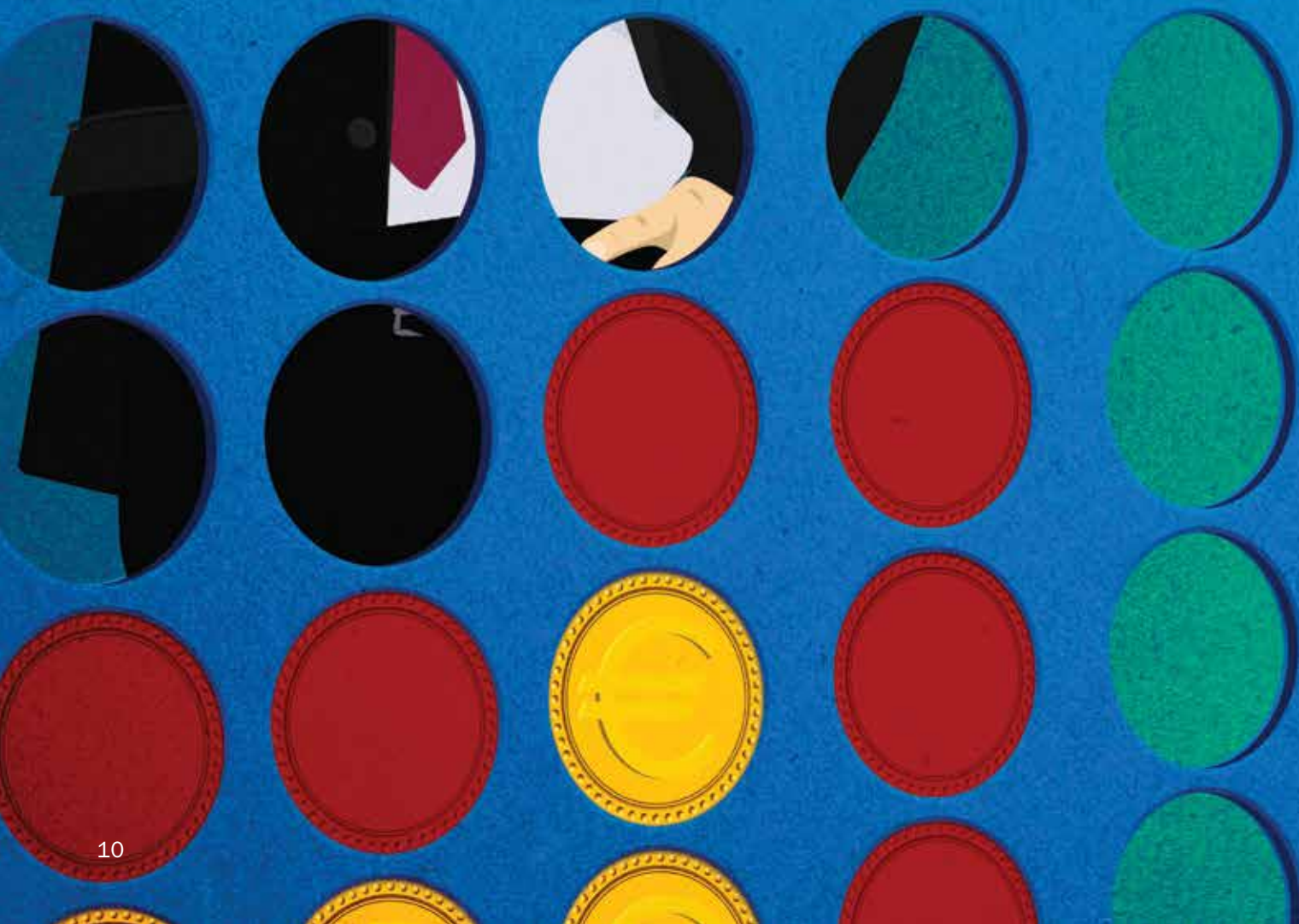


1

THE GOVERNANCE DIVIDEND



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.¹ 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,² 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,³ 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.⁴

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.⁵

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**

¹ See Smith (1776).

