 100 and is based on survey respondents' confidence in the national government, the judicial system, the courts, the fairness of elections and the freedom of the media, as well as their faith in the fact that corruption is not widespread throughout the government or business. GDP per capita in comparator economies lies between the lowest and highest values observed in the EBRD regions.

## Improvements in the quality of institutions have slowed down

Progress in terms of institutional development has varied substantially across countries. In Turkey, for instance, firms regard the business environment as less conducive to the growth of their operations than they did 10 years ago (see Charts 1.6 and 1.7).

Moreover, those improvements in governance in the EBRD regions also appear to have slowed markedly in recent years relative to developments in the rest of the world. The average governance score for central and south-eastern Europe peaked in 2014, for instance (see Chart 1.9). This reflects a number of factors discussed in recent *Transition Reports*, including reform fatigue and rising income inequality. In addition, for EU member states, EU membership was a stronger external anchor for reform momentum during the pre-accession phase than it has been in the post-accession period.<sup>25</sup>

## Stagnation in terms of the quality of governance as perceived by residents

Perceptions of the quality of governance among the regions' residents have been improving at a very modest pace, if at all – similar to firms' perception of approval processes and regulations, as discussed in the previous subsection. Evidence of individuals' views on governance comes from the annual Gallup World Poll, a representative household survey conducted by Gallup in more than 140 economies around the world. In each economy, Gallup interviews at least 1,000 respondents in up to 50 different locations or "primary sampling units" (with 20 respondents per location).

Individuals' confidence in governance can be measured using six different questions from the Gallup World Poll, with respondents being asked about their confidence in the national government, the judicial system, the courts, the fairness of elections and the freedom of the media, as well as their faith in the fact that corruption is not widespread throughout the government or business. An overall index can be constructed by attributing 2 points to each question where the respondent expresses confidence in something (for instance, confidence in elections being fair), 1 point in the case of a refusal to answer (with approximately half of respondents failing to answer at least one of the questions definitively), and 0 points where the respondent expresses a lack of confidence. Respondents who do not answer any of the six questions are excluded from the analysis. The resulting index, rescaled to range from 0 to 100, has a fairly flat density function, suggesting that individuals tend to have differing degrees of confidence in different institutions. Otherwise, most values for the index would be either close to 0 (no confidence in any institutions) or close to 100 (full confidence in all institutions).

This index suggests that the average perception of governance has improved somewhat in the EBRD regions since 2006 (see Chart 1.10), albeit the rate of improvement has been very modest. The EBRD regions continue to lag far behind the G7 on this metric, mirroring the governance gap depicted using the Worldwide Governance Indicators.

Unlike firms' perception that corruption represents an obstacle to doing business, the governance gap as perceived by individual residents is larger in the EBRD regions than it is in other economies with comparable per capita incomes. Differences between the assessments of experts and households as regards the quality of institutions are common globally.<sup>26</sup> In part, this reflects the fact that individuals' tolerance of corruption may decline as economies develop.

The gap between the EBRD regions and the G7, as perceived by individual residents, has been widening over time. The next section examines the implications of this governance gap for economies, firms and individuals.

<sup>25</sup> See also Bruszt and Campos (2018) and EBRD (2013).

<sup>26</sup> See, for instance, Razafindrakoto and Roubaud (2010).

## Governance matters for growth and well-being

### Poor governance impedes investment and leads to misallocation of resources

The governance gap matters. Higher-quality institutions are strongly associated with faster long-term economic growth, and thus higher per capita incomes.<sup>27</sup> Poor-quality institutions and an absence of robust property rights make returns to investment more uncertain. This discourages investment and undermines long-term growth.<sup>28</sup> Moreover, the detrimental effect that corruption has on firms' growth is three times greater than the negative impact of extra taxes (where corruption and increased taxation result in outgoing payments of a similar size) because of the greater uncertainty and transaction costs that are associated with corruption.<sup>29</sup> Furthermore, weakness in the rule of law tends to increase the reliance of individuals and firms on personal connections. This blunts market signals and leads to the misallocation of human and physical capital within the economy.

In fact, governance can influence long-term economic outcomes in part by altering the structure of economic activity. Economies with stronger institutions tend to specialise in sectors that are more reliant on innovation and complex contracts and require a large number of production inputs to produce final goods.<sup>30</sup> As technological change is increasingly resulting in the automation of medium-skilled jobs and the creation of low-skilled and high-skilled jobs in emerging markets, better-governed economies stand a greater chance of specialising in industries that support larger numbers of highly skilled employees.<sup>31</sup> Importantly, governments in countries with better governance are also able to raise more fiscal revenues relative to their income levels, and are thus in a better position to provide social safety nets.<sup>32</sup>

**HIGHER LEVELS OF EXPECTED INVESTMENT ACCOUNT FOR AROUND**

**60%**

**OF THE IMPROVEMENT IN POTENTIAL GROWTH WHEN ECONOMIES IN THE EBRD REGIONS CLOSE THE GOVERNANCE GAP RELATIVE TO THE G7**

### The governance deficit may be particularly problematic for upper-middle-income economies

At higher levels of income per capita, economies tend to leverage innovation and entrepreneurship, relying less on cheap labour, economies of scale and imported technologies. In such economies, good governance is essential in order to ensure robust property rights and strong incentives for entrepreneurship and innovation.<sup>33</sup>

That is reflected in the fact that high-income economies tend to have stronger governance than a linear relationship between the logarithm of income per capita and the quality of institutions would predict (see Charts 1.2 and 1.3). Higher-quality economic institutions in advanced economies tend to be underpinned by mature democratic institutions that offer protection through a system of checks and balances, constraints on the executive and electoral accountability.<sup>34</sup>

Weak economic institutions also contribute to the low levels of innovation and entrepreneurship that are currently observed in the EBRD regions – levels that are not sufficient to support the growth of modern industries.<sup>35</sup> They do so in part by exacerbating the “brain drain” and reducing the stock of available human capital. In particular, individuals in the EBRD regions are much more likely to report an intention to emigrate within the next year if they regard the quality of governance as poor (see Box 1.6 for details of this analysis).<sup>36</sup> In Albania, for instance, a newly acquired belief in the fact that the government is working to tackle corruption will have the same impact in terms of reducing the likelihood of an individual intending to emigrate as a wage increase of almost US\$ 400 a month.

### Improvements in governance can yield a significant growth dividend

In order to quantify the contribution that improved governance makes to long-term growth, consider a scenario in which a country (Ukraine, for instance) closes half of the gap between its current institutional quality and the G7 average, doing so gradually over 10 years (in line with developments in the best-performing economies in Chart 1.5). In other words, imagine a scenario in which the perceived quality of Ukraine's economic institutions (again, as captured by the average of four Worldwide Governance Indicators) reaches the level currently observed in Croatia.

<sup>27</sup> There is a large body of literature documenting the importance of institutions for economic development. See, for instance, Hall and Jones (1999) and Acemoglu et al. (2005).

<sup>28</sup> See, for instance, Mauro (1995) for a discussion of the negative impact that corruption has on growth.

<sup>29</sup> See Fisman and Svensson (2007).

<sup>30</sup> See Silve and Plekhanov (2018), Nunn (2007) and Levchenko (2007).

<sup>31</sup> See EBRD (2018) for a discussion of recent trends in the EBRD regions.

<sup>32</sup> See IMF (2019).

<sup>33</sup> See EBRD (2019).

<sup>34</sup> See Besley and Mueller (2018) and Acemoglu et al. (2019).

<sup>35</sup> See Naudé et al. (2019).

<sup>36</sup> See also Atoyán et al. (2016).

Analysis of potential growth on the basis of the fundamental characteristics of a large number of economies suggests that potential growth in Ukraine would be, on average, 1.2 percentage points a year higher in the long term in this scenario (see Box 1.7).<sup>37</sup> At the level of the EBRD regions as a whole, such a scenario would result in annual per capita income growth averaging around 0.9 percentage point more than it would in the absence of institutional improvements (reflecting a smaller institutional gap relative to the G7). This growth differential has the potential to make a material difference to the amount of time that the EBRD regions need to achieve the per capita income levels seen in the G7, as discussed in the Macroeconomic Overview (see Chart M.2).

Higher levels of expected investment account for around 60 per cent of the improvement in potential growth in the EBRD regions in this scenario, with increases in human capital and total factor productivity – the efficiency with which physical capital, labour and human capital are combined to produce final goods – accounting for the rest.

## Governance and economic growth following close elections

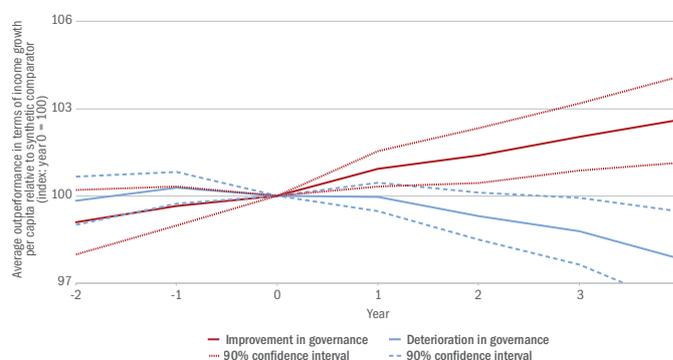
Another way of evaluating the impact that changes in governance have at country level involves looking at the events that follow closely fought elections (defined here as elections where the margin of victory does not exceed 5 percentage points). Close elections may bring to power a government with a higher or lower level of integrity, with the outcome being hard to predict on the basis of pre-election trends. This facilitates an examination of changes in the quality of economic institutions, as well as analysis of the causal links between institutional changes, income per capita and other economic outcomes over the subsequent government's term in office.

Data on elections since 1995 are taken from the Database of Political Institutions 2017.<sup>38</sup> The margin of victory in parliamentary elections is defined as the smaller of (i) the difference between the vote shares of the winning political party (or coalition of parties) and the main opposition party (or coalition of parties) and (ii) the difference between the percentages of seats won by the winning political party (or coalition of parties) and the main opposition party (or coalition of parties). With elections deemed to be close where the margin of victory does not exceed 5 percentage points, presidential elections are deemed to be close if the winning candidate obtains 52.5 per cent or less in the final round of voting.<sup>39</sup>

By this measure, just over half of all elections in advanced economies are close. In these economies democratic institutions tend to be stronger and electoral politics are more competitive. Close elections are significantly less frequent in the EBRD regions, occurring around 30 per cent of the time, but they are more frequent than in other emerging markets, where around 20 per cent of elections can be considered close.

**CHART 1.11.**

**After close elections, income growth per capita is, on average, 1.2 percentage points a year higher when those elections are followed by an improvement in the quality of economic institutions**



Source: Scartascini et al. (2018), IMF and authors' calculations.

Note: Elections are considered to be close if the difference between the vote shares (or the percentages of parliamentary seats) secured by the winning candidate/party and the main opposition candidate/party does not exceed 5 percentage points. A country's performance in terms of income growth per capita is evaluated relative to the performances of similar economies in the same year (see Box 1.1 for details). Outperformance is calculated in percentage points, before being converted to an index. Year 0 represents the year before the election.

The analysis below focuses on the 95 close elections between 1997 and 2015 that were followed by improvements in governance over the subsequent four-year period. In this group of episodes, improvements in governance (captured, as before, by the average of the four Worldwide Governance Indicators) averaged 10 per cent of a standard deviation, a value that is statistically significant at the 5 per cent level.<sup>40</sup> The 99 close elections in that period where governance did not subsequently improve serve as a control group. In this group, the quality of governance declined, on average, by 10 per cent of a standard deviation. There were no statistically significant differences between the governance trends of the two groups in the years leading up to those close elections. This study does not look at cases where elections were not close.

This study looks at the relative economic performance of a country over the four-year period that follows a close election (a typical electoral cycle). Relative economic performance, as defined in Chapter 1 of the *Transition Report 2017-18*,<sup>41</sup> evaluates per capita income growth in an economy in a given year relative to a weighted average of data for economies that are similar in terms of per capita income (see also Box 1.1). The formula assigns greater weights to comparator economies with larger populations. Comparators are drawn from the global sample of countries (regardless of electoral outcomes) and change every year, reflecting the tendency of economic growth to slow as economies get richer.

The economies where improvements in governance followed close elections tended to perform better in the subsequent four-year period than one would have expected on the basis of their per capita incomes and global economic conditions at the time. At the end of those four years, income per capita exceeded expectations by 2.6 per cent (see Chart 1.11, where year 0 is

<sup>37</sup> This exercise updates and builds on analysis presented in the *Transition Report 2013* (see EBRD, 2013).

<sup>38</sup> See Scartascini et al. (2018).

<sup>39</sup> The vote shares of other candidates are not recorded in the database.

<sup>40</sup> The Worldwide Governance Indicators measure governance in a broad sense, such that economic reforms like service-sector liberalisation or the simplification of taxation will also be reflected in higher governance scores.

<sup>41</sup> See EBRD (2017).

the year before the election). In contrast, economies where governance did not improve following close elections were underperforming by an average of around 2.2 per cent by the end of that four-year period.

The difference between the two groups averages 1.2 percentage points a year in terms of income growth per capita under comparable conditions. This difference-in-difference estimate is statistically significant at the 5 per cent level and corresponds to an average difference in terms of changes in governance scores of 20 per cent of a standard deviation. In contrast, there are no significant differences between the two groups of countries in terms of relative economic performance in the run-up to the elections (see the years to the left of 0 in Chart 1.11).

Further analysis reveals that episodes of improved governance following close elections are also characterised by higher levels of investment and exports than episodes where governance does not improve. Levels of employment are also higher, albeit the difference is smaller than in the case of investment.

## Governance and firm-level performance

The growth dividend stemming from improved governance that is estimated at the level of the economy as a whole can be traced back to improvements in the performance of individual firms. While it is clear that the economy as a whole will benefit from improved governance, the relationship between corruption and the performance of individual firms is more ambiguous. Faced with onerous regulations and inefficient bureaucracies, a firm may find that its best option is to make informal payments in order to “grease the wheels”. At economy level, the combination

**ON AVERAGE, FIRMS  
IN THE EBRD REGIONS  
CURRENTLY SPEND  
AROUND**

**0.4%**

**OF THEIR TURNOVER ON  
INFORMAL PAYMENTS,  
DOWN FROM 0.9%  
A DECADE AGO**

**TABLE 1.1.**

Estimating the relationship between informal payments and firm-level performance

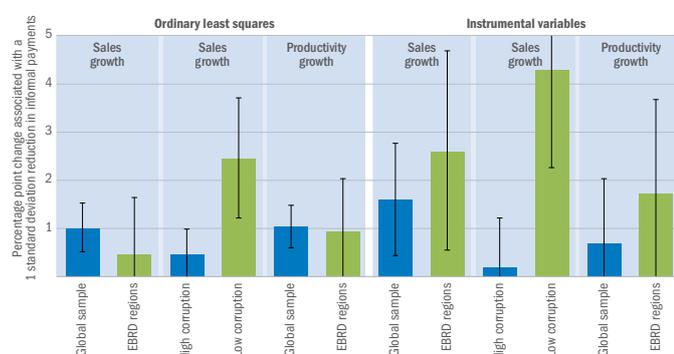
Estimator Dependent variable	Ordinary least squares				Instrumental variables			
	Annual sales growth (%)		Productivity growth		Annual sales growth (%)		Productivity growth	
	Global sample	EBRD regions	Global sample	EBRD regions	Global sample	EBRD regions	Global sample	EBRD regions
Informal payments (% of sales; 0 to 50)	-0.0026*** (0.00066)	-0.0012 (0.0015)	-0.0027*** (0.00059)	-0.0024 (0.0014)	-0.0041** (0.0015)	-0.0067* (0.0027)	-0.0018 (0.0017)	-0.0044 (0.0025)
Sales (productivity) two years before (US\$, log)	-0.056*** (0.0019)	-0.066*** (0.0040)	-0.066*** (0.0019)	-0.076*** (0.0039)	-0.056*** (0.0020)	-0.066*** (0.0040)	-0.066*** (0.0021)	-0.076*** (0.0039)
Propensity to complain (kvetch index)	0.0037 (0.0026)	0.0062 (0.0052)	0.0041 (0.0024)	0.0017 (0.0053)	0.0038 (0.0027)	0.0063 (0.0052)	0.0039 (0.0025)	0.0017 (0.0053)
Number of employees (log)	0.076*** (0.0025)	0.089*** (0.0054)	-0.00056 (0.0017)	-0.0018 (0.0031)	0.076*** (0.0027)	0.089*** (0.0054)	-0.00056 (0.0017)	-0.0020 (0.0031)
Foreign firm	0.020** (0.0071)	0.023 (0.015)	0.051*** (0.0072)	0.032* (0.015)	0.022** (0.0074)	0.023 (0.015)	0.055*** (0.0074)	0.032* (0.015)
Exporting firm	0.021*** (0.0052)	0.032** (0.0098)	0.030*** (0.0047)	0.045*** (0.010)	0.021*** (0.0054)	0.033*** (0.0098)	0.029*** (0.0049)	0.045*** (0.010)
Age (years; log)	-0.031*** (0.0025)	-0.051*** (0.0059)	0.018*** (0.0028)	0.0089 (0.0062)	-0.031*** (0.0027)	-0.051*** (0.0059)	0.020*** (0.0029)	0.0089 (0.0062)
Observations	59,651	13,652	59,852	13,885	55,147	13,652	55,303	13,885
R <sup>2</sup>	0.37	0.45	0.32	0.42	0.052	0.063	0.061	0.067
F-stat	138.1	41.9	138.1	44.4	115.2	42.1	116.9	44.3

Source: Enterprise Surveys and authors' calculations.

Note: Regressions incorporate additional control variables including state ownership and female ownership, as well as year, sector and region fixed effects. Informal payments reported by a firm are instrumented using the average for its neighbours (in the same region and sector). Standard errors clustered at region level are reported in parentheses, and \*, \*\* and \*\*\* denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively.

**CHART 1.12.**

**A 1 standard deviation reduction in informal payments is associated, on average, with a 1.4 percentage point increase in annual sales growth**



Source: Enterprise Surveys and authors' calculations.

Note: A firm's perception of corruption is instrumented using the average value for the region and sector where the firm operates. The "high-corruption" subsample contains countries where the Worldwide Governance Indicator for control of corruption is above the sample average; the rest of the sample is regarded as "low-corruption". The 95 per cent confidence intervals shown are based on robust standard errors.

of poor regulations, inefficient bureaucracy and informal payments is probably less efficient than a combination of formal taxes, sensible regulations and efficient enforcement. Yet when all firms are in a long queue, it may, for instance, be optimal for an individual firm with an extremely large opportunity cost in terms of wasted time to "jump the queue".<sup>42</sup> In this scenario, firms that report making informal payments will conceivably also grow faster.

The link between informal payments and firm-level performance can be analysed using data from Enterprise Surveys.<sup>43</sup> The sample comprising surveys conducted in the period 2006-19 spans more than 120 countries around the world, most of which can be classified as middle-income economies. (It also includes 8 advanced economies, as well as 17 economies with per capita incomes lower than those observed in the EBRD regions, most of which are in Africa.)

In this analysis, a firm's sales growth over a two-year period is related to various firm-level characteristics, the country and region where the firm operates and the percentage of the firm's revenue that is spent on informal payments (as reported by the firm). On average, firms in this sample spent around 0.8 per cent of their turnover on informal payments. This figure ranges from more than 5 per cent in Sierra Leone and almost 3 per cent in Albania (the highest value in the EBRD regions) to less than 0.01 per cent in advanced economies, Estonia and Latvia. The average for the EBRD regions as a whole declined from 0.9 per cent a decade ago to 0.4 per cent in 2019, mirroring the perceived improvements in the business environment that have been discussed above.

Informal payments made by firms may depend on firms' performance.<sup>44</sup> For instance, firms that grow faster may have to deal with a larger number of regulations (in order, for instance, to obtain new licences, export their products or file patents). Similarly, firms with larger profits may be more likely to be targeted by rent-seeking officials putting obstacles in their path in the hope of receiving some kind of payment.

As a way of confronting these concerns, this analysis looks at the average bribe rate for the firm's (subnational) region and sector, excluding the firm in question. That average is used as an instrument for the answer given by the firm itself. In some specifications, instruments include the average perception, among firms in the same sector and region, that corruption represents an obstacle to business, with a greater tendency among "neighbouring" firms to regard corruption as an obstacle being associated with a greater tendency to make informal payments. Another variable used as a proxy for corruption is the amount of time that senior managers of "neighbouring" firms report spending on regulations, with more onerous regulations tending to be more conducive to rent-seeking behaviour by officials.

The region/sector averages in terms of perceptions of corruption and regulations should reflect the quality of the business environment, which will determine the need to make informal payments. At the same time, they should not be influenced by the sales growth of a particular firm or its hiring and investment decisions. This makes those variables plausible instruments.

Regressions also control for a firm's tendency to complain. Following the approach employed by Kaufmann and Wei (2000), the so-called "kvetch effect" is measured as the difference between a firm's perception of transport, electricity and access to land as obstacles to its operations and the country average in terms of perceptions of infrastructure. The results of this analysis are summarised in Table 1.1.

This analysis suggests that, at a global level, a 1 standard deviation reduction in the amount of informal payments that a firm has to make is associated, on average, with a 1.4 percentage point increase in annual sales growth (see also Chart 1.12).<sup>45</sup> Estimates are somewhat higher for the EBRD regions subsample than they are for the global sample.

This analysis also appears to suggest that the marginal cost of corruption increases as governance improves. Indeed, the effect that corruption has on sales growth is estimated to be larger in a subsample of low-corruption economies (those with above-median values for the Worldwide Governance Indicators; see Chart 1.12). This may be because firms in more corrupt countries are accustomed to working with corruption.

Broadly speaking, the estimates that are obtained for firms are consistent with estimates of the governance-related growth dividend that are obtained at the country and regional levels (see Chapter 2). Evidence from Enterprise Surveys indicates that firms do not systematically benefit from making informal payments in order to get ahead of peers that refrain from such behaviour.

<sup>42</sup> See, for instance, Lui (1985).

<sup>43</sup> This analysis follows the approach adopted by Fisman and Svensson (2007), who investigated a similar relationship in Uganda in the 1990s.

<sup>44</sup> See Guriev (2004) for a discussion of this issue. If regulations are adopted with rent seeking in mind, regulations may also take into account firms' ability to pay bribes.

<sup>45</sup> In this sample, 1 standard deviation is around 3.5 percentage points. The estimated effect is the product of the standard deviation and the coefficient for informal payments.

## In addition to the growth dividend, improved governance also increases satisfaction with life

Governance has a major effect on individuals' well-being, in addition to any impact on per capita incomes. Respondents to Gallup World Polls are also asked about the extent to which they are satisfied with life. Their answers are recorded on a scale of 0 to 10, where 0 represents "the worst possible life". As discussed in the *Transition Report 2016-17*, satisfaction with life has improved over the last decade in the EBRD regions.<sup>46</sup> Within the EBRD regions, it is highest in Cyprus and Slovenia (where it averages more than 6) and it is lowest in Armenia, Bulgaria, Egypt and Georgia (averaging less than 4.5 in all four cases).

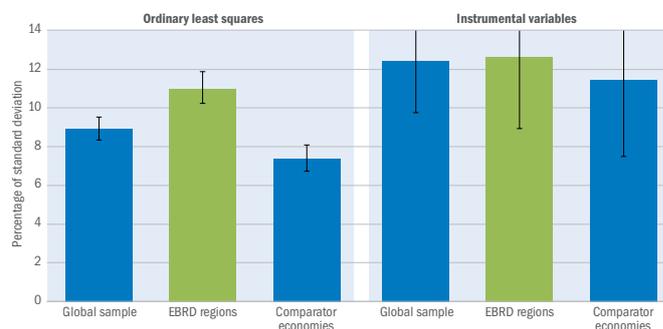
In order to estimate the relationship between governance and satisfaction with life, the measure of life satisfaction is regressed on the index of perceptions of governance that was introduced earlier, as well as the logarithm of the individual's income, gender, level of education, age, age squared and a number of other individual characteristics (since women tend to report greater satisfaction with life, for instance). Specifications also include country fixed effects.

There may be factors that influence both an individual's perception of economic institutions and their satisfaction with life. To account for this, a person's confidence in institutions is instrumented using the average for other individuals from the same subnational region. Half of the respondents in each region – selected at random – are used to construct this instrument, and these observations are then removed from the main sample.

The logic behind this "split-sample" instrument is similar to the rationale for the instrumentation of firms' perceptions of governance using the average for neighbouring firms: the average perceptions of neighbours are influenced by matters of governance, and an individual's satisfaction with life should have no bearing on other individuals' perceptions of institutions.<sup>47</sup> As before, regressions also include the "kvetch effect" – the difference between an individual's evaluation of the quality of air, water, transport infrastructure and other local amenities and the average evaluation by other individuals in the region. To the extent that the air quality in the locality is the same, differences between perceptions may reflect an individual's tendency to complain.

**CHART 1.13.**

Satisfaction with life is significantly higher where governance is stronger



Source: Gallup World Poll and authors' calculations.

Note: This chart shows the improvement in satisfaction with life that is associated with a 1 standard deviation improvement in confidence in institutions. The index of perceptions of governance is instrumented using the average of a randomly selected subsample of observations in the same region as the survey respondent (comprising half of the total number of observations in that region), which are then excluded from the main sample. Regressions include gender, age, age squared, level of education and other individual characteristics, as well as country fixed effects. The 95 per cent confidence intervals shown are based on robust standard errors. GDP per capita in comparator economies lies between the lowest and highest values observed in the EBRD regions.

This analysis suggests that an improvement in confidence in institutions from the level observed in Moldova to that seen in Cyprus (a difference of approximately 1 standard deviation) is associated with an improvement in life satisfaction totalling 12 per cent of a standard deviation (see Chart 1.13). This is a large impact and holds both globally and at the level of the EBRD regions. To put that into perspective, in a country such as Ukraine a similar improvement in satisfaction with life is produced by a US\$ 270 increase in monthly income. In this case, closing half of the governance gap relative to the G7 is associated with the closing of 15 per cent of the corresponding gap in satisfaction with life, making the average Ukrainian as satisfied with life as the average citizen of Bulgaria. Eight percentage points of this effect are due to the direct impact that governance has on life satisfaction, and the remaining 7 percentage points are on account of an increase of approximately 30 per cent in household income (as estimated in Box 1.7).

<sup>46</sup> See EBRD (2016). See also Helliwell et al. (2019) for a discussion of measures of life satisfaction and their determinants.

<sup>47</sup> See Angrist and Krueger (1995).

## Conclusion

The EBRD regions began the 1990s with weaker governance than comparators with similar per capita incomes. Since then, many of the economies in those regions have achieved substantial improvements in the quality of economic institutions on the back of transition reforms and accession to the European Union.

While those improvements have outpaced the progress seen in other emerging market economies, the rate of improvement in the EBRD regions has slowed markedly in recent years and the governance gap relative to advanced economies remains substantial. That governance gap matters, as it hinders investment and prevents the efficient allocation of resources within the economy (with resource allocation being shaped by personal connections rather than price signals). As economies develop and become more reliant on innovation and entrepreneurship, poor governance may become an even greater obstacle to achieving the income levels of advanced economies.

The analysis in this chapter shows that closing half of the gap relative to the G7 in terms of the quality of economic institutions would yield a sizeable growth dividend. This growth dividend can, in turn, be traced back to improvements in the productivity and output growth of individual firms, both for a global sample of more than 100 countries and within the EBRD regions. While one might think that firms could potentially benefit from corruption as a way of circumventing onerous regulations and getting ahead of their peers, Enterprise Surveys suggest that, on balance, poor governance is costly for individual firms.

As a result of their contribution to economic growth, improvements in governance raise household incomes, thereby improving satisfaction with life and reducing intentions to emigrate. However, the impact that improved governance has on satisfaction with life and intentions to emigrate far exceeds the effect that can be explained by rising household incomes, reflecting households' increased confidence in institutions and their expectations of improved social and economic outcomes in the future.

While strengthening governance is notoriously difficult, a number of economies have achieved major improvements in the quality of their economic institutions in relatively short periods of time. Their experiences can teach us important lessons about the ways in which technological improvements, external anchors and independent media can be leveraged to strengthen governance.

### BOX 1.1.

#### THE RELATIVE ECONOMIC PERFORMANCE OF COUNTRIES ACHIEVING PARTICULARLY STRONG IMPROVEMENTS IN THE QUALITY OF ECONOMIC INSTITUTIONS

Relative economic performance, as defined in Chapter 1 of the *Transition Report 2017-18*,<sup>48</sup> is measured using per capita growth in an economy in a given year relative to a weighted average of data for economies that are similar in terms of their per capita incomes.<sup>49</sup> The formula used assigns greater weights to comparator economies with larger populations, while comparators change every year in line with the evolution of per capita incomes. Thus, the changing mix of comparators takes account of the tendency of economic growth to slow down as economies become richer.

At a global level, economies that achieve particularly remarkable improvements in terms of governance (relative to the global average) outperform their peers in terms of economic growth by an average of 1.3 percentage points a year. In the EBRD regions, the equivalent figure is even higher, standing at 1.8 percentage points a year. Georgia, for instance, grew 3.5 percentage points a year faster in the period 1996-2017 than one would have expected on the basis of the growth records of similar economies. Meanwhile, Serbia's output per capita expanded 1.2 percentage points a year faster than that of its comparators over the same period. Likewise, economies that experience large deteriorations in the quality of economic institutions relative to the global average underperform comparators by an average of 2.7 percentage points a year in terms of income growth per capita.

These are, if anything, somewhat larger than the other estimates of the growth dividend that are obtained in this chapter, reflecting the fact that they relate to episodes involving exceptional improvements in governance.

<sup>48</sup> See EBRD (2017).

<sup>49</sup> See also Plekhanov and Stostad (2018) for a detailed discussion of the methodology.

**BOX 1.2.**

**BUILDING BETTER STATES: THE CASE OF THE UKRAINE REFORM ARCHITECTURE PROGRAMME**

In 2013-14, Ukraine’s “Revolution of Dignity” set in motion a far-reaching political transformation and opened up avenues allowing new reform-minded leaders to accede to key positions in Ukraine’s government. In late 2016, having taken stock of what had worked and what had not, the EBRD, in cooperation with the EU, embarked on the Ukraine Reform Architecture (URA) programme in support of Ukraine’s public administration reform. That programme, which draws on the complementary expertise of the EBRD and the EU, aims to boost the country’s general capacity to implement reforms, while also focusing on a number of key sectors.

The URA programme consists of three mutually supportive components driving the implementation of reforms at all levels of Ukraine’s government. Nearly 200 locally recruited Ukrainian reformers working in Reform Support Teams (RSTs) are embedded in eight ministries and public agencies, temporarily filling capacity gaps and ensuring the transfer of skills while working closely with civil servants. A Reforms Delivery Office under the responsibility of the Cabinet of Ministers coordinates reforms across the public administration. Lastly, the Strategic Advisory Group for Support of Ukrainian Reforms (SAGSUR) is providing high-level advice to Ukraine’s top decision-makers, including the President, the Prime Minister and ministers (see Chart 1.2.1).

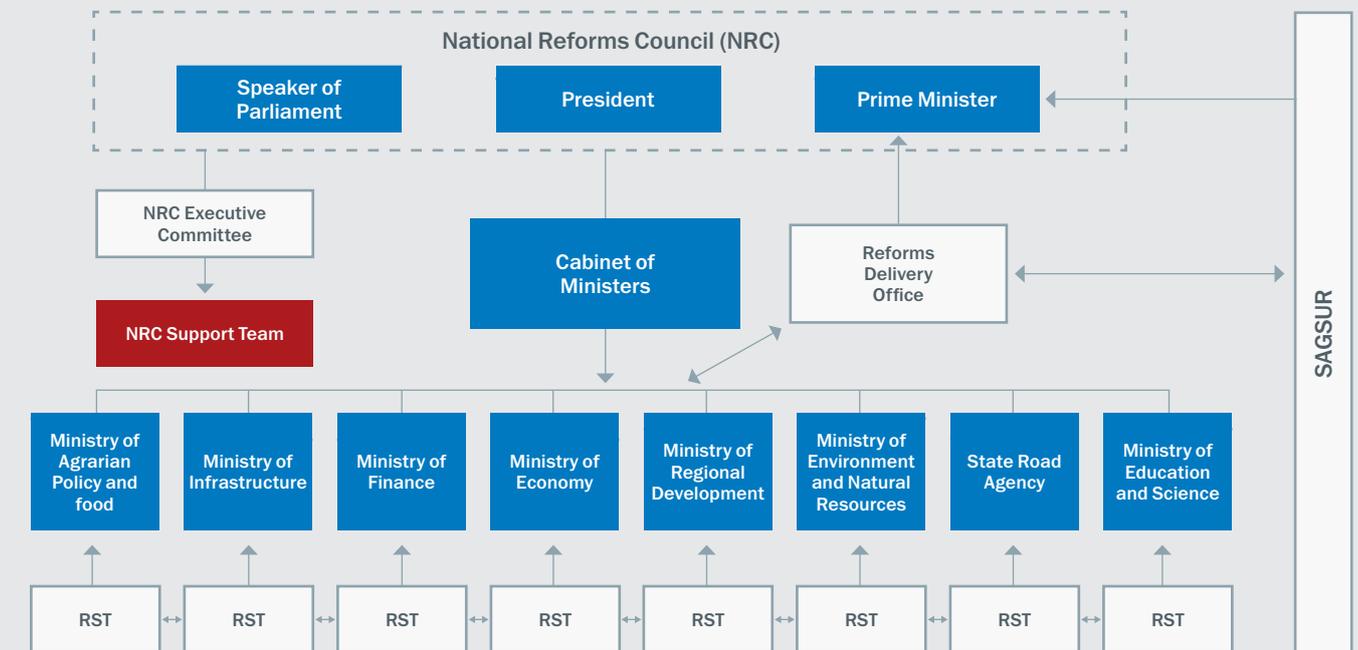
Experience with the URA programme to date highlights a number of important lessons as regards support for the implementation of reforms in public institutions.

**Institutional capacity relies on developing local expertise, not simply importing foreign know-how**

Simply transplanting best-practice solutions is unlikely to deliver real institutional capacity.<sup>50</sup> Successful reforms require behavioural changes by a critical mass of local policymakers and implementers, not just the adoption of new rules. While all RSTs within the URA programme have been successful in helping to improve the pace and quality of reforms, the best results have been observed in ministries where reformers have been able to establish close cooperation with civil servants and foster behavioural change. This has enabled a gradual transfer of knowledge and, over time, facilitated a behavioural shift within state institutions. Thus, notwithstanding the importance of external expertise in order to fill capacity gaps on a temporary basis, the distance between permanent and temporary structures should be minimised in order to ensure the sustainability of capacity-building interventions.

**CHART 1.2.1.**

Ukraine Reform Architecture programme – a snapshot



Source: EBRD.

<sup>50</sup> See Andrews et al. (2015).

### Nurturing reform coalitions is key to effecting real change

The provision of support via the URA programme has been conditional on Ukraine's political leaders showing genuine commitment to the delivery of reforms. However, as in other economies,<sup>51</sup> such reform champions have proven to be a necessary – but not a sufficient – condition for improved capacity to implement reforms. Consequently, the URA project seeks, via its three mutually supportive components, to encourage the formation of reform coalitions focusing on specific issues. This is achieved through the in-built coordination between RSTs, the Reforms Delivery Office and the advisory body SAGSUR, as well as stakeholders outside of the programme (including government officials, members of parliament and experts). The most noteworthy successes, such as the creation of independent supervisory boards in key state-owned enterprises, have been achieved when URA reformers have managed to establish broad networks of supporters. Where reform stakeholders have failed to forge strong cross-institutional coalitions, progress with reforms has been more modest.

### Built-in flexibility encourages local ownership and long-term sustainability

Given the highly fluid political environment surrounding reform efforts, a flexible design that is able to respond to the changing context appears to be preferable to a rigid framework. The ability of the URA programme to flexibly extend support to new institutions or withdraw assistance from poorly performing beneficiaries has been essential in sustaining decision-makers' commitment to reforms. At the same time, it has

also provided space for reform champions to formulate objectives that respond to the changing demands of the Ukrainian population, as well as offering flexibility to implementers in terms of working out the most viable solutions to problems arising along the way. This approach has fostered a sense of ownership as regards reform efforts which spans all stakeholders, including the country's political leaders, the policymakers in charge of the day-to-day business of implementing reforms and, above all, the Ukrainian people.

These lessons – which highlight the importance of embedding local enablers with a view to driving change from within and creating sustainable yet agile solutions that are capable of establishing enduring coalitions among reform stakeholders – have the potential to inform the design of other capacity-building programmes around the world. At the same time, capacity-building interventions always need to be tailored to the relevant country's characteristics and needs.

**NEARLY  
200  
LOCALLY RECRUITED  
UKRAINIAN REFORMERS  
ARE EMBEDDED IN  
EIGHT MINISTRIES AND  
PUBLIC AGENCIES AS  
PART OF THE UKRAINE  
REFORM ARCHITECTURE  
INITIATIVE**

<sup>51</sup> See Andrews (2013).

**BOX 1.3.**

**CAN BUSINESS OMBUDSMEN HELP TO CURB SYSTEMIC CORRUPTION AND UNFAIR BUSINESS PRACTICES?**

Can the establishment of new bodies such as business ombudsmen remedy general shortcomings in terms of governance and encourage broader institutional improvement? This box looks at the case of Ukraine, where in 2014 the government signed a memorandum of understanding with the EBRD, the Organisation for Economic Co-operation and Development (OECD) and five Ukrainian business associations implementing an anti-corruption initiative (see also Box 1.2). On the basis of that agreement, the various parties began working closely together in order to establish the Business Ombudsman Council and its underlying institutional, legal, organisational and logistical structures.

Like other ombudsmen, Ukraine's Business Ombudsman Council provides a recourse mechanism that seeks to protect the basic rights of a predefined group of people or entities – in this case, businesses and entrepreneurs – and investigates claims that state authorities have abused their powers. In order to be successful, the Business Ombudsman Council needs to have reasonably extensive investigative powers, as well as robust legal protection against possible actions designed to prevent it from conducting objective and rigorous investigations.

The Business Ombudsman Council became fully operational in May 2015. In the period 2015-18, with the EBRD as its main sponsor, it received more than 4,800 complaints, of which more than 3,200 were successfully resolved (see Chart 1.3.1). In addition to facilitating direct repayments to businesses totalling UAH 13.4 billion (€420 million), it has also had a significant impact in other areas, with malpractice by officials ceasing to be the most common complaint among firms. The Business Ombudsman Council has contributed to the addressing of systemic problems by making recommendations to the Ukrainian authorities regarding the reform of law enforcement institutions (such as the Prosecutor's Office and the State Security Service), as well as by issuing 12 systemic reports on selected issues. Overall, 96 per cent of those who have sought the assistance of the Business Ombudsman Council have been satisfied with its work, and the majority of its recommendations are being implemented.

The annual number of complaints received more or less tripled between 2015 and 2018 (see Chart 1.3.1). This is a sign of the new institution's effectiveness, but is also a reminder that firms' typical problems are persistent in nature. Tax issues remain the largest category of complaints (tax inspections and tax invoice suspension), with deficiencies in the regulatory framework and abuse of powers by law enforcement authorities also featuring in the top five concerns in all four years.

Following the Revolution of Dignity, comprehensive anti-corruption legislation has been put in place, and a new institutional framework has been established comprising four specialist anti-corruption bodies: the National Anti-Corruption Bureau of Ukraine (NABU), the Specialised Anti-Corruption Prosecutor's Office (SAPO), the National Agency for Prevention of Corruption (NAPC) and the Asset Recovery and Management Agency (ARMA). In June 2018 Ukraine also adopted legislation establishing a High Anti-Corruption Court (HACC), and in April 2019 the HACC's 38 judges were appointed by means of a

competitive and transparent selection process. The country has also achieved a significantly higher level of transparency by establishing an electronic asset declaration system (with around a million public officials filing e-declarations to date), introducing an innovative public procurement system called ProZorro, opening up public registries (including the registry of beneficial owners), implementing fiscal decentralisation, and adopting a new civil service law establishing rules on ethics and conflicts of interest.