² See North (1990).

³ See Tabellini (2008, 2010).

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

⁵ 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*.⁶

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.⁷ 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.⁸ 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.⁹

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).

⁶ See EBRD (2013).

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

⁸ See EBRD (2019).

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

The governance gap

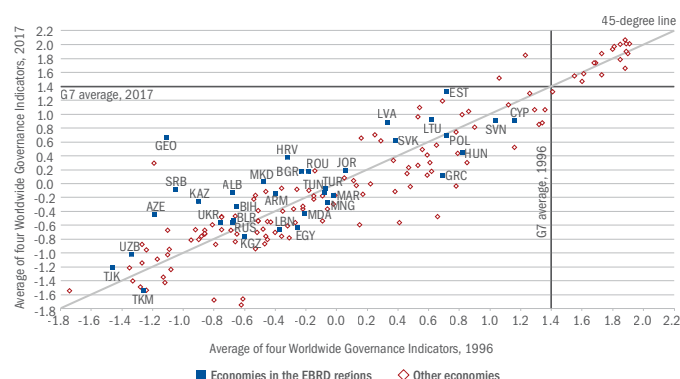
Countries in the EBRD regions have improved the quality of their institutions

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).¹⁰ 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.¹¹

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.

¹¹ See EBRD (2013) and IMF (2017).

The starting position in terms of governance was weak

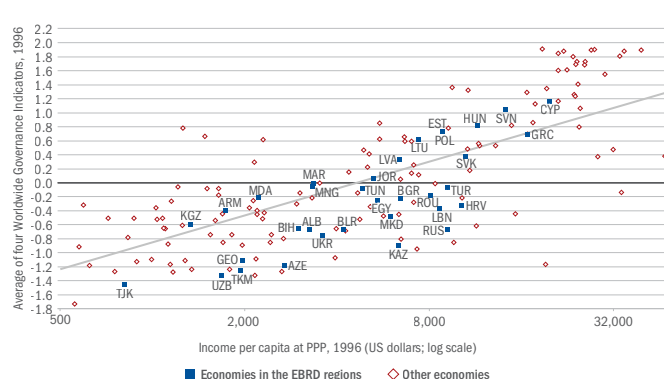
Central planning left a legacy of weak economic institutions. However, in many economies weak governance actually predated central planning (see the discussion of European empires in Chapter 2). Opportunities for cash-based bribery were more limited under central planning, with exchanges of favours often 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.¹²

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.¹³ 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.¹⁴

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).

¹⁰ 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.

¹¹ See EBRD (2013) and IMF (2017).

¹² See Kaufmann and Siegelbaum (1997).

¹³ See World Bank (2018).

¹⁴ See EBRD (2018).

The governance gap remains large today

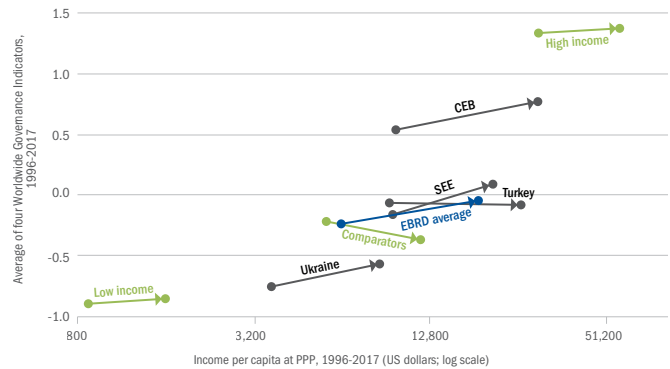
On balance, the EBRD regions' governance gap relative to advanced economies remains large today, despite the income gap having narrowed considerably (see Chart 1.3). The economies of the EBRD regions have achieved the greatest improvements in the area of regulatory quality, making somewhat less progress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

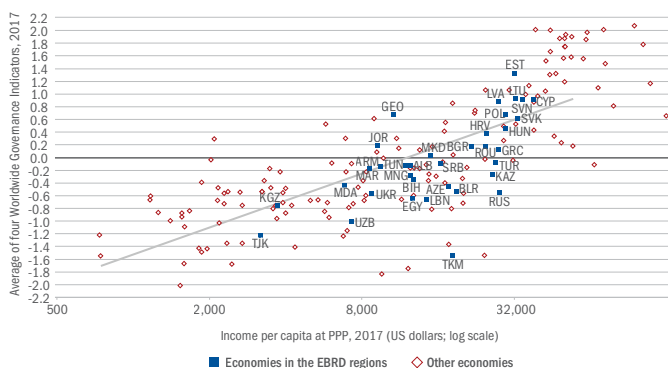


Source: IMF, World Bank and authors' calculations.

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%

Episodes involving major improvements

A number of countries around the world (including several economies where the EBRD invests) have made remarkable progress in a relatively short period of time – just a decade or so – in terms of improving the quality of economic institutions (see Chart 1.5) showing changes over time). It should be noted, however, that the perceived quality of governance still remains relatively modest in a number of those big improvers.

Georgia, for instance, has closed almost 70 per cent of its governance gap relative to the G7 since 1996, while Estonia has closed around 90 per cent of its gap. Of the 21 economies in the world that have improved their average governance score by at least half of a standard deviation (0.5 point on this scale) at some point in the recent past, 12 are in the EBRD regions (see the *Transition Report 2013* for more details regarding some of these episodes).¹⁵

During their respective governance improvement episodes, those economies significantly outperformed their peers in terms of average growth in income per capita, exceeding their peers' growth rates by an average of 1.3 percentage points a year (see Box 1.1 for details of this analysis; the growth dividend that is associated with improvements to institutions is explored further in the next section of this chapter). Meanwhile, three of the economies where the EBRD invests (Egypt, the Kyrgyz Republic and Greece) feature among the 22 cases where the average of the four Worldwide Governance Indicators has declined by at least 0.5 point.

At a global level, major deteriorations in institutional quality are almost as frequent as significant improvements, and they tend to occur over slightly shorter periods of time. To some extent, this is by construction, as a result of measuring the quality of governance relative to the global average. Nevertheless, this is still a sobering reminder that institutional reforms can suffer rapid – and devastating – reversals.

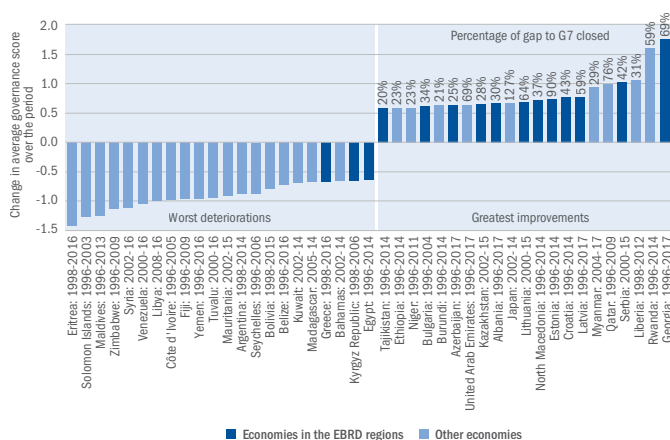
Strengthening governance at national level

Improving the quality of institutions at country level is notoriously difficult. Nonetheless, there are several steps that countries can profitably take in this regard, and they are well illustrated by recent initiatives in Ukraine (see Boxes 1.2 and 1.3). These largely involve the implementation of civil service reforms, the simplification of unnecessarily complex regulations, the leveraging of digital technology, the protection of press freedom and the deepening of international cooperation as regards the fight against corruption.

A professional civil service with transparent, merit-based recruitment and remuneration procedures is an important element of the strengthening of institutions. The simplification of tax systems and laws can also play an important role, as unnecessary complexity tends to breed abuse by people holding public office.

CHART 1.5.