Despite this significant progress, making sustainable and tangible changes to Ukraine's governance system in order to eliminate corruption opportunities and ensure proper prosecution and punishment for corruption-related crimes remains one of the country's key challenges. Indeed, the conviction rate in high-level corruption cases remains low. The EU and other international bodies have consistently stressed the need to ensure that Ukraine's specialist anti-corruption institutions have the necessary independence and operational capacity and are fully effective, as well as the importance of creating an effective mechanism for the verification of electronic asset declarations and the subsequent recovery of assets.

These challenges demonstrate the continued need for the Business Ombudsman Council. And yet, at the same time, recent experience also shows that while the Business Ombudsman Council can draw attention to certain systemic failings, help to improve the investment climate and attract foreign direct investment, it cannot compensate for other institutions or remedy endemic abuse of authority. Indeed, no ombudsman can interfere with ongoing legal proceedings, overturn courts' decisions or take on complaints regarding court decisions.

Overall, Ukraine's experience – in terms of both the successes and the limitations of the Business Ombudsman Council's role – has the potential to provide useful insight to other countries that are in the process of setting up ombudsmen, such as the Kyrgyz Republic.

**CHART 1.3.1.**

**In the period 2015-18, the Business Ombudsman Council received more than 4,800 complaints**



Source: Business Ombudsman Council's reports and authors' calculations.

## BOX 1.4.

## MEDIA AND GOVERNANCE

A pluralistic and independent press plays a crucial role in a well-functioning democracy, informing the public and holding politicians accountable. However, there is a growing body of evidence showing that news reporting is often biased, impacting election outcomes.<sup>52</sup> A diverse diet of news consumption based on reliable sources can help to provide a strong defence against such bias.

But how common are such diverse diets of news? A recent study by Kennedy and Prat (2019) measures the extent of media power in 40 countries, including seven economies in the EBRD regions (Croatia, Greece, Hungary, Poland, Romania, the Slovak Republic and Turkey). Their analysis uses internet survey data from the 2017 Reuters Digital News Report covering more than 70,000 individuals. This dataset covers all major media sources, including television, newspapers and social media.

The survey data reveal that people with higher levels of income and education tend to access a larger number of news sources, both in the EBRD regions and globally. Indeed, the average university-educated respondent in the top third of the income distribution consumes two sources more than the average secondary school graduate in the bottom third of the income distribution.

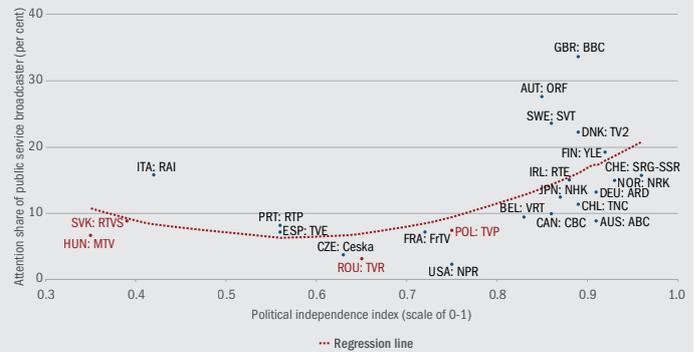
As a result, countries with less equal income distributions also tend to have higher levels of information inequality, as measured by the Gini coefficient of the number of news sources used by individuals. Levels of information poverty, defined as the percentage of individuals who report using one or zero news sources, also appear to be higher in more unequal societies.

The fact that many people are reliant on a very small number of news sources means that the news organisations that *do* reach them are potentially very influential indeed. The power of a specific news source can be measured by its attention share, which is defined as the percentage of citizens who get news from that source divided by the total number of sources they use. By this metric, a news organisation with a large attention share will have a large number of users, who do not typically get news from many other sources. A high Herfindahl-Hirschman concentration index in respect of the attention shares of news organisations will, in turn, mean that a relatively small number of news organisations have the potential to exert significant political influence over a large percentage of the population.

By this metric, media power appears to be less concentrated in those seven economies in the EBRD regions than it is in many advanced European economies. This partly reflects the dominance of influential public service broadcasters in such advanced economies – as is the case, for example, with SRG-SSR in Switzerland or ORF in Austria. Such

CHART 1.4.1.

Public service broadcasters in the EBRD regions tend to have low scores for political independence



Source: Hanretty (2010), Kennedy and Prat (2019) and authors' calculations.

public service broadcasters are often funded by taxpayers and subject to direct government oversight. These broadcasters tend to have high levels of political independence (see Chart 1.4.1), meaning that it is hard for politicians to fire their staff or otherwise exert undue influence over news coverage.<sup>53</sup>

In the EBRD regions, however, public service broadcasters score relatively poorly in terms of their political independence. This may help to explain the relatively low levels of concentration for media power in the EBRD regions, in the sense that voters do not trust their public service broadcasters to be credible, unbiased and politically independent. Consequently, reforms aimed at strengthening the independence of public service broadcasters could help to improve the health of the press and democratic discourse as a whole. Such reforms could include the introduction of multi-year funding periods, independent regulators who serve staggered multi-year terms with a dispersal of authority, and legal charters that prevent politicians from influencing journalistic and editorial content.<sup>54</sup>

Indices based on the attention shares of media organisations can also be used to measure the risk of audiences being captured by media owners – or, indeed, the risk of the media industry itself being captured by the government (see the discussion of Turkey in Finkel (2015) and the discussion of Hungary in Szeidl and Szucs (2017)).

<sup>52</sup> See Puglisi and Snyder (2015).

<sup>53</sup> See Hanretty (2010).

<sup>54</sup> See Benson et al. (2017).

**BOX 1.5.**

**SPREAD OF MOBILE INTERNET AND CONFIDENCE IN GOVERNMENTS**

Over the past decade or so, third-generation (3G) mobile networks have expanded significantly, with the percentage of the world’s population that have access to 3G rising from just 4 per cent in 2007 to 69 per cent in 2018. Unlike the preceding second-generation (2G) technology, 3G changes the ways in which people read and disseminate news in text and video format. Has the roll-out of 3G technology helped to increase governments’ accountability and expose government corruption? The short answer is “yes” – so long as the government in question has not responded with internet censorship.

Guriev et al. (2019) use a comprehensive dataset (comprising survey data taken from Gallup World Polls over the period 2008-17, spanning 840,537 individuals in 2,232 subnational regions of 116 economies) to study the impact that the expansion of 3G networks has had on confidence in governments. Their study shows that as internet access increases (owing to the expansion of mobile 3G networks), governments’ approval ratings fall and the perception of corruption in government rises (see left-hand panel of Chart 1.5.1). These findings are robust to the incorporation of respondents’ socio-demographic characteristics, their income, regional fixed effects and regional levels of development.

Does the availability of 3G affect individuals’ beliefs through internet access, rather than some other mechanism? The expansion of 2G networks (which allow individuals to make phone calls and send text messages, but not browse the internet) serves as a natural placebo test in this regard. Guriev et al. (2019) show that 2G penetration had no effect on internet usage and, if anything, had a positive impact on governments’ approval ratings (which is understandable, since the expansion of 2G networks will have improved people’s quality of life).

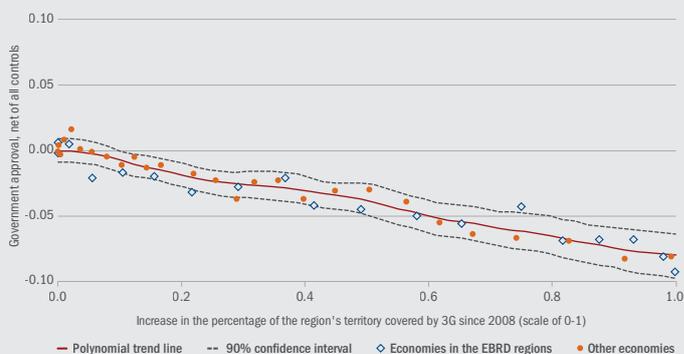
Guriev et al. (2019) also show that the negative impact that 3G mobile internet has on governments’ approval ratings is particularly pronounced in developing countries and rural areas. This makes sense, since in developed countries and urban areas there are other ways of accessing the internet and alternative delivery channels for political news.

Does access to mobile internet help to expose corrupt governments? Or does it simply provide a platform for indiscriminate critique of both honest and dishonest governments? In order to study this issue, Guriev et al. (2019) use an objective measure of corruption: the Global Incidence of Corruption Index (GICI) created by the IMF.<sup>55</sup> The GICI is based on analysis of the reports that the Economist Intelligence Unit provides to potential investors on a subscription basis. If mobile internet does help to expose real corruption, it should strengthen the link between actual corruption (as captured by the GICI) and citizens’ perception that their government is corrupt.

**CHART 1.5.1.**

**3G penetration and government approval ratings around the world**

**Panel A: No internet censorship**



**Panel B: Internet censorship**

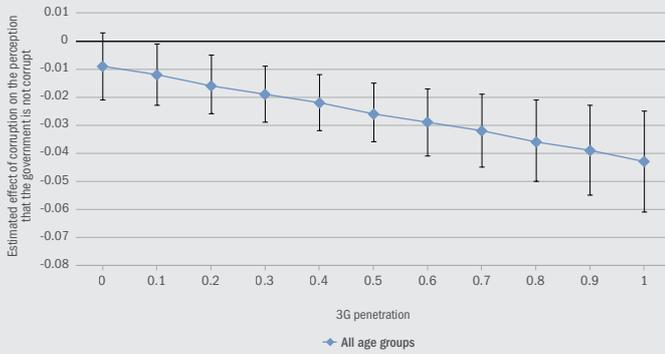


**Source:** Guriev et al. (2019).  
**Note:** This chart illustrates the relationship between regional 3G coverage and government approval ratings for countries with low and high levels of internet censorship. The dots show the means of the outcome variable net of all controls by equal-size bins, with polynomial trend lines. The confidence intervals are constructed by performing a block bootstrap at the level of clusters.

<sup>55</sup> See Furceri et al. (2019).

**CHART 1.5.2.**

**The effect of corruption on the perception that the government is not corrupt, by 3G penetration**



Source: Guriev et al. (2019).

Note: The outcome variable is a dummy for the perception that there is no corruption in government. The explanatory variables are 3G penetration, the logarithm of corruption (as measured by the GICI), their interaction term and all baseline controls (including region and year fixed effects). The number of observations is 581,944; R<sup>2</sup> is 0.15. Standard errors used to construct confidence intervals are corrected for two-way clusters at the level of subnational regions (to account for correlation over time) and at the level of countries in each year (to account for intra-country correlation).

As Chart 1.5.2 shows, in regions with no 3G penetration there is no correlation between the GICI and the perception that the government is corrupt. In contrast, in regions with full 3G coverage there is a strong and statistically significant relationship between actual and perceived corruption, with every 10 per cent increase in the measure of actual corruption reducing the public’s perception that the government is clean by 0.34 percentage point. In other words, a 1 standard deviation increase in the logarithm of the intensity of corruption (0.65) is associated with a 2.2 percentage point reduction in the perception that the government is clean (compared with a mean of 18.3 per cent).

When corrupt governments begin to realise that transparency leads to accountability, they may resort to internet censorship – and, as the right-hand panel of Chart 1.5.1 shows, that strategy is typically effective. That panel presents the relationship between 3G penetration and governments’ approval ratings in countries with high levels of internet censorship (on the basis of Freedom House’s Limits on Online Content score). In such countries, the expansion of 3G networks has no impact on governments’ approval ratings.

**BOX 1.6.**

**PERCEPTIONS OF GOVERNANCE AND INTENTIONS TO EMIGRATE**

Emigration rates in the economies where the EBRD invests are higher than the global average.<sup>56</sup> This box looks at whether their residents’ negative views on governance, as reflected in low levels of confidence in public institutions, play a role in emigration decisions.

In particular, the analysis in this box examines links between perceptions of governance and intentions to emigrate for economies in the EBRD regions and comparator economies with similar income levels, using data from the Gallup World Poll. As discussed earlier in the chapter, average confidence in public institutions is higher in comparator economies than it is in the EBRD regions (see Chart 1.10).

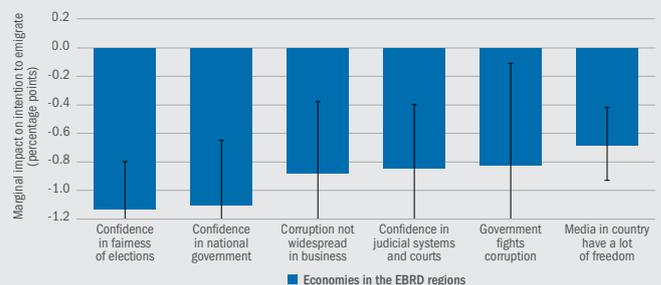
After accounting for individual characteristics (such as age or gender) and country of residence, people who complain about corruption or report low levels of trust in government are also significantly more likely to indicate an intention to emigrate in the next 12 months (see Chart 1.6.1). For example, people who are confident that their government is fighting corruption are 0.8 percentage point less likely to plan on emigrating than those without such confidence. This is a large figure, given that 2.5 per cent of the people in the sample intend to move abroad.

In Albania, for instance, a newly established confidence in the fact that the government is fighting corruption has the same impact on an individual’s intentions to emigrate as a wage increase of around US\$ 400 per month – roughly three-quarters of the average pay rise that can be expected after moving to the intended country of destination. At the level of the EBRD regions as a whole, this effect is more than double the size of that estimated for comparator countries – a difference that is statistically significant at the 5 per cent level. In other words, frustration with poor governance is much more strongly associated with a desire to emigrate than it is in other countries with similar levels of development.

Similar results are obtained for confidence in the national government, faith in the judiciary, media freedom and perceptions of corruption.

**CHART 1.6.1.**

**People with low levels of confidence in public institutions are more likely to report an intention to emigrate**



Source: Gallup World Poll 2010-15, CEPII database and authors’ calculations.

Note: Calculated by regressing intentions to emigrate on each governance indicator in turn, using a linear probability model with survey-weighted observations. All regressions take account of demographic characteristics, education, employment status, measures of the cost of migration and satisfaction with public goods, as well as country of origin and survey year fixed effects. The 95 per cent confidence intervals shown are based on robust standard errors clustered by country of origin.

<sup>56</sup> See EBRD (2018).

**BOX 1.7.****ESTIMATING THE IMPACT THAT IMPROVEMENTS IN GOVERNANCE HAVE ON POTENTIAL LONG-TERM GROWTH**

This box considers a scenario in which a country closes half of the gap between its current level of governance (measured as the average of the Worldwide Governance Indicators for control of corruption, government effectiveness, regulatory quality and the rule of law) and the corresponding average for the G7 economies, doing so gradually over a period of 10 years. The results suggest that potential growth in Ukraine, for instance, would be an average of 1.2 percentage points a year higher in the long term in this scenario (see Chart 1.7.1). At the level of the EBRD regions as a whole, annual per capita income growth would be an average of around 0.9 percentage point a year higher than it would be in the absence of such institutional improvements (reflecting a smaller institutional gap relative to the G7).

The growth dividend is sustained once the quality of economic institutions has stabilised at a higher level, owing to the fact that better institutions enable the economy to benefit from greater stocks of human and physical capital. In particular, higher-quality institutions make economic outcomes more predictable, reducing uncertainty about the returns to investment in physical capital and education. An improvement in the risk-return profile of such investments boosts the stock of physical and human capital over time. For instance, studies have found that financial deepening stimulates firms' investment in research and development (R&D) to a much greater extent in regions where institutions are stronger.<sup>57</sup>

Higher levels of expected investment account for around 60 per cent of the improvement in potential growth. In particular, after 20 years the stock of capital per worker is expected to be around 30 per cent higher than in the baseline scenario. Meanwhile, the stock of human capital is expected to be around 13 per cent higher and contribute around 25 per cent to the overall governance dividend.

Once improvements in human capital and physical capital have been taken into account, the quality of governance also has an additional impact on total factor productivity – the efficiency with which physical capital, labour and human capital are combined to produce final goods. Improvements in total factor productivity contribute around

15 per cent of the overall growth effect. In the long run, the impact that improved governance has on income per capita stabilises (at around 30 per cent in the case of Ukraine) as a result of the tendency of economic growth to slow as economies grow richer.

These estimates of overall gains in income per capita are conservative, to the extent that they assume that improvements in institutions have no impact on other control variables included in the exercise (such as the level of financial development or openness to trade, which also tend to rise as governance improves).

The estimates of the governance dividend build on estimates of long-term potential growth derived using panel data for a large number of economies over the period 1996-2017 (based on the availability of the Worldwide Governance Indicators used to measure the quality of economic institutions).

In this exercise, average real growth in output per worker in a given country over a three-year period is regressed on the logarithm of lagged output per worker, the logarithm of a lagged measure of human capital, the logarithm of the lagged stock of physical capital per capita, a lagged measure of the quality of economic institutions,<sup>58</sup> a number of explanatory variables with a three-year lag and interval fixed effects. The use of three-year intervals reflects the high levels of inertia exhibited by institutions; in addition, any institutional change takes some time to produce a meaningful impact on economic activity.

Net investment growth (change in the capital stock per worker) is itself assumed to be a function of economic institutions and human capital, as well as other variables.<sup>59</sup> Available data on the quality of human capital better reflect long-term trends and cross-country differences than the accumulation of educational endowments over a relatively short period of time. (Here, human capital is measured using an index published as part of the Penn World Tables, which takes into account the average years of schooling in an economy.) Hence, a further equation seeks to explain the level of human capital as a function of the quality of economic institutions and other factors.

The coefficients that are estimated using this system of equations are then used to forecast the evolution of capital per worker, output per worker and human capital for a given country on the basis of the latest observed values for explanatory variables. The model takes account of the fact that higher-quality economic institutions may affect both the accumulation of factors of production and the efficiency with which these factors are combined (total factor productivity). It also takes into account the law of diminishing returns: as governance improves and income per capita and the stock of physical and human capital rise, potential growth slows. The system is estimated using three-stage least squares.

Coefficients are estimated separately for advanced economies and the rest of the sample by interacting lagged values for capital stock, human capital and income per capita with a dummy variable for advanced economies (and the dummy itself is also included). The resulting estimates suggest that factor accumulation has had a greater impact on income growth per capita in advanced economies than it has in emerging markets.

**HIGHER LEVELS OF HUMAN CAPITAL ACCOUNT FOR AROUND**

**25%**

**OF THE OVERALL GOVERNANCE DIVIDEND THAT IS ACHIEVED WHEN AN ECONOMY'S GOVERNANCE IMPROVES**

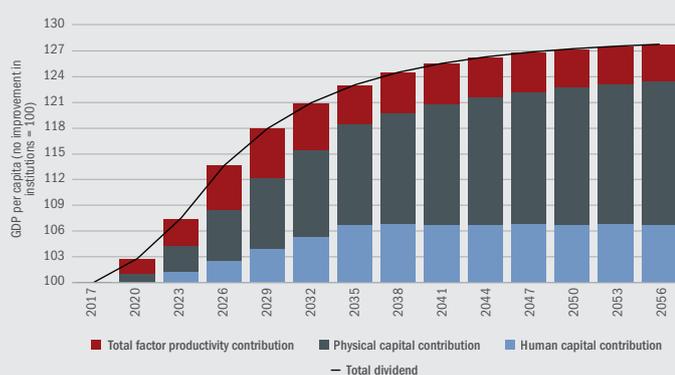
<sup>57</sup> See Bircan and De Haas (2019).

<sup>58</sup> Average values for control of corruption, government effectiveness, regulatory quality and the rule of law are linearly extrapolated for years in which they are not available.

<sup>59</sup> See Young (1995) for evidence on the link between investment and long-term growth.

**CHART 1.7.1.**

In a scenario with improved governance, income growth per capita in Ukraine would be an average of 1.2 percentage points a year higher on account of increased physical and human capital



Source: IMF, World Bank, Penn World Tables 9.0 and authors' calculations.

Note: "Improved governance" assumes that the country closes half of the gap between the quality of its economic institutions and the equivalent G7 average. The quality of economic institutions is measured using the average of the Worldwide Governance Indicators for control of corruption, government effectiveness, regulatory quality and the rule of law. The underlying regressions are estimated using a three-stage least squares procedure in which savings are instrumented using demographic characteristics of the economy. Regressions include additional control variables and time fixed effects. Key coefficients are statistically significant at the 5 per cent level on the basis of robust standard errors.

The set of controls reflects the findings of earlier studies looking at economic growth in a cross country context.<sup>60</sup> The logarithm of the purchasing power parity coefficient (the ratio of GDP per capita at PPP to the ratio of GDP per capita at market exchange rates) controls for the level of the exchange rate. Countries with undervalued currencies, and thus higher PPP coefficients, tend to grow faster. Current account balances reflect the level of savings, which is instrumented using demographic characteristics of the economy: life expectancy, the ratio of people aged 65 and over to the working-age population, and the ratio of people aged 14 and under to the working-age population. Meanwhile, the level of financial development is captured by credit to the private sector as a percentage of GDP. Those controls also include a measure of the quality of democratic institutions, which is based on the Polity index, as well as a measure of capital account openness. Time period fixed effects are included to control for features of the global economic environment that affect all economies simultaneously at any given point in time, such as the global financial crisis.

Chart 1.7.1 compares the baseline scenario with a scenario in which institutions gradually improve over a 10-year period. The demographic profile of a country is assumed to be the same in the baseline and improved-governance scenarios, implying that differences in output per worker translate into similar differences in output. This assumption may, however, be conservative. As discussed in Box 1.6, improvements in governance may translate into a decline in net emigration by working-age individuals, creating an additional growth dividend. Human capital is assumed to start improving after five years, with improvements taking 15 years to materialise fully, reflecting the typical duration of schooling in advanced economies.

The contributions that the various factors make to increases in GDP per capita are based on the estimated production function in per worker terms with a similar set of control variables. The estimation yields a coefficient of 0.45 for capital per worker and coefficients of 0.55 for labour and human capital per worker.

Alternative estimation methods, such as those employed by Blundell and Bond (1998), can be applied with a view to addressing the Nickell (1981) bias in a dynamic panel model, albeit in exchange for a reduction in efficiency. Those generalised method of moments estimators yield similar results.

<sup>60</sup> See, for instance, Levine and Renelt (1992).



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# 2

## GOVERNANCE AT MUNICIPAL AND REGIONAL LEVEL



The quality of governance varies significantly, not just across countries, but also within them, reflecting differences in the responsibilities assigned to subnational government entities, as well as variation in the enforcement and implementation of national regulations. Such differences are especially pronounced in countries with poor governance and relatively low levels of subnational spending. Disparities across subnational regions have increased

over time in most of the economies in the EBRD regions, and regional factors have become more important when it comes to explaining people's perceptions of governance. The findings of this chapter suggest that improving regional and municipal governance can result in large payoffs in terms of economic growth, firms' performance and individual well-being.



## Introduction

The previous chapter highlighted the key role that is played by the quality of governance when it comes to growth, firm-level outcomes and satisfaction with life. While the quality of governance is often thought of as a country-level characteristic, many aspects of governance are dependent on regulations established at regional or municipal level and, crucially, the way in which regulations are enforced at a local level. For example, it is usually local officials who handle applications seeking connection to the electricity supply or applications for operating licences, often on the basis of national legislation. Similarly, individuals' perceptions of governance will largely depend on their experiences with hospitals, schools and the police in the area where they live.<sup>1</sup>

As countries become richer, public spending and decision-making tends to become more decentralised. Demand for public goods and services shifts beyond the provision of law and order, roads and basic healthcare to include more specialised services such as nurseries, cycle lanes and the management of local green spaces. Decentralised decision-making is, in principle, better at matching economic policies to local circumstances or residents' preferences.<sup>2</sup>

In the EBRD regions, municipal administrations typically have primary responsibility for providing public services such as waste collection, wastewater treatment, the water supply and pre-school education, as well as some responsibilities in the areas of housing, urban public transport and heating. Regional administrations are often responsible for urban public transport and roads, with higher levels of responsibility in economies with federal structures. Such arrangements vary significantly within countries. This chapter starts by providing an overview of the responsibilities of municipal administrations in the EBRD regions, as well as the corresponding governance arrangements, on the basis of an EBRD survey.

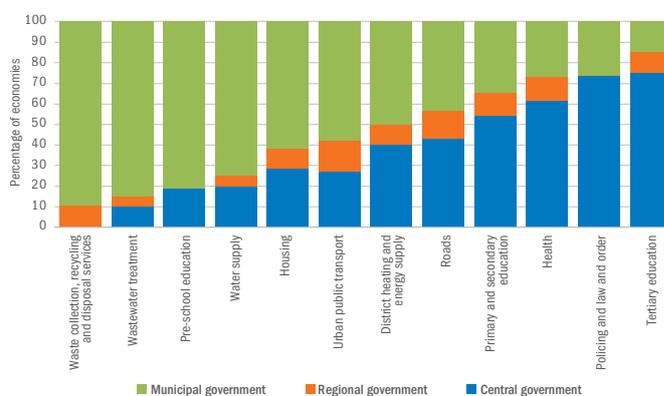
This chapter goes on to show that the quality of governance varies significantly within countries. Moreover, the degree of

variation has increased over time. This suggests that, even in the absence of major changes to legislation or the quality of economic institutions at a national level, improvements in governance can still be achieved at a local level.

Motivated by that fact, this chapter shows that improving regional and municipal governance within a country can result in significant benefits for regional growth, firms' performance and individual well-being. Around 95 per cent of municipalities in the EBRD regions see regulatory processes and political or regulatory instability as obstacles to their operations – significantly more than in advanced European economies. These constraints are, in turn, associated with lower satisfaction ratings for individual cities and lower levels of satisfaction with public services. The final section shows that people are more likely to want to leave regions with inferior governance, and that regions with superior governance are more successful at attracting foreign investment.

**CHART 2.1.**

Tiers of government with legal responsibility for service delivery, by area



Source: EBRD Capital Expenditure and Investment by Municipalities Survey and authors' calculations.

<sup>1</sup> See EBRD (2016). See also EBRD (2012) for a discussion of regional variation in the business environment and Rodríguez-Pose (2013) and Rodríguez-Pose and Di Cataldo (2015) for a discussion of the importance of regional institutions and cultural norms.

<sup>2</sup> See Prud'homme (1995).

## Subnational governance in the EBRD regions

This section provides an overview of the legal responsibilities, funding sources and governance of municipalities in the EBRD regions on the basis of an EBRD survey looking at capital expenditure and investment by municipalities. That survey, which was conducted in 16 economies in the EBRD regions at the end of 2018, took the form of a questionnaire completed by countries' ministries of finance or other central agencies with responsibility for overseeing municipal finances. That questionnaire covered governance structures and financing arrangements at subnational level.

In more than three-quarters of the economies covered, municipalities are responsible for waste collection, wastewater treatment and the water supply, as well as pre-school education. And in more than half of those countries, municipal administrations are responsible for housing, urban public transport and heating (see Chart 2.1). Central governments, on the other hand, typically look after policing, law and order, tertiary education and healthcare. With the exception of economies with federal structures, regions tend to have fewer legal responsibilities in the economies of the EBRD regions, with most revolving around urban public transport and roads.

Municipal investment is mostly financed using municipalities' own resources and transfers from central government, although programmes co-financed by the EU are one of the main sources of funding in most economies in central and south-eastern Europe. Reimbursable funding comes primarily from bank loans or national development banks, with capital markets not generally being used as a source of funding.

**IN MORE THAN THREE-QUARTERS OF THE ECONOMIES COVERED IN THE EBRD SURVEY OF MUNICIPALITIES, MUNICIPAL AUTHORITIES ARE RESPONSIBLE FOR WASTE COLLECTION, WASTEWATER TREATMENT, WATER SUPPLY AND PRE-SCHOOL EDUCATION**

**95%**  
**OF MUNICIPALITIES IN THE EBRD REGIONS SEE THE LENGTH AND VARIABILITY OF REGULATORY PROCESSES AS OBSTACLES TO THEIR OPERATIONS**

Most municipalities covered by the survey have some form of urban development strategy and a multi-year budget plan, although only half have green development strategies. This mirrors the findings of Enterprise Surveys in the EBRD regions, which show that firms' environmental management practices lag behind overall management practices (as discussed in Chapter 4). About half of all respondents report that municipalities regularly carry out independent assessments of the budgetary implications, social costs/benefits and environmental impact of infrastructure projects (with such independent assessments constituting a legal requirement in less than 30 per cent of cases).

Meanwhile, municipalities in all economies covered by the survey award major municipal-funded contracts via tender procedures, with online publication in three-quarters of cases. That being said, the minimum length of such tender procedures varies significantly across countries – from 7 days in Armenia to 37 days in Montenegro.

In two-thirds of those economies, municipalities tend to coordinate frequently with metropolitan authorities and regional and central governments. However, coordination with neighbouring municipalities is common in fewer than a fifth of economies, reflecting the legacies of more centralised economic systems.

Even if legal responsibility does not lie with the region or municipality, the actual provision of services or enforcement of economy-wide legislation can still vary significantly at a local level. For instance, a recent study found that once Serbia had transferred responsibility for registering new firms from district courts to a central agency, the rate at which new businesses were registered increased much faster in districts where trust in the courts was weak.<sup>3</sup>

The next section examines the extent to which the quality of governance varies across regions within individual countries on account of differences in legal frameworks and the delivery of public services.

<sup>3</sup> See Bruhn et al. (2018).

## Subnational variation in governance

### Significant intra-country regional variation in institutional quality

The European Quality of Government Index (EQI) points to high levels of intra-country variation in the quality of governance, with significant differences between countries' best and worst performing regions (see Chart 2.2). This index, which only covers EU member states and is based on surveys completed by individual residents, includes, for instance, residents' perceptions of the quality of public education, public healthcare and policing, the question of whether certain people are given special advantages in the provision of such public services or are treated differently by the police or tax authorities, and the question of whether respondents have been asked for or given a bribe (see Box 2.1 for details). Bulgaria has the largest regional disparities relative to the average quality of governance in the economy, followed by Italy.

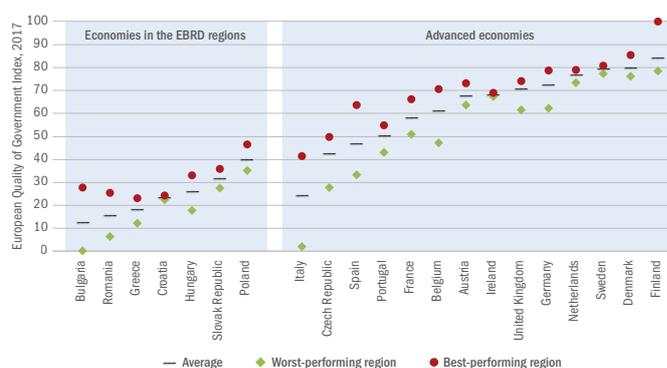
Intra-country differences in the quality of institutions are large relative to cross-country differences. For instance, the EQI score of the worst-performing region in Hungary is comparable to the average in Romania, whereas the quality of governance in the best-performing region in Hungary is comparable to that seen in the worst-performing region in Spain. Such intra-country heterogeneity is especially pronounced in Bulgaria and Romania (with the quality of governance perceived to be weakest in the south-eastern regions of each country). Considerable variation can also be found in Belgium (where the quality of governance is significantly lower in Wallonia than it is in Flanders), Italy (where the southern regions of Calabria, Abruzzo and Campania have weaker governance) and Spain (where the Canary and Balearic Islands and the southern region of Andalusia all have relatively low EQI scores). In contrast, levels of regional variation are much lower in Nordic countries.<sup>4</sup>

### Countries with poor governance tend to have more subnational variation as well

The pattern that emerges suggests that intra-country differences in governance are larger in countries with lower average levels of governance (see Chart 2.3). For instance, while the quality of governance in Bucharest or Sofia is almost the same as that observed in Bratislava, those countries' other regions are currently lagging some way behind. In contrast, the Nordic countries stand out not only for the high average quality of their governance, but also for their greater uniformity in the quality of governance across regions.

Intra-country disparities also tend to be larger in countries where spending by municipalities and regions is lower (see Chart 2.4). Regional and municipal governments account

**CHART 2.2.**  
The quality of governance varies significantly within countries



Source: European Quality of Government Survey and authors' calculations.  
Note: Higher values for the index (which has a scale of 0 to 100) correspond to superior governance.

<sup>4</sup> A similar picture emerges when looking at regions in the 90th and 10th percentiles of the distribution of governance, rather than the best and worst-performing regions.

for just over a fifth of general government spending in the economies of the EBRD regions, equivalent to around 8 per cent of GDP. In contrast, in Europe's advanced economies subnational spending accounts for around 30 per cent of general government spending, or about 14 per cent of GDP, according to IMF data.

In line with that finding, municipalities in the EBRD regions also tend to report that financing represents a key constraint on their operations. The results of an EIB survey of municipalities suggest that around three-quarters of municipalities in emerging Europe regard limits on borrowing as an obstacle to municipal investment, compared with just over half in advanced European economies. Revenue collection tends to be less decentralised than expenditure responsibilities, reflecting the potential pitfalls of tax competition between different regions. This imbalance between own revenues and expenditure responsibilities is especially acute in many economies in the EBRD regions.

8%

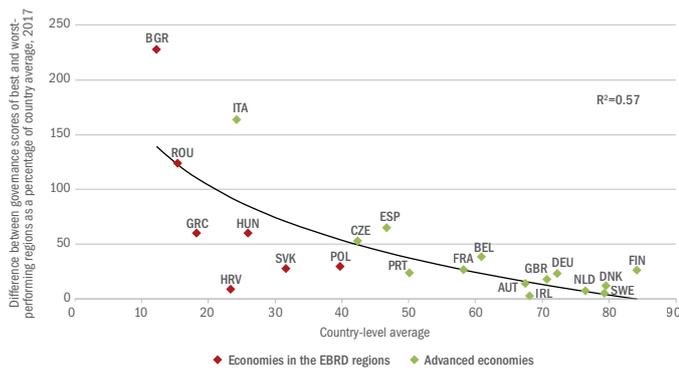
SUBNATIONAL SPENDING AS A PERCENTAGE OF GDP IN THE EBRD REGIONS

14%

SUBNATIONAL SPENDING AS A PERCENTAGE OF GDP IN ADVANCED EUROPEAN ECONOMIES

CHART 2.3.

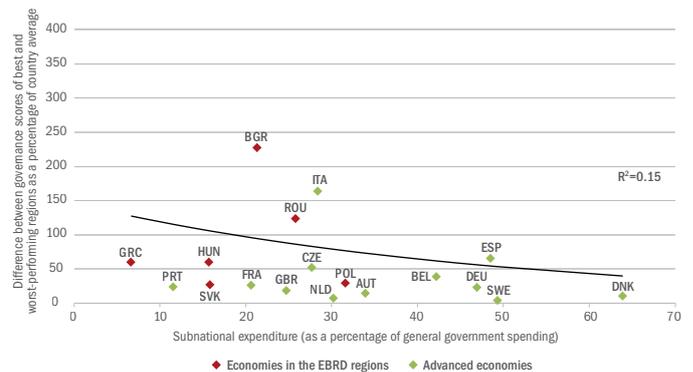
The quality of governance varies more in countries with poor governance



Source: European Quality of Government Survey and authors' calculations.  
 Note: The line shows the logarithmic trend line.

CHART 2.4.

The quality of governance varies more in countries with lower subnational spending



Source: European Quality of Government Survey and authors' calculations.  
 Note: The line shows the logarithmic trend line.

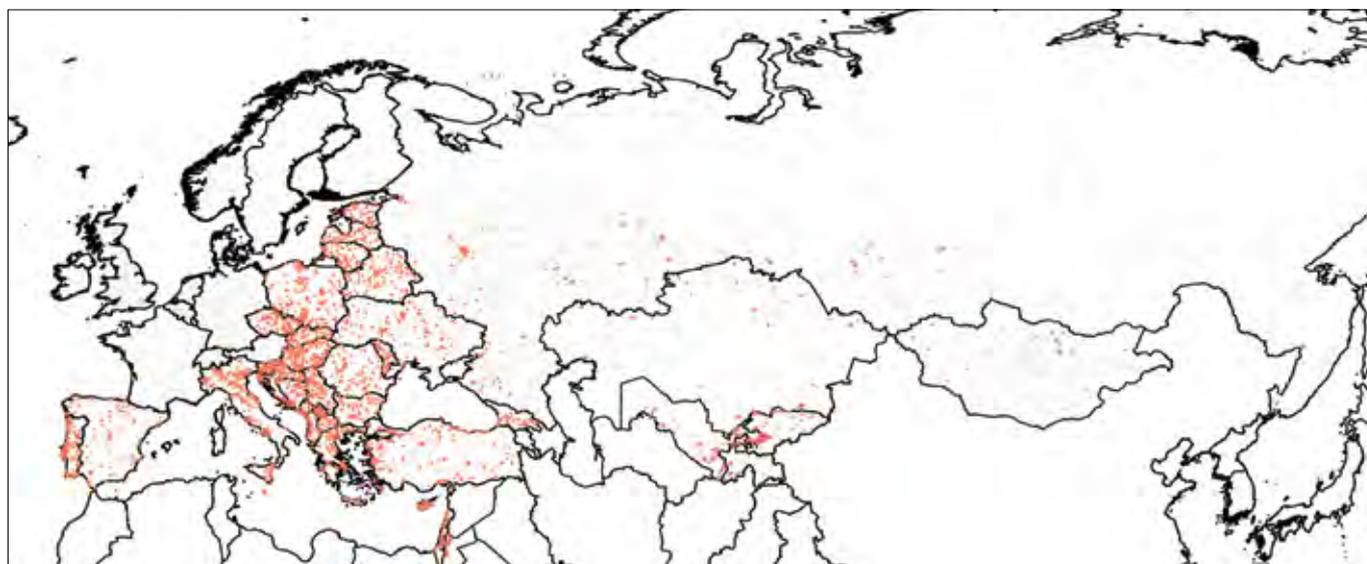
## Evidence from Enterprise Surveys

Substantial variation in governance at regional level can also be seen in the results of Enterprise Surveys conducted in 2018-19 (see Chapter 1 for details of those surveys). Respondent firms' locations (depicted in Chart 2.5) can be used to construct regional averages of governance perceptions, with those measures being established on the basis of whether a firm reports that an informal gift was requested or expected in connection with a recent application seeking connection to the electricity or water supply, an import licence or an operating licence, as well as the average percentage of total annual sales that surveyed firms report spending on informal payments to public officials (see Chart 2.6 and the discussion in Chapter 1). Significant subnational variation can also be observed in respect of the factor that firms regard as the main obstacle to their operations (see Chart 2.7).

**75%**  
**OF MUNICIPALITIES IN  
 THE EBRD REGIONS  
 REGARD LACK OF  
 FINANCING AS AN  
 OBSTACLE TO THEIR  
 OPERATIONS**

**CHART 2.5.**

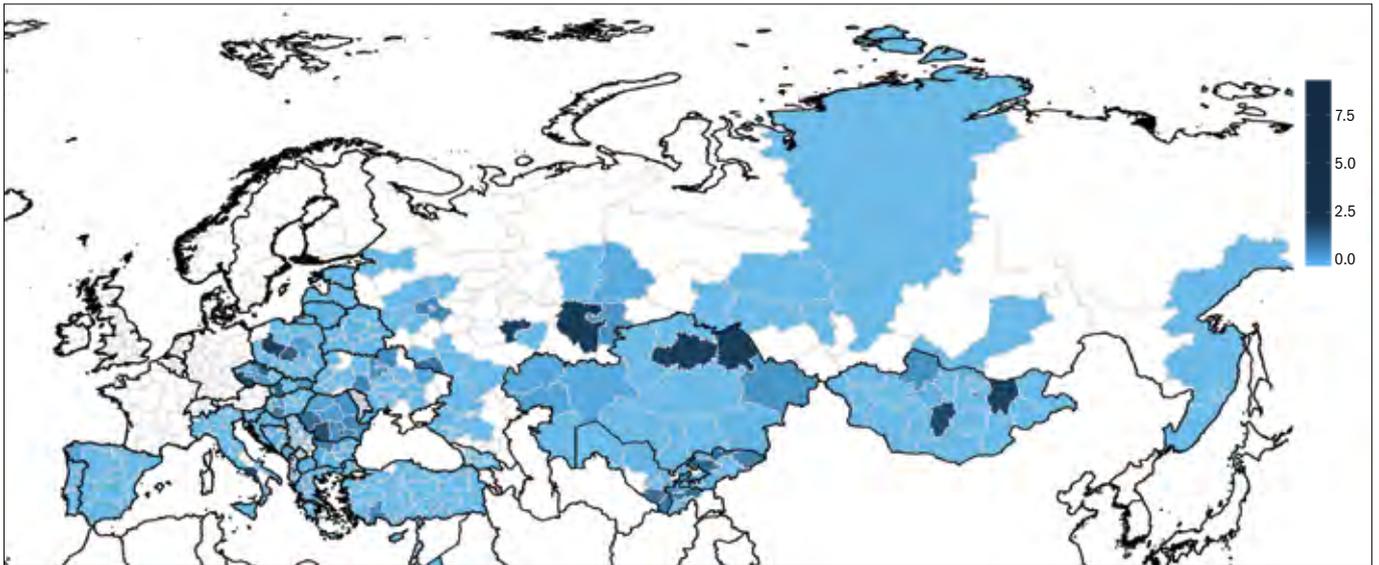
Location of respondent firms in Enterprise Surveys



Source: Enterprise Surveys and authors' calculations.