Several economies in the EBRD regions have made substantial progress in terms of closing the governance gap relative to the G7



Source: World Bank and authors' calculations.

Note: This chart shows the best and worst performers in terms of changes in the quality of economic institutions (measured as a simple average of the Worldwide Governance Indicators for control of corruption, the rule of law, government effectiveness and regulatory). The years indicate the period in which the largest change in the average governance indicator was recorded for each country.

Modern technologies can be leveraged in order to dramatically increase transparency as regards procurement, tax administration and public disclosure.¹⁶ The impact of enhanced disclosure has the potential to be particularly sizeable in areas that are linked to the management of natural resource wealth – a sector with high rents and a high risk of misappropriation (as discussed in the *Transition Report 2009*).¹⁷ At the same time, increasing the roll-out of e-government services puts an onus on governments to effectively tackle threats relating to cybersecurity and data protection.¹⁸

Measures aimed at increasing transparency and fighting corruption have been shown to be more effective in the presence of greater press freedom.¹⁹ Yet press freedom itself is largely a reflection of the strength of a country's democratic institutions (see Box 1.4, which discusses the media industries of seven economies in the EBRD regions). Moreover, while greater availability of mobile internet helps to improve transparency and accountability, this is only the case if there is no internet censorship, which is also a function of political freedom (see Box 1.5).

All of these measures have limitations, as the success of their implementation may, in turn, be dependent on the strength of existing institutions.²⁰ Indeed, sweeping reforms of public administrations often take advantage of strong political momentum, as discussed in the *Transition Report 2013* and Box 1.2.²¹

International cooperation has the potential to play an important role in this respect, particularly as regards concerted efforts to make it more difficult for rent-seeking officials to park unexplained wealth abroad.

¹⁵ See EBRD (2013), Chapter 3.

¹⁶ See Elbahnasawy (2014) and Kahn et al. (2018).

¹⁷ See EBRD (2009).

¹⁸ See Kopp et al. (2017).

¹⁹ See Starke et al. (2016).

²⁰ See Fisman and Golden (2017).

²¹ See EBRD (2013), Chapter 3, which looks at "critical junctures".

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

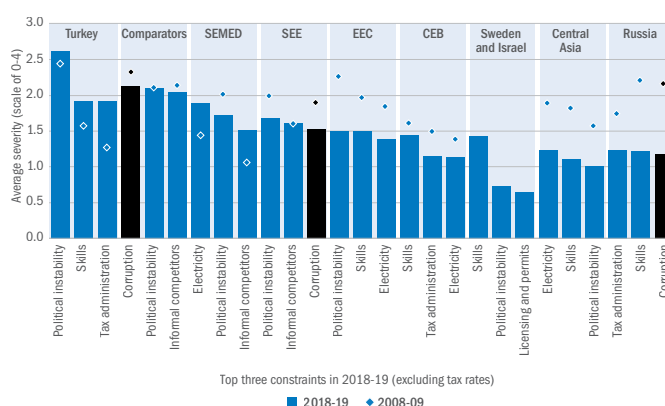
ARE IN THE EBRD REGIONS

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).²² 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).²³

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

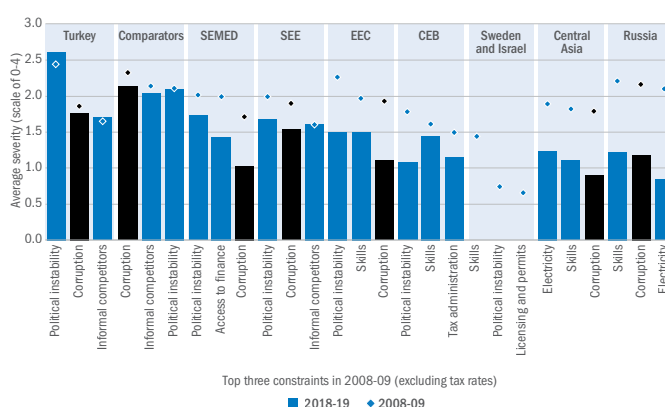


Source: Enterprise Surveys and authors' calculations.