**CHART 2.6.**

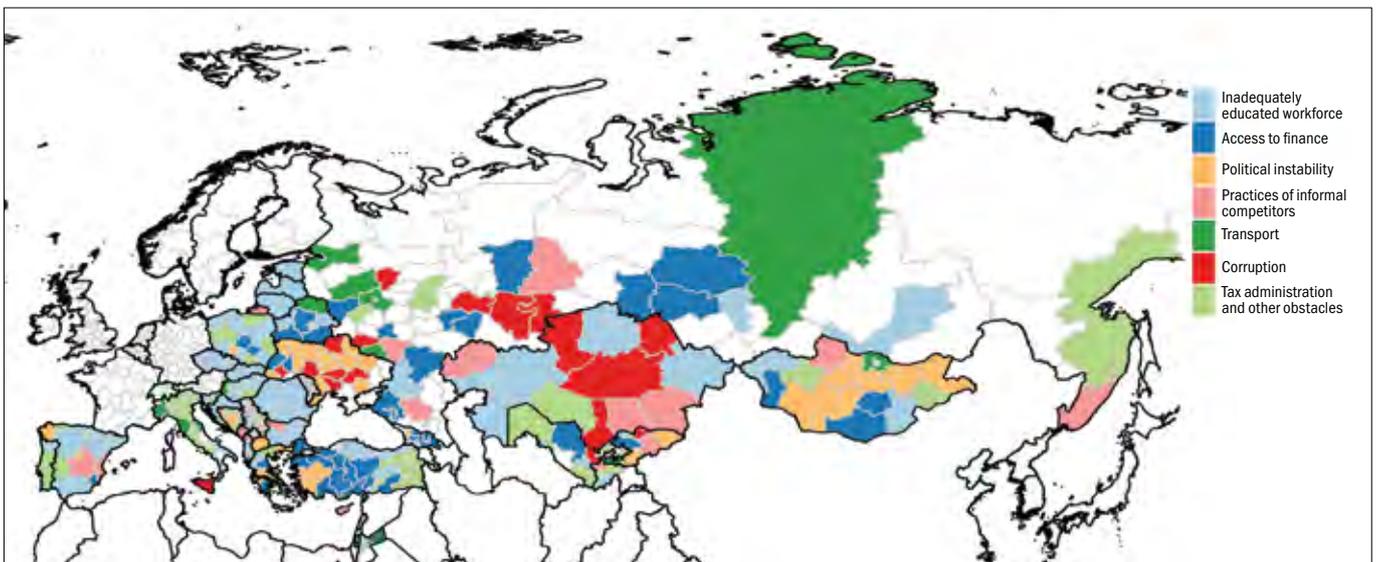
Intra-country variation in informal payments as a percentage of sales



Source: Enterprise Surveys and authors' calculations.

**CHART 2.7.**

Intra-country variation in respect of the factor that firms regard as the main obstacle to their operations



Source: Enterprise Surveys and authors' calculations.

## Rising subnational variation in the quality of governance

Large intra-country differences in the quality of governance can be temporary if certain regions improve their governance and others learn from those improvements and catch up over time. For example, intra-country regional variation in institutional quality has fallen in Romania as gains have spread across regions (with the exception of the north-west of the country).<sup>5</sup> In some instances, cities have pioneered legislation that may eventually be adopted at national level, whether as regards environmental protection, universal basic income or driverless cars. However, the transmission of good governance practices from better-performing to worse-performing areas is far from automatic.

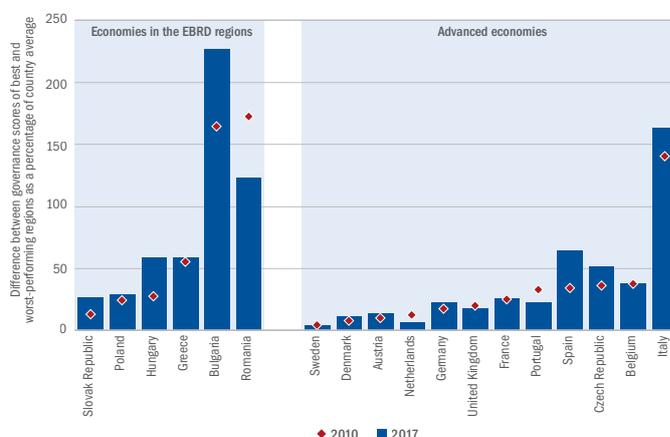
In fact, between 2010 and 2017 intra-country disparities in governance actually increased in more than 70 per cent of all economies for which EQI data are available for that period (a sample which includes both economies where the EBRD invests and advanced economies; see Chart 2.8). In Bulgaria, for instance, variation in the quality of governance rose sharply, with governance improving in the south-west (including Sofia) and the north-central region, while the north-east and south-central regions fell further behind. Gaps also widened significantly in Spain, with the quality of governance falling in the south (Andalusia and Valencia) as perceptions of bribery and special treatment in public services increased, while several northern regions (Cantabria, Navarra and Basque Country) experienced improvements. Disparities increased in the Czech Republic, too, with Prague, Jihovýchod and Central Moravia experiencing significant gains, while the north-western border region consistently lagged behind.<sup>6</sup>

## Rising variation in subnational governance: further evidence from household and firm-level surveys

Similar patterns showing rising variation in subnational governance can also be seen in household and firm-level surveys with global coverage. In the case of the Gallup World Poll, a global household survey,<sup>7</sup> intra-country differences at regional level explain around 10 per cent of total variation in perceptions of governance across the EBRD regions (see Box 2.2 for details of this analysis). Cross-country differences explain a further 13 per cent, and the rest can be attributed to differences in responses across individuals *within* each region (with a small share being explained by age, gender and other observable individual characteristics; see Chart 2.9). Similar patterns can be observed in the perceptions of the business environment that are reported by firms in the context of the Enterprise Surveys conducted by the World Bank, the EBRD and the EIB.

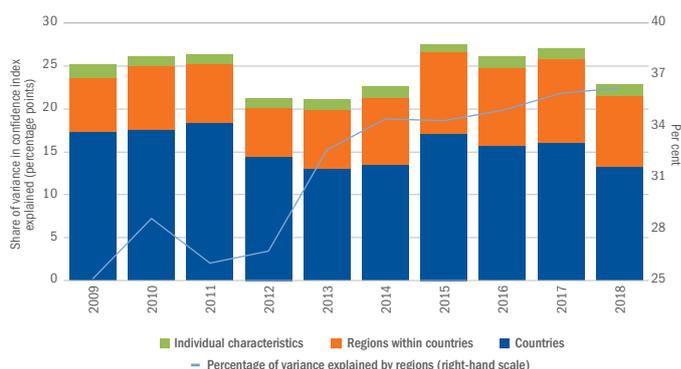
In terms of individual features of the business environment, regional differences matter most for business licensing, access to land and other aspects that tend to fall within the remit of regional governments, as well as infrastructure, the quality of which tends to vary significantly across regions (see Chart 2.10).

**CHART 2.8.**  
Subnational differences in institutional quality increased between 2010 and 2017



Source: European Quality of Government Survey and authors' calculations.

**CHART 2.9.**  
Subnational differences explain an increasing share of total variation in perceptions of governance



Source: Gallup World Polls and authors' calculations.  
Note: Based on conditional variance decomposition.

<sup>5</sup> More generally, while spillovers from one region to another over time are difficult to identify directly, regions with better governance tend to be near other regions with good governance. Within countries, regions that are further from the capital tend to have worse governance, although this effect is not statistically significant when controlling for stocks of human and physical capital (which may themselves reflect the quality of governance, as discussed in Chapter 1).

<sup>6</sup> See also Charron and Lapuente (2018).

<sup>7</sup> See Chapter 1 for details.

The share of variance in individuals' perceptions of governance that is explained by regional differences has also been increasing over time (see Chart 2.9). This trend is not driven by changes in regional composition, since the regions covered by Gallup World Polls are nearly identical across different survey rounds.

This increase in the importance of regional factors may, in part, reflect the increased devolution of decision-making authority to lower levels of government, coupled with more limited decentralisation of funding (which will result in more binding financing constraints). Growing regional inequality (see Chart 2.11) and greater disparities between the fortunes of urban and rural areas (and even booming and struggling cities) may also be playing a role.<sup>8</sup> The next section quantifies the costs of such regional governance gaps for regions that are falling further behind.

## The governance dividend at regional level

As at national level, regional governance has implications for firms' performance and individuals' well-being and job opportunities. These, in turn, translate into substantial differences in terms of regions' economic growth.

## Path dependence of regional institutions

Improvements in governance at regional level can increase a region's growth rate by making it easier to attract investment and skilled labour to the region, as well as by increasing the productivity of existing resources. In Russia, for instance, it has been shown that improved access to credit only leads to firm-level innovation and greater firm-level productivity in regions with relatively good governance.<sup>9</sup> Stronger growth, on the other hand, could itself attract investment, which could, in turn, result in improvements to institutions and the business environment at a local level.<sup>10</sup> Such reverse causality may reinforce the positive impact that stronger institutions have at subnational level, but it also presents a fundamental difficulty in terms of identifying the effect that improved institutions have on growth.

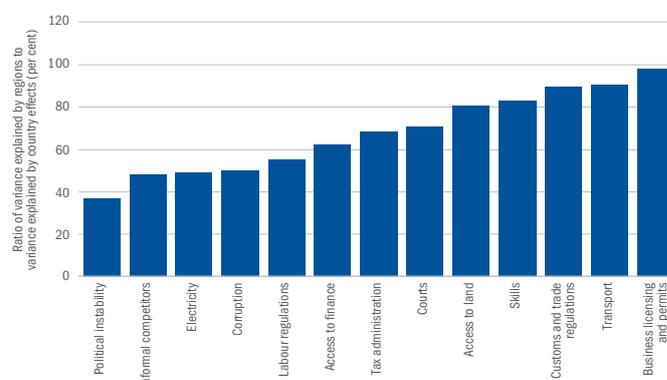
The strongly persistent nature of institutions can help us to address this problem.<sup>11</sup> For instance, Ottoman rule had lasting negative effects on financial development and social norms relating to trust in south-eastern Europe.<sup>12</sup> Habsburg rule, in contrast, has had a positive legacy in terms of lower incidence of corruption.<sup>13</sup>

Thus, former empires have the potential to exert significant influence on institutions (as also illustrated in Box 3.1 in EBRD (2013)). On the other hand, keeping the quality of institutions constant, an imperial past is unlikely to have a direct effect on regional growth or residents' well-being today. Nor would former empires be affected by economic activity today, making them plausible instruments in regressions. Unlike the country-level

**IN OVER  
80%  
OF THE ECONOMIES  
IN THE EBRD REGIONS  
THAT ARE COVERED BY  
THE EUROPEAN QUALITY  
OF GOVERNMENT  
SURVEY, SUBNATIONAL  
DIFFERENCES  
IN GOVERNANCE  
INCREASED BETWEEN  
2010 AND 2017**

**CHART 2.10.**

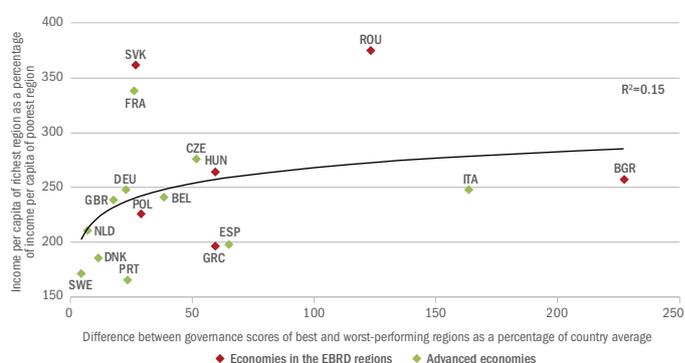
Subnational differences are most pronounced when it comes to business licensing



Source: Enterprise Surveys (2018-19) and authors' calculations.

**CHART 2.11.**

Larger disparities in governance are associated with higher levels of regional income inequality



Source: European Quality of Government Survey, OECD and authors' calculations.  
Note: The line shows the logarithmic trend line.

<sup>8</sup> See IMF (2019) and AfDB et al. (2019).

<sup>9</sup> See Bircan and De Haas (2019).

<sup>10</sup> See, for instance, Long et al. (2015) for evidence from China.

<sup>11</sup> There is a large body of literature exploring the long-term legacies of historical institutions and their impact on economic outcomes. See, for instance, Acemoglu et al. (2001, 2011), Acemoglu and Johnson (2005), Dimitrova-Grajzl (2007) and Djankov et al. (2003).

<sup>12</sup> See Grosjean (2011a, 2011b).

<sup>13</sup> See Becker et al. (2016).

analysis in Chapter 1, the subnational analysis in this chapter can exploit the fact that the borders of former empires run across several countries today, and country-level institutions can be controlled for in these cases. Subnational variation can then be used to estimate the causal effects that regional governance has on regional growth.

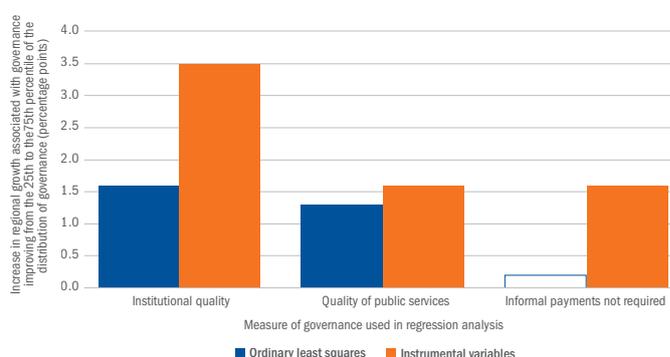
## 1.7 PERCENTAGE POINTS ANNUAL GROWTH DIVIDEND IF GOVERNANCE IMPROVES FROM THE LEVEL SEEN IN ROMANIA'S WORST-PERFORMING REGION TO THAT OF ITS BEST-PERFORMING REGION

### Regional governance has a large impact on regional growth

Analysis based on the path dependence of institutions confirms that improvements in regional governance have a large impact on regional growth (see Chart 2.12). For instance, improving the level of governance from that observed in Romania's worst-performing region (Sud-Est, in the south-east of the country), to that of its best-performing region (Sud-Muntenia, the region surrounding – but not including – Bucharest) would increase regional growth by about 1.7 percentage points a year. Over time, this differential results in a very large cumulative impact on per capita income. Over an individual's working life, this growth differential is sufficient to lift Hungary's GDP per capita to the level of Spain, or to lift Serbia's to that of Poland. Estimates based on the informal payments that firms in Enterprise Surveys report having to make in order to obtain various types of authorisation yield an effect of a similar magnitude: moving to the level of informal payments that is observed in a country's best performing region would boost income growth per capita by an average of 1.6 percentage points a year.

As in the case of country-level governance, institution building at regional level is a challenging task, despite the large economic dividend that is associated with superior institutions. Indeed, the largest improvement observed in the EQI sample between the first survey round in 2010 and the most recent round in 2017 is only about half the size of the difference between the best and

**CHART 2.12.**  
Regional governance has a large impact on regional growth



**Source:** Enterprise Surveys, Eurostat, European Quality of Government Survey, OECD, World Bank and authors' calculations.

**Note:** Based on the regression of regional growth on the quality of regional governance (instrumented using dummy variables based on the boundaries of former empires in Europe). Specifications control for investment, the share of the labour force with tertiary education, the ratio of the young and the old to the working-age population, a dummy variable indicating whether the country's largest city is at least twice the size of its second largest, and country-level corruption. Results are robust to controlling for country fixed effects instead of country-level corruption. Data on institutional quality and the quality of public services are taken from the European Quality of Government Survey; data on informal payments are taken from the Enterprise Surveys. Hollow bars denote effects that are not significant at the 5 per cent level. Standard errors are clustered at country level.

worst-performing regions in that particular country. The growth dividend that is associated with the improvements in regional governance that can actually be seen in the EQI data is about 0.9 percentage point a year. This is broadly similar to the country-level governance dividend that is estimated in Box 1.7, noting that the time period that is available to track improvements in regional governance is significantly shorter than that used to identify major improvements to institutions at country level.

Examination of a number of episodes involving large improvements in municipal and regional governance, as reflected in EQI data, points to several common features. In many of these cases, the municipalities and regions in question have scaled up public participation in decision-making, for instance through closer coordination with non-governmental organisations (NGOs) or participatory approaches to budgeting. In Gdansk, for example, residents vote directly on how to spend part of the city's budget, with chosen projects including a new bike park next to a school and a sports field.<sup>14</sup> Many also feature improved coordination with neighbouring municipalities – sometimes across borders, as in the case of Ruse, the biggest Bulgarian port on the River Danube, and Giurgiu, which lies across the river on the Romanian side. The ability of municipalities to leverage available external funding programmes has also played an important role in supporting improvements to the quality of municipal services.

<sup>14</sup> See Garski (2016).

## Improvements to regional governance also boost firms' employment growth

The superior growth performance of well-governed regions is based on superior outcomes at the level of individual firms. Better regional governance could, for instance, reduce the amount of uncertainty that is faced by firms, thereby supporting investment and employment growth. Firm-level regressions can be used to estimate the impact that governance has on employment growth while controlling for the size of the firm, the sector and other firm-level characteristics. Here, a single firm's performance is unlikely to affect regional governance directly, mitigating concerns regarding reverse causality, although as better-performing firms may choose to operate in locations with superior governance – as the analysis of foreign direct investment (FDI) projects later in the chapter suggests – the estimates should be interpreted as correlations rather than evidence of causal effects.

This analysis suggests that improving governance has a large impact on employment. Take the EQI measure of impartiality, for example, which captures things like the extent to which all firms are perceived to be treated equally by tax authorities (see Box 2.1 for details). Lifting the level of impartiality from that observed in Poland's worst-performing region to that observed in its best-performing region (Pomorskie, which includes the city of Gdansk) would increase employment growth by about 2.2 percentage points a year, controlling for regional employment growth and country fixed effects (see Chart 2.13). Older, larger firms also tend to experience weaker employment growth, while those with a business strategy tend to do better (as discussed in more detail in Chapter 3).

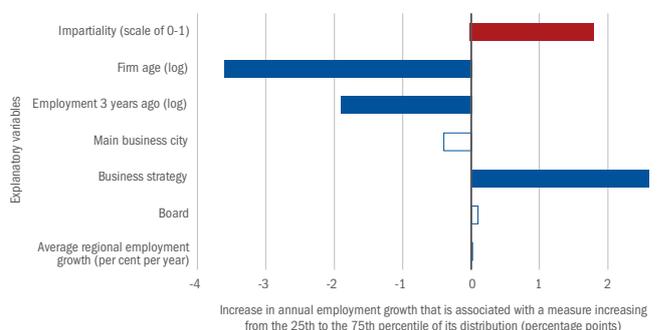
## Improvements in governance increase satisfaction with various municipal services

Higher-quality governance at subnational level is also associated with higher levels of satisfaction with the quality of services provided by municipalities. The results of Gallup World Polls indicate that satisfaction with public goods and services (particularly roads, healthcare and education) is generally lower in the EBRD regions than it is in advanced European economies. Regional-level regressions similar to those examining the impact that regional governance has on regional growth can be used to estimate the impact that governance has on satisfaction with such public goods and services. Chart 2.14 shows the impact that confidence in government (as captured by Gallup World Polls) has on average satisfaction with services at regional level.

The results of this analysis suggest that increasing confidence in the government from the level observed in Bulgaria's worst-performing region to the level observed in the country's best-performing region would increase the percentage of people who were satisfied with roads by 1.8 percentage points, corresponding to about 40 per cent of the gap observed between those two regions in terms of satisfaction with roads.

**CHART 2.13.**

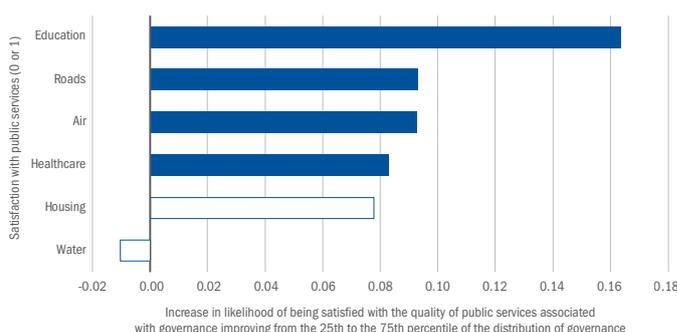
Regional governance has a large impact on firms' employment growth



**Source:** Enterprise Surveys (2018-19), European Quality of Government Survey and authors' calculations.  
**Note:** Firm-level regressions of employment in the EBRD regions, including country fixed effects. Hollow bars denote effects that are not significant at the 5 per cent level. Standard errors are clustered at country level.

**CHART 2.14.**

Regional governance also affects satisfaction with services



**Source:** Gallup World Polls and authors' calculations.  
**Note:** Confidence in the government is instrumented using former empire dummy variables at the level of subnational regions. Specifications control for the logarithm of average regional income per capita in US dollars, the average regional employment rate and country fixed effects. Hollow bars denote effects which are not significant at the 5 per cent level. Standard errors are clustered at country level.

**2.2**  
**PERCENTAGE**  
**POINTS A YEAR**  
**EMPLOYMENT**  
**GROWTH DIVIDEND**  
**IF IMPARTIALITY**  
**IMPROVES FROM**  
**THE LEVEL OBSERVED**  
**IN POLAND'S**  
**WORST-PERFORMING**  
**REGION TO THAT OF ITS**  
**BEST-PERFORMING REGION**

## Regional governance also has a large impact on individual well-being

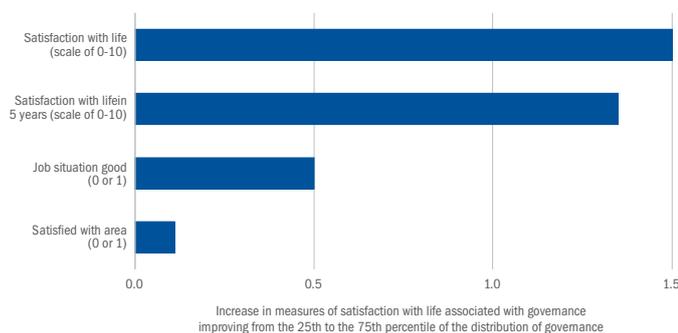
Like governance at country level, superior governance at regional level is also found to improve individual well-being, beyond its impact on per capita incomes, and the estimated impact is again large. Regressions similar to those described above can be used to estimate the impact that governance has on current satisfaction with life and expected satisfaction with life in five years' time (both measured on a scale of 0 to 10), as well as the percentage of the region's population who think that the job situation in their area is good or who are satisfied with their area (see Chart 2.15). All specifications take account of the level of development of the various regions, any characteristics that are common across all regions of a country, and regions' average employment rates.

Improved governance has a large impact on satisfaction with life. For instance, increasing confidence in the government from the level observed in Hungary's worst-performing region to that of its best-performing region would increase average regional satisfaction with life by about 1.3 points on a scale of 0 to 10 – more than 1 standard deviation of satisfaction with life in this sample. Similar results can be obtained using individual-level regressions controlling for a range of individual and regional characteristics, as well as measures of individuals' propensity to complain (see the discussion of the "kvetch effect" in Chapter 1).

The analysis in this section has looked at the performance of firms and life satisfaction of individuals who already reside in a given region. The next section examines the ways in which regional governance can influence the actions of individuals and firms when they are deciding where to reside.

**CHART 2.15.**

Regional governance has a large impact on individual well-being



Source: Gallup World Polls and authors' calculations.

Note: Confidence in the government is instrumented using former empire dummy variables at the level of subnational regions. Specifications control for the logarithm of average regional income per capita in US dollars, the average regional employment rate and country fixed effects. All effects are significant at the 5 per cent level. Standard errors are clustered at country level.

## Subnational competition for resources

In particular, the analysis below shows that people are more likely to want to leave regions with inferior governance, and that regions with superior governance are more successful in attracting foreign investment.

### Improvements in regional governance reduce residents' intentions to leave the area

As Box 1.2 in Chapter 1 showed, improvements in country-level governance reduce people's intentions to emigrate. What is more, regional analysis of intentions to emigrate reveals that, within countries, those intentions are most pronounced in the regions with the weakest governance. For instance, increasing confidence in the government from the level observed in Bulgaria's worst-performing region to that observed in Bulgaria's best-performing region would reduce the percentage of individuals who wanted to emigrate by about 1 percentage point, even after taking into account regional differences in income per capita and labour market conditions. This accounts for almost a fifth of the gap observed between those two regions in terms of average intentions to emigrate.

At the same time, outward migration is also likely to change the profile of regions' populations and workforces. The young and the better educated tend to be more able and willing to leave. Mobility is lowest among the unemployed.<sup>15</sup> A decline in the population as a result of outward migration can make the provision of local public goods and services hard to sustain. Having too few school-age children, for example, may result in the closure of schools in small settlements, resulting in further outward migration by people who are dependent on schooling, leading to a vicious circle of population decline and dissatisfaction with the quality of public services. Conscious policy efforts may be needed to address such instances of regional decline.<sup>16</sup>

### Better regional governance helps to attract foreign direct investment

Like individuals, firms can also choose their place of residence. Domestic firms, for example, choose where to launch a start-up or expand. Indeed, Amazon turned the selection of the location for its second headquarters in the United States of America into a competition, with extensive coverage in the media. Similarly, foreign firms that are considering entering a new market may be undecided regarding the precise location of production.

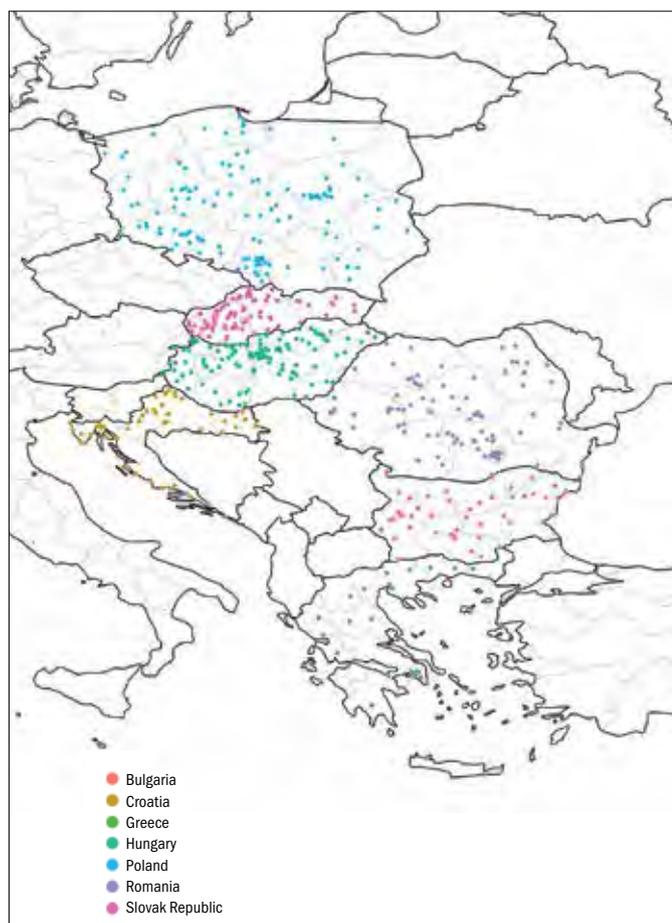
This section uses project-level data on the location of greenfield FDI projects in seven economies in the EBRD regions for which EQI scores are available. Those data, which are taken from the Financial Times' fDi Intelligence database, are used to

<sup>15</sup> See, for instance, Bound and Holzer (2000), Diamond (2016), Greenwood (1975), Hornbeck and Moretti (2018), Long (1988), Malamud and Wozniak (2012), Notowidigdo (2013) and Wozniak (2010). See also Aksoy and Poutvaara (2019) on self-selection of refugees.

<sup>16</sup> See AfDB et al. (2019) for a discussion of this issue.

**CHART 2.16.**

Locations of greenfield FDI projects



Source: fDi Intelligence and authors' calculations.

Note: Based on the locations of the 500 most recent projects in Bulgaria, Croatia, Greece, Hungary, Poland, Romania and the Slovak Republic.

IF CONFIDENCE IN THE GOVERNMENT IMPROVED FROM THE LEVEL SEEN IN BULGARIA'S WORST-PERFORMING REGION TO THAT OF ITS BEST-PERFORMING REGION, THE PERCENTAGE OF PEOPLE WANTING TO EMIGRATE WOULD DECLINE BY

**1**

**PERCENTAGE POINT**

examine the impact that *regional* governance has on the location of FDI within countries, taking into account various characteristics of projects, as well as country-specific factors (as countries with higher-quality institutions have been shown to receive more FDI projects).<sup>17</sup> Chart 2.16 shows the locations of the 500 most recent projects in each of the seven countries (Bulgaria, Croatia, Greece, Hungary, Poland, Romania and the Slovak Republic). Each location is, in turn, mapped to a NUTS 2 region.

<sup>17</sup> For more on the impact that institutions have on FDI, see, for instance, Belgibayeva and Plekhanov (2019), Gliberman and Shapiro (2002), Javorcik and Wei (2009) and Kinda (2010).

**AROUND HALF OF ALL GREENFIELD FDI PROJECTS IN EMERGING EUROPE RELATE TO RETAIL TRADE, TRANSPORT EQUIPMENT, INFORMATION AND COMMUNICATION TECHNOLOGY OR THE GENERATION OF ELECTRICITY**

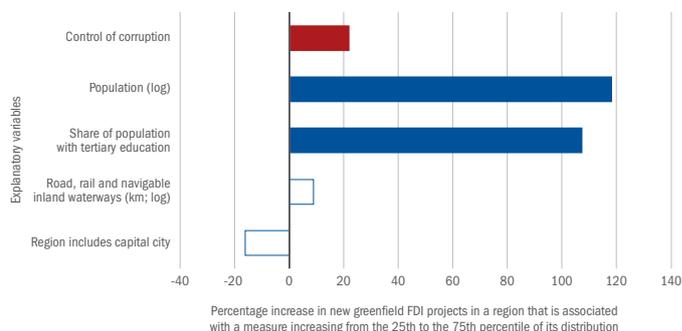
About half of all greenfield FDI projects in these countries relate to retail trade, transport equipment, information and communication technology or the generation of electricity. About a fifth originate in Germany, and the next largest source country is the United States of America (which accounts for 14 per cent of projects). A typical (median) project generates about 90 jobs, though the estimated impact on employment ranges from 4 to 3,000 jobs. Examples of recent projects include a new Lufthansa maintenance and servicing centre in north-eastern Hungary, a number of investment projects around Krakow and Katowice in Poland focusing on software development, and the expansion of car and car component factories in western areas of the Slovak Republic.

Regression analysis can be used to relate the logarithm of the number of projects in each NUTS 2 region (plus one) to the economic size of the region, its endowments in terms of human and physical capital (including measures of transport infrastructure), a dummy variable indicating whether the region contains the country's capital city, and country fixed effects. In order to mitigate reverse causality concerns (that is to say, concerns that FDI inflows may help to improve regional governance), measures of institutional quality derived from EQI data for 2010, 2013 and 2017 are used to predict FDI inflows in subsequent years. (For instance, the institutional quality that is measured in 2010 is used to predict the number of greenfield projects in the period 2011-13.) Given the limitations of relying on lagged variables to identify causal effects, we can also use alternative specifications to examine the links between regional governance and FDI locations, with former empires acting as instruments for regional governance. The results of that alternative analysis point to similar effects.

Improved regional governance has a large impact on a region's ability to attract FDI projects (see Chart 2.17). In Romania, for instance, differences in institutional quality between the south-east of the country (Romania's worst-performing region in terms of perceived control of corruption) and central Romania (its best-performing region) more than account for the difference observed in the numbers of FDI projects in those regions. In line with the large body of

**CHART 2.17.**

**Regions with better governance attract more greenfield FDI projects**



**Source:** Eurostat, fDi Intelligence and authors' calculations.

**Note:** Based on regression of the logarithm of the number of greenfield FDI projects (plus one) per NUTS 2 region in Bulgaria, Croatia, Greece, Hungary, Poland, Romania and the Slovak Republic on institutional quality (as derived from the European Quality of Government Survey), various regional characteristics and country fixed effects. Hollow bars denote effects that are not significant at the 5 per cent level. Standard errors are clustered at country level.

literature on the drivers of FDI, regions with a larger stock of human capital are also found to attract more greenfield FDI.

The quality of regional governance appears to matter more for projects with high levels of capital expenditure, where subsequent relocation may be more costly. In particular, regions with lower perceived corruption in business receive significantly larger amounts of total capital investment across greenfield FDI projects. This is consistent with the results reported in Box 1.7 in Chapter 1, where gross fixed capital formation was found to be the main driver of the growth dividend associated with improvements in the quality of economic institutions. The quality of governance is also more important for new projects than for the expansion of existing projects. The impact is most pronounced in the transport sector and is not statistically significant in the case of the retail sector.

**A TYPICAL GREENFIELD FDI PROJECT IN EMERGING EUROPE GENERATES ABOUT 90 JOBS**

## Conclusion

The quality of governance varies significantly, not just across countries, but also within them, partly reflecting differences in the quality of public goods and services delivered by municipalities. Municipalities in the EBRD regions are typically responsible for waste collection, wastewater treatment, the water supply and pre-school education, as well as the provision of a range of other public goods and services. As the funding of these expenditure responsibilities tends to be fairly centralised, municipalities in the EBRD regions are more likely to regard financing as an obstacle to municipal investment than their counterparts in advanced European economies. Some variation in the quality of governance across regions stems from differences in the enforcement and implementation of nationwide regulations. In general, countries with lower levels of subnational spending and countries with weaker average governance tend to have larger intra-country disparities in the quality of governance.

Strikingly, intra-country disparities in terms of governance have been increasing in most countries, contrary to the hopeful view that good governance practices might gradually “trickle down” from pioneer regions to the rest of the country. Growing disparities across regions in terms of the perceived quality of governance could, in part, reflect increases in the devolution of expenditure responsibilities to lower levels of government, coupled with more limited decentralisation of funding. Other factors include rising income inequality across regions within countries and growing disparities between the fortunes of urban and rural areas (and even prosperous and struggling cities). In areas that are lagging behind, relatively poor governance, weak economic growth and outward migration by skilled residents can reinforce one another in a vicious circle.

While subnational differences in governance undoubtedly pose challenges, they also represent an opportunity – an opportunity to strengthen governance at the local level despite weaknesses in terms of country-level governance. The findings of this chapter suggest that improving regional or municipal governance could result in a large payoff in terms of regional growth (with that impact totalling 1 percentage point a year in per capita terms), which can be traced back to the performance of individual firms.

Superior governance at municipal and regional level is also associated with higher levels of individual well-being, in addition to any effect that this might have on income. Furthermore, competition for resources among regions creates strong incentives to strengthen governance at subnational level. Better-governed regions attract more (and larger) greenfield foreign investment projects, and individuals living in those regions are less likely to emigrate.

Various policies could help to improve governance at regional and municipal level, even in the absence of improvements to country-level institutions. Benchmarking the performance of regions and municipalities could both strengthen incentives to improve governance and provide opportunities to disseminate best practices more widely, thereby reducing red tape and increasing the transparency of the regulatory process. Case studies involving major improvements in municipal governance point to the importance of stakeholder participation in decision-making. At country level, such policies could be supported by fostering constructive inter-regional competition for investment, supporting coordination and ensuring that municipal-level investment projects with high economic rates of return are able to secure financing.

**BOX 2.1.**

**MEASURING GOVERNANCE AT REGIONAL LEVEL**

The analysis in this chapter is based on several different measures of governance at regional level – two survey-based measures of the governance perceptions and experiences of households, and a measure based on the perceptions and experiences of firms.

**European Quality of Government Index**

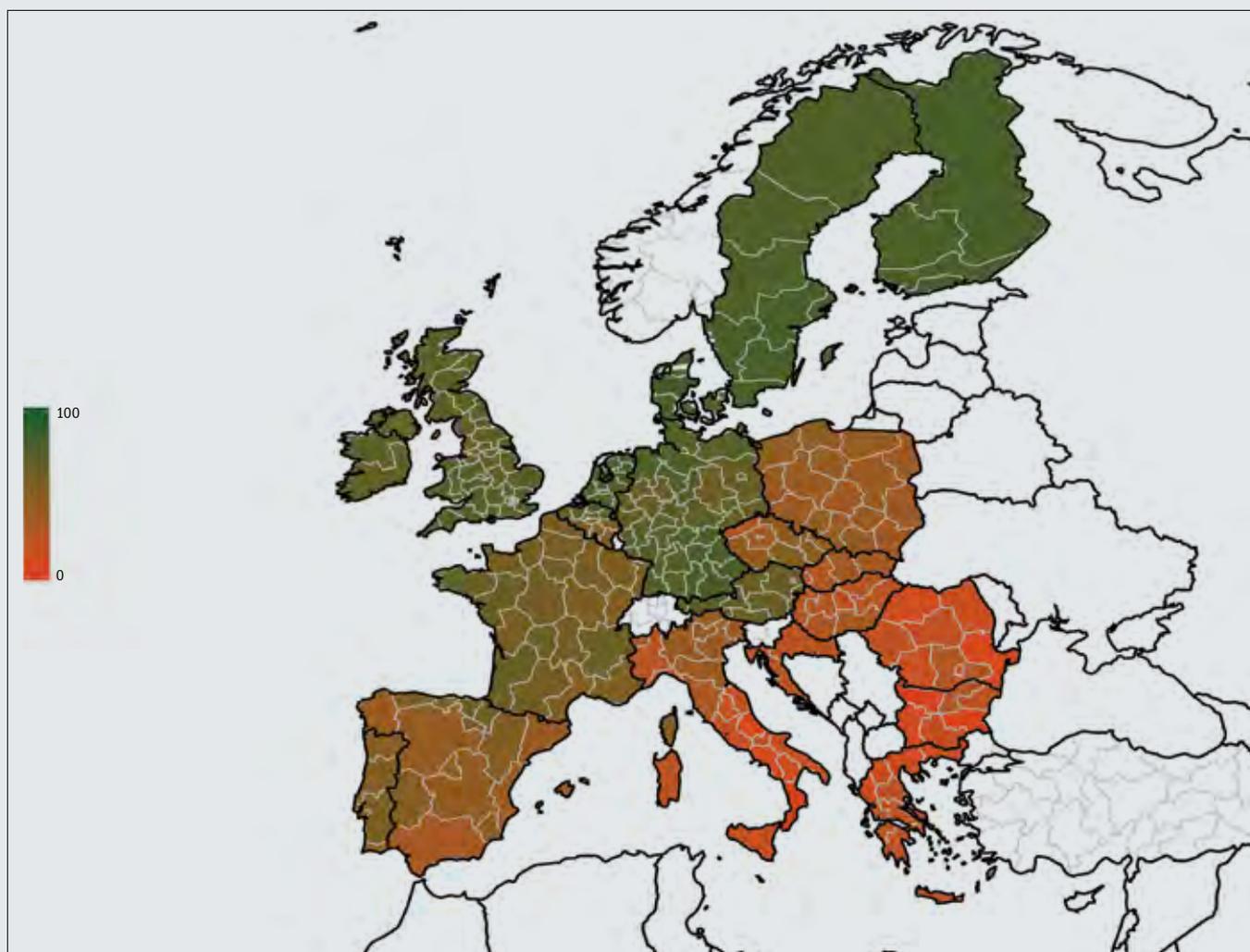
The European Quality of Government Index is based on surveys ascertaining the perceptions and experiences of individual residents and provides data at NUTS 2 region level for 7 economies in the EBRD regions and 14 European comparators for the years 2010, 2013 and 2017.

An overall index of institutional quality has been constructed on the basis of two subpillars measuring the quality and impartiality of public services and a third subpillar measuring perceptions and experiences of corruption. The “quality” subpillar has been established by aggregating respondents’ assessments of the quality of public education, public healthcare and policing in the local area. The “impartiality” subpillar has been constructed by aggregating opinions as to whether certain people are given special advantages when it comes to public education, public healthcare and policing in the local area and whether all citizens are treated equally in the provision of such public services and in dealings with tax authorities.

Lastly, the “corruption” subpillar examines both perceptions and experiences of corruption. It takes account of respondents’ views as

**CHART 2.1.1.**

Intra-country variation in EQI data for 2017



Source: European Quality of Government Survey and authors’ calculations.

to whether corruption is prevalent in their local public school system, public healthcare system and police force. Respondents are also asked whether people in their area need to engage in some form of corruption simply to gain access to basic public services, whether corruption is used to obtain special unfair privileges and wealth, and whether the respondent or someone in their family has given (or been asked to give) an informal gift or bribe to a public official working in the area of education, healthcare or policing or any other service area in the last 12 months. Participants are also asked if elections in their area are free from corruption.

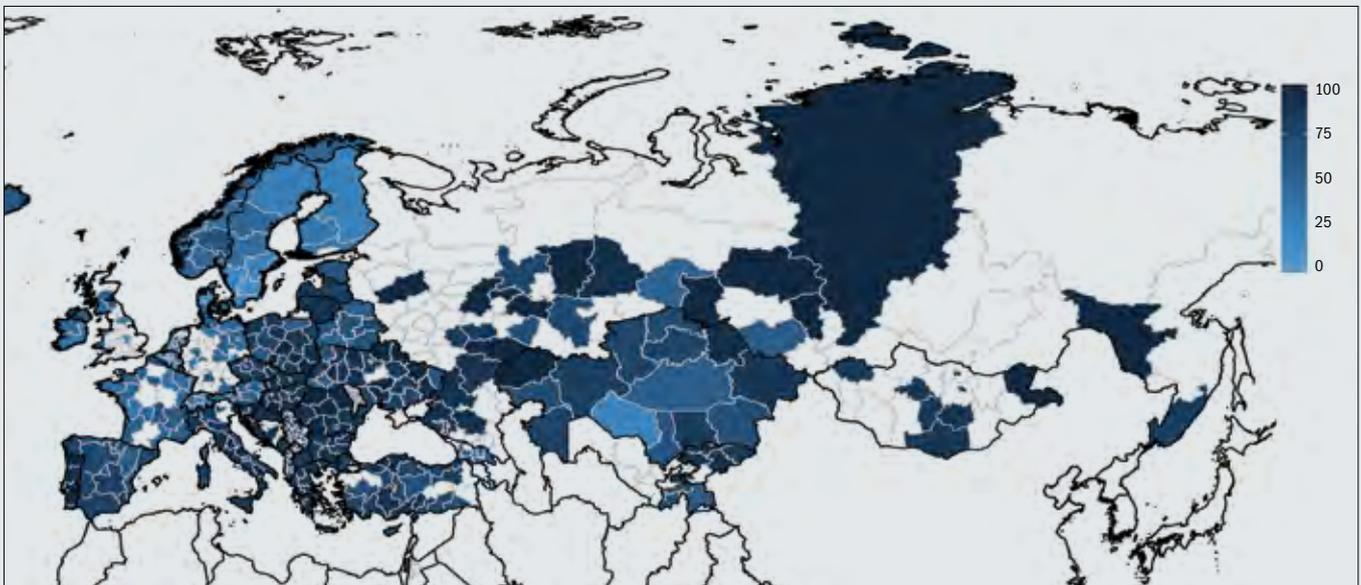
The index reveals high levels of intra-country heterogeneity as regards the overall measure of governance (see Chart 2.1.1). Higher values for the index, which has a scale of 0 to 100, correspond to superior governance.

### Gallup World Polls

Gallup World Polls are used as an alternative measure of individuals' perceptions of corruption in business and government (see Chart 2.1.2) and their confidence in institutions such as the judicial system, courts and the national government. Households' locations are used to construct regional averages of governance perceptions on the basis of whether respondents have confidence in the judicial system, courts and the national government, and whether they believe that corruption is widespread within the government and in businesses located in their country.

#### CHART 2.1.2.

The percentage of individuals who believe that corruption is widespread within businesses varies from region to region within countries



Source: Gallup World Polls (2016 data) and authors' calculations.

Note: Some regional averages are missing, as descriptions of geographical locations were not specific enough to assign individuals to NUTS 2 regions.

**BOX 2.2.****ESTIMATING THE SHARES OF VARIANCE THAT ARE EXPLAINED BY REGIONAL AND COUNTRY-LEVEL FACTORS**

Variance decomposition can be used to disentangle the effect that national and regional characteristics have on confidence in institutions as expressed in Gallup World Polls and firms' perceptions of the business environment as reported in Enterprise Surveys. The analysis in this box is based on various approaches proposed by Gibbons et al. (2014).

Consider a regression model where a measure of governance as perceived by a firm or individual in a given region within a given country is explained by a set of country dummy variables, a set of region dummy variables (with a base region dropped in every country) and a number of characteristics of the firm (or individual) that may have an impact on perceptions of the business environment (such as the age of the firm, the sector in question or the gender of the most senior manager). This equation can be estimated using ordinary least squares.

**The raw variance share**

An upper-bound estimate of the percentage of variance that is explained by country-level effects is the  $R^2$  in a regression of the governance indicator on the set of country dummies, with regional dummies omitted. When the residuals from this regression are regressed on the regional dummies, the  $R^2$  yields, in turn, the raw variance share of the regional effects. If the regional, country-level and individual characteristics of the firm that are relevant for perceptions of the business environment are correlated, the raw variance share overestimates the amount of variance that is explained by the country-level (and regional) characteristics.

**The uncorrelated variance share**

The uncorrelated variance share is the percentage of variance that can only be explained by country level or regional characteristics. It is calculated as the difference between (i) the  $R^2$  of a regression of perceptions of the business environment on country dummies and firm-level characteristics and (ii) the  $R^2$  of a regression that only includes firm-level characteristics as covariates. This represents a lower-bound estimate of the percentage of variance that can be attributed to cross-country differences in economic institutions. As before, to obtain the regional variance share, the residuals from the first-stage regression are used.

**The correlated variance share**

A similar exercise can be performed by including various firm-level characteristics in the regressions above at both the first and second stages. The resulting estimates of the variance shares of country-level and regional effects are referred to as correlated variance shares. These are the values that are reported in this chapter. The results for the raw and unconditional variance shares are qualitatively similar.



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# 3

## FIRM-LEVEL GOVERNANCE



The quality of corporate governance – the system of rules and practices by which companies are directed and managed – is critical in a well-functioning market economy. Firms that have better governance and management practices are significantly more productive than equivalent firms with weaker governance. The quality of governance varies greatly across companies in the EBRD regions, tending to be higher in foreign-owned firms

and companies that face stronger product market competition. Firm-level practices and the quality of economic and political institutions at national level both need to evolve in order to ensure that company directors and managers maximise firm value. In particular, weak governance at national level will make owners reluctant to delegate the running of their companies to professional managers.



## Introduction

Governance at firm level is all about the rules, practices and processes that determine the relationships between shareholders, the board of directors, senior managers and other employees. A firm constitutes a partnership between outside investors, who contribute financial capital, and the company's management and employees, who operate the firm and contribute human capital.<sup>1</sup> A successful company will require both types of capital and use formal arrangements to combine the two in an efficient manner. Good governance practices can help to align the incentives and interests of companies' owners, management and employees, thereby helping to solve the "agency problem" that arises from the separation of firms' ownership and control.<sup>2</sup>

This chapter looks at how businesses can achieve good governance practices. It begins by presenting findings from the EBRD's Corporate Governance Sector Assessment, which discusses the state of play in the EBRD regions in terms of legislation, regulations and industry practices in the area of corporate governance. It then uses data from the latest wave of Enterprise Surveys, which includes special modules on the quality of management and the use of senior managers' time (see Chapter 1). The results of those surveys are consistent with a plethora of studies across various countries showing that good governance practices raise firm-level productivity, thereby increasing the value of firms. Although this chapter focuses on firms' maximisation of shareholder value, contemporary assessments of corporate governance are also increasingly emphasising the importance of stakeholder value – a concept that encompasses the interests of consumers and society as a whole.

The analysis in this chapter reveals a close relationship between the various aspects of firm-level governance. For instance, data from the latest round of Enterprise Surveys indicate that firms which are located in countries with higher scores in terms of the EBRD's Corporate Governance Sector Assessment tend to have better management practices. Moreover, senior

managers of firms in those countries also tend to use their time more efficiently.

This chapter argues that firm-level differences in performance are, in part, driven by differences in the formal arrangements that determine the ways in which financial capital and human capital are combined. It points to several factors driving variation in management practices and senior managers' use of time.

The first thing to note is that ownership of companies matters. Across the EBRD regions, affiliates of multinational companies consistently outperform domestically owned firms when it comes to the quality of management practices. And among domestically owned firms, listed companies tend to be better managed than firms owned by families or individuals.

Family-owned companies often appoint family members to senior management roles, rather than recruiting managers externally. The analysis in this chapter finds that family members are less efficient than professional managers when it comes to allocating working hours to different parts of the business. At the same time, weaknesses in governance at national level can make owners reluctant to delegate the running of their companies to professional managers.

Competition can also have a transformative effect on firms' governance. Domestically owned firms that engage in international trade tend to have better management practices, as do firms that face strong competition in product markets. Less onerous labour regulations also appear to facilitate the adoption of good management practices.

<sup>1</sup> See Brealey et al. (2014).

<sup>2</sup> See Shleifer and Vishny (1997) for an overview of this issue.

## Governance at firm level

### Firms' shareholder value

Corporate governance is generally defined as the system of rules, practices and processes by which companies are directed and controlled. These formal arrangements determine the manner in which the owners and shareholders of a company interact with its board (which typically includes non-executive and independent directors, in addition to managers), as well as governing interaction between the board and the managers responsible for running the company.

Corporate governance is often regarded as helping suppliers of finance to ensure that companies' managers invest funds responsibly and return profits.<sup>3</sup> The provision of such "shareholder value" is widely considered to be the chief goal of a firm, and this view of corporate governance is written into law in both the United States of America and the United Kingdom.<sup>4</sup>

### A broader take on corporate governance

However, it is often suggested that firms should adopt a more inclusive perspective on governance, looking beyond shareholder value. The concept of "stakeholder value", for instance, takes account of the interests of all stakeholders in a company, including workers, customers and suppliers, as well as environmental issues. Indeed, it is worth noting that shareholders themselves may have objectives other than the maximisation of profits.<sup>5</sup> Where the various objectives embedded in stakeholder value contradict each other (for instance, when it comes to the maximisation of profits and customers' right to privacy), managers may face difficult trade-offs.

### Good corporate governance in practice

When companies reach a certain size and need to raise capital outside their close-knit network of initial shareholders and founders, or when the business becomes more complex, more formal governance arrangements are required. This is especially true of situations where external finance takes the form of equity investment.

In such companies, shareholders often delegate their responsibilities as supervisors and strategic decision-makers to an independent board of directors. The role of the board is to help management – often the firm's founders – to put in place the necessary processes to allow a company to grow, strengthening investors' trust and ensuring that risks are kept under control. For instance, in the case of a family business with multiple owners, investors may insist on the establishment of a board to drive the firm for the benefit of all shareholders and avoid conflicts between family members.

Boards are instrumental in providing strategic guidance to management and ensuring that managers follow that strategy within the agreed budget and risk envelope. An effective board of directors will set measurable performance targets for management and regularly evaluate performance against those targets.

Evidence from a recent survey of non-executive directors who have served on the boards of companies where the EBRD holds an equity stake suggests that local legislation can help in this regard, revealing that directors who feel adequately empowered by local legislation play a stronger role in the company's strategic decision-making.<sup>6</sup>

### Minimising the costs of agency

A firm's corporate governance structure should be designed to minimise the costs that are associated with misalignment between the interests of owners and managers.<sup>7</sup> For instance, senior managers may seek to maximise their own wealth, prioritising short-term objectives (such as next year's profits) at the expense of shareholders, who may take a longer-term view and place greater emphasis on R&D, for instance.

Such agency problems stem from an imperfect flow of information. Companies' boards delegate the authority to implement strategic decisions to management, in part because management teams running firms' day-to-day operations have better access to relevant information. However, the advantage that managers gain from having this information complicates external supervision of the company by the board or the annual general meeting of shareholders.<sup>8</sup> In particular, it may be hard for shareholders to decide whether a dissenting view put forward by a firm's management is rooted in managers' superior access to relevant information or managers' personal interests.

For this reason, a company's shareholders and creditors will insist on a set of governance practices to ensure that managers' behaviour remains aligned with their interests. One such practice is incentive-based pay, whereby shareholders offer managers remuneration packages that tie their pay to the firm's long-term performance.

Another is the establishment of an independent board of directors, which should consist of qualified individuals who are able to challenge management and ensure that they act in the long-term interests of the company (which may sometimes be different from the interests of the controlling shareholder). In this way, independent boards are able to provide a fresh perspective on a company's future that controlling shareholders might not have. They can also help to shield corporate decision-making from any conflicts of interest between shareholders and managers. At the same time, various studies have found strong links between high levels of diversity on boards and good corporate performance.<sup>9</sup> When pursued in isolation, incentive-based pay, independent directors and other corporate governance practices may not succeed in aligning stakeholders' interests. But when they are pursued in combination, they often do.<sup>10</sup>

<sup>3</sup> See Shleifer and Vishny (1997).

<sup>4</sup> See Brealey et al. (2014).

<sup>5</sup> See Hart and Zingales (2017).

<sup>6</sup> See De Haas et al. (2019).

<sup>7</sup> See Jensen and Meckling (1976).

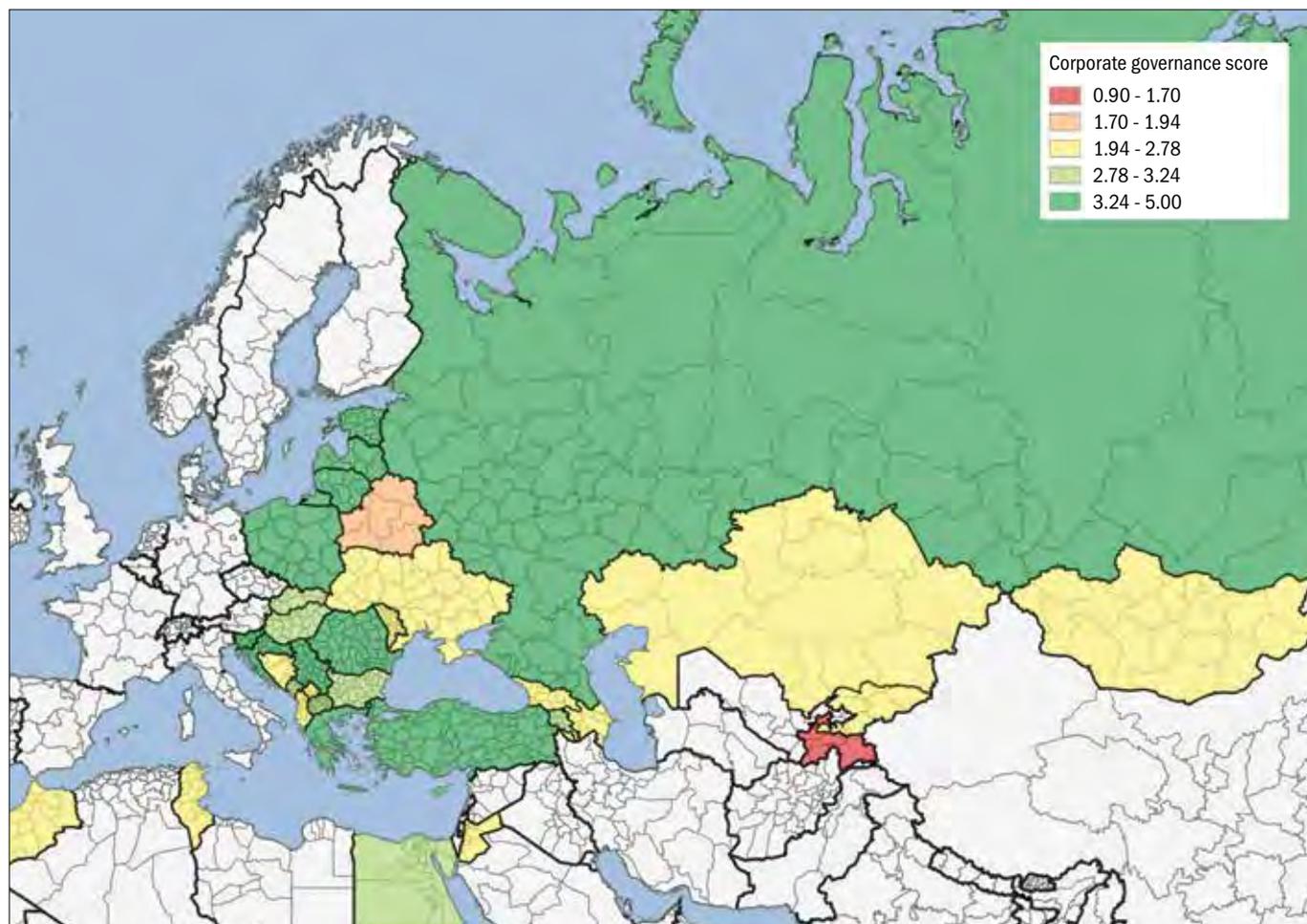
<sup>8</sup> See Tirole (2017).

<sup>9</sup> See Bernile et al. (2018).

<sup>10</sup> See Tirole (2017).

**CHART 3.1.**

Corporate Governance Sector Assessment scores in the EBRD regions



Source: EBRD Corporate Governance Sector Assessment.

Note: Corporate governance scores (which are on a scale of 1 to 5) are based on the quality of legislation and the quality of the governance practices of the 10 largest listed companies in each country, both of which are assessed relative to international best practices. Higher scores denote superior corporate governance.

## Corporate governance across the EBRD regions

The EBRD conducts regular assessments of the legal frameworks that shape corporate governance in the economies where it invests. These assessments cover the quality of the legal framework in place (including voluntary codes), as well as the extent to which the country’s institutions (courts and regulators, for example) are able to enforce legislation. In order to test the effectiveness of such frameworks and alignment with best practices, this analysis also includes a review of the corporate governance disclosures of the 10 largest companies in each jurisdiction.

**2.9**  
**OUT OF**  
**5**  
**AVERAGE SCORE IN THE**  
**EBRD’S CORPORATE**  
**GOVERNANCE SECTOR**  
**ASSESSMENT**

The most recent assessment of this kind was carried out in 2016 and 2017 and covered 34 countries across the EBRD regions (see Box 3.1). As part of that assessment, a detailed report was produced for each country and scores were calculated detailing the quality of legislation and practices in five areas of corporate governance: structure and functioning of firms' boards; transparency and disclosure; internal controls; rights of shareholders; and stakeholders and institutions. That assessment found significant variation across the EBRD regions in terms of the quality of corporate governance (see Chart 3.1) and highlighted several key weaknesses in the corporate governance systems in question, which was reflected in an average score of 2.9 (on a scale of 1 to 5) across the EBRD regions.

The first thing to note as regards that assessment was that the quality of listed companies' non-financial disclosures was poor, particularly when it came to their own corporate governance. The information that firms provided regarding the composition of boards and their subcommittees (and the qualifications of the people sitting on them) was often insufficient, as was information on companies' compliance with national corporate governance codes.

Second, in almost all countries there were concerns regarding the responsibilities and composition of firms' boards of directors. There were only a handful of countries where boards were clearly assigned, by means of legislation, responsibilities that could be considered key functions of a board of directors. In most cases, such powers continued to be exercised by the general meeting of shareholders, raising fundamental questions about the reasons for having a board in the first place.

Third, the results showed that little attention had been paid to the issue of board-level diversity. There seemed to be a lack of regulatory measures aimed at recognising and addressing this issue, coupled with an absence of good practices, particularly as regards gender diversity. In 19 of the 34 countries covered by the assessment, women made up less than 10 per cent of the boards of the 10 largest listed companies, compared with 29 per cent in the United Kingdom (on the basis of 2018 data for FTSE 100 companies).

Fourth, the roles and required characteristics of independent directors were not typically well defined. Legal frameworks did not generally establish clear expectations as regards the number of independent directors that should sit on firms' boards and the qualities they should have in order to contribute meaningfully to the functioning of the board. Moreover, in many cases the definition of independence was itself found to be inadequate. It was frequently the case that independent directors needed only to be unaffiliated with the company's executives or owners. However, independent directors also need to be highly engaged and demonstrate objectivity of mind in order to challenge executives. In fact, there was very little in listed companies' disclosures which showed that independent directors, and the issue of their independence, were being taken seriously.

Fifth, the assessment also revealed a need to improve internal control systems in many countries. This will involve clarifying

**IN 19  
OUT OF  
34  
COUNTRIES  
COVERED BY  
THE CORPORATE  
GOVERNANCE SECTOR  
ASSESSMENT, WOMEN  
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10% OF THE BOARDS OF  
THE 10 LARGEST LISTED  
COMPANIES, COMPARED  
WITH 29% IN THE  
UNITED KINGDOM**

the positioning and roles of individual control functions (risk management, compliance and internal audit) and strengthening the role of boards' audit committees. The responsibilities of an audit committee will typically include overseeing the financial reporting process, reviewing audits with management and external auditors, and discussing possible risk exposures and mitigation with management.

## Measuring the quality of management practices

How does good governance at firm level translate into increases in the value of firms on a day-to-day basis? And given the benefits of good governance, why do owners of successful businesses often find it hard to adopt sound corporate governance practices?

In order to gain insight into these questions, the analysis in this chapter uses preliminary data on more than 18,000 firms taken from the latest round of Enterprise Surveys conducted by the World Bank, the EBRD and the EIB (see Chapter 1 for details). As part of that survey round, respondents (all of whom were either senior managers or owners of firms) answered a set of detailed questions about their business planning and strategies, their management practices (for firms with at least 20 employees) and the use of senior managers' time (for firms with at least 50 employees).

The questions on management practices (which cover everything from the number of key performance indicators (KPIs) used by a firm to the links between promotion decisions and business outcomes) can be used to ascertain a firm's core business practices as regards operations, monitoring, targets and incentives.<sup>11</sup> Operational KPIs typically include measures of customers' satisfaction with a company's main product or service, while financial KPIs include net profit margins, returns on assets and returns on equity. The questions about management

<sup>11</sup> See Bloom et al. (2012) and EBRD (2014).

**MORE THAN  
80%  
OF TOTAL VARIATION  
IN THE QUALITY OF  
MANAGEMENT ACROSS  
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BE EXPLAINED BY  
DIFFERENCES BETWEEN  
COUNTRIES OR SECTORS**

practices also capture the extent to which companies are well organised in terms of developing a sound business plan and executing it in a way that enables the board or shareholders to monitor progress against that plan. On the basis of firms' answers to these questions, the quality of their management practices can be given a rating. For example, the management score is higher if a firm monitors more KPIs or the remuneration of senior managers is linked to progress against KPIs. Similarly, firms are given a higher score if a large number of managers and workers are aware of production targets.

## Measuring the use of senior managers' time

Senior managers – typically the CEO, although official titles vary across firms – also answered questions on how many meetings they had with suppliers, other senior managers and employees involved in production activities in a typical week, how many people attended those meetings and how long those meetings took. Research shows that CEOs' answers to such questions can be used to ascertain their leadership style – that is to say, whether they are “managers”, who primarily implement specific tasks or monitor their implementation, or “leaders”, who foster organisational alignment and improve communication between various stakeholders.<sup>12</sup>

Various studies have found that CEOs who style themselves as “leaders” tend to contribute more to firms' performance than those who act as “managers”. In this regard, meetings with senior executives and participation in longer meetings with large numbers of participants tend to constitute efficient use of a senior manager's time, as opposed to time spent with suppliers and workers involved in production.

Answers to questions about a specific management practice (such as monitoring) are aggregated to form a single score and normalised such that they have a mean of 0 and a standard deviation of 1. The sum of the scores for the various individual management practices, which are also normalised with a mean of 0 and a standard deviation of 1, represents the final overall “z-score”. A positive value for that z-score denotes performance that is better than the sample average. Scores assessing the use of CEOs' time are constructed in a similar manner.

## Positive correlation between national corporate governance frameworks and the quality of firms' management

The quality of firms' management varies greatly across countries. In countries with stronger legislative guidelines regarding corporate governance and countries where listed firms follow such guidelines, as reflected in the EBRD's Corporate Governance Sector Assessment scores, firms also tend to score more highly in terms of management practices. A similar relationship can be observed for senior managers' use of time. These correlations are stronger for listed companies, which tend to have larger and more complex operations.

Subindicators used in the Corporate Governance Sector Assessment reveal that shareholder protection can explain almost a third of total variation in the average quality of management across countries. Indeed, increasing shareholder rights from the level seen in Hungary to that observed in Greece is associated with an increase in the average management score totalling 80 per cent of a standard deviation. That is a large increase, equivalent to two-and-a-half times the difference between foreign-owned and domestically owned firms in terms of the average quality of management (with foreign-owned firms tending to be better managed, as discussed below). That differential in the quality of management is, in turn, associated with a 1.3 per cent boost to labour productivity, as analysis later in the chapter will show.

Similarly, cross-country differences in the structure and functioning of boards can explain around a quarter of total variation in the average quality of management practices. These cross-country relationships suggest that the scores for management practices and senior managers' use of time that are obtained from Enterprise Surveys are also indirectly indicative of the quality of corporate governance at firm level (which is not observed for individual firms in Enterprise Surveys).

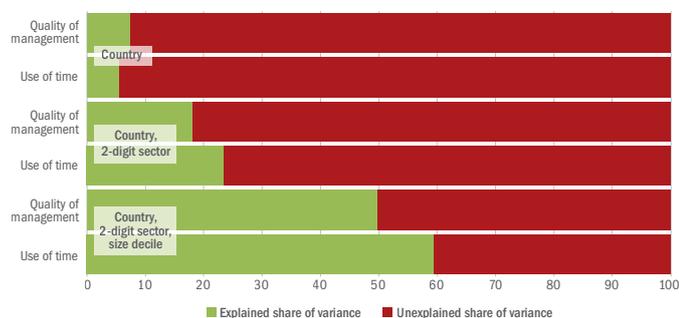
## Quality of management varies significantly within individual economies

The quality of firms' management also varies significantly within each individual country, particularly in emerging markets. Indeed, more than 80 per cent of total variation in the quality of management across firms cannot be explained by differences between countries or sectors (see Chart 3.2; manufacturing firms tend to have better management practices than firms in the services sector). Around half of all intra-country and intra-sector variation in management practices can be explained by firm size, as larger businesses tend to have more formal arrangements governing the setting of targets, their monitoring and the management of operations, as well as having various firm-level characteristics discussed in the next subsection.

<sup>12</sup> See Bandiera et al. (2017).

**CHART 3.2.**

The quality of firms' management and the use of senior managers' time vary greatly within countries



Source: Enterprise Surveys and authors' calculations.

Note: This chart shows the shares of variance in firm-level scores for quality of management and use of senior managers' time that are explained by different combinations of country, sector and firm size fixed effects.

**IN A FIELD EXPERIMENT  
LOOKING AT TEXTILE  
MANUFACTURERS  
IN INDIA, THE  
IMPLEMENTATION  
OF MANAGEMENT  
CONSULTANTS'  
RECOMMENDATIONS  
IMPROVED LABOUR  
PRODUCTIVITY BY  
17%  
IN A YEAR**

## Management as a production technology

Existing studies leave little doubt as to the importance of management for firms' performance. A survey of more than 11,000 firms from 34 countries over 15 years documents a robust positive correlation between management practices and various measures of efficiency, such as labour productivity.<sup>13</sup> Similarly, senior managers and key employees within a firm play a major role in determining the quality of management practices and the firm's level of performance.<sup>14</sup> Moreover, analysis of data on firms from 30 countries in emerging Europe and Central Asia taken from the previous wave of Enterprise Surveys suggests that management practices can be more important than the introduction of new products or the importing of foreign technology when it comes to raising productivity levels in lower-income economies.<sup>15</sup>

Importantly, rather than being a simple correlation, the relationship between the quality of management and firms' performance is likely to be causal. In a field experiment involving textile manufacturers in India, the implementation of management consultants' recommendations resulted in labour productivity increasing by 17 per cent in a year.<sup>16</sup> In another study where access to management consultancy services was granted in a randomised manner, improvements in management had a positive impact on total factor productivity and profitability for SMEs across a range of industries in Mexico.<sup>17</sup>

Recent work suggests that differences in management practices account for nearly a third of overall differences in total factor productivity – the efficiency with which physical capital, human capital and materials are combined to produce final goods.<sup>18</sup> These differences add up at country level: the average quality of management is higher in the United States of America and other advanced economies than it is in emerging markets (including those where the EBRD invests).

**TABLE 3.1.**

Better management practices are associated with higher output per worker

Dependent variable	Sales per worker (log)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Use of time (z-score)	0.110*** (0.034)					0.102*** (0.035)	0.092** (0.036)
Quality of management (z-score)		0.155*** (0.016)			0.143*** (0.018)		0.135*** (0.018)
R&D spending (percentage of total costs)			0.073*** (0.027)		0.058** (0.027)	0.065** (0.026)	0.056** (0.027)
Skilled workers (percentage of total workers)				0.106*** (0.037)	0.096*** (0.037)	0.095*** (0.036)	0.092** (0.037)
Observations	3,274	3,274	3,274	3,274	3,274	3,274	3,274
R <sup>2</sup>	0.704	0.705	0.704	0.704	0.707	0.706	0.708

Source: Enterprise Surveys and authors' calculations.

Note: Estimated using ordinary least squares. Regressions control for the logarithm of firm age, a set of dummy variables (indicating the number of employees by decile of the distribution, whether the firm is a listed company, whether it is foreign-owned and whether it is state-owned), industry fixed effects (at two-digit ISIC level) and country fixed effects. Standard errors are shown in parentheses, and \*, \*\* and \*\*\* denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively.

<sup>13</sup> See Bloom et al. (2016).

<sup>14</sup> See Bertrand and Schoar (2003), Bennis et al. (2007), Kaplan et al. (2012), Bandiera et al. (2017) and Bloom et al. (2019a).

<sup>15</sup> See EBRD (2014) and Bartz-Zuccala et al. (2018).

<sup>16</sup> See Bloom et al. (2013).

<sup>17</sup> See Bruhn et al. (2018).

<sup>18</sup> See Bloom et al. (2016).

In this sense, good management and decision-making can be regarded as part of a firm's production technology.<sup>19</sup> In the most recent wave of Enterprise Surveys, higher-quality management and more efficient use of CEOs' time are strongly associated with greater output per worker, even after taking into account the firm's sector, age and size, whether or not it is a listed company and the type of ownership (see Table 3.1). Specifically, a 1 standard deviation improvement in the quality of management can raise output per worker by 16 per cent. A similar improvement in the use of a senior manager's time raises output per worker by 11 per cent. These effects are greater than the estimated impact of conceivable increases in a firm's expenditure on R&D or human capital (measured as the percentage of workers with university degrees).

Many best practices in the area of management (such as the monitoring of KPIs) have been the subject of numerous studies and seem easy to apply. Many also have cost risk profiles superior to those of investment in R&D, innovation, the upgrading of skills and plenty of other measures that are commonly used to enhance productivity. And yet, many firms still choose to refrain from improving their management practices. The next section explores the reasons for such decisions.

## What explains differences in firm-level governance?

### Foreign-owned firms tend to be better managed

Some of the differences that are observed in the quality of management across firms may be related to company ownership. In most countries, affiliates of multinational companies generally have better management than other firms, as parent companies often export their management styles to their foreign subsidiaries. Family-owned domestic firms, on the other hand, tend to have weaker management than other domestically owned private firms (such as listed companies or firms that are owned by private equity funds or institutional investors).<sup>20</sup>

In emerging markets, dynastic family firms tend to play a more important role in the economy than they do in high-income countries. In such firms, ownership and senior management roles pass from one generation to the next within a family, partly owing to weaker legal protection of outside investors in companies.<sup>21</sup> Firms owned by families and individuals account for 74 per cent of all the companies located in the EBRD regions that participated in the most recent round of Enterprise Surveys. They also account for 57 per cent of all employment provided by those companies (see Chart 3.3). Ownership structures vary from economy to economy

**TABLE 3.2.**

#### Determinants of the quality of firms' management practices

Dependent variable	Quality of management (z-score)		Use of time (z-score)			
	(1)	(2)	(3)	(4)	(5)	(6)
Domestic private firm	-0.187*** (0.064)	-0.118* (0.064)	-0.157* (0.092)	-0.127 (0.081)		
Managed by family					-0.152** (0.076)	-0.137* (0.076)
Partially state-owned	-0.108 (0.121)	-0.116 (0.098)		-0.394*** (0.143)		
Strategy		0.216*** (0.047)		0.041 (0.055)		0.059 (0.066)
Board		0.070 (0.052)		0.080** (0.041)		0.059 (0.064)
Experienced senior manager		0.031 (0.039)		0.033 (0.042)		-0.095 (0.064)
Not credit-constrained		-0.032 (0.035)		-0.034 (0.059)		0.070 (0.091)
Exporter		0.104*** (0.037)		0.018 (0.058)		0.120 (0.094)
Importer		0.178*** (0.042)		0.023 (0.072)		-0.079 (0.101)
Part of a group of companies		0.070 (0.049)		0.133*** (0.051)		0.190* (0.109)
Observations	6,170	6,170	3,124	3,124	1,101	1,101
R <sup>2</sup>	0.116	0.143	0.102	0.107	0.144	0.155

Source: Enterprise Surveys and authors' calculations.

Note: Estimated using ordinary least squares. Regressions control for the logarithm of the number of employees, the logarithm of firm age, whether or not the firm is a listed company, industry fixed effects (at two-digit ISIC level) and country fixed effects. The base category is foreign-owned firms. Standard errors are reported in parentheses, and \*, \*\* and \*\*\* denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively.

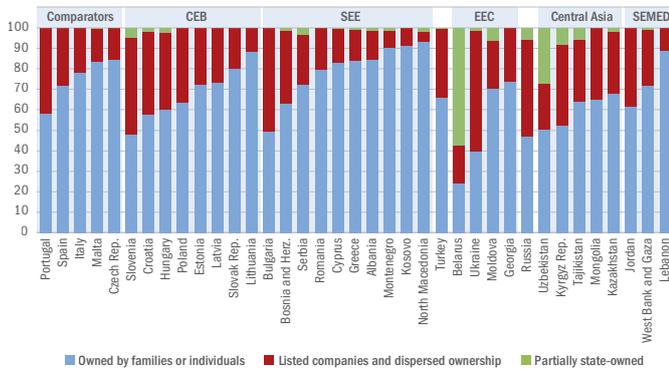
<sup>19</sup> See Bloom et al. (2016).

<sup>20</sup> See Bloom and Van Reenen (2010) and Bloom et al. (2014).

<sup>21</sup> See La Porta et al. (1998) and Aminadav and Papaioannou (2019).

**CHART 3.3.**

Firms owned by families and individuals account for a large percentage of corporate employment in the EBRD regions



Source: Enterprise Surveys and authors' calculations.

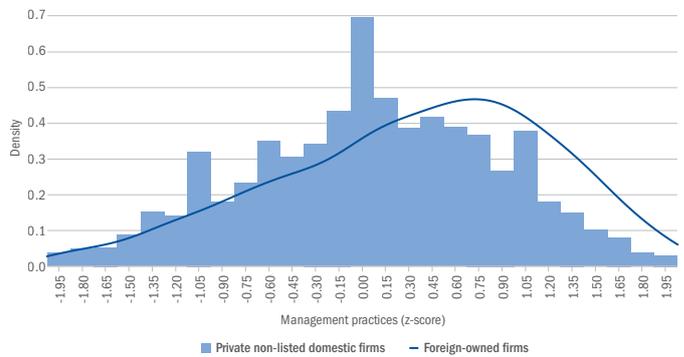
across the EBRD regions. Firms with dispersed ownership and listed companies are more common in central Europe and the Baltic states (CEB), while firms that are partially owned by the state account for a larger percentage of total firms in Belarus and Uzbekistan. (Firms that are owned entirely by the state are excluded from the Enterprise Surveys.) It is worth noting in this regard that many people in the EBRD regions believe that the state should have primary responsibility for providing jobs (see Box 3.2).

The quality of management tends, on average, to be significantly higher in foreign-owned firms than it is in domestic firms (see Chart 3.4). Indeed, the difference between the average quality of management in foreign-owned firms and private non-listed domestic firms totals 32 per cent of a standard deviation. These differences are more pronounced in the southern and eastern Mediterranean (SEMED), Central Asia and Turkey, reflecting the weaker management practices of domestic firms located in those economies (see Chart 3.5). In central and south-eastern Europe, domestic firms tend to be managed better, although there is still a gap relative to foreign-owned firms (see Chart 3.6). Only a small part of the difference between foreign-owned and domestic firms can be explained by the industries in which firms operate, their size, their age, whether they are listed on a stock exchange and other firm-level characteristics (see Table 3.2).

**FIRMS OWNED BY FAMILIES AND INDIVIDUALS ACCOUNT FOR 74% OF ALL THE COMPANIES LOCATED IN THE EBRD REGIONS THAT PARTICIPATED IN THE MOST RECENT ROUND OF ENTERPRISE SURVEYS**

**CHART 3.4.**

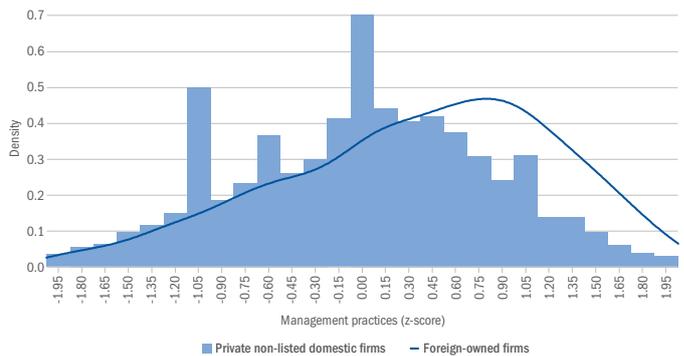
Foreign-owned firms tend to have better management practices



Source: Enterprise Surveys and authors' calculations.

**CHART 3.5.**

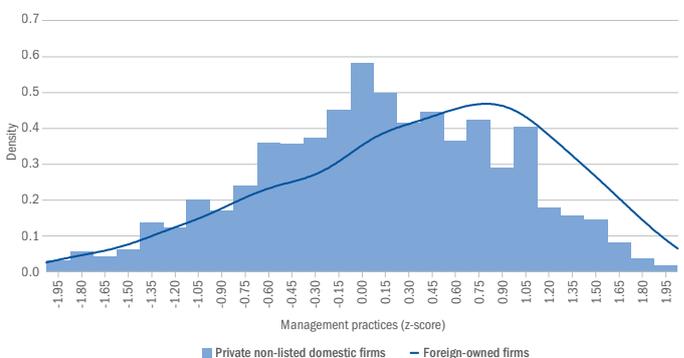
Differences between foreign-owned and domestic firms in terms of the quality of management are more pronounced in the SEMED region, Turkey and Central Asia



Source: Enterprise Surveys and authors' calculations.

**CHART 3.6.**

Differences between foreign-owned and domestic firms are less pronounced in central and south-eastern Europe



Source: Enterprise Surveys and authors' calculations.

## The quality of management practices varies significantly across partially state-owned companies

Firms that are partially owned by the state also tend to score poorly in terms of senior managers' use of time (see Table 3.2). This may be caused by poor practices in terms of the appointment of managers in such companies (see Box 3.3). The quality of management varies significantly across partially state-owned companies covered by the Enterprise Surveys, with some firms scoring highly and others scoring poorly. Easy access to funding, resulting in greater use of debt relative to equivalent private firms, may also blunt incentives to strengthen the quality of management in badly managed partially state-owned companies (see Box 3.4).

## Firms with a clear strategy tend to have better management practices

Firms that have a clear written business strategy also tend to score more highly in terms of management practices (see Chart 3.7). Perhaps unsurprisingly, foreign-owned firms are more likely to have a written strategy: 66 per cent of them do (on the basis of responses to the most recent round of Enterprise Surveys), compared with 41 per cent of domestic firms. Foreign-owned firms are also twice as likely to have a board of directors: 60 per cent of them do, compared with 30 per cent of domestic companies. That being said, companies with a board of directors do not necessarily do better than other firms in terms of the quality of management. This highlights the importance of boards being able to effectively supervise management, as discussed in the previous section.

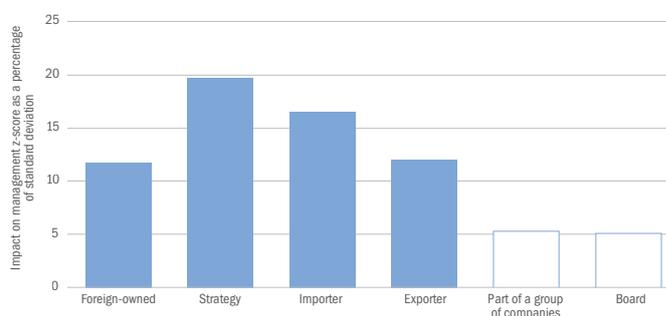
## Competition helps to improve management practices

Analysis of firms participating in the Enterprise Surveys also shows that companies that are involved in international trade (either as exporters or importers) tend to have better management practices. (A total of 63 per cent of foreign-owned firms in the sample export, compared with 26 per cent of domestic firms.) In part, this reflects the higher levels of competition that are faced by firms with cross-border operations.

More broadly, firms that face greater competitive pressures in the markets where they operate tend to have better management practices. With firms reporting the number of competitors that they have as part of the Enterprise Surveys, the level of product market competition can be measured as the percentage of firms in a given subnational region that have at least 10 competitors. (Overall, more than 60 per cent of surveyed firms fall into this category.) This analysis reveals that firms which operate in regions with higher levels of competition tend, on average, to have significantly higher management scores (see Table 3.3).

**CHART 3.7.**

Firms that are engaged in international trade tend to have better management

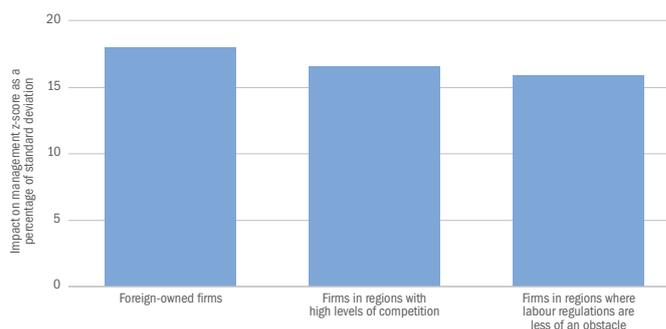


Source: Enterprise Surveys and authors' calculations.

Note: Based on the estimates reported in Table 3.2. Hollow bars denote effects that are not significant at the 5 per cent level.

**CHART 3.8.**

Firms operating in regions with stronger competition and a more favourable business environment tend to be better managed



Source: Enterprise Surveys and authors' calculations.

Note: Estimates are based on regressions similar to those reported in Table 3.3 and are significant at the 5 per cent level. Regions with high levels of competition are those where the percentage of firms that report having at least 10 competitors exceeds the median across all regions. Regions where labour market regulations are less of an obstacle are those where the extent to which labour market regulations are regarded as an obstacle is, on average, less than or equal to the median across all regions.

Competitive product markets reduce the scope for managerial slack and encourage managers to adopt best practices applied by their peers in order to remain profitable. Equally, low levels of competition, coupled with regulations that restrict the application of good management practices, allow bad management to persist.<sup>22</sup> At the same time, competition's ability to discipline managers may be limited where a firm's investment represents a sunk cost and managers use the resulting resources irresponsibly despite competitive pressures.<sup>23</sup>

The degree of product market competition can directly affect firms' ownership structures and governance choices. For instance, firms that operate in more competitive environments tend to have more dispersed ownership.<sup>24</sup> This is because competition increases businesses' need to raise equity capital externally, reducing the benefits of private control of a firm.

## Favourable business environments support good management

Research suggests that business-friendly regulations (such as the right-to-work laws in the United States of America, which regulate agreements between employers and labour unions) may enable firms to adopt better management practices.<sup>25</sup> Regression analysis finds some evidence of such effects in the EBRD regions. Domestic firms located in regions where firms tend, on average, to regard labour regulations as less of a constraint on their operations tend to be better managed (see Table 3.3 and Chart 3.8).

## Professional managers do a better job than family members

Senior managers and key employees have a strong influence on firms' management practices and performance.<sup>26</sup> In global surveys of management practices, family-owned firms that are run by professional CEOs do better than family-owned firms where senior managers come from within the family.<sup>27</sup> CEOs who are family members work 9 per cent fewer hours than professional CEOs at family-owned firms, according to a study of more than 1,000 firms across six countries. This difference in working hours accounts for 18 per cent of the performance gap between family-run and professionally run firms.<sup>28</sup>

Data from the Enterprise Surveys indicate that professional managers of domestic family-owned firms tend to make better use of their time than managers who are members of the family (see Table 3.2), with the difference between the average time use scores of the two groups of managers standing at around 15 per cent of a standard deviation. Consistent with this evidence, family successions (whereby management of a firm is transferred from one family member to another) are estimated to result in a decline of at least 6 percentage points in the profitability of the firm.<sup>29</sup>

And yet, only 17 per cent of family-owned firms in the EBRD regions are run by professional managers. Why are family-owned firms so reluctant to hire professional managers?

**TABLE 3.3.**

### Institutional determinants of the quality of firms' management

Dependent variable	Quality of management (z-score)			Use of time (z-score)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Domestic private firm	-0.187*** (0.064)	-0.180*** (0.065)		-0.157* (0.092)	-0.153* (0.091)		
Partially state-owned	-0.108 (0.121)	-0.089 (0.108)		-0.385*** (0.148)	-0.385** (0.151)		
Managed by family			0.049 (0.043)			-0.152** (0.076)	-0.158** (0.074)
Competition (regional average)		0.093*** (0.033)	0.114* (0.064)		0.014 (0.039)		-0.042 (0.095)
Favourable labour regulations (regional average)		0.082 (0.098)	0.205*** (0.067)		-0.086 (0.060)		-0.021 (0.123)
Observations	6,170	6,170	2,448	3,124	3,124	1,101	1,101
R <sup>2</sup>	0.116	0.122	0.115	0.099	0.103	0.144	0.145

Source: Enterprise Surveys and authors' calculations.

Note: Estimated using ordinary least squares. Regressions control for the logarithm of the number of employees, the logarithm of firm age, whether or not the firm is a listed company, industry fixed effects (at two-digit ISIC level) and country fixed effects. Competition is measured as the average percentage of firms operating in the same subnational region that report having at least 10 competitors. Standard errors are reported in parentheses, and \*, \*\* and \*\*\* denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively.

<sup>22</sup> See Bloom and Van Reenen (2010) and Bloom et al. (2016).

<sup>23</sup> See Shleifer and Vishny (1997).

<sup>24</sup> See Bena and Xu (2017).

<sup>25</sup> See Bloom et al. (2019a).

<sup>26</sup> See Bertrand and Schoar (2003), Bennedsen et al. (2007), Kaplan et al. (2012) and Bandiera et al. (2017).

<sup>27</sup> See Bloom et al. (2010) and Lemos and Scur (2019).

<sup>28</sup> See Bandiera et al. (2018).

<sup>29</sup> See Bennedsen et al. (2007).

**TABLE 3.4.**

Family-owned companies are more likely to hire professional managers in regions with high levels of trust

Dependent variable	Professional manager		Time use score	
	(1)	(2)	(3)	(4)
High trust (region with above-median trust)	0.029** (0.013)			
High trust * delegation-intensive industry		0.031** (0.015)		
High trust * non-delegation-intensive industry		0.026 (0.023)		
Professional manager			0.278*** (0.103)	
Professional manager * low trust				0.022 (0.174)
Professional manager * high trust				0.393*** (0.076)
Number of observations	1,873	1,873	563	563
R <sup>2</sup>	0.090	0.090	0.209	0.214

Source: Enterprise Surveys and authors' calculations.

Note: Estimated using ordinary least squares. Regressions control for the logarithm of the number of employees, the logarithm of firm age, industry fixed effects (at two-digit ISIC level) and country fixed effects. Subnational regions are divided into high-trust and low-trust regions on the basis of the percentage of respondents in Gallup World Polls who believe that others can be trusted. The list of delegation-intensive industries that has been used for this analysis is taken from Bloom et al. (2012). Standard errors are reported in parentheses, and \*, \*\* and \*\*\* denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively.

## Weaknesses in country-level governance impede delegation to professional managers

One reason why firms' owners may potentially forgo the services of professional managers is low levels of trust, combined with weaknesses in the rule of law. This is because when the rule of law is weak, owners may have little recourse against rogue managers who steal from their firms or otherwise expropriate value.

The analysis below examines the determinants of decisions to delegate the running of family-owned firms to professional managers. For each subnational region, an average is constructed indicating the extent to which respondents in Gallup World Polls (a household survey; see Chapter 1 for details) believe that others in society can be trusted. On the basis of that measure, which is also strongly correlated with measures of confidence in government, regions are divided into high-trust regions (where the percentage of respondents who think that others can be trusted is above the median) and low-trust regions (all other regions).

Family-owned firms operating in high-trust regions are 2.9 percentage points more likely to hire a professional manager than equivalent firms operating in low-trust regions (see Table 3.4). This is a fairly sizeable effect, given that 17 per cent of all firms delegate to professionals. What is more, that figure rises to 3.1 percentage points for firms operating in industries where production technologies require greater delegation of tasks to middle managers (such as the manufacturing of electrical motors, where specialist expert knowledge is required).<sup>30</sup>

Furthermore, professional managers in regions with higher levels of trust appear to make better use of their time than peers in regions with lower levels of trust – presumably because they are, in turn, more able to delegate management tasks to others (see Table 3.4).

In addition to delegation within the firm, the quality of economic institutions will also affect a firm's sourcing decisions, altering the boundaries of the firm by encouraging or discouraging vertical integration of supply chains. In practice, this means that firms may, in a weak legal environment, deviate from the choice of supplier that would have been optimal had institutions been stronger (see Box 3.5).

A lack of access to finance may amplify inefficiencies arising from weak institutions.<sup>31</sup> Where owners prefer to keep management within the firm, regardless of other managerial talent available, talented managers can still take over family firms if they have the vision and skills needed to improve the running of those businesses – provided that they also have access to the funding that is required for a change of ownership. At the same time, a combination of weak institutions and large numbers of family-run firms may also affect the composition of investment at country level (see Box 3.6).

<sup>30</sup> The measure of the intensity of delegation that is used in this analysis has been taken from Bloom et al. (2012).

<sup>31</sup> See Caselli and Gennaioli (2013).

## Learning about good governance and management practices

### Learning from other parts of the firm

The analysis of the quality of management that is reported in Table 3.2 suggests that managers who work for a firm that forms part of a wider group of companies tend to make better use of their time. This suggests that managers can learn about good practices from each other.

Indeed, firms may be run badly because their executives are unaware of good management practices. A study a few years ago looking at firms employing fewer than 1,000 workers in India found that many were unaware of KPIs and other basic management practices.<sup>32</sup> As part of that study, a randomly selected plant within a firm was given advice provided by management consultants, while other plants within the same firm did not receive such advice. A follow-up study conducted several years later revealed that many of the consultants' recommendations had subsequently been implemented at other plants within the firm.<sup>33</sup>

### Movement of managers facilitates dissemination of management practices

Firms can also learn from each other through repeated business interactions with suppliers and customers and as a result of managers moving from one firm to another. Importantly, managers often move across industries. For instance, US data suggest that it is fairly common for managers to move from the production of machinery and equipment to the production of fabricated metal products, supporting the dissemination of good management practices across industries.

Accordingly, firms participating in the Enterprise Surveys that are located in cities which host well managed foreign-owned firms also tend, on average, to be better managed. (Admittedly, the data do not allow the effect of interaction between firms to be separated from the effect of, say, superior local governance, with well-managed firms tending to be located in cities with better governance.)

The dissemination of good management practices that is brought about by the movement of managers works both ways: management expertise may be lost when managers depart, unless companies make specific efforts to ensure that knowledge of good management practices is shared within the firm. The study of management practices in India that was described earlier found that some of the management practices that were introduced with the help of management consultants were subsequently dropped, particularly in instances where the plant manager changed, the CEO and the CFO were busier and the practice in question was not commonly used in other firms.<sup>34</sup>

**17%**  
OF FAMILY-OWNED  
FIRMS IN THE EBRD  
REGIONS ARE RUN  
BY PROFESSIONAL  
MANAGERS

FAMILY-OWNED FIRMS  
OPERATING IN HIGH-  
TRUST REGIONS ARE  
**2.9**  
PERCENTAGE  
POINTS  
MORE LIKELY TO HIRE  
A PROFESSIONAL  
MANAGER THAN  
EQUIVALENT FIRMS  
IN LOW-TRUST REGIONS

<sup>32</sup> See Bloom et al. (2013).

<sup>33</sup> See Bloom et al. (2019b).

<sup>34</sup> See Bloom et al. (2019b).

## Conclusion

This chapter has discussed the importance of corporate governance and examined the ways in which shareholders, companies' boards and managers can work together to maximise the value of firms. The discussion has drawn on the novel Corporate Governance Sector Assessment conducted by the EBRD, as well as a wealth of firm-level data on management practices and the use of senior managers' time that has been collected as part of the latest wave of Enterprise Surveys.

Improvements in governance can be regarded as a relatively low-cost and low-risk way of improving companies' performance by increasing the efficiency with which physical capital, human capital and material inputs are combined to produce goods and services. The EBRD's Corporate Governance Sector Assessment points to several priority areas in terms of boosting the quality of corporate governance in the EBRD regions.

For instance, companies need to be organised in a way that enables boards to effectively supervise decisions taken by management. Having an engaged board of directors and establishing an audit committee comprising independent non-executive directors can go a long way towards ensuring proper disclosure of information and overcoming any frictions that may arise as a result of an imperfect flow of information from managers to directors to shareholders. Moreover, in many countries the enforcement of legislation relating to corporate governance has been found to be relatively weak.

In countries that score more highly in terms of the EBRD's Corporate Governance Sector Assessment, firms tend to have better management practices and firms' CEOs tend to make better use of their time. Foreign-owned firms tend to set the standard in the EBRD regions when it comes to the quality of management. Firms that are exposed to greater competition in product markets (including firms that operate internationally) also tend to have superior governance, as do firms that operate in regions with more business-friendly labour regulations.

It is important to emphasise that there is no one ideal corporate governance system that suits all countries. Successful market economies such as the United States of America, Germany and Japan have very different corporate governance procedures. What they do have in common, however, is significant legal protection for investors, which allows the development of external financing mechanisms. In contrast, weak governance at national level will make owners reluctant to delegate the running of their companies to professional managers.

Recent thinking in the area of corporate governance emphasises that companies should look beyond shareholders and consider the broader interests of stakeholders such as employees and customers. This new approach to corporate governance, which aims to maximise stakeholder value, rather than just shareholder value, should help to create more sustainable and inclusive economies. This could, for instance, involve the monitoring of non-financial outcomes, such as greenhouse gas emissions (see the discussion in Chapter 4), and the establishment of links between those outcomes and managers' remuneration.

### BOX 3.1.

#### EBRD CORPORATE GOVERNANCE SECTOR ASSESSMENT

The EBRD's Legal Transition Team carries out regular Corporate Governance Sector Assessments. These assessments are designed to measure the quality of corporate governance legislation and the effectiveness of its implementation as evidenced by companies' disclosures. They also take account of the ability of a country's institutions (such as courts and regulators) to sustain high-quality corporate governance. The analytical grid that has been developed for the assessment of governance frameworks is based on internationally recognised best practice benchmarks (including the OECD's Principles of Corporate Governance and governance methodologies applied by development finance institutions such as the International Finance Corporation and the World Bank).

For the purposes of this assessment, corporate governance practices are divided into five key areas: (i) structure and functioning of the board; (ii) transparency and disclosure of company information; (iii) internal controls; (iv) rights of shareholders; and (v) stakeholders and institutions. Each of these key areas is, in turn, divided into a number of sections and subsections.

The assessment begins with the sending of a questionnaire to law firms, audit firms, national regulators, stock exchanges and the 10 largest listed companies in terms of capitalisation in each country. Questions differ across the various types of respondent. Respondents are asked to provide information about the legislation that is in force and give details of how that legislation is implemented in practice.

Responses are validated by the EBRD's corporate governance specialists, who look at the applicable frameworks, relevant reports by international financial institutions and the disclosures made by the 10 largest listed companies in each country (on the assumption that those companies will be the ones making the best disclosures in each country). Conclusions are then formulated for each subsection in the form of a score ranging from 1 (very weak) to 5 (strong) reflecting the level of adherence to international governance standards. In addition, a number of adjustments are made to the average scores for the various sections on the basis of a qualitative assessment.

**BOX 3.2.****COUNTING ON THE STATE TO PROVIDE JOBS?**

This box explores people's expectations regarding the role played by the state in terms of the provision of jobs, using data from the 2018 OeNB Euro Survey conducted by Austria's central bank. The sample for that survey comprised 1,000 individuals in each of the following 10 economies: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Hungary, North Macedonia, Poland, Romania and Serbia.

In line with evidence from Gallup World Polls (see discussion in Chapter 1), respondents have fairly limited confidence in economic and political institutions. For instance, nearly 70 per cent of people surveyed believe that most politicians primarily serve the interests of particular groups, while 45 per cent report a lack of trust in the government.

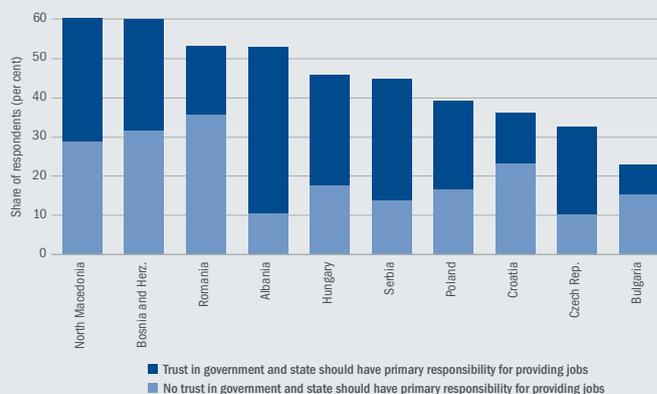
And yet, despite those concerns, about 45 per cent of respondents argue that the state should have primary responsibility for providing jobs (see Chart 3.2.1). Regression analysis reveals that respondents are more likely to expect the state to provide people with jobs if they have lower incomes, lower levels of assets or fewer years of education, have previously worked in the public sector, are reliant on welfare payments or live outside the capital city.

Some of those who expect the state to be the primary provider of jobs have confidence in state institutions, while others do not. When institutions are weak, private firms may find it easier to abuse their market power or political connections. This may result in demand for greater state ownership and regulation, even though people have little confidence in economic institutions.<sup>35</sup> Indeed, around 20 per cent of respondents report a lack of trust in government but still agree that the state should have primary responsibility for providing jobs.

In conclusion, these survey results suggest that support for state intervention in the economy remains relatively strong. Improving the quality of economic institutions and building effective social safety nets can go a long way towards strengthening support for the idea that the private sector should play a greater role in the economy.

**CHART 3.2.1.**

**Many people believe that the state should have primary responsibility for providing jobs**



Source: OeNB Euro Survey and authors' calculations.

Note: Survey respondents were asked who should be responsible for supplying people with work and were given five options: "primarily the state"; "primarily the private sector"; "shared responsibility between the state and the private sector"; "it does not matter, as long as the task is performed to a satisfactory standard"; and "don't know". Respondents who replied "don't know" or declined to answer have been excluded when calculating percentages.

<sup>35</sup> See Aghion et al. (2010).

**BOX 3.3.****CORPORATE GOVERNANCE IN STATE-OWNED ENTERPRISES: BEST PRACTICES AND REALITY**

The quality of corporate governance is of great importance for state-owned firms, which have a significant impact on the rest of the economy through their activities. For example, a recent report found that poor management at EPS, a state-owned electricity company in Serbia, was the cause of a strong decline in its production levels, significantly impairing the economic growth of the entire country.<sup>36</sup> Indeed, the efficiency of state-owned utility companies can have a major impact on the quality and cost of infrastructure used by other firms.

Economic research suggests that superior governance (in the form of independent and well functioning boards and the recruitment of professional managers, for example) will improve operational efficiency at state-owned firms, increasing returns on equity and assets.<sup>37</sup>

In addition, state ownership often involves an inherent conflict of interest, whereby the owner of a company may also be the sector's regulator and have a policy-making role. Against that background, the OECD published Guidelines on Corporate Governance of State-Owned Enterprises in 2005 (and updated them in 2015) with the aim of (i) professionalising the state as an owner, (ii) making state-owned enterprises operate with the kind of efficiency, transparency and accountability that well-functioning private firms exhibit, and (iii) ensuring a level playing field for state-owned and private firms.<sup>38</sup> Those guidelines cover: the rationale for state ownership (clear definition of the state's objectives for state ownership in a public ownership policy document); the state's role as an owner (informed and active ownership with proper governance); the issue of a level

playing field and fair competition with private competitors; equitable treatment of non-state shareholders; stakeholder relations and responsible business; disclosure and transparency (allowing for proper monitoring of state-owned enterprises' activities by the public); and the responsibilities of the boards of state-owned firms (professional management and proper managerial oversight).

As a recent survey by the OECD shows, full compliance with these principles has yet to be achieved in OECD countries. For example, financing is often provided to state-owned firms on non-market terms, while the remuneration of such firms' boards is frequently below market rates.<sup>39</sup>

More significant deviation from those principles can be observed in non-OECD countries in the EBRD regions. Ownership policies are often lacking, allowing ad-hoc political interference in the operations of state-owned firms. Managerial and board appointments are often politicised, with board members lacking appropriate qualifications. For instance, 12 of the 20 largest state-owned enterprises in Serbia have had "acting" managers for periods of up to six years, and those managers have often appeared to have conflicts of interest as members of parliament.<sup>40</sup> Management objectives can be unclear, in some cases prioritising a desire to appeal to governing parties' voter bases over the desire to meet key financial performance targets. Proper disclosure may also be lacking, with annual reports published late and omitting essential information. Regulatory and ownership functions may not be clearly separated, with "independent" regulators biased in favour of state-owned firms. Accordingly, uneven playing fields are common, with state-owned enterprises receiving direct or indirect subsidies and substandard service being tolerated.

<sup>36</sup> See Fiscal Council (2017).

<sup>37</sup> See, for example, Jurkonis and Petrusauskaitė (2014) and Curi et al. (2016) on Lithuania, Miring'u and Muoria (2011) on Kenya, Fan et al. (2014) on China, Menozzi et al. (2012) on Italy, Andrés et al. (2013) on Latin America and the Caribbean, and Heo (2018) on South Korea.

<sup>38</sup> See OECD (2015).

<sup>39</sup> See OECD (2018).

<sup>40</sup> See Richmond et al. (2019).

**BOX 3.4.****STATE OWNERSHIP AND FIRM LEVERAGE**

In countries with good general governance and strong protection for creditors, creditworthy firms will find it relatively easy to attract bank funding. Indeed, there is a large body of literature showing that stronger legal systems with better legal protection for creditors and minority shareholders will have a positive causal impact on the size of a country's financial system.<sup>41</sup> Firms can then use debt to supplement their internal financial resources where those resources are not sufficient to fund all investment projects with a positive net present value.

In such a scenario, firms' leverage – the ratio of debt to equity financing – depends on the intrinsic trade-offs in the area of debt finance. On the one hand, interest expenses are typically tax deductible, whereas dividends are not, favouring debt financing. In addition, if the firm raises external finance via equity, the original shareholders' stakes are diluted, weakening their incentives to maximise value.

On the other hand, though, an excessively high leverage ratio may make the firm more exposed to financial distress. High levels of debt entail large interest payments and, everything else being equal, greater vulnerability to external shocks.

In countries with underdeveloped financial systems, many firms may be credit-rationed or face particularly high interest rates. Governments may then be tempted to take ownership of such firms in order to

ease those credit constraints and use the firms to further a variety of economic or political goals.

There is an extensive body of literature showing that such active government involvement in private companies typically results in significant inefficiencies.<sup>42</sup> This is especially true where state ownership is used to support “national champions” as part of an active industrial policy, help politically connected individuals, or create employment with a view to maximising political support (see Box 3.2 for a discussion of voters' expectations regarding the provision of jobs by the state).

One important effect of state ownership is that it can dramatically change the trade-off between the benefits and risks of taking on more debt. The implicit or explicit bailout guarantees that accompany state ownership can reduce the cost of debt, as banks and other lenders will worry less about firms defaulting on their obligations.

This debt bias may be even stronger if a large percentage of the domestic banking system is also in state hands.<sup>43</sup> Indeed, there are widespread concerns about the ballooning debt of state-owned companies in China and other emerging markets where state banks play an important role in the financial sector.<sup>44</sup>

This box analyses the impact that state ownership has on firm leverage using an extensive dataset detailing ownership of listed firms across 127 countries.<sup>45</sup> State ownership is defined as a situation where the state holds more than 20 per cent of a company's voting rights, but the results below are robust to changes in this threshold.

State-owned companies tend, on average, to have a leverage ratio (defined as total liabilities over total assets) that is about 5 percentage points higher than that of private firms in the same country, sector and year (see column 1 of Table 3.4.1). This is a substantial difference relative to the average leverage ratio of 49 per cent across all firms in the sample. Controlling for firm size, profitability and other characteristics that are known to be correlated with leverage reduces the impact that state ownership has on firm leverage to 2 percentage points (see column 2).

Perhaps the most convincing way of showing the impact that state ownership has on leverage is to look at changes in ownership – that is to say, nationalisations (moves from private to state ownership) and privatisations (moves from state to private ownership). The inclusion of fixed effects in column 3 leaves only firms that experienced such a change in ownership in the period 2004–12. Regression analysis shows that, for that subsample, privatisation is associated with a 2 percentage point reduction in leverage, with nationalisation associated with a 2 percentage point increase, while the average leverage ratio for that subsample is 53 per cent.

Column 4 shows that this effect is driven exclusively by privatisations: when a firm moves from state to private hands, its leverage ratio tends, on average, to drop by about 6 percentage points. This is a substantial difference and shows that when firms cease to be owned by the state and become exposed to market discipline, they reduce their leverage ratios substantially.

**TABLE 3.4.1.**

State-controlled firms have higher leverage ratios

Dependent variable	Leverage (current and non-current liabilities over total assets)			
	All firms		Nationalised/ privatised firms	
	(1)	(2)	(3)	(4)
State control	0.047*** (0.007)	0.015** (0.007)	0.023* (0.013)	
State control (after nationalisation)				-0.007 (0.019)
State control (before privatisation)				0.060*** (0.023)
Firm characteristics	No	Yes	Yes	Yes
Firm fixed effects	No	No	Yes	Yes
Country * sector * year fixed effects	Yes	Yes	No	No
Country * year fixed effects	No	No	Yes	Yes
Sector * year fixed effects	No	No	Yes	Yes
R <sup>2</sup>	0.210	0.252	0.075	0.098
Adjusted R <sup>2</sup>	0.163	0.206	0.069	0.088
Number of observations	155,237	142,299	1,659	1,659
Number of firms	30,416	28,224	225	225

Source: Aminadav and Papaioannou (2019) and authors' calculations.

Note: Estimated using ordinary least squares. Standard errors are clustered at firm level, and \*, \*\* and \*\*\* denote values that are statistically significant at the 10, 5 and 1 per cent levels respectively. Specifications 2 to 4 also control for firm tangibility, profitability, non-debt tax shields and total assets. "Within R<sup>2</sup>" is reported for specifications 3 and 4.

<sup>41</sup> See, for example, La Porta et al. (1997, 1998).

<sup>42</sup> See, for example, Megginson (2017).

<sup>43</sup> See Kornai (1980) and Berglöf and Roland (1998) for a discussion of soft budget constraints.

<sup>44</sup> See Molnar and Lu (2019).

<sup>45</sup> See Aminadav and Papaioannou (2019).

**BOX 3.5.**

**SOURCING OF INPUTS AND CONTRACT ENFORCEMENT**

The quality of legal institutions not only affects firms’ internal organisation; it also affects firms’ boundaries and sourcing decisions. When firms cannot enforce contracts with suppliers because enforcement costs are prohibitively high or judges make poor decisions, sourcing inputs becomes costlier.

This is particularly true of relationship-specific inputs – goods that are tailored to a particular buyer – because the lack of enforceability gives rise to opportunistic behaviour.<sup>46</sup> Indeed, countries with strong legal institutions have been shown to have a comparative advantage in sectors that rely heavily on contracting.<sup>47</sup> Researchers have also used detailed data on plants’ input and output mixes in India to show that weak enforcement of contracts with suppliers causes firms to carry out more production steps within the same plant, switch to alternative (sometimes inferior) suppliers or switch from relationship-specific to generic inputs.<sup>48</sup>

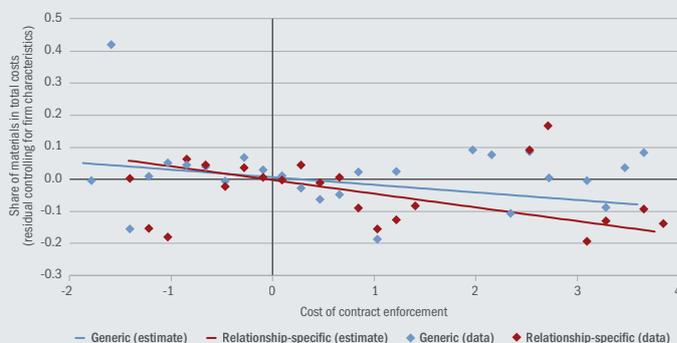
Distortions in individual firms add up to distortions at regional level. Researchers looking at the situation in India estimate that improving the quality of courts from the median level to the level observed in the best-performing Indian state would raise aggregate productivity by several percentage points.

The problem of weak enforcement of contracts is also pervasive in the EBRD regions.<sup>49</sup> Indeed, 17 per cent of all firms taking part in the Enterprise Surveys report that courts are a “major” or “very severe” obstacle to their operations. And in Kyiv, nearly half of all firms fall into that category.

As in the case of India, data from the Enterprise Surveys reveal correlations between the quality of courts and the cost shares of the various factors of production. In regions where courts are of poor quality according to the World Bank’s subnational *Doing Business* indicators, material inputs account for a smaller share of firms’ total costs (see Chart 3.5.1). This correlation is stronger in industries that rely heavily on relationship-specific materials and are therefore more prone to hold-up problems (where a party to a contract fails to comply with the terms of that contract after production has started).<sup>50</sup> This evidence is consistent with firms adjusting their organisational structures and the mix of factors of production on the basis of the quality of judicial institutions.<sup>51</sup>

**CHART 3.5.1.**

Where contract enforcement is costly, firms’ use of material inputs is lower



Source: World Bank *Doing Business* reports, Enterprise Surveys and authors’ calculations.  
 Note: The share of material inputs in total costs on the vertical axis represents residuals after taking account of firms’ size and sector and other observable characteristics in the regression analysis. The cost of enforcing contracts is derived from the World Bank’s *Doing Business* reports.

**49%**  
**PERCENTAGE OF FIRMS IN KYIV WHICH REPORT THAT COURTS ARE A MAJOR OR VERY SEVERE OBSTACLE TO THEIR OPERATIONS**

<sup>46</sup> See Klein et al. (1978).

<sup>47</sup> See Nunn (2007), Levchenko (2007) and Ciccone and Papaioannou (2009).

<sup>48</sup> See Boehm and Oberfield (2018).

<sup>49</sup> See Johnson et al. (2002).

<sup>50</sup> See Nunn (2007).

<sup>51</sup> See Boehm (2018).

**BOX 3.6.****GOVERNANCE AND FOREIGN INVESTMENT**

Cross-border asset holdings such as portfolio equity investment and foreign direct investment can help to diversify investment risks, channel finance towards opportunities with higher expected returns and contribute to the diffusion of technology and skills. However, levels of cross-border asset holdings are lower than the international capital asset pricing model and other economic models would suggest. This well-documented fact is known as “equity home bias”.

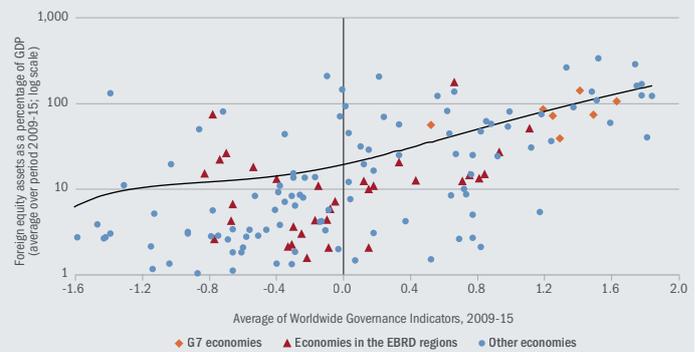
The quality of institutions appears to be an important factor explaining that equity home bias. Economies with higher levels of institutional quality (as captured by the average of their Worldwide Governance Indicators) tend, on average, to receive more foreign investment (as discussed in Chapter 2). They also hold more foreign assets (see Chart 3.6.1). These relationships hold when alternative measures of institutional quality or cross-border investment are used. In the EBRD regions, outward equity investment levels tend to be even lower than the modest quality of those regions’ institutions would suggest. This reflects, in part, the relatively low levels of savings in the EBRD regions, as discussed in the *Transition Report 2015-16*.<sup>52</sup>

This pattern whereby residents of economies with weaker institutions exhibit a stronger home bias may appear counterintuitive at first. Recent research<sup>53</sup> highlights the importance of two factors in this regard. First of all, when levels of institutional quality are low, influential individuals and families tend to retain large controlling stakes in companies. In part, this is because when protection of minority shareholders is weak, insiders can only sell small stakes at a significant discount, reflecting the low levels of protection associated with such stakes. This means that existing large shareholders are unwilling to sell their stakes in the first place, reinforcing the home bias. And that home bias, in turn, locks funds in the domestic economy, reducing the supply of funding for outward investment.

The second – more surprising – insight from that recent literature is that the *optimal* investment portfolio of an individual in a country with weaker institutions may also be strongly dominated by domestic assets. Imagine that a country with weaker investor protection is experiencing strong productivity growth. Such a boom tends to increase both investment by controlling shareholders and wages in the economy. As controlling shareholders increase investment, they reduce dividend payouts. This results in a negative correlation between labour income and income from dividends. Individuals who want to hedge their labour income may, in turn, find this negative relationship convenient, reinforcing the home bias. In contrast, where economic institutions are stronger, minority shareholders tend to have a greater say in dividend and investment decisions.

**CHART 3.6.1.**

**Levels of outward equity investment are higher in economies with higher-quality institutions**



Source: Lane and Milesi-Ferretti (2017) and authors' calculations.

<sup>52</sup> See EBRD (2015).

<sup>53</sup> See Mukherjee (2015).



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# 4

## FIRMS' GREEN GOVERNANCE



While greenhouse gas emissions in the EBRD regions have fallen since the 1990s, there remains ample scope to make firms' production processes more energy efficient. The quality of firms' green management – the way they address environmental issues and monitor energy usage and pollution – varies widely both between and within countries. In the EBRD regions and comparator economies, there is a lack of green leaders and the majority of firms

continue to perform poorly in terms of green credentials. Foreign firms, exporters and listed companies generally perform best in this area. Financing constraints can hinder green investment, limiting firms' ability to reduce emissions. However, for many firms it is not insufficient funding that prevents investment in this area – it is the low priority that managers assign to such investment.



## Introduction

The EBRD regions have seen a substantial reduction in carbon dioxide (CO<sub>2</sub>) emissions from energy usage in the period since 1990 – the baseline year for the emission cuts agreed in the Kyoto Protocol. However, this reduction partly reflects the collapse in output at the beginning of the transition from central planning to market economies. What is more, since the early 2000s emissions have started to rise again. Many countries in the EBRD regions are still among the world's most carbon-intensive economies.

Production structures will need to change significantly if energy efficiency is to be increased and the carbon footprints of firms in transition countries are to be reduced. This green transition can only succeed if firms' owners set clear, measurable and realistic environmental objectives. At the same time, firms' managers will need to be given the right incentives to achieve those targets (and those incentives must not be distorted by the subsidising of fossil fuels).<sup>1</sup> Managers also need to be equipped with the right know-how if they are to deliver on environmental and climate change-related targets. This chapter takes a detailed look at firms' green governance, examining the links between green objectives, green management practices and green investment.

It starts by defining green management in terms of firms' strategic objectives regarding the environment and climate change, their managerial structure, their setting of green targets and the way that they monitor such targets. It describes the ways in which these aspects of green management differ across and within the economies of the EBRD regions. It also looks at investment in energy efficiency and the reduction of pollution, exploring the external and internal drivers of such green investment. Lastly, it looks at the extent to which financial and managerial constraints hinder green investment and thwart firms' efforts to reduce greenhouse gas emissions.

## Green management

### Measuring green management practices

Nowadays, the ability to handle environmental, social and governance (ESG) issues in a proactive manner is part and parcel of effective firm management. However, information on firms' ESG practices is often only available for listed companies, particularly when it comes to the quality of green management. In the EBRD regions, relatively few firms are listed, with many stock markets remaining underdeveloped. Consequently, few firms disclose ESG information. To help fill that gap, the most recent round of Enterprise Surveys carried out by the EBRD, the EIB and the World Bank Group (which was still in the process of being conducted as this *Transition Report* went to print) included a special Green Economy module with the aim of systematically collecting information on firms' green management practices and other aspects of firm behaviour relating to climate change.

The information collected by those surveys covers four main types of green management practice. The first concerns the question of whether firms have strategic objectives pertaining to the environment and climate change. The second looks at whether firms employ a manager with an explicit mandate to deal with green issues. (It is also important to see who that environmental manager reports to, since research suggests that the link between a firm's strategic objectives and its day-to-day actions depends crucially on its organisational structure. Generally speaking, the closer the person with environmental responsibilities is to the firm's most senior manager, the more able they are to solve problems and overcome ill-defined incentives.<sup>2</sup>) The third concerns the question of whether firms have clear and attainable environmental targets. And the fourth looks at whether firms actively and frequently monitor their energy and water usage, as well as CO<sub>2</sub> emissions and other pollutants, in order to reduce their environmental footprint.<sup>3</sup>

<sup>1</sup> See Schweiger and Stepanov (2019).

<sup>2</sup> See Martin et al. (2012) and Yong et al. (2018).

<sup>3</sup> Energy usage is just one source of greenhouse gas emissions, albeit an important one. Other sources include physical and chemical processing and the transportation of materials, products, waste and employees (see World Resources Institute and World Business Council for Sustainable Development, 2004).

# 0.23

## CORRELATION BETWEEN THE QUALITY OF FIRMS' GENERAL MANAGEMENT AND THE QUALITY OF THEIR GREEN MANAGEMENT

### International patterns in terms of green management

The quality of firms' green management can be quantified on the basis of their answers to several specific questions in the Enterprise Surveys (see Box 4.1). This exercise shows that the quality of firms' green management, averaged at country level, is positively correlated with the average quality of general management practices (that is to say, firms' general approach to operations, monitoring, targets and incentives; see Chapter 3). This positive correlation is, however, relatively modest, with a coefficient of 0.23.

As Chart 4.1 shows, firms in Latvia tend, on average, to have the best green management practices in the EBRD regions, followed by firms in Greece, Slovenia and North Macedonia. Of the comparator economies in that sample, the Czech Republic, Malta and Spain are all in the top half of the list, while Portugal scores fairly poorly – not much different from the average levels seen in Kosovo and Lebanon. Turkish firms score worst in terms of the average quality of green management.

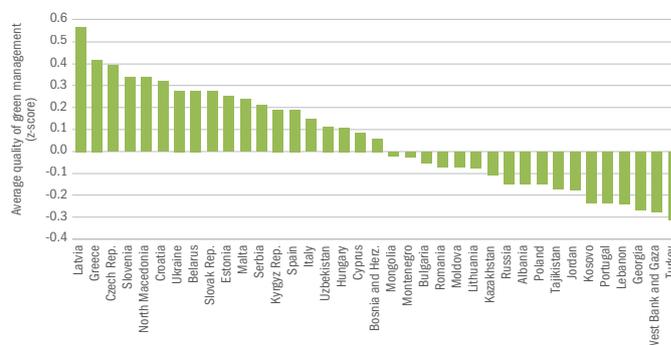
As Chart 4.2 shows, there are marked differences across the EBRD regions in the four scores underlying the overall rating. For example, many firms in eastern Europe and the Caucasus (EEC) and Central Asia excel when it comes to monitoring. In other words, they frequently collect data on energy and water usage and the emission of pollutants. However, they are less adept at translating that monitoring into specific targets. Comparator economies outside the EBRD regions, on the other hand, do not score so well when it comes to the environmental responsibilities of management. That is to say, relatively few firms in those countries have a manager with explicit responsibilities in the area of climate change and the environment (or, if they have one, that manager is relatively lowly in terms of the firm's hierarchy).

All in all, 18 per cent of firms in the EBRD regions and the Czech Republic report having strategic objectives relating to the environment or climate change, a percentage similar to that seen in the comparator economies of Italy, Malta, Portugal and Spain (20 per cent). However, this average masks large differences between countries. For instance, only 7 per cent of all Turkish firms have such strategic objectives, compared with a third of firms in Slovenia.

A total of 12 per cent of firms in the EBRD regions and the Czech Republic have a manager responsible for environmental and climate change-related issues, with that figure ranging from

CHART 4.1.

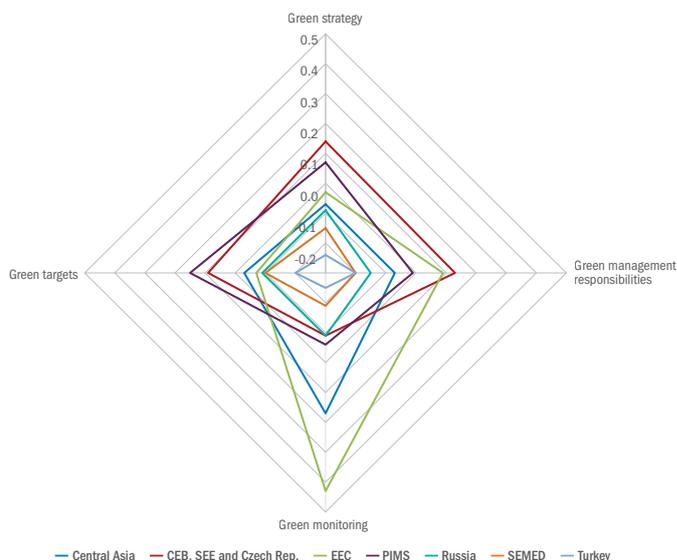
The average quality of firms' green management differs across economies



Source: Enterprise Surveys and authors' calculations.

CHART 4.2.

The four main aspects of green management



Source: Enterprise Surveys and authors' calculations. Note: "PIMS" means Portugal, Italy, Malta and Spain.

ONLY **12.2%** OF FIRMS HAVE A MANAGER RESPONSIBLE FOR ENVIRONMENTAL AND CLIMATE CHANGE-RELATED ISSUES

ONLY **18.3%** OF FIRMS HAVE STRATEGIC OBJECTIVES RELATING TO ENVIRONMENTAL ISSUES

just 3 per cent in Turkey to 28 per cent in the Czech Republic. In central Europe and the Baltic states (CEB) and the Czech Republic, almost three-quarters of those managers report directly to the firm’s CEO, its board of directors or its owners, compared with just 18 per cent in Russia. Turkey and the economies of the southern and eastern Mediterranean (SEMED) score worst in this regard.

When it comes to monitoring, the EEC region has the highest score for all four subcomponents – energy, water, CO<sub>2</sub> and other pollutants. Comparator economies are fairly close behind in terms of the monitoring of CO<sub>2</sub> emissions, but they tend to lag when it comes to the monitoring of energy and water usage and other pollutants. That being said, regional averages mask significant differences across countries within those regions. For example, 19 per cent of firms in Latvia monitor their CO<sub>2</sub> emissions, compared with only 6 per cent in Poland. Lastly, comparator economies lead the way in terms of having explicit green targets. In contrast, only 15 per cent of Turkish firms report having energy consumption targets, compared with an average of 32 per cent of firms across all other economies.

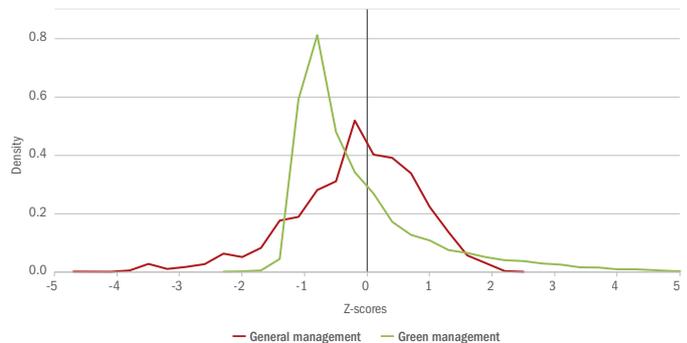
## Distribution of green management scores

Although there are substantial differences across countries in terms of the average quality of green management, most of the variation (92 per cent) is found *within* economies, even after accounting for cross-country differences in sectoral composition. As with general management scores, there are firms with low and high green management scores in every economy (see Chart 4.3). Importantly, however, green management scores are much less evenly distributed than general management scores. Namely, there is a large mass of firms with green management scores that are just below average (that is to say, slightly to the left of zero) and a long thin tail of firms with good green management scores. This pattern is also evident within each individual country.

**92%**  
OF ALL VARIATION IN THE QUALITY OF FIRMS’ GREEN MANAGEMENT PRACTICES IS OBSERVED ACROSS FIRMS WITHIN THE SAME COUNTRY

**CHART 4.3.**

The quality of firms’ green management varies considerably within countries



Source: Enterprise Surveys and authors’ calculations.

Note: Cross-country differences in the sectoral composition of the sample are controlled for. Density is calculated by dividing the number of values that fall into each class by the number of observations in the set and the width of the class.

## Differences in the quality of green management across sectors

There are several factors that may explain the large differences in green management scores across firms within a given country, as shown by the green line in Chart 4.3. The analysis below looks first at internal factors – firm-level characteristics such as size and ownership structure – before turning to external factors, such as customer pressure, losses due to extreme weather, or pollution caused by other firms.

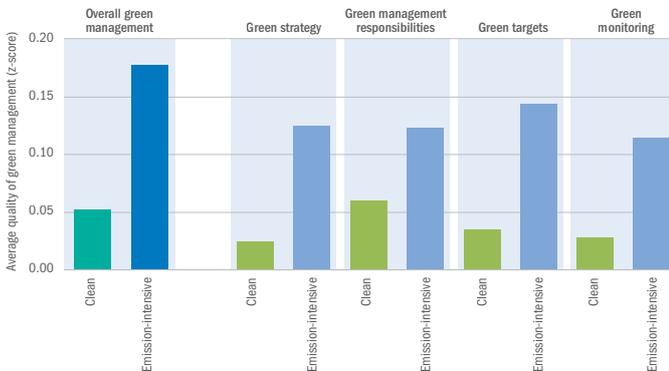
A firm’s willingness and ability to adopt good green management practices (and the extent to which it is legally obliged to do so) will be dependent first of all on its sector or industry. A firm’s sector provides a rough indication of the amount of pollution that it is likely to generate. It also determines the extent to which the firm is obliged to monitor its pollutant emissions and report them to national or international regulatory bodies, such as the European Pollutant Release and Transfer Register (E-PRTR), or participate in an emissions trading system.

Using data on average CO<sub>2</sub> emissions per unit of value added,<sup>4</sup> we can identify emission-intensive sectors, which are defined here as industries covered by the Enterprise Surveys that have above-median emissions. The following sectors are emission-intensive on the basis of that definition: paper products, printing and publishing, coke, petroleum, chemical products,

<sup>4</sup> See De Haas and Popov (2019). Alternative classifications yield a similar set of industries. See, for instance, Broner et al. (2016).

**CHART 4.4.**

Firms in emission-intensive sectors tend, on average, to have better green management



Source: Enterprise Surveys and authors' calculations.

Note: Sectors are based on ISIC Rev. 3.1. Clean sectors include food, beverages and tobacco (15-16), textiles, textile products, leather and footwear (17-19), wood (20), fabricated metal products, machinery and equipment (28-33), transport equipment (34-35) and construction (45). Emission-intensive sectors include paper and paper products (21), printing and publishing (22), coke and petroleum (23), chemical products (24), rubber and plastic products (25), non-metallic mineral products (26), basic metals (27), land transport (60), water transport (61) and air transport (62). Wholesale and retail (50-52), hotels and restaurants (55), supporting and auxiliary transport activities (63), post and telecommunications (64) and IT (72) cannot be classified as either clean or emission-intensive owing to data availability issues.

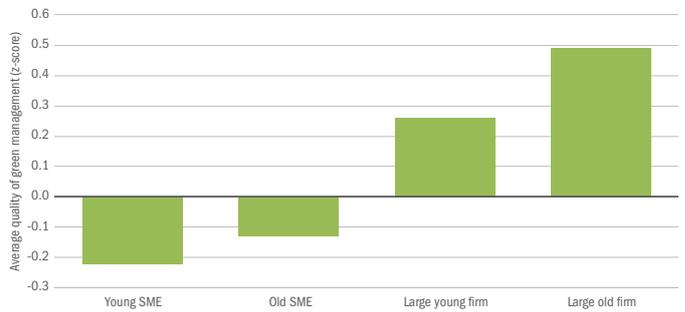
rubber and plastic products, non-metallic mineral products, basic metals, land transport, water transport and air transport. Firms operating in these emission-intensive sectors in the EBRD regions and the Czech Republic tend, on average, to have better green management practices (see first two bars in Chart 4.4). This also holds for the four main subcomponents of green management (see other bars in Chart 4.4). This partly reflects pressure from regulators and customers. The same pattern, with a few exceptions, holds within each region as well.

### Larger and older firms have better green management practices

It is perhaps not too surprising that firms which have at least 100 employees and are at least five years old tend, on average, to have higher green management scores (see Chart 4.5). As firms grow, they may eventually reach a size at which they are obliged to monitor their emissions. They may also face increasing pressure from consumers to reduce their impact on the environment. For instance, providers of takeaway coffee and food have experienced growing pressure to switch to recyclable cups and containers. For young small and medium-sized enterprises (SMEs), emphasising their environmental credentials could also prove to be a unique selling point.

**CHART 4.5.**

Older and larger firms tend to have better green management



Source: Enterprise Surveys and authors' calculations.

Note: SMEs have fewer than 100 employees; young firms are less than five years old.

One such SME is Croatian company Include, which manufactures solar-powered smart benches for municipal parks and streets that can charge mobile phones, act as 4G Wi-Fi hotspots, provide street lighting and collect temperature and air pollution data. Another is Ukrainian company SolarGaps, which has developed the world's first ever smart blinds. These automatically track the sun throughout the day, adjusting their position to ensure the optimal angle for generating solar electricity, helping to power devices in a home, apartment or office.

The positive correlations between firm size and the quality of green management and between firm age and quality generally also hold in firm-level regressions: large old firms tend, on average, to have better green management scores than young SMEs (see Table 4.1). Meanwhile, the average green management scores of old SMEs are worse than those of young SMEs, and the average green management scores of large young firms are not significantly different from those of young SMEs. Unlike the simple averages presented above, Table 4.1 also takes account of the sectors and countries where firms operate.

**TABLE 4.1.**

Determinants of the quality of firms' green management

Dependent variable	Green management score	
	(1)	(2)
Old SME (indicator)	-0.079* (0.044)	-0.095** (0.041)
Large young firm (indicator)	0.149 (0.119)	0.074 (0.113)
Large old firm (indicator)	0.214*** (0.046)	0.138*** (0.041)
25% or more foreign-owned (indicator)	0.236*** (0.053)	0.219*** (0.044)
Direct exporter (indicator)	0.187*** (0.037)	0.139*** (0.031)
Listed (indicator)	0.212*** (0.054)	0.191*** (0.047)
Sole proprietorship (indicator)	-0.108** (0.041)	-0.070* (0.040)
Financial reports audited (indicator)	0.390*** (0.028)	0.262*** (0.024)
General management score (z-score)	0.172*** (0.014)	0.128*** (0.012)
Customer pressure (indicator)		0.853*** (0.040)
Monetary losses due to extreme weather (indicator)		0.167*** (0.049)
Monetary losses due to pollution caused by others (indicator)		0.335*** (0.110)
Energy tax/levy (indicator)		0.454*** (0.036)
Observations	7,362	7,294
R <sup>2</sup>	0.220	0.342

Source: Enterprise Surveys and authors' calculations.

Note: Estimated using ordinary least squares. All regressions include country, sector, locality, accuracy and truthfulness fixed effects. Old firms are at least five years old; large firms have at least 100 employees. Omitted size category: young SME (firm with fewer than 100 employees). Standard errors clustered at four-digit industry level are reported in parentheses, and \*, \*\* and \*\*\* denote statistical significance at the 10, 5 and 1 per cent levels respectively.

## Foreign-owned and listed firms have better green management practices, as do exporters

When it comes to the impact that foreign ownership has on the environment, the results of existing studies are mixed. In general, foreign ownership often improves firm-level productivity by transferring cutting-edge technology, management practices and knowledge to acquired firms and encouraging product and process innovation. Indeed, multinationals tend to use more advanced technology and production methods than their domestic counterparts, which can improve environmental outcomes.<sup>5</sup> This has sometimes been referred to as the "pollution halo effect". At the same time, however, firms in polluting industries may also relocate to countries with less stringent environmental regulations (termed "pollution havens") in response to costly regulations in their home countries, increasing pollution levels both in their host countries and globally.<sup>6</sup>

Evidence from the Enterprise Surveys suggests that the positive impact of foreign ownership tends to dominate in the EBRD regions and the Czech Republic (although pollution haven effects cannot be ruled out on the basis of those data). Firms where foreign investors hold a stake of 25 per cent or more tend, on average, to have higher green management scores than domestically owned counterparts and firms where foreign investors hold a stake of less than 25 per cent (see Chart 4.6). This relationship continues to hold when other factors are taken into account (see Table 4.1).

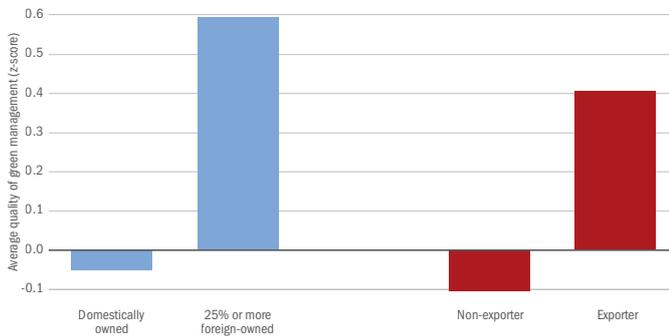
Foreign ownership is not the only way in which firms can learn about state-of-the-art green management practices. They can also do so by competing in international markets. Indeed, data from the Enterprise Surveys confirm that firms which export tend to have better green management than firms which do not (see Chart 4.6 and Table 4.1).

Another factor is whether a firm is listed on a stock exchange. Listed firms tend to be subject to greater scrutiny and under more pressure (from institutional investors, for example) to report on ESG issues. Although listed firms make up a relatively small percentage of all companies in the EBRD regions, the regression results in Table 4.1 confirm that listed firms do, on average, tend to have better green management. In contrast, sole proprietorships face the least scrutiny and tend to have lower green management scores.

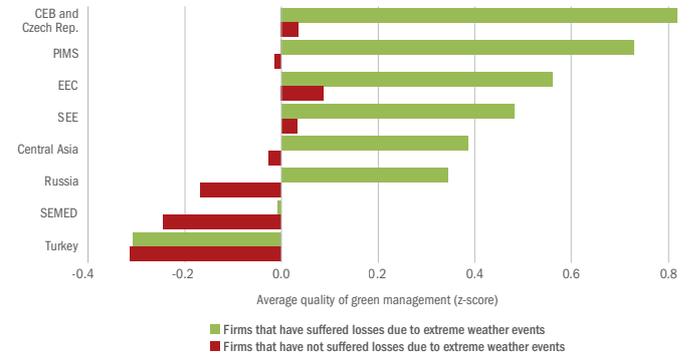
**1 IN 7 FIRMS**  
REPORT THAT  
CUSTOMERS PRESSURE  
THEM TO OBTAIN  
ENVIRONMENTAL  
CERTIFICATION  
OR COMPLY WITH  
ENVIRONMENTAL  
STANDARDS

<sup>5</sup> See, for instance, EBRD (2014), Cole et al. (2005), Dean et al. (2009) and Bruccal et al. (2019).

<sup>6</sup> See, for instance, Cai et al. (2016).

**CHART 4.6.****Foreign firms and exporters have better green management**

Source: Enterprise Surveys and authors' calculations.

**CHART 4.7.****Firms exposed to extreme weather events tend to have better green management**

Source: Enterprise Surveys and authors' calculations.

**10.3%**  
OF FIRMS HAVE EXPERIENCED MONETARY LOSSES DUE TO EXTREME WEATHER EVENTS OVER THE LAST THREE YEARS

## Customer pressure can lead to improved green management practices

External factors – such as customer pressure and environmental regulations, as well as firms' own experiences of pollution and extreme weather events – can also prompt firms to reduce their environmental impact. About one in seven firms in the EBRD regions and the Czech Republic report that at least some of their customers require environmental certificates or adherence to certain environmental standards as a precondition for doing business. In every region, green management scores tend, on average, to be much higher for firms that have experienced such customer pressure than for those that have not. Indeed, in the regression analysis, the improvement in green management that is associated with facing customer pressure is almost four times the size of that associated with foreign ownership.

## Firms that are exposed to extreme weather or pollution have better green management practices

Firms with direct, first-hand experience of environmental and climate change-related problems – for example, firms that have suffered monetary losses due to extreme weather events or have been negatively affected by pollution produced by nearby firms – may be more inclined to enhance their green credentials. Data from the Enterprise Surveys reveal that about 10 per cent of all firms in the EBRD regions and the Czech Republic have experienced monetary losses due to extreme weather events over the last three years. For instance, Moldova, North Macedonia and Romania all experienced severe flooding in 2016, and heatwaves and droughts have become a common occurrence in many countries during the summer months. Similarly, severe hailstorms have occurred in Croatia, Poland, Romania and Slovenia.

In all regions, firms that have experienced monetary losses due to extreme weather events tend, on average, to have higher green management scores than firms that have not experienced such losses (see Chart 4.7). While these data are cross-sectional and do not provide a timeline of events, it is conceivable that some firms have improved their green management practices in response to suffering losses (for a discussion of climate risk governance, see Box 4.2). The same is true of the 2.4 per cent of firms that report having experienced monetary losses as a result of pollution not caused by their own activities. The results in Table 4.1 confirm that these relationships continue to hold when other factors are taken into account.

## Environmental regulations also affect the quality of green management

Another important external factor is environmental regulations, which can be proxied by energy taxes or levies (see also Box 4.3 on energy efficiency standards). Where energy is expensive, firms have an incentive to use less of it. The resulting positive impact on the environment is especially large where energy is generated using fossil fuels. The estimates in Table 4.1 suggest that firms which are subject to an energy tax or levy have substantially better green management practices than firms which are not. That effect is about twice the size of the impact of being under foreign ownership or listed on a stock exchange. In fact, a formal comparison of the sizes of all the estimates reported in Table 4.1 reveals that the two most important drivers of green management scores are both external factors: customer pressure and being subject to an energy tax or levy.

## Green investment

### Evidence on green investment

In addition to improving their green management practices, firms can also invest in measures that directly reduce their environmental impact. In the Enterprise Surveys, firms are asked about various types of green investment. Some of these reduce firms' environmental impact as a by-product of achieving other objectives. For instance, as innovation proceeds, new vintages of assets such as machines and vehicles tend to be more energy efficient than the outdated models they replace. Thus, investment in new assets may also lead to improvements in energy efficiency. Improvements to heating and cooling systems, machinery and equipment upgrades, vehicle upgrades and improvements to lighting systems all fall into this category. In the analysis that follows, these four types of investment are referred to as "mixed" green investment.

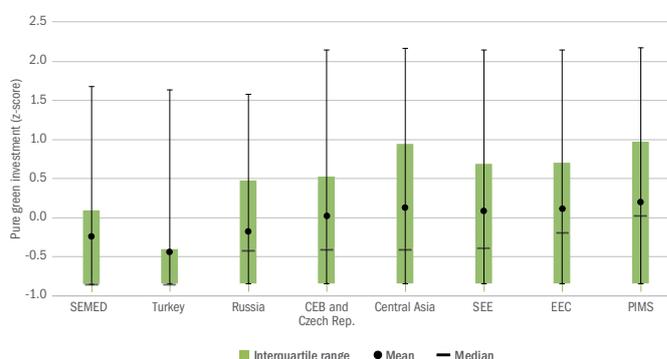
With other types of investment, the aim of improving the firm's environmental footprint is explicit and the main reason for undertaking the investment. Such measures include: on-site generation of green energy; energy management; waste minimisation, recycling and waste management; measures controlling air pollution; other pollution control measures; water management; and energy efficiency measures. These seven types of investment are classified as "pure" green investment.

Evidence from the most recent round of Enterprise Surveys indicates that more than a quarter of respondent firms in the EBRD regions have not engaged in either mixed or pure green investment over the last three years, while 52 per cent have engaged in both. Firms that engage in pure green investment tend to implement only one pure type of measure. The most popular pure green measure in the EBRD regions is waste minimisation, recycling and waste management (implemented by 43 per cent of firms), followed by energy efficiency measures (34 per cent)

**THE GREEN MANAGEMENT SCORES OF FIRMS THAT ARE SUBJECT TO AN ENERGY TAX ARE, ON AVERAGE, 16.1% OF A STANDARD DEVIATION HIGHER THAN THOSE OF FIRMS THAT ARE NOT SUBJECT TO SUCH TAXES**

**CHART 4.8.**

The prevalence of pure green investment in different regions



Source: Enterprise Surveys and authors' calculations.  
Note: The lines show the 5th and 95th percentiles of the distribution.

and investment in energy management (33 per cent). The least common is measures controlling pollutants other than air pollution (14 per cent). These patterns vary across the EBRD regions. In the EEC region and Turkey, for example, energy efficiency measures are the most popular, whereas energy management is the most common type of measure in Russia, Central Asia and the SEMED region. Improvements to lighting systems and machinery and equipment upgrades are the two most common types of mixed green investment.

On the basis of firms' answers, mixed and pure green investment indices have been created, using an approach similar to that employed for green management practices (see Box 4.1 for details). As with green management practices, most of the variation in pure green investment (90 per cent) is within countries, rather than across them, after accounting for differences in sectoral composition (see Chart 4.8).

## Factors explaining differences in green investment

Firms in emission-intensive sectors are more likely to be aware of the need to reduce their impact on the environment and thus more likely to engage in green investment. Indeed, Chart 4.9 shows that levels of pure and mixed green investment are typically higher for firms in sectors with above-median CO<sub>2</sub> emissions per unit of value added. However, that difference is only statistically significant for pure green investment.

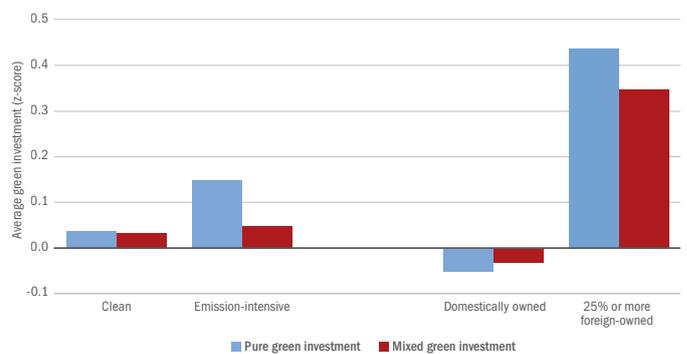
Unsurprisingly, large firms (whether young or old) tend, on average, to have higher pure and mixed green investment scores, perhaps because they may find it easier to access bank financing in order to fund such measures. Similarly, as in the case of green management practices, the type of firm ownership also affects green investment. Foreign owners tend to introduce cutting-edge technology, which may require investment in specific green measures. Evidence from the Enterprise Surveys suggests that foreign-owned firms in the EBRD regions tend, on average, to have higher pure and mixed green investment scores, with a particularly large differential relative to domestically owned firms when it comes to pure green measures (see Chart 4.9). As was the case with green management practices, listed firms also tend to have higher green investment scores (and again, this is particularly true of pure green investment).

Firms may need to engage in green investment in order to meet their customers' expectations or comply with regulations. Indeed, firms with customers that require certificates or adherence to environmental standards tend, on average, to have higher green investment scores than those that do not face such pressure, and their pure green investment scores tend to be higher than their mixed investment scores (see Chart 4.10). The pure and mixed investment scores of firms that are subject to an energy tax or levy are broadly similar to each other, and both are higher than the corresponding scores of firms that are not subject to such taxes/levies. Exporters are also more likely to adopt investment measures that reduce their environmental impact.

**61.9%**  
PERCENTAGE OF FIRMS THAT HAVE UNDERTAKEN "PURE" GREEN INVESTMENT IN THE LAST THREE YEARS

**CHART 4.9.**

Firms in emission-intensive sectors and foreign-owned firms are more likely to engage in green investment

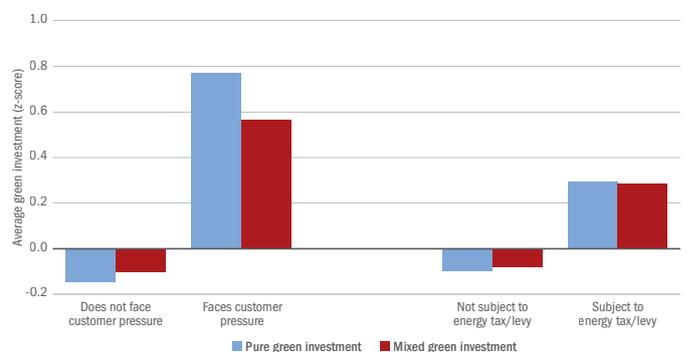


Source: Enterprise Surveys and authors' calculations.

Note: For details of clean and emission-intensive sectors, see the note accompanying Chart 4.4.

**CHART 4.10.**

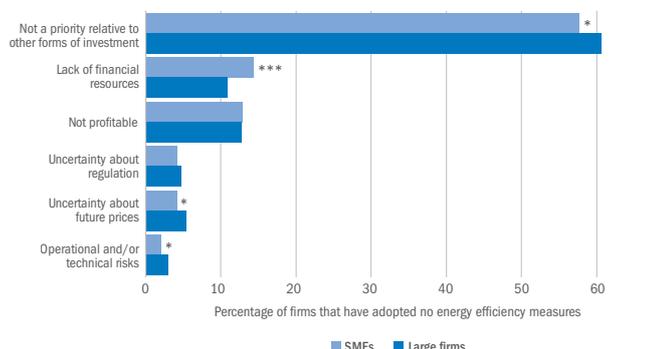
Firms that face customer pressure or are subject to energy taxes/levies tend to have higher green investment scores



Source: Enterprise Surveys and authors' calculations.

**CHART 4.11.**

**Reasons for not investing in energy efficiency measures**



Source: Enterprise Surveys and authors' calculations.  
 Note: \* and \*\*\* denote statistical significance at the 10 and 1 per cent levels respectively, based on t-tests for differences in sample means. SMEs have fewer than 100 employees; large firms have 100 or more.

### Why do so many firms refrain from investing in energy efficiency?

Despite the potential environmental and efficiency benefits of investment aimed at reducing firms' impact on the environment, there are many firms that refrain from implementing such measures. In order to better understand the rationale behind these decisions, the Enterprise Surveys ask firms that have decided not to adopt one specific type of pure green investment – energy efficiency measures – about their reasons for forgoing such measures.

Overall, more than 60 per cent of respondent firms that have not implemented energy efficiency measures report that this is not a priority relative to other types of investment. (In the SEMED region, this figure is even higher, at more than 74 per cent.) The second and third most cited reasons are a lack of financial resources (14 per cent) and the unprofitability of such investment (13 per cent). In Turkey and Central Asia, the perceived lack of profitability was the second most common reason for both SMEs and large firms alike.

Across the board, financial constraints are more of an obstacle for SMEs than they are for large firms (see Chart 4.11). Large firms, on the other hand, are more likely to worry about the uncertainty surrounding future prices and operational or technical risks relating to energy efficiency measures.

**60.8%**  
**OF FIRMS THAT HAVE NOT INVESTED IN ENERGY EFFICIENCY MEASURES OVER THE PAST THREE YEARS REPORT THAT OTHER TYPES OF INVESTMENT ARE A HIGHER PRIORITY**

## Access to credit, the quality of green management and green investment

Bearing in mind that a lack of financial resources is the second most common reason cited by firms that have not adopted energy efficiency measures, this section provides more structured analysis of the relationship between firms' ability to access bank credit, their green management credentials and their propensity to undertake green investment. In the analysis that follows, a firm is regarded as credit-constrained if its survey answers indicate that it needed credit in the past year but was either rejected by a bank when it applied for credit or was discouraged from applying in the first place.

In order to assess the link between credit constraints and green management on the one hand and green investment on the other, one needs to bear in mind that both the extent to which a firm is credit-constrained and the quality of its green management can themselves be influenced by the firm's investment decisions. To alleviate such concerns, the following analysis estimates the impact that credit constraints and green management have on investment in two stages. The first stage isolates the shares of credit constraints (see column 1 of Table 4.2) and green management (see column 2) that are purely due to exogenous factors ("instrumental variables") and therefore unlikely to be affected by green investment. Those predicted shares of credit constraints and green management are then used in the second stage (see columns 3 to 6) to estimate the causal impact on green investment. More details regarding this approach can be found in the notes accompanying Table 4.2.

The first stage exploits exogenous variation in credit constraints across different localities. The supply of bank credit tightened significantly in emerging Europe in the wake of the global financial crisis. Importantly, this deleveraging varied greatly across localities on the basis of the funding structures of local banks.<sup>7</sup> Banks that, before the crisis, had mainly financed themselves using short-term and relatively unstable wholesale funding had to deleverage a lot. In contrast, banks that could count on a stable deposit base turned out to be much more stable lenders.<sup>8</sup> In this context, the instrumental variable measures average dependence on wholesale funding in 2007 (just before the outbreak of the global financial crisis) across all bank branches within 5 km of the firm, the assumption (as borne out by international evidence) being that smaller firms typically only access banks that are located nearby.<sup>9</sup> Column 1 of Table 4.2 confirms that firms in localities where banks were hit hard by the crisis were more likely to be credit-constrained in the years that followed, everything else being equal. Reassuringly, the availability of local funding is not correlated with the quality of firms' green management (see column 2).

<sup>7</sup> See De Haas et al. (2015), De Haas et al. (2016) and Beck et al. (2018).  
<sup>8</sup> See De Haas and Van Lelyveld (2014). Wholesale funding is defined as all non-deposit-based debt funding of banks.  
<sup>9</sup> For instance, the median Belgian SME borrower in Degryse and Ongena (2005) was located 2.5 km from the lending bank branch. In the US data featured in Petersen and Rajan (2002) and Agarwal and Hauswald (2010), the corresponding median distances were 3.7 km and 4.2 km respectively.

In order to identify exogenous variation in the quality of firms' green management, this analysis uses a dummy variable indicating whether a firm has experienced monetary losses due to extreme weather events such as storms, floods, droughts or landslides over the last three years. Likewise, a second instrument indicates whether a firm has experienced monetary losses due to pollution caused by another firm over the last three years. As shown earlier, energy efficiency and climate-related issues tend to be more important to firms that have experienced unexpected losses as a result of extreme weather and pollution, with such events incentivising them to take green management practices more seriously. The results in column 2 of Table 4.2 are in line with those findings.

With these first-stage results in hand, columns 3 to 6 look at how exogenous variation in credit constraints and the quality of green management influences firms' ability and willingness to invest. The dependent variable in column 3 indicates whether a firm has undertaken *any* type of investment in fixed assets over the past three years, while column 4 looks at investment in fixed assets excluding pure green investment. The dependent variable in column 5 is a standardised measure of the number of mixed green investment projects that a firm has implemented over the past three years, and the dependent variable in column 6 is an equivalent measure for pure green investment. A comparison of the coefficients in columns 3 to 6 yields two striking results.

**14.5%**  
OF FIRMS THAT HAVE  
REFRAINED FROM  
INVESTING IN ENERGY  
EFFICIENCY MEASURES  
OVER THE LAST THREE  
YEARS REPORT THAT  
THIS STEMS FROM A  
LACK OF FINANCIAL  
RESOURCES

First, firms with better green management are consistently more likely to undertake investment projects involving at least some green components (but not investment projects without any green components), with the coefficient estimated for pure green investment being higher than that estimated for mixed green investment. A 1 standard deviation increase in a firm's green management score is associated with an 18 per cent increase in the probability of a firm undertaking mixed green investment and a 24 per cent increase in the likelihood of a firm undertaking pure green investment.

**TABLE 4.2.****Credit constraints, green management and green investment**

Dependent variable	First stage		Second stage			
	Credit-constrained	Green management (z-score)	Investment in fixed assets	Investment in fixed assets excluding pure green investment	Mixed green investment (z-score)	Pure green investment (z-score)
	(1)	(2)	(3)	(4)	(5)	(6)
Local banks' dependence on wholesale funding	0.004*** (0.001)	0.002 (0.001)				
Monetary losses due to extreme weather	-0.065** (0.026)	0.401*** (0.058)				
Monetary losses due to external pollution	0.111** (0.044)	0.529*** (0.127)				
Credit-constrained			-0.801*** (0.194)	-0.246* (0.139)	-0.781*** (0.286)	-0.311 (0.347)
Green management			0.213*** (0.053)	-0.022 (0.029)	0.565*** (0.089)	0.734*** (0.085)
Observations	4,646	4,646	4,646	4,646	4,602	4,646
R <sup>2</sup>	0.574	0.201	0.322	0.109	0.140	0.346
F-statistic	62.21	23.49				

**Source:** Enterprise Surveys, Banking Environment and Performance Survey II (BEPS II), Bureau Van Dijk's Orbis database and authors' calculations.

**Note:** This table shows the results of instrumental variables regressions explaining the impact that credit constraints and the quality of green management have on green investment at firm level. Columns 1 and 2 show the first-stage regressions, where the dependent variable is credit-constrained (column 1) or green management (column 2). The dependent variables in the second stage are: a dummy indicating whether the firm has invested in any fixed assets in the past year (column 3); a dummy indicating whether the firm has invested in fixed assets other than pure green investment (column 4); the z-score for mixed green investment over the past three years (column 5); and the z-score for pure green investment over the past three years (column 6). The first-stage instruments are a branch-weighted measure of average dependence on wholesale funding across all banks within 5 km of the firm and dummies indicating whether the firm has recently experienced monetary losses due to extreme weather events or pollution caused by other firms. The mixed green investment score is a z-score based on the following types of investment: improvements to heating and cooling systems; machinery and equipment upgrades; vehicle upgrades; and improvements to lighting systems. The pure green investment score is a z-score based on the following types of investment: energy management; waste minimisation, recycling and waste management; water management; on-site generation of green energy; measures controlling air pollution; other pollution control measures; and energy efficiency measures. All regressions include firm-level controls (indicators for exporter status, listed firm, sole proprietorship and audited financial reports, as well as the log of firm age), as well as country, sector, locality, accuracy and truthfulness fixed effects. Standard errors clustered at four-digit industry level are shown in parentheses, and \*, \*\* and \*\*\* denote statistical significance at the 10, 5 and 1 per cent levels respectively.

Second, while credit constraints reduce the likelihood of firms undertaking investment, including mixed green investment, they have no significant impact on pure green investment. In other words, a “horse race” between financial and managerial constraints suggests that where the primary goal of an investment project is to reduce pollution or increase energy efficiency, the quality of green management is the most important factor. These findings also suggest that credit constraints mainly hinder measures involving substantial investment in fixed assets (which can potentially be used as collateral for loans) – that is to say, machinery, vehicles, and waste and recycling systems (see Table 4.3). Most of the other coefficients for credit constraints have the expected negative sign but are imprecisely estimated. At the same time, the importance of the quality of green management for green investment comes through across all types of measure.

### Credit constraints, green management, firms’ performance and energy consumption

This subsection looks at the impact that credit constraints and the quality of green management have on firms’ performance. Financial constraints and green management practices both appear to matter, but in different ways (see Table 4.4). As expected, credit constraints have a negative impact on both sales per worker (a measure of labour productivity; see column 1) and overall sales (see column 2). When firms are financially constrained and cannot invest as much as they would like, their capital-to-labour ratio may be lower than that of similar firms in the same country and sector. Indeed, the analysis above showed that such firms tend to reduce their investment in fixed assets. Output per worker is likely to be correspondingly lower, and this may, in turn, negatively affect total sales.

However, there is no statistically significant relationship between the quality of a firm’s green management and the firm’s productivity or sales once the endogeneity of green management has been accounted for. Column 3 does, however, provide some weak evidence that better green management is associated with lower levels of electricity consumption per unit of sales, in line with the findings of earlier studies.<sup>10</sup> This may reflect the fact that firms with better green management undertake more green investment, as discussed earlier.

### Credit constraints and greenhouse gas emissions

If credit constraints prevent firms from undertaking some green investment projects – especially those of a mixed nature (see Table 4.2) – one might expect that, perhaps with some lag, they could also hamper firms’ ability to reduce the emission of greenhouse gases and other pollutants. In order to investigate that question, this subsection examines changes in the levels of greenhouse gas emissions and other air pollutants produced by 1,819 industrial facilities in 10 eastern European countries (Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia) in the period 2007-17. The green dots in Chart 4.12 show the locations of those various facilities. For each facility, the European Pollutant Release and Transfer Register (E-PRTR) provides data on annual emissions of greenhouse gases, ammonia, carbon monoxide, sulphur oxides and other noxious air pollutants.

As before, this analysis exploits exogenous differences in local credit conditions in the aftermath of the global financial crisis. Because the E-PRTR does not contain information on firms’ financial situations, it is impossible to link local bank lending conditions to firm-level credit constraints.

**TABLE 4.3.**

Credit constraints, green management and individual types of green investment

Dependent variable	Mixed green investment				Pure green investment						
	Improved heating/cooling system	Machinery upgrade	Vehicle upgrade	Improved lighting	Generation of green energy	Energy management	Waste and recycling	Measures controlling air pollution	Water management	Other pollution control measures	Energy efficiency measures
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Credit-constrained	-0.264 (0.182)	-0.463*** (0.144)	-0.269* (0.139)	-0.153 (0.186)	-0.147 (0.115)	0.033 (0.168)	-0.480*** (0.181)	-0.035 (0.126)	-0.263* (0.135)	0.310* (0.181)	-0.073 (0.168)
Green management	0.243*** (0.045)	0.221*** (0.045)	0.194*** (0.038)	0.186*** (0.044)	0.139*** (0.033)	0.211*** (0.041)	0.198*** (0.044)	0.206*** (0.041)	0.231*** (0.039)	0.214*** (0.048)	0.237*** (0.050)
Observations	4,511	4,542	4,526	4,547	4,418	4,535	4,484	4,396	4,460	4,464	4,646
R <sup>2</sup>	0.407	0.496	0.418	0.559	0.215	0.480	0.402	0.359	0.329	0.138	0.505

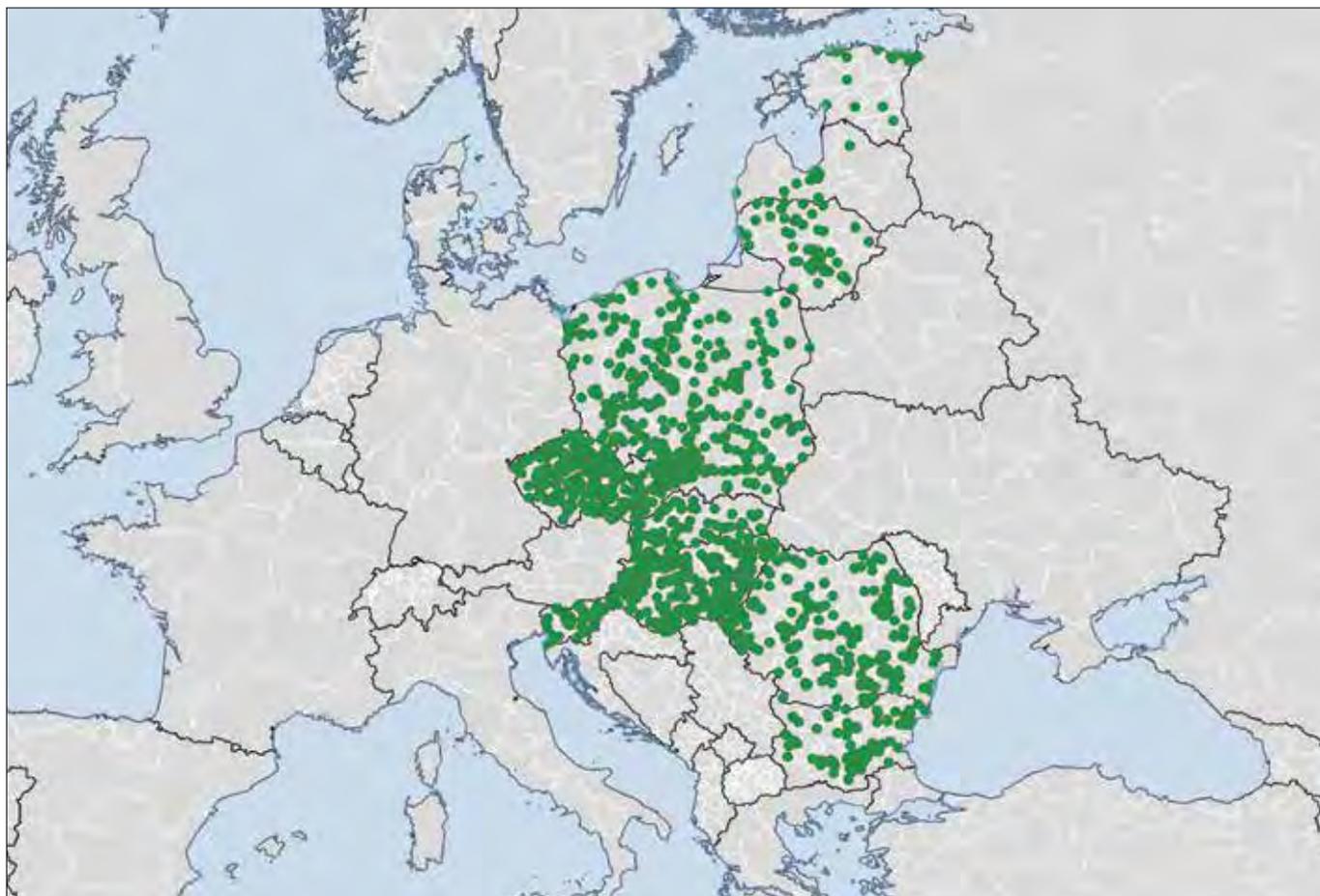
Source: Enterprise Surveys, BEPS II, Bureau Van Dijk’s Orbis database and authors’ calculations.

Note: This table shows the results of second-stage instrumental variables regressions explaining the impact that credit constraints and the quality of green management have on the probability of a firm undertaking mixed green investment (columns 1 to 4) or pure green investment (columns 5 to 11). Standard errors clustered at four-digit industry level are shown in parentheses, and \*, \*\* and \*\*\* denote statistical significance at the 10, 5 and 1 per cent levels respectively. For more details, see the note accompanying Table 4.2.

<sup>10</sup> See Martin et al. (2012).

**CHART 4.12.**

Geographical distribution of industrial facilities across emerging Europe



Source: E-PRTR.

Note: Based on the locations of 1,819 industrial facilities in Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia in the period 2007-17, as recorded in the E-PRTR.

**TABLE 4.4.**

Green management and real outcomes at firm level

Dependent variable	Labour productivity (log)	Sales (log)	Electricity intensity of sales (kWh/US\$, log)
	(1)	(2)	(3)
Credit-constrained	-2.036*** (0.726)	-1.014** (0.488)	-0.053 (0.203)
Green management	0.325 (0.208)	0.030 (0.140)	-0.091* (0.049)
Observations	4,060	4,043	1,887
R <sup>2</sup>	0.982	0.986	0.422

Source: Enterprise Surveys, BEPS II, Bureau Van Dijk's Orbis database and authors' calculations.

Note: This table shows the results of instrumental variables regressions explaining the impact that credit constraints and the quality of green management have on firm-level labour productivity (column 1), sales (column 2) and the electricity intensity of sales (column 3). Labour productivity is defined as the ratio of sales to employment and is winsorised at 1 per cent. The electricity intensity of sales is defined as the ratio of the amount of electricity consumed in kWh to sales and is winsorised at 5 per cent. Standard errors clustered at four-digit industry level are shown in parentheses, and \*, \*\* and \*\*\* denote statistical significance at the 10, 5 and 1 per cent levels respectively. For more details, see the note accompanying Table 4.2.

It is, however, possible to establish a direct link between local credit conditions and changes in facility-level air pollution. In particular, the regression analysis in Table 4.5 estimates the impact that local credit constraints have on total air pollution (see columns 1 and 2) and total greenhouse gas emissions (see columns 3 and 4) at the level of industrial facilities. The explanatory variable is the average dependence on wholesale funding of all bank branches within 15 km of an industrial facility in 2007. In the case of facilities that are part of a larger group (which make up 44 per cent of the sample), the distance is calculated relative to the parent company. Because many of these facilities are fairly large (relative to the typical respondent firm in the Enterprise Surveys), this analysis looks at bank branches within a larger radius (15 km, rather than 5 km). This reflects the fact that larger firms, which are typically more transparent and less risky, tend to be able to borrow across larger distances than smaller firms.

The negative coefficient for the dummy variable for the post-2007 period reflects a secular decline in pollution. The average industrial facility reduced its greenhouse gas emissions by 12 per cent in the period 2008-17 (in localities where banks had an average funding structure). The interaction term between the post-2007 dummy and the measure of wholesale funding is positive, large and statistically significant. This means that the decline in emissions was smaller in those localities where banks had to deleverage more in the wake of the global financial crisis, suggesting that credit constraints not only hindered firms' mixed green investment (see Table 4.2), but also, as a result, hampered their ability to produce in a less polluting manner.

Initially, the impact of credit constraints on greenhouse gas emissions was small (see Chart 4.13, which shows the estimated coefficients for the interactions between each year dummy and the measure of local credit constraints). It takes time for investment to materialise, and thus for differential access to bank credit to translate into differing levels of greenhouse gas emissions. The size of the coefficient quickly picks up after the sixth year (2013), though the difference between the two types of firm (those with easy local access to bank credit and those without) is statistically significant as of 2010. The difference in annual emission levels stabilises after around eight years at about 3.6 percentage points.

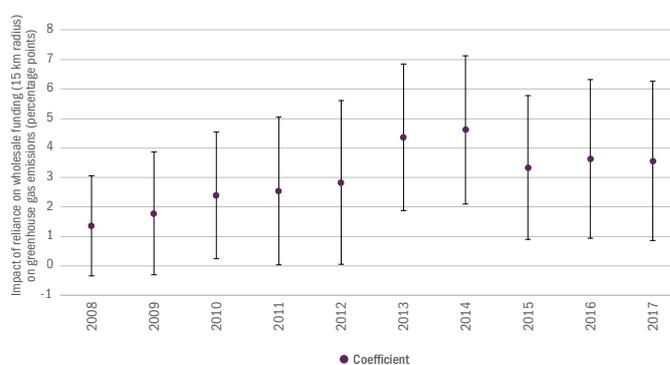
These results are robust to using credit conditions around the facilities themselves, rather than conditions around the locations of parent companies. The magnitude of the coefficients is slightly smaller in these specifications, suggesting that at least some industrial groups operate an internal capital market in which the parent company raises debt funding and allocates it across various affiliated facilities.

**TABLE 4.5.**
**Local credit shocks and facility-level air pollution (2007-17)**

Dependent variable	Log of total emissions of air pollutants + 1		Log of total greenhouse gas emissions + 1	
	(1)	(2)	(3)	(4)
Local banks' dependence on wholesale funding	-0.043** (0.022)	-0.044** (0.022)	-0.029 (0.032)	-0.030 (0.032)
Post-2007	-0.797** (0.336)	-0.796** (0.336)	-1.360 (0.900)	-1.360 (0.900)
Post-2007* Local banks' dependence on wholesale funding	0.012*** (0.004)	0.012*** (0.004)	0.026** (0.012)	0.026** (0.012)
Observations	3,638	3,638	3,638	3,638
R <sup>2</sup>	0.435	0.436	0.408	0.408

Source: E-PRTR, BEPS II, Bureau Van Dijk's Orbis database and authors' calculations.

Note: This table shows the results of difference-in-difference regressions explaining the impact that local credit constraints have on total air pollution (columns 1 and 2) and total greenhouse gas emissions (columns 3 and 4) at the level of industrial facilities. If raw data on total air pollution and greenhouse gas emissions are missing, they are assumed to be zero. Local banks' dependence on wholesale funding measures the average dependence on wholesale funding of all bank branches located within 15 km of the industrial facility – or, in the case of multi-facility firms, the parent company – in 2007. Post-2007 is a dummy variable that is 0 in 2007 and 1 thereafter. All regressions control for the latitude and longitude of the facility, country and sector fixed effects, and (in columns 2 and 4) whether the facility is owned by a private company, the state, a financial institution/bank, or an individual or family. Standard errors clustered by parent company are shown in parentheses, and \*, \*\* and \*\*\* denote statistical significance at the 10, 5 and 1 per cent levels respectively.

**CHART 4.13.**
**Impact of local credit shocks on facility-level greenhouse gas emissions, by year**


Source: E-PRTR, BEPS II, Bureau Van Dijk's Orbis database and authors' calculations.

Note: These coefficients are estimated by using a difference-in-difference regression to explain the impact that local credit constraints have on the logarithm of greenhouse gas emissions (in kilograms of CO<sub>2</sub>) in every year after 2007 (the base year). The lines show the 95 per cent confidence interval. See also the note accompanying Table 4.5.

## Conclusion

Greenhouse gas emissions in the EBRD regions have fallen substantially since the 1990s, but if the regions' economies are to fulfil their commitments under the Paris Agreement, those improvements will need to continue. This, in turn, will require further improvements to the green credentials of the regions' firms. While some firms in the EBRD regions (as well as comparator countries) have excellent green management practices, most continue to perform poorly in this regard. Firms with weaker green management practices may be aware of the importance of monitoring their impact on the environment, but lack the organisational structures necessary to set and achieve targets in this area.

Credit constraints hamper investment by firms, including investment with environmental benefits. However, when it comes to pure green investment (such as improvements in energy management, the generation of green energy and controls on air pollution), access to finance is not the main constraint. The empirical analysis in this chapter shows that whether a firm undertakes such investment projects – many of which have uncertain outcomes and involve large externalities – depends primarily on the strength of the firm's green management practices.

Indeed, many firms refrain from undertaking pure green investment for the simple reason that managers believe it to be a low priority relative to other types of investment. While firms may, in principle, want to reduce their environmental impact, they often face more pressing matters in the short term. In the face of financial and time constraints, managers may prioritise non-green investment, even where green investment would have a positive, albeit small, net present value.

In line with that interpretation, this chapter also shows that firms tend to bump green management and investment up their priority list when environmental issues suddenly become more important to them in the wake of exposure to adverse weather events or external pollution, as well as in response to customer pressure. This suggests that behavioural barriers could also be preventing the adoption of better green management practices. Experience of negative environmental effects may focus minds and make firms more aware of such opportunities.

Thus, improving the availability of credit is just one element of the broad policy mix that is necessary to stimulate green investment and improve firms' green management practices. Governments may also have to compel firms to produce in a more energy efficient manner using environmental standards or other regulations (see Box 4.3) or via subsidies that are contingent on the use of specific green technologies. Targeted green credit lines can also encourage firms to prioritise green investment (see Box 4.4 for details of the EBRD's Green Economy Transition approach). However, an important precondition for the success of such interventions is effective enforcement of regulations in a corruption-free environment.<sup>11</sup> Lastly, firms are also known to improve their green credentials in response to pressure from their customers. With this in mind, voluntary environmental standards may help to leverage the power of peer pressure and consumer awareness in order to further reduce firms' environmental footprints.

### BOX 4.1.

#### MEASURING GREEN MANAGEMENT PRACTICES AND GREEN INVESTMENT

The most recent round of Enterprise Surveys conducted by the EBRD, the EIB and the World Bank Group included a special Green Economy module, which sought to gather information on key aspects of firm behaviour relating to climate change (including green management practices). In most economies, the response rate for the Green Economy module was in excess of 95 per cent.

As regards green management practices, firms were asked: one question about strategic objectives relating to environmental or climate change issues; two questions about managers responsible for environmental and climate change issues and their reporting lines; nine questions about the monitoring of energy and water usage, greenhouse gas emissions and other pollutants over the last three years, as well as external audits; and three questions about targets relating to energy consumption and emissions (with questions relating to water usage and pollutants other than greenhouse gas emissions being answered only by manufacturing firms).

The scores for each question were normalised such that they had a mean of 0 and a standard deviation of 1 (turning them into z-scores). Those z-scores were then aggregated to produce average z-scores for each of the four types of green management practice. Overall z-scores for all green management practices were then constructed as unweighted averages of the four types of practice. A z-score above zero indicates that a firm's management practices are better than the sample average.

As regards green investment, firms were asked whether they had invested in any of the seven types of pure green investment (on-site generation of green energy; energy management; waste minimisation, recycling and waste management; measures controlling air pollution; other pollution control measures; water management; and energy efficiency measures) or any of the four types of mixed green investment (improvements to heating and cooling systems; machinery upgrades; vehicle upgrades; and improvements to lighting systems). Again, the scores for each question were normalised such that they had a mean of 0 and a standard deviation of 1. Those z-scores were then aggregated to produce average z-scores for pure and mixed green investment and normalised such that they had a mean of 0 and a standard deviation of 1.

<sup>11</sup> See, for example, Duflo et al. (2013) for an analysis of corruption among third-party pollution auditors in India.

**BOX 4.2.****CORPORATE CLIMATE GOVERNANCE**

As discussed elsewhere in this chapter, the management of environmental risks and the fostering of better environmental performance can have a positive impact on a firm's financial outcomes. The strength of this relationship depends, among other things, on the type of industry in question, the firm's location, and the quality of governance in the country where the firm is located.<sup>12</sup>

The management of risks caused by climate change can be particularly challenging, given the uncertain nature and timing of such effects and because firms' investment decisions today may impose societal costs in the future. Firms face twin risks in this regard: (i) the risk of a decline in the profitability of high-carbon sectors (termed "transition risk"); and (ii) the risk of potential damage from climate change (termed "physical risk"). The total financial value that is at risk from climate change has been estimated at between 2 and 17 per cent of the total value of financial assets today.<sup>13</sup>

Companies also face litigation risk as a result of a failure to develop an adequate response to climate change. An increasing number of legal claims are being brought by investors against firms and company directors or officers for failing to account for possible risks to carbon-intensive assets or for failing to disclose physical climate risks in financial reporting. Such climate-liability risks can be mitigated if companies develop long-term strategies and disclosure policies for climate-related risks.

Against that background, there is now a growing emphasis on improving firms' management of climate-related risks and opportunities and their disclosure to investors. The most prominent market-driven initiative in this area is the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD). In 2017 the TCFD published recommendations advocating voluntary climate-related financial disclosures for regulated financial and non-financial organisations.<sup>14</sup> Those recommendations are structured around four thematic areas (governance, strategy, risk management, and metrics and targets) and are based on the premise that climate-related risks may have a significant financial impact on companies and, as such, warrant public disclosure. In 2018 the EBRD became the first multilateral development bank to pledge support for the TCFD, alongside more than 800 companies and financial institutions holding a total of more than US\$ 40 trillion in assets.

While climate-related disclosure remains voluntary at present, stricter national regulations and growing shareholder pressure are

likely to increase board-level engagement on this issue in the short to medium term. Firms are also likely to face mandatory disclosure in the years to come. For example, France recently became the first country to require investors to disclose information about their contributions to climate goals, compelling institutional investors to provide information on the methodology applied under the "comply or explain" approach. In June 2019 the EU's Technical Expert Group on Sustainable Finance published non-binding guidelines aimed at helping insurance firms, banks and listed companies to disclose the impact that climate change has on their business, as well as the impact that their activities have on the environment.<sup>15</sup> Meanwhile, the Network for Greening the Financial System, a group of central banks and financial regulators, has put forward recommendations aimed at making climate risk management a standard component of financial supervision across a range of advanced and emerging market economies.

Despite these initiatives, the implementation of climate governance measures at company level is, in practice, still at an early stage. Against that background, a recent study by the EBRD analysed recent legal and regulatory trends, as well as emerging climate-related disclosure practices among firms in the EBRD regions, detailing a number of good practices in the area of climate-related corporate governance.<sup>16</sup>

Senior buy-in at the highest level is crucial for effective corporate climate governance. However, even with the right buy-in, developing an approach to climate-related corporate governance may still take several years, requiring close cooperation between finance, risk management and audit teams, as well as local business units in order to account for local climate-related risks and effects. Furthermore, companies may also need to establish partnerships with experts and scientific organisations in order to translate scientific data into workable and operational action plans and improve access to data. More mature companies should also carry out climate scenario modelling tests to feed into the analysis of risks and opportunities and support organisational decision-making processes.

Governance of climate risks also needs to be supported by regular meetings of designated governance bodies and training for key managerial staff. Companies are expected to provide enhanced disclosure in line with international standards in order to ensure that they engage with investors in an open and transparent manner.

<sup>12</sup> See Manrique and Marti-Ballester (2017) and Xie et al. (2019).

<sup>13</sup> See Dietz et al. (2016).

<sup>14</sup> See TCFD (2017).

<sup>15</sup> See European Commission (2019).

<sup>16</sup> See Haralampieva (2019).

**BOX 4.3.****ENERGY EFFICIENCY STANDARDS AND GREEN TRANSITION**

In the absence of improvements in energy efficiency, global energy usage would have increased by 65 per cent between 2000 and 2017, instead of the 33 per cent that was actually recorded, according to the International Energy Agency (IEA).<sup>17</sup> Investment in energy efficiency can lower energy bills and prevent premature deaths associated with air pollution. However, despite these benefits, many efficiency savings remain untapped. The IEA estimates that two-thirds of the cost-effective energy efficiency measures that are available today may not be implemented by 2040.

The energy intensity of output in the EBRD regions has declined significantly since the early 1990s, but it remains much higher than the levels seen in other economies with comparable levels of income. Indeed, there are seven countries in the EBRD regions that feature among the world's 20 most energy-intensive economies.<sup>18</sup>

A key obstacle to firms' investment in energy efficiency is the under-pricing of energy, whereby prices do not typically reflect environmental externalities. Under-pricing of energy remains widespread in the EBRD regions, as do fossil fuel subsidies.<sup>19</sup> Non-price barriers may also play a role. Firms may be unaware of available opportunities to improve energy efficiency, or they may be financially constrained. Policy responses to such informational and financial barriers include government information campaigns and the introduction of targeted energy efficiency credit products offered by banks.

Energy efficiency standards can also be a valuable policy tool when it comes to encouraging energy efficiency in buildings, equipment and consumer appliances.<sup>20</sup> Prescriptive standards introduce a specific requirement, such as the thermal insulation value for windows that is set by building regulations. Minimum energy performance standards, which leave it to producers to decide how they achieve the overall target set for a particular product, are frequently set for vehicles, appliances and buildings. In contrast,

class average standards (which are commonly applied to car fleets) set a minimum average level of efficiency across various products, allowing manufacturers to meet that overall standard at the lowest possible cost.

Standards can be either compulsory or voluntary. Japan's Top Runner programme, for instance, sets energy efficiency standards for energy-intensive products at or beyond the level of the most efficient model in the market at a given point in time. This incentivises companies to make ever more efficient models. Companies that comply with those standards are allowed to use a dedicated label, while non-compliance can result in companies being named publicly. This initiative involves close cooperation between the government and industry to ensure that standards are realistic. It is estimated that this programme has reduced energy consumption in the road transport sector by 5 per cent.<sup>21</sup>

Furthermore, many countries label buildings on the basis of their energy performance, rather than applying mandatory standards. In the EU, for example, energy performance certificates are typically required when a building is sold or rented. Many economies in the EBRD regions have successfully implemented the EU's Energy Labelling Regulation (which puts in place a framework for establishing energy efficiency standards for equipment and appliances) and the Ecodesign Directive.

Energy efficiency standards follow several general principles. First, the benefits of achieving a standard need to outweigh the costs, and any impact on low-income households needs to be well understood. Second, standards such as fuel efficiency requirements for vehicles should be continually updated to reflect technological advances. And third, standards need to be adequately enforced. This requires a combination of monitoring systems, penalties for non-compliance and tax credits to incentivise improvements in energy efficiency.

<sup>17</sup> See IEA (2018).

<sup>18</sup> See EBRD (2017).

<sup>19</sup> See, for instance, Schweiger and Stepanov (2019).

<sup>20</sup> See Wiel and McMahon (2005).

<sup>21</sup> See OECD (2010).

**BOX 4.4.****THE GREEN ECONOMY TRANSITION APPROACH**

High levels of carbon intensity and climate vulnerability remain key issues for many economies in the EBRD regions. The desire to help firms move towards lower-carbon production structures and create more climate-resilient economies lies at the heart of the EBRD's Green Economy Transition (GET) approach, which is closely aligned with the United Nations' Sustainable Development Goals and the Paris Agreement.

GET programmes provide financing to firms and work closely with governments with a view to creating regulatory environments that promote investment in green buildings, renewable energy, green cities and other related areas. EBRD clients also benefit from feasibility studies, energy audits and other technical assistance packages, which help companies to deploy innovative tools that accelerate market responses to climate change. Between 2006 and the end of 2018, a total of 1,649 projects were financed under the GET initiative, helping to reduce greenhouse gas emissions by the equivalent of around 100 million tonnes of CO<sub>2</sub> a year.

Under the GET initiative's Green Economy Financing Facility (GEFF) programme, the EBRD has worked with more than 140 local financial institutions, which have been lending to businesses and homeowners wanting to invest in green technology. By the end of 2018, more than 180,000 green technology upgrades had been financed under the GEFF programme, reducing emissions by more than 8 million tonnes of CO<sub>2</sub> a year.<sup>22</sup>

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# 5

## MACROECONOMIC OVERVIEW



Growth in the EBRD regions has been slowing since the middle of 2018. In the first half of 2019 it averaged 2.1 per cent year on year, down from 3.4 per cent in 2018 and 3.8 per cent in 2017. This deceleration has been driven by a very sharp slowdown in Turkey and weaker

export growth across the EBRD regions, mirroring the global slowdown in trade. Economic growth is expected to moderate in 2019 relative to 2018, in line with less favourable external conditions, before picking up somewhat in 2020 as the recovery in Turkey takes hold.



## Income convergence has slowed

Most countries in the EBRD regions have experienced stable growth in recent years, but at levels far below those seen prior to the 2008-09 global financial crisis. On average, growth rates in the period 2010-18 were less than half of those recorded in the period 2000-07, in line with the weaker growth seen in the eurozone and the global economy as a whole.

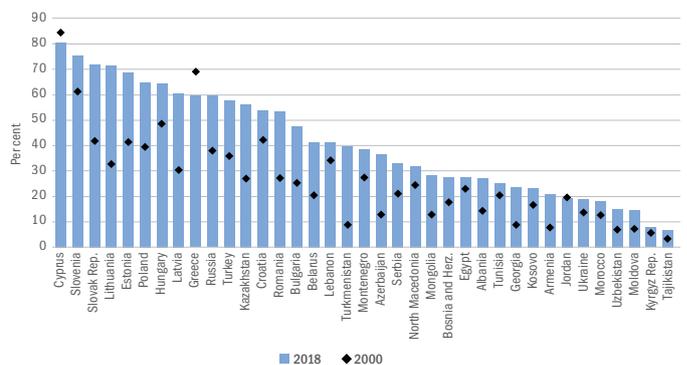
Incomes in most of the economies where the EBRD invests remain far below the levels observed in advanced economies. GDP per capita at purchasing power parity is still less than 60 per cent of G7 levels<sup>1</sup> in three-quarters of the EBRD regions' economies. Indeed, in some countries it remains less than one-tenth of the G7 average (see Chart M.1).

Furthermore, income convergence has slowed in recent years. On the basis of the average growth rates seen in the period 2010-18, incomes are expected to take almost 40 years to reach G7 levels in central Europe and the Baltic states (CEB) and about 140 years in the southern and eastern Mediterranean (SEMED). This is, on average, more than 25 years longer than it would have taken with the higher average growth rates observed in the period 2000-07 (see Chart M.2).<sup>2</sup>

There are many reasons for this slowdown in income convergence. After the recessions seen in the early stages of the transition to open-market economies in the early 1990s, most countries in the EBRD regions experienced rapid income convergence. This was driven primarily by those economies catching up in terms of total factor productivity (that is to say, the efficiency with which labour, physical capital and human capital are combined to produce final output). These efficiency gains were, in turn, driven by the liberalisation of prices, the reorientation of trade patterns and the integration of the EBRD regions into global value chains, which facilitated the introduction of new activities and technologies (see the discussion in the *Transition Report 2013*).<sup>3</sup>

**CHART M.1.**

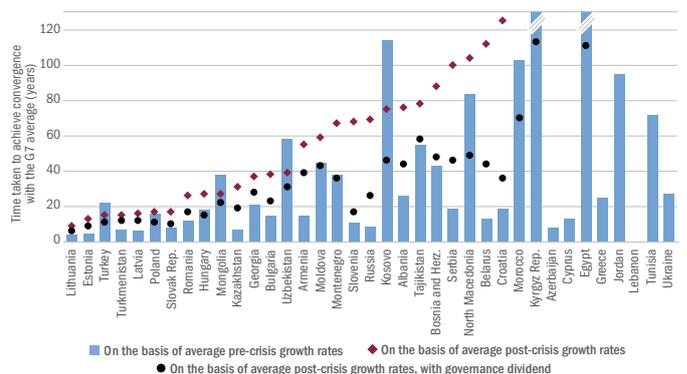
**GDP per capita at PPP as a percentage of the G7 average: substantial increases since 2000**



Source: IMF and authors' calculations.  
Note: Based on current PPP in dollars.

**CHART M.2.**

**Income convergence is now forecast to take longer**



Source: IMF and authors' calculations.  
Note: Based on income levels measured at PPP. Where data are missing, no convergence is expected on the basis of observed growth rates.

<sup>1</sup> The G7 comprises Canada, France, Germany, Italy, Japan, the United Kingdom and the United States of America.  
<sup>2</sup> If convergence is calculated on the basis of market exchange rates instead of purchasing power parity, it will probably take even longer, as income gaps tend to be wider when measured using market exchange rates. In addition, calculations also assume - optimistically - that growth rates can be maintained as economies grow richer.  
<sup>3</sup> See EBRD (2013).

By the mid-2000s, however, total factor productivity in the EBRD regions was comparable to that seen in other emerging economies. As the EBRD regions opened up and emerging Europe, in particular, became strongly integrated into global value chains, growth became much more dependent on global economic conditions. Thus, slowdowns in global growth and global trade growth began to weigh on the EBRD regions' growth prospects.

In addition, as countries develop, growth in income per capita tends to weaken, reflecting the fact that the low-hanging fruit of economic development has already been harvested.<sup>4</sup> Economies in the EBRD regions have also been facing additional headwinds relating to governance. As Chapter 1 of this report explains, weak governance becomes particularly problematic as income levels rise, suggesting that sustained productivity growth in the EBRD regions will require further improvements in the quality of economic institutions.

If countries were to reap the benefits of improved governance, convergence with G7 income levels could be achieved about 26 years earlier than is currently expected on the basis of average growth rates for the period 2010-18, given the governance dividend of around 1.2 percentage points per year that is estimated in Chapters 1 and 2. In other words, that governance dividend could potentially result in income convergence returning to something close to pre-crisis levels (see Chart M.2).

## Slowing global growth has weighed on exports

These long-term trends are compounded by the fact that the external conditions faced by economies in the EBRD regions have become less favourable. Global growth has been slowing, hampered by a prolonged period of heightened policy uncertainty and continued trade tensions. Global growth averaged 3.6 per cent in 2018, down from 3.8 per cent in 2017, with a pronounced deceleration being observed since the middle of 2018.

While service-sector activity has held up, global manufacturing activity has been slowing since early 2018, with firms and households continuing to hold back on long-term spending as a result of high levels of uncertainty. This restraint has also been weighing on international trade, with investment goods and consumer durables making up a disproportionately large

**GDP PER CAPITA  
AT PPP IS STILL  
LESS THAN  
60%  
OF G7 LEVELS IN  
THREE-QUARTERS  
OF THE EBRD  
REGIONS' ECONOMIES**

**ON THE BASIS OF THE  
RECENT GROWTH  
PERFORMANCE OF  
ECONOMIES IN THE  
EBRD REGIONS, INCOME  
CONVERGENCE WILL  
TAKE, ON AVERAGE,**

**25  
YEARS LONGER  
THAN IT WOULD HAVE  
DONE WITH THE HIGHER  
GROWTH RATES SEEN IN  
THE PERIOD 2000-07**

**ON THE BASIS OF THE  
AVERAGE GROWTH  
RATES SEEN IN THE  
PERIOD 2010-18,  
INCOME CONVERGENCE  
IS EXPECTED TO TAKE**

**40  
YEARS  
IN THE CEB REGION**

<sup>4</sup> See EBRD (2019) for a discussion of this issue.

percentage of all merchandise traded across borders. Recently, global trade growth has been at its lowest level since 2012.

Economic conditions in the eurozone in particular have deteriorated sharply since the middle of 2018, reflecting a decline in exports and slowing manufacturing activity. Domestic demand has also softened – albeit to a lesser extent, since it has been buoyed by declines in unemployment (following the persistently high levels observed in the aftermath of the 2008-09 global financial crisis) and robust real wage growth.

That slowdown in global trade growth and the weakening of economic activity in the eurozone have weighed on export demand in economies where the EBRD invests. As a result, export growth in the EBRD regions has slowed further across the board, averaging just 6.3 per cent year on year in euro terms in the first half of 2019, compared with 9.6 per cent in the first half of 2018.

## But financing conditions have been favourable

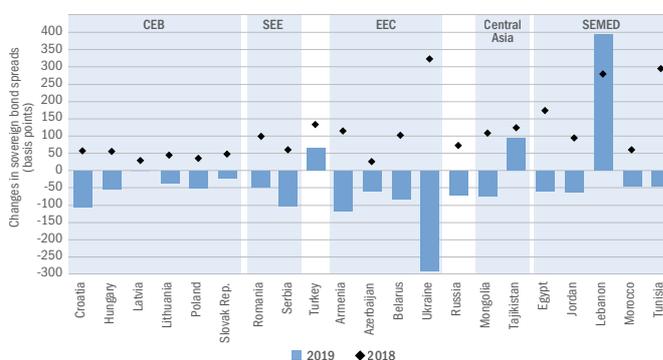
The financing conditions faced by economies in the EBRD regions tightened throughout 2018, but have generally eased since January 2019 (see Chart M.3). That tightening of financing conditions primarily affected capital flows to economies with underlying weaknesses – notably Turkey. It also involved less cross-country variation in terms of changes in sovereign bond spreads than previous periods of financial tightening. The reduced differentiation between emerging market economies primarily benefited those countries where risks are perceived to be higher, such as Ukraine. While these economies faced significant increases in interest rates, those increases were smaller than those experienced during previous episodes (such as in 2013, when the US Federal Reserve (the Fed) announced its intention to reduce the size of asset purchases under its quantitative easing programme).

The interest rates faced by emerging market economies around the world (including the economies of the EBRD regions) have remained low from a historical perspective. The monetary policies of the United States of America and the eurozone are expected to remain accommodative. The Fed, for example, cut its policy rate in July 2019 – the first time it had done so in over a decade – and again in September 2019. It reduced the target range for its benchmark rate to 1.75-2.00 per cent, citing a weaker outlook for the US economy and the global economy as a whole. This was the first time that the Fed had begun an easing cycle with its policy rate at such a low level.

As in other emerging markets, the recovery in capital flows to the EBRD regions is ongoing. The volatility of capital flows has also declined over time, consistent with investors' increased confidence in the ability of countries' macroeconomic policy frameworks to respond to external shocks. Stock market valuations in emerging Europe have also been recovering in 2019, following a relatively weak year in 2018.

**CHART M.3.**

Sovereign bond spreads have declined in 2019, following a rise in 2018



Source: Bloomberg and authors' calculations.

Note: All bonds included in these statistics have at least one year to maturity, and they all have at least 30 months to maturity at the time of their initial inclusion.

**EXPORT GROWTH HAS SLOWED FURTHER ACROSS THE EBRD REGIONS, AVERAGING JUST 6.3% YEAR ON YEAR IN EURO TERMS IN THE FIRST HALF OF 2019**

## Regional developments

Growth in the EBRD regions has slowed overall since the middle of 2018, averaging 2.1 per cent year on year in the first half of 2019, down from 3.4 per cent in 2018 and 3.8 per cent in 2017. This deceleration has, to a large extent, been driven by a very sharp slowdown in Turkey.

Domestic demand has continued to support economic activity in the CEB region, with annual growth in that region averaging 4.7 per cent in 2018, up from 4.4 per cent in 2017, and remaining at 4.2 per cent in the first half of 2019. Economic activity in the CEB region has been bolstered by rising wages, favourable financing conditions and improved absorption of EU structural funds.

Average growth in south-eastern Europe (SEE), however, has moderated somewhat, falling from 4.3 per cent year on year in 2017 to 3.4 per cent in 2018 and the first half of 2019, with significant variation across countries. Weak industrial production weighed on growth in Montenegro and Serbia in early 2019. Growth in Greece was also weaker than expected in 2018 and early 2019, with the country's recovery remaining fragile. Growth in Bulgaria and Romania, meanwhile, was relatively strong in 2018 and picked up further in early 2019.

Annual growth in eastern Europe and the Caucasus (EEC) has picked up overall, rising from 2.4 per cent on average in 2017 to 3.0 per cent in 2018 and the first half of 2019.

In Russia, annual growth reached a six-year high of 2.3 per cent in 2018, with rising oil prices and increases in oil production boosting government revenues and export receipts. The central bank raised its policy rate in order to contain inflation and tackle the currency depreciation resulting from the fresh round of economic sanctions imposed by the United States of America and the EU. Capital outflows reached 3-4 per cent of GDP in 2018 and early 2019 – the highest levels since 2014. Annual growth then fell to 0.7 per cent in the first half of 2019, with retail sales slowing on account of an increase in value-added tax (VAT) and oil production cuts agreed with the Organization of the Petroleum Exporting Countries taking effect.

Growth in Central Asia averaged 4.8-5.0 per cent year on year in 2018 and early 2019, up slightly from the 4.7 per cent recorded in 2017. On balance, the external economic environment remained conducive to growth, with strong export receipts and large inflows of remittances from Russia. Mongolia, Tajikistan and Uzbekistan also benefited from significant growth in gross fixed capital formation, primarily in the form of public investment and investment by foreign-owned firms.

In Turkey, annual growth slowed sharply in 2018, averaging just 2.6 per cent in that year, down from 7.4 per cent in 2017. The economy entered a recession in the second half of 2018 amid a tightening of monetary policy, private-sector deleveraging and a deterioration in consumer and investor sentiment. Output then contracted by 1.9 per cent year on year in the first half of 2019.

Average annual growth in the SEMED region rose to 4.4 per cent in 2018 and early 2019, up from 3.8 per cent in 2017, representing growth of around 2 per cent in per capita terms. This was driven by a combination of larger numbers of tourists, greater competitiveness in Tunisia and reforms in Egypt. At the same time, social unrest and political instability delayed the implementation of reforms in Jordan and Lebanon, weighing on growth.

### GROWTH IN THE EBRD REGIONS AVERAGED

**2.1%**  
YEAR ON YEAR IN THE  
FIRST HALF OF 2019,  
DOWN FROM 3.4%

## Outlook for growth set to improve in 2020

Forecasts for global growth in 2019 have repeatedly been revised downwards since the middle of 2018, hampered by continued US-China trade tensions and high levels of uncertainty (see Chart M.4 showing IMF growth forecasts). Growth momentum is, in particular, expected to weaken in economies that are reliant on external demand and manufacturing exports. A projected pick-up in 2020 is conditional on recoveries taking place in stressed emerging markets (those that were in recession in early 2019) and is thus subject to significant risks.

Average growth in the EBRD regions is also expected to slow in 2019, before picking up somewhat in 2020 (see Chart M.5). In line with global trends, growth is expected to weaken more or less across the board in the EBRD regions, with few exceptions. A recovery in Turkey and a pick-up in growth in Russia are then expected to contribute to stronger average growth in 2020.

Despite some strong data in the first half of 2019, average growth in the CEB region is projected to slow in 2019 and 2020, mirroring weakening growth in the eurozone. Similarly, growth momentum is also expected to weaken in the SEE region. A recovery in Greece is likely to be slower than previously anticipated on account of weaker demand for the country's exports.

Growth in Russia is projected to decline in 2019, hampered by interest rate rises, the increase in VAT and the tightening of economic sanctions imposed by the United States of America and the EU. Growth is expected to start picking up in 2020, driven partly by an ambitious public investment plan for the period 2019-24.

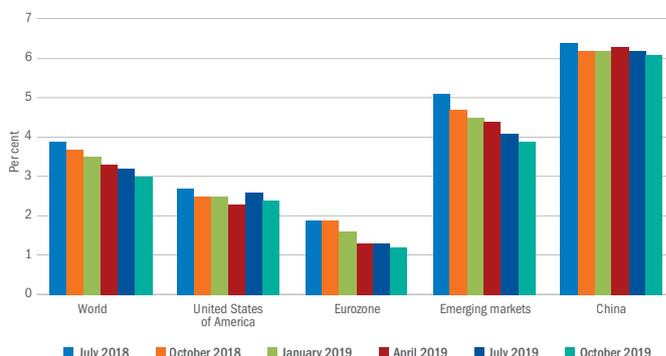
The weakness of Russian growth in 2019 will also weigh on growth in eastern Europe, the Caucasus and Central Asia. While stronger fiscal policy frameworks and moves towards greater exchange rate flexibility will facilitate adjustments to external shocks in many of the economies in these regions, in most cases growth remains too weak in per capita terms to raise living standards to a meaningful extent in the short term.

Following a recession, growth in Turkey is expected to recover in 2020 (reflecting, among other things, a lower base value for output in 2019). This forecast is in line with Turkey's rapid recoveries following previous recessions, but remains subject to significant uncertainty.

Growth in the SEMED region is expected to remain modest in per capita terms, reflecting the higher rates of population and workforce growth in these economies (see the discussion in the *Transition Report 2018-19*).<sup>5</sup> Since 2010, GDP per capita measured at purchasing power parity has grown at levels below, or on a par with, the G7 average in Egypt and Tunisia, implying an absence of income convergence. And in Jordan and Lebanon, GDP has actually contracted in per capita terms over that period.

**CHART M.4.**

IMF growth forecasts for 2019

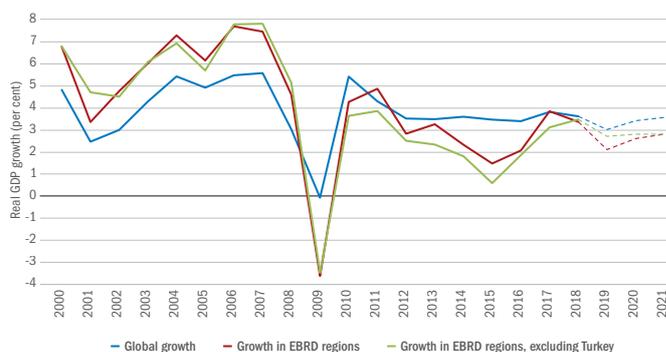


Source: IMF and authors' calculations.

Note: Dates correspond to the publication of IMF projections.

**CHART M.5.**

GDP growth in EBRD regions projected to pick up in 2020



Source: IMF, EBRD and authors' calculations.

Note: Projections are based on EBRD forecasts weighted using GDP measured at PPP.

**RECENT GROWTH RATES IN THE SEMED REGION CORRESPOND TO AROUND**

**2%**

**IN PER CAPITA TERMS, IMPLYING AN ABSENCE OF INCOME CONVERGENCE**

<sup>5</sup> See EBRD (2018).

## Risks to growth lie on the downside

The outlook for the EBRD regions remains subject to significant downside risks, including a further moderation in global growth and, in particular, a sharper-than-expected slowdown in the eurozone. Trade tensions between the United States of America and its major trading partners and possible further disruptions to global supply chains remain major concerns. Moreover, as this report went to press, there was still significant uncertainty surrounding Brexit in the United Kingdom and global policy uncertainty remained elevated. The security situation in the Middle East and geopolitical tensions also represent significant sources of risk for the economies of the EBRD regions.

On the upside, many of the economies where the EBRD invests have strengthened their macroeconomic frameworks, and many have fiscal space available that will facilitate an appropriate policy response in the event of an adverse external shock.

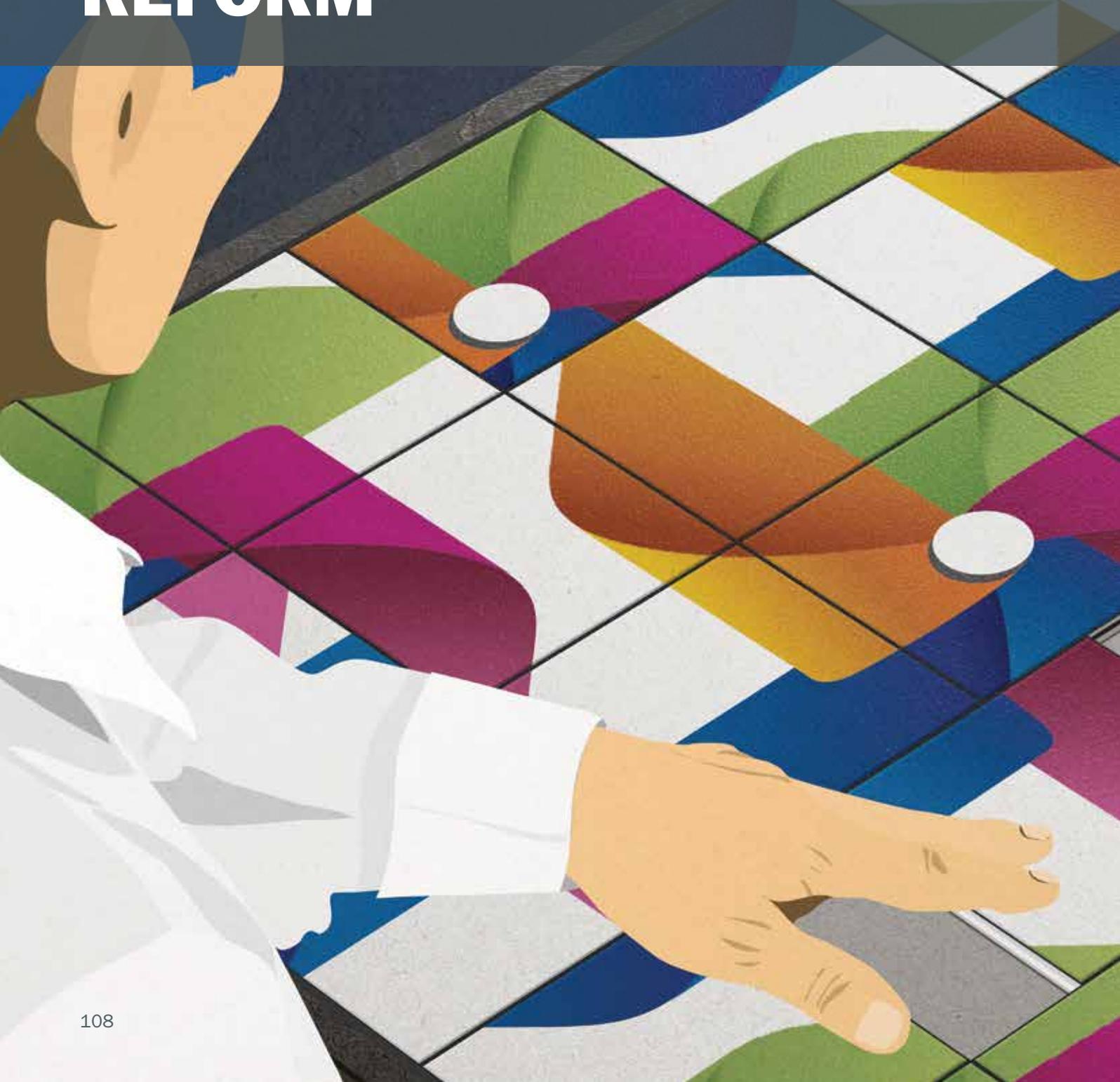


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# 6

## **STRUCTURAL REFORM**



This section of the report presents updated transition scores for all of the economies in the EBRD regions. Over the past year, many countries have implemented reforms in the area of competitiveness, seeking to improve their tax regimes, develop support mechanisms for SMEs and restructure state-owned enterprises. A number of economies have achieved advances in the area of legislation with a view to tackling corruption or facilitating out-of-court

dispute resolution. Several countries have made progress with the implementation of carbon pricing, while Montenegro, North Macedonia and Russia have all ratified the Paris Agreement. And new laws aimed at strengthening gender equality in the workplace have been adopted in a number of countries. At the same time, negative developments have been observed in several countries in terms of the degree of media freedom.



## Introduction

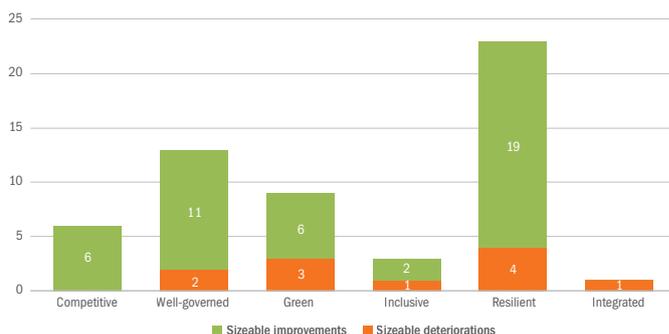
This section of the report presents updated “assessment of transition qualities” (ATQ) scores for all of the economies where the EBRD invests. It measures those economies’ progress against six key qualities of a sustainable market economy, looking to see whether they are competitive, well-governed, green, inclusive, resilient and integrated. It then compares those findings with last year’s scores, highlighting significant developments that have occurred since the publication of last year’s *Transition Report*. It also discusses major reform initiatives across the EBRD regions. As in 2018, the calculation methodology for the ATQ scores has undergone a number of changes, including the addition of new indicators for the inclusion, integration and resilience scores. The scores for previous years have been recalculated to reflect these changes, so they may differ from the scores published in 2018. The updated methodology is available online at [2019.tr-ebd.com](http://2019.tr-ebd.com).

There have been a few sizeable changes in the scores for competitiveness, governance, green transition and resilience over the past year (see Table S.1 and Chart S.1). In this analysis, a change is considered sizeable if it exceeds 1 standard deviation of all changes in scores across all qualities and economies during the period 2018-19.

Changes to competitiveness scores largely reflect gradual improvements in the business environment, with a number of countries (including Azerbaijan, Georgia, Morocco and Turkey) making progress in this area. Meanwhile, Albania, Armenia, Hungary and Uzbekistan have all embarked on major reforms of their tax regimes, and new mechanisms supporting access to finance for SMEs have been introduced in Belarus, Georgia, Ukraine and Uzbekistan. Several countries (including Cyprus, Greece, Ukraine and Uzbekistan) have also made further efforts to restructure state-owned enterprises and banks. In contrast, Romania’s business environment has deteriorated, resulting in a modest decline in its competitiveness score.

**CHART S.1.**

Number of sizeable improvements and deteriorations in transition scores in 2018-19



Source: EBRD.

Note: An improvement or deterioration is considered to be sizeable if it exceeds 1 standard deviation of all score changes across all qualities and countries during the period 2018-19.

**TABLE S.1.**

Transition scores for six qualities of a sustainable market economy

	Competitive		Well-governed		Green		Inclusive		Resilient		Integrated	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
<b>Central Europe and the Baltic states</b>												
Croatia	5.64	5.62	5.97	6.04	6.38	6.38	6.39	6.36	7.47	7.26	6.54	6.59
Estonia	7.63	7.61	8.27	8.30	6.42	6.55	7.66	7.73	8.11	7.87	7.49	7.50
Hungary	6.36	6.34	6.01	5.91	6.27	6.27	6.65	6.66	7.15	6.85	6.84	7.61
Latvia	6.48	6.45	6.66	6.46	6.77	6.77	7.07	7.05	7.89	7.87	7.00	6.98
Lithuania	6.27	6.24	6.85	6.77	6.63	6.63	6.94	6.92	7.34	7.35	7.05	7.04
Poland	6.76	6.76	6.82	6.88	6.52	6.64	6.81	6.72	7.86	7.99	6.81	6.81
Slovak Republic	6.76	6.73	6.21	6.10	6.87	6.87	6.54	6.53	7.97	7.96	7.10	7.13
Slovenia	7.09	7.09	6.65	6.64	7.08	7.21	7.35	7.37	7.73	7.62	7.14	7.22
<b>South-eastern Europe</b>												
Albania	5.14	5.11	5.11	5.09	4.49	4.49	5.31	5.30	5.22	5.25	5.66	5.68
Bosnia and Herzegovina	4.68	4.66	4.53	4.64	5.20	5.20	5.48	5.46	5.91	5.90	5.08	5.08
Bulgaria	5.71	5.69	5.79	5.73	6.04	6.04	6.24	6.27	6.91	6.85	6.85	6.86
Cyprus	6.68	6.66	7.07	6.94	6.32	6.32	6.66	6.60	5.60	5.23	7.68	7.68
Greece	5.78	5.78	5.22	5.25	6.13	6.13	6.24	6.26	7.04	6.68	6.41	6.36
Kosovo	4.78	4.75	4.56	4.58	3.47	3.47	5.28	5.30	5.18	5.23	4.67	4.72
Montenegro	5.44	5.42	6.11	5.93	5.41	5.15	5.98	5.91	6.44	6.42	6.15	6.13
North Macedonia	6.02	6.01	5.57	5.81	5.16	4.92	5.90	5.85	5.93	5.91	5.75	5.78
Romania	6.01	6.06	6.04	5.86	6.14	6.14	5.74	5.71	7.11	7.17	6.75	6.73
Serbia	5.36	5.34	5.52	5.44	5.79	5.79	6.16	6.13	5.86	5.78	5.99	5.99
<b>Turkey</b>	5.42	5.19	6.18	6.17	5.28	5.28	5.01	5.01	7.02	7.34	5.70	5.71
<b>Eastern Europe and the Caucasus</b>												
Armenia	4.97	4.90	5.78	5.82	5.72	5.72	5.97	5.96	6.40	6.08	5.45	5.43
Azerbaijan	4.39	4.22	5.79	5.75	5.35	5.35	4.94	4.94	3.97	4.10	5.59	5.60
Belarus	5.17	5.12	5.15	5.11	6.22	6.22	6.63	6.64	4.16	3.65	5.43	5.44
Georgia	4.98	4.96	6.40	6.34	5.32	5.32	5.14	5.14	6.19	5.99	6.35	6.33
Moldova	4.36	4.32	4.81	4.68	4.68	4.67	5.58	5.73	5.82	5.50	4.94	4.95
Ukraine	4.77	4.74	4.78	4.61	5.87	5.74	6.21	6.21	5.67	5.41	4.75	4.75
<b>Russia</b>	5.83	5.80	5.90	5.85	5.09	5.08	6.83	6.83	6.42	6.40	5.00	5.08
<b>Central Asia</b>												
Kazakhstan	5.26	5.22	5.67	5.62	5.36	5.11	6.46	6.43	5.95	6.17	4.91	4.96
Kyrgyz Republic	4.04	3.90	4.12	4.11	4.48	4.48	4.62	4.62	5.12	5.08	4.92	4.90
Mongolia	4.22	4.21	5.11	5.19	5.36	5.36	5.19	5.18	5.37	5.20	4.53	4.49
Tajikistan	3.25	3.26	3.63	3.70	4.84	4.81	5.05	5.04	3.68	3.52	3.51	3.51
Turkmenistan	2.81	2.80	2.28	2.28	4.09	4.09	5.41	5.41	3.21	3.26	3.97	3.96
Uzbekistan	3.39	3.36	4.45	4.42	4.41	4.31	5.41	5.41	3.96	3.77	3.93	3.93
<b>Southern and eastern Mediterranean</b>												
Egypt	3.08	2.96	4.83	4.68	5.19	5.06	3.51	3.51	5.60	5.51	4.43	4.42
Jordan	4.18	4.15	6.23	6.18	5.85	5.84	4.36	4.36	6.18	5.89	5.81	5.83
Lebanon	4.36	4.35	3.84	3.74	5.10	5.09	4.73	4.73	4.48	4.14	4.70	4.72
Morocco	4.49	4.26	5.34	5.15	5.87	5.87	3.17	3.17	5.73	5.81	4.88	4.90
Tunisia	3.93	3.84	4.88	4.82	4.92	4.92	3.82	3.82	5.10	4.77	4.33	4.33
West Bank and Gaza	2.87	2.86	3.88	3.80	4.07	4.07	3.84	3.80	4.95	4.84	4.65	4.66

Source: EBRD.

Note: Scores range from 1 to 10, where 10 represents a synthetic frontier corresponding to the standards of a sustainable market economy. Scores for 2018 have been updated following methodological changes, so they may differ from those published in the *Transition Report 2018-19*. Owing to lags in the availability of data, ATQ scores for a given year may not fully correspond to that calendar year. In particular, ATQ scores for 2019 reflect data spanning the period 2017-19.

As regards governance reforms, a number of countries (including Azerbaijan, Cyprus, Georgia and Kazakhstan) have recently embarked on judicial reforms and introduced alternative dispute resolution mechanisms. At the same time, several countries have adopted policies that could potentially restrict the independence of judges and undermine public trust in the judicial system.

Green scores – measuring transition to a green economy – have been revised upwards in several countries (including Egypt, Kazakhstan, Ukraine and Uzbekistan) on the back of progress with intended nationally determined contributions (INDCs) and carbon-pricing mechanisms, while Montenegro, North Macedonia and Russia have now ratified the Paris Agreement on climate change. In the area of inclusion, various countries (including Russia, Tunisia and Uzbekistan) have adopted new laws and regulations aimed at strengthening gender equality in the workplace.

Changes to resilience scores have been driven largely by declines in levels of non-performing loans (with Cyprus and Greece making particular progress in this area), as well as improvements to the regulatory environment and standards of governance in the financial sector (albeit some worsening of scores has also been observed in this area).

Changes to integration scores – measuring the degree of economic integration across the EBRD regions – have largely been limited to a few declines in central Europe and the Baltic states (CEB) on account of reduced capital inflows. At the same time, a number of countries (including Albania, Greece, Kazakhstan, the Kyrgyz Republic, Serbia, Ukraine and Uzbekistan) have adopted measures aimed at reducing barriers to cross-border trade and improving air connectivity.

## Competitive

Competitiveness scores have been revised upwards in several countries. In Turkey, the upward revision reflects improvements to the country's World Bank *Doing Business* scores for resolving insolvencies, starting a business and accessing credit. Similar improvements have been observed in Morocco's business environment, resulting in a similar increase in its competitiveness score. Meanwhile, Azerbaijan and Georgia have improved their business environments and the quality of their logistics, while Mongolia has seen an increase in its global value chain participation score. At the same time, Romania's *Doing Business* ranking has fallen, following the introduction of additional procedures that have made it more difficult to start a business. This change has been reflected in the country's competitiveness score.

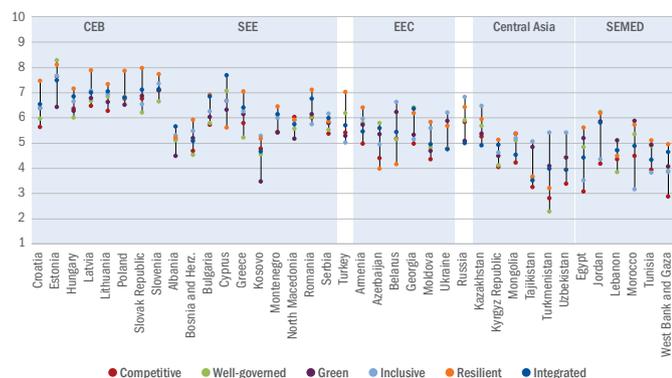
Several countries have implemented reforms in the area of competitiveness with the aim of improving their tax regimes, developing support mechanisms for SMEs and restructuring state-owned enterprises. In May 2019, for instance, Hungary announced a series of measures aimed at simplifying its tax regime, lowering the tax burden on firms and facilitating access to finance for SMEs. Similarly, amendments to the tax regime aimed at reducing incentives for SMEs to evade tax have now come into force in Albania. Reforms aimed at simplifying the tax regime have also been launched in Uzbekistan. These include simplified tax reporting, the reduction of rates for several types of tax, and broadening of the base for VAT, with a revised tax code expected to come into force in January 2020. Similarly, Armenia amended its tax code in June 2019, switching to a flat income tax with a view to improving compliance. Meanwhile, a package of tax reforms adopted in Azerbaijan in December 2018 aims to address tax evasion and pervasive informality.

A number of countries have introduced new institutional structures with the aim of strengthening their competitiveness. In particular, following up on recommendations by the Council of the European Union, an Economy and Competitiveness Council was set up in Cyprus in 2018 with the aim of monitoring the competitiveness of the Cypriot economy and making policy recommendations in this regard. Meanwhile, Ukraine established an SME Development Office in 2018 to boost the competitiveness of SMEs, and Uzbekistan has established a similar agency with a view to supporting entrepreneurs and providing training in the area of business standards.

Several countries have taken steps to improve access to finance for SMEs. In some countries this has involved reforms to existing credit guarantee schemes, while other countries have launched new programmes. For example, a credit guarantee fund that was set up in Belarus in April 2019 is able to guarantee up to 60 per cent of the principal amount of a loan or leasing contract, while a credit guarantee scheme that was launched in Georgia in April 2019 targets sectors where SMEs have limited access to finance. Meanwhile, Tajikistan has established a modern collateral registry for movable property with a view to facilitating the use of such assets as collateral

**CHART S.2.**

Transition scores for six qualities of a sustainable market economy



Source: EBRD.

Note: Scores range from 1 to 10, where 10 represents a synthetic frontier corresponding to the standards of a sustainable market economy.

– particularly by SMEs. Similar reforms aimed at expanding credit information systems or improving laws and systems to support the collateralisation of movable assets have been carried out in Azerbaijan, Egypt, Jordan and Turkey. In addition, some countries have made progress with legal and regulatory reforms aimed at supporting the take-up of non-bank financing instruments such as leasing and factoring (Kosovo and Montenegro) and investment-based crowdfunding (Kazakhstan, Morocco and Turkey).

Several countries have continued to work on reducing state-owned enterprises' footprints in the economy. Ukraine, for instance, has continued to successfully implement the small-scale privatisation programme that it launched in 2018 using the Prozorro.Sale electronic sales platform, with a privatisation programme for large state-owned enterprises expected to follow in 2020. Meanwhile, a large-scale privatisation programme that was launched in Uzbekistan in April 2019 is aiming to sell shares in 29 companies in the chemicals, oil and gas, construction and food processing sectors, among others. In addition, Uzbekistan adopted its first law on public-private partnerships (PPPs) in May 2019 with a view to boosting private-sector participation in a number of areas that are traditionally dominated by state owned enterprises. With that in mind, a newly established PPP Development Agency has been tasked with planning and implementing PPP projects.

At the same time, several countries have adopted policies that could potentially undermine their competitiveness. For example, Turkey has ordered retail chains to freeze or reduce the price of food products following significant declines in the value of its currency, while an emergency order that was issued by the Romanian government in December 2018 introduced additional taxes in the banking sector, price caps and distribution restrictions in the electricity and gas markets, and new capital requirements for private pension funds. Those measures, which were introduced without public consultation, were partially reversed in early 2019 following strongly negative feedback from the private sector.

While some countries have succeeded in reforming state-owned enterprises, many economies' privatisation programmes have lacked momentum. This has been the case, for example, in Cyprus, Greece and Kazakhstan. Belarus has continued to reduce the amount of direct financial support and subsidies it provides to state-owned enterprises, but progress in terms of improving the governance standards and efficiency of state-owned firms has been slow. In Bosnia and Herzegovina, meanwhile, Aluminij Mostar, a major state-owned manufacturer of aluminium, has continued to experience financial difficulties as a result of its high level of indebtedness and the continued low-price environment for aluminium.

**IN 2019, THE GOVERNMENT OF UZBEKISTAN ANNOUNCED THE SALE OF SHARES IN 29 COMPANIES IN THE CHEMICALS, OIL AND GAS, CONSTRUCTION AND FOOD PROCESSING SECTORS, AMONG OTHERS**

**IN NOVEMBER 2018, THE SLOVAK REPUBLIC INTRODUCED**

**36 MEASURES AIMED AT EXPANDING THE PROVISION OF GOVERNMENT E-SERVICES**

## Well-governed

On balance, improvements in governance scores have tended to outweigh negative developments over the past year. The improved scores in Azerbaijan, Latvia, Lithuania, Montenegro, Morocco, Romania and the Slovak Republic largely reflect better perceived protection of private property rights and stronger frameworks for challenging regulation and protecting shareholders' rights. Meanwhile, Kazakhstan's governance score has been revised upwards on the back of stronger protection of shareholders' rights and a reduced regulatory burden.

On the other hand, governance scores have been revised downwards in North Macedonia and Bosnia and Herzegovina, reflecting worsening scores for regulatory burdens, the protection of private property rights and judicial independence. Meanwhile, the downward revision seen in Mongolia reflects a lower score for compliance with standards for anti-money laundering and for countering the financing of terrorism (AML/CFT). In Tajikistan, scores for judicial independence and regulatory burdens have been revised downwards. Reduced scores for perceived independence of the judicial system also contributed to the declines seen in the overall governance scores of Croatia and Poland.

A number of countries have launched reforms aimed at increasing the efficiency of the government and improving the quality of public services. For instance, a third anti-bureaucracy package adopted in the Slovak Republic in November 2018 includes 36 measures aimed at expanding the provision of government e-services and simplifying procedures for granting and renewing business licences. And in May 2019, Armenia approved a restructuring package aimed at increasing the effectiveness of government operations. As part of that restructuring, the number of ministries was cut from 17 to 12, with some being turned into government agencies.

Several countries have embarked on reforms of their judicial systems. For instance, Cyprus has begun the process of establishing new specialist courts, including a Commercial Court, a Court of Appeal and an Administrative Court for International Protection. However, the implementation of that judicial reform programme (which includes an e-justice system) has been slow overall, and Cyprus remains one of the lowest-ranked economies in the EU's Justice Scoreboard. In Azerbaijan, meanwhile, a Law on Mediation was adopted in March 2019 with a view to enabling alternative dispute resolution mechanisms to operate in commercial, civil, family, labour and other disputes. Azerbaijan has also begun establishing specialist commercial courts to provide entrepreneurs with access to efficient dispute resolution.

In Kazakhstan, new legislation adopted in January and February 2019 seeks to improve the selection and training of new judges, strengthen judicial independence and reduce courts' caseload by promoting more efficient out-of-court resolution options for certain types of commercial dispute. In addition, the Astana International Financial Centre has introduced a new arbitration-mediation mechanism, which seeks to resolve commercial disputes in a cost-effective manner. Similar initiatives aimed at reforming the judiciary have also been launched in Georgia (albeit their implementation has been subject to delays), with the Georgian government indicating a willingness to establish specialist commercial chambers within courts to make dealing with commercial disputes more efficient. Meanwhile, Georgia's new insolvency law, which will seek to strengthen the protection of creditors' rights and increase the efficiency of insolvency procedures, has yet to be finalised.

A number of countries have adopted measures aimed at fighting corruption. In December 2018, for instance, the Lebanese parliament adopted legislation establishing a new National Anti-Corruption Commission, which is responsible for initiating anti-corruption investigations looking at public officials. The establishment of that commission followed the adoption of a series of laws aimed at curbing corruption, including a 2017 law on the right to access information, a 2018 law on protecting whistleblowers and a 2018 law on fighting corruption in oil and gas contracts. Meanwhile, Uzbekistan's State Anti-Corruption Programme for 2019-20, which was adopted in May 2019, seeks to strengthen the independence of the judiciary, gradually introduce income declarations for public officials and establish effective means of protecting whistleblowers.

Despite these positive developments, there is cause for concern in other parts of the EBRD regions in the area of governance. In a report published in June 2019, the Council of Europe's Commissioner for Human Rights raised a number of concerns regarding the judicial reforms that have been implemented in Poland in recent years, calling for efforts to ensure that those reforms do not curtail the independence of Poland's judiciary and undermine confidence in the judicial system. In Mongolia, meanwhile, concerns have been raised

**HUNGARY HAS  
FALLEN**

**14  
PLACES**  
IN THE LATEST WORLD  
PRESS FREEDOM INDEX

**MEANWHILE, THE  
SLOVAK REPUBLIC  
HAS FALLEN**

**8  
PLACES**

regarding legislative amendments that were approved in March 2019 concerning the status of judges and their independence. In particular, those amendments give Mongolia's National Security Council greater powers to revoke the mandates of chief judges, the head of the state prosecutor's office and the head of the country's anti-corruption agency. Similarly, legislative amendments giving the executive branch greater influence over the appointment of judges were approved in several SEMED economies during the past year, giving rise to concerns about the potential impact on the independence of the judiciary.

Another worrying development is the fact that Hungary has gone from a "free" to a "partly free" country in Freedom House's latest assessment of key freedoms. That change in status follows a number of recent developments in the country that are regarded as having negatively affected the operations of the media, civil society and other key institutions. Hungary has also dropped 14 positions (to 87th place) in the latest World Press Freedom Index following increases in the concentration of media ownership in the past year, leading to concerns about weaker competition in the media sector and reduced pluralism. Similarly, the Slovak Republic has fallen 8 positions in that list this year (now standing in 35th place) on account of a deterioration in press freedom, having already fallen 10 positions in the previous year.

## Green

Montenegro and North Macedonia have both seen significant increases in their green scores this year, following their ratification of the Paris Agreement in 2018. Meanwhile, Russia – one of the world's top ten emitters of greenhouse gases – ratified and fully adopted the agreement in September 2019 by means of a government decree (having originally signed up to the agreement back in 2016).

Several countries have enhanced their regulatory environments in this regard. In Egypt, Ukraine and Uzbekistan, for instance, increases in green scores reflect progress with the implementation of carbon pricing. On the other hand, slow implementation of carbon-pricing mechanisms has resulted in scores falling in Estonia, Poland and Slovenia. Meanwhile, Kosovo has adopted a new law on energy efficiency, equivalent legislation is in the process of being drafted in North Macedonia, and Uzbekistan has adopted a number of policies aimed at increasing the energy efficiency of its economy. Support schemes for renewable energy have undergone changes in a number of countries (including Kazakhstan, Latvia and Ukraine), and Kazakhstan, Kosovo and Ukraine have all established specialist funds with the aim of assisting firms with energy efficiency.

## Inclusive

A number of economies where the EBRD invests have seen their inclusion scores increase modestly on account of improvements in indicators measuring youth and gender inclusion. Poland, for instance, has improved its performance in the World Bank Group's Women, Business and the Law Index following the removal of restrictions on the employment of women in certain sectors and further reforms to its paid parental leave system. Numbers of female employers and managers in Poland have also risen, while youth unemployment has fallen. Meanwhile, the female labour force participation rate has improved in both Montenegro and the West Bank and Gaza, and the percentage of women in managerial positions has increased in Montenegro. In Estonia and Moldova, on the other hand, the percentage of female employers has fallen.

A number of countries have adopted legislation aimed at addressing the gender pay gap and strengthening gender equality. In November 2018, for instance, Tunisia adopted a law guaranteeing equal treatment of men and women in relation to inheritance practices. Uzbekistan, meanwhile, adopted a comprehensive new law on equal rights and opportunities for men and women in August 2019. That law introduces the concept of gender discrimination, as well as a framework for reviewing new legislation to ensure that principles of gender equality are upheld. It also calls for the collection of data in order to monitor progress against national gender equality targets. In Russia, a new regulation will reduce the number of occupations that are officially closed to women from 456 at present to 100 by 2021. Examples of positions that will be opened up to women include jobs driving tractors, trains and lorries.

Several countries have reformed their vocational education and training systems. Croatia, for example, has established a network of regional centres of competence, with the first 25 vocational education and training schools joining the network in July 2018. Those schools are expected to cooperate closely with potential employers. Serbia, meanwhile, has made further progress with reforms to its qualifications framework. Following the adoption of a law on the national qualifications framework in April 2018, it has established sectoral skills councils and a dedicated Qualifications Agency. These reforms have created formal feedback mechanisms that can help to ensure that the evolving needs of the job market are reflected in education programmes.

## Resilient

Changes to overall resilience scores reflect both financial resilience and energy resilience. These are discussed separately below.

### Financial resilience

A number of countries in the EBRD regions have made progress in the area of financial resilience. In Belarus, for example, the sizeable improvement seen in the country's financial resilience score reflects improvements to its regulatory environment, risk management practices and governance standards, as well as higher levels of liquidity in the financial sector. In Cyprus and Greece, meanwhile, improved scores reflect lower levels of non-performing loans, higher liquidity levels in the financial sector, and improvements to governance standards and risk management practices. Strengthening of the regulatory environment and improved governance standards have also been observed in Armenia, Hungary, Moldova and Ukraine. In the case of Jordan, the country's financial resilience score also reflects legislative amendments approved in 2019 which extend the scope of the country's deposit insurance scheme to include Islamic banks.

Several countries have improved the risk management practices in their financial sectors. Legislation adopted in Latvia in June 2019 aims to help tackle money laundering and strengthen supervision of the country's banking system, in line with the recommendations of the Council of Europe's MONEYVAL committee (which evaluates anti-money laundering measures) and the provisions of the European Union's Fifth Anti-Money Laundering Directive. In Kazakhstan, meanwhile, the country's central bank, the National Bank of Kazakhstan, has introduced risk-oriented supervision of the banking sector as of 2019. This should allow the bank to conduct a more holistic evaluation of the sector and its participants (including as regards the nature and complexity of operations, corporate governance standards and capital adequacy) and identify early risks that could potentially affect the overall resilience of the banking sector. In addition, an asset quality review (AQR) looking at the 14 largest banks in the country is expected to be completed by the end of 2019.

Following the completion of a similar AQR exercise in Mongolia, the country's central bank, the Mongol Bank, is carrying out a forensic audit of all banks that require recapitalisation on the basis of the recommendations of the AQR.

In some countries, authorities have initiated reforms with the aim of improving the governance and efficiency of state-owned banks. In Ukraine, for instance, a law on the functioning of the financial sector was adopted in October 2018 with a view to improving corporate governance practices in several state-owned banks and increasing the professionalism of their supervisory boards. Uzbekistan, meanwhile, has announced plans to partially privatise selected banks.

Further progress has also been made with the restructuring of Moldova's banking sector, following the crisis of 2014. In March 2019, for example, a Bulgarian investment fund acquired a controlling stake in Moldindconbank, Moldova's second-largest bank. This followed the purchase of the state's 41 per cent stake in Moldova Agroindbank (MAIB), the country's largest commercial lender, by a consortium of international investors (including the EBRD) in October 2018. The country's third-largest bank, Victoriabank, had already been acquired earlier in 2018 by Banca Transilvania, a Romanian lender, in partnership with the EBRD. Such strategic investment in the country's three largest commercial banks should help to restore confidence in Moldova's banking sector. In Serbia, meanwhile, the privatisation of Komercijalna banka, the country's third-largest commercial lender, has gained momentum. The government has increased its stake in the bank to 83 per cent with a view to offering it to a strategic investor through a tender procedure. That tender procedure, which was launched in May 2019, was still ongoing when this report went to print.

At the same time, a number of developments in the financial sectors of economies in the EBRD regions have prompted concerns. Turkey's financial resilience score has fallen, for example, reflecting a decline in its score for risk management practices and weaknesses in its governance standards. The unexpected dismissal of the governor of the Central Bank of Turkey has also been viewed with concern by market participants. Scores have also declined in Poland, owing to a reduction in the percentage of assets held by private banks.

As indicated above, an emergency order issued by the Romanian government in December 2018 introduced additional taxes in the banking sector, price caps and distribution restrictions in the electricity and gas markets, and new capital requirements for private pension funds. Moreover, those measures were introduced without public consultation. Although some of the measures have already been reversed, they appear to have affected international investors' confidence in Romania's economy. Despite recent reform efforts, there remains significant scope for progress as regards the governance standards of financial institutions (including state-owned banks) in a number of countries (including Azerbaijan, Belarus, Tajikistan, Ukraine and Uzbekistan).

## Energy resilience

The upward revision of Uzbekistan's energy resilience score reflects significant progress with the restructuring of the sector following the creation of the Ministry of Energy, which is responsible for policy setting in the sector. The Uzbek government has also begun dividing the country's main energy company, Uzbekenergo, into separate entities responsible for the generation, transmission and distribution of electricity. Moreover, Uzbekneftegaz, the country's main state-owned oil and gas company, has now been split into two distinct entities responsible for production and distribution activities. Tariff reforms in the electricity sector have also been initiated with a view to introducing a cost-reflective methodology for determining tariffs, although the implementation of those reforms has been subject to delays. Some initial steps have also been taken towards restoring the regional power network in Central Asia, with Tajikistan and Uzbekistan starting work on enabling trade in electricity between the two countries.

A number of countries have adopted measures aimed at bringing energy-sector regulation closer to the standards applied in the European Union. The Albanian government, for instance, has announced plans to establish a national power exchange in order to operate day-ahead and intraday trading platforms. This will help the Albanian energy sector to meet its obligations under the Energy Community acquis and pave the way for further deregulation of the electricity market. Meanwhile, the Ukrainian parliament has ratified the updated annex to the EU-Ukraine Association Agreement with a view to bringing the country's energy-sector regulation into line with EU law. This updated document covers the whole of Ukraine's energy sector, including electricity, gas, oil, renewable energy and nuclear energy. Full implementation will result in a significantly reformed regulatory environment in Ukraine's energy sector.

**AN ASSET QUALITY  
REVIEW LOOKING  
AT THE  
**14**  
LARGEST BANKS  
IN KAZAKHSTAN IS  
EXPECTED TO BE  
COMPLETED BY  
THE END OF 2019**

At the same time, Romania's energy resilience score has been revised downwards following the issuance of the abovementioned emergency order in December 2018. That order demanded that electricity be supplied to distribution companies (which, in turn, supply electricity to households) at regulated prices. The government also capped the price of gas produced in Romania and stipulated that gas could not be sold to suppliers until household demand had been met. These policies undermine the functioning of Romania's open energy markets and are not in line with key provisions of the EU's Electricity and Gas Directives. Following criticism from the business community, the Romanian parliament's Industrial and Services Committee has now voted to cancel the gas and electricity price caps and return to liberalised price-setting in the energy market. Those revised provisions, if adopted by the Romanian parliament's Chamber of Deputies, will align Romania's energy market with the Gas and Electricity Directives and should help to restore investor confidence.

## Integrated

A number of countries have adopted measures aimed at facilitating cross-border trade and improving air connectivity. In October 2018, for instance, Ukraine approved a law simplifying border clearance procedures, enabling the implementation of a "single window" for clearing imports and exports and providing for wider use of electronic documentation. Meanwhile, Kazakhstan rolled out a new "single window" web portal in March 2019. That portal allows standardised documentation to be submitted electronically and reduces the time needed to obtain customs clearance, as well as cutting costs. A few months earlier, in December 2018, Kazakhstan also launched an e-freight system for electronic clearance of transit air cargo. In February 2019, Azerbaijan launched a "green corridor" system in an attempt to significantly simplify export and import clearance procedures for authorised firms. And in November 2018, Uzbekistan simplified its customs clearance processes and launched a new system involving "authorised economic operators" – entities assessed as being low-risk, which are able to clear exports or imports under a simplified regime.

Several countries have also taken steps towards improving air connectivity and the quality of related infrastructure. In February 2019, for example, Greece signed a concession agreement for the construction, operation and maintenance of a new international airport on Crete, the country's largest island, in order to address capacity constraints at the existing airport. In addition, in April 2019 Greece initiated concession procedures for 23 regional airports that are not yet in private hands or operating under concession agreements. The Greek government has also announced a plan to sell its remaining 30 per cent stake in Athens International Airport. The modest increase in Greece's integration score also reflects larger non-FDI capital inflows and an improved assessment of the quality of roads.

In Serbia, the concessionaire that had been selected to develop Belgrade's airport took charge of airport operations in December 2018. This – the country's first ever large-scale airport concession agreement – is expected to significantly increase the airport's passenger and cargo capacity.

In January 2019, the Kyrgyz Republic approved the open skies policy and the fifth air freedom (thus lifting restrictions on foreign carriers flying to and from the country's airports). This is expected to contribute to increases in passenger and cargo traffic and improve the affordability of air services. Uzbekistan, meanwhile, has announced the adoption of the open skies policy and the fifth air freedom in respect of four regional airports, effective from October 2019. In addition, the Uzbek government has unveiled a plan to unbundle Uzbekistan Airways, the country's state-owned airline, creating two separate companies: an airline and an airport operator. A number of regulatory functions and responsibilities that were previously assigned to Uzbekistan Airways have been transferred to the sectoral regulator. These changes should help to modernise the regulatory environment in the aviation sector and facilitate the further development of Uzbekistan's aviation industry.

At the same time, the integration scores for Croatia and Slovenia have been revised downwards, reflecting declines in net capital inflows in 2018. Russia has also seen a small reduction in its integration score, reflecting a more restrictive regime for FDI.

**IN APRIL 2019, GREECE  
INITIATED CONCESSION  
PROCEDURES FOR  
23  
REGIONAL AIRPORTS**

**THE GREEK  
GOVERNMENT HAS  
ANNOUNCED A PLAN TO  
SELL ITS REMAINING  
30%  
STAKE IN ATHENS  
INTERNATIONAL AIRPORT**

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Abbreviations: For charts in this *Transition Report*, the abbreviations used for each economy follow the ISO 3166-1 three-letter economy codes published by the International Organization for Standardization (ISO).

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A glossary for this report is available at



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