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.

²² 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.

²³ 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.

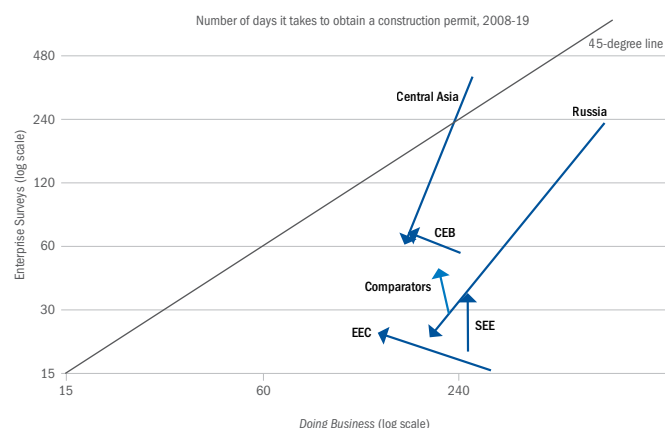
Firms' estimates of the average amount of time that various types of authorisation take tend to be much shorter than the laws on the statute books would suggest. Chart 1.8 looks specifically at construction permits, but a similar picture can be observed for the amount of time it takes to get connected to an electricity supply or obtain a licence.²⁴ 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

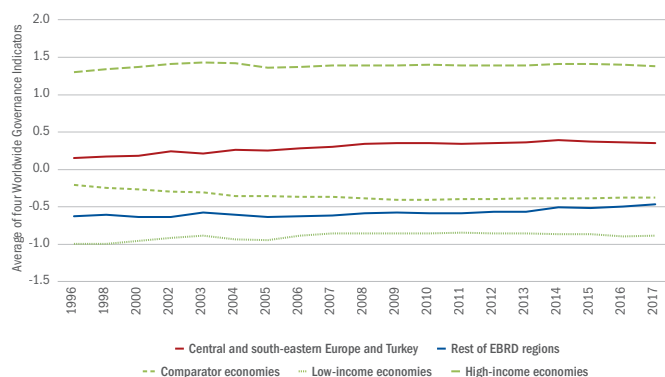


Source: World Bank *Doing Business* reports, Enterprise Surveys and authors' calculations.

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



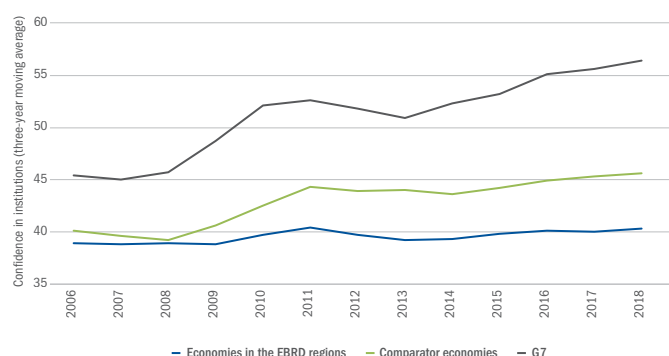
Source: World Bank and authors' calculations.

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.

²⁴ 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.²⁵

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.²⁶ 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.

²⁵ See also Bruszt and Campos (2018) and EBRD (2013).

²⁶ 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.²⁷ Poor-quality institutions and an absence of robust property rights make returns to investment more uncertain. This discourages investment and undermines long-term growth.²⁸ 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.²⁹ 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.³⁰ 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.³¹ 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.³²

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.³³

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.³⁴

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.³⁵ 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).³⁶ 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.

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

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

²⁹ See Fisman and Svensson (2007).

³⁰ See Silve and Plekhanov (2018), Nunn (2007) and Levchenko (2007).

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

³² See IMF (2019).

³³ See EBRD (2019).

³⁴ See Besley and Mueller (2018) and Acemoğlu et al. (2019).

³⁵ See Naudé et al. (2019).

³⁶ 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).³⁷ 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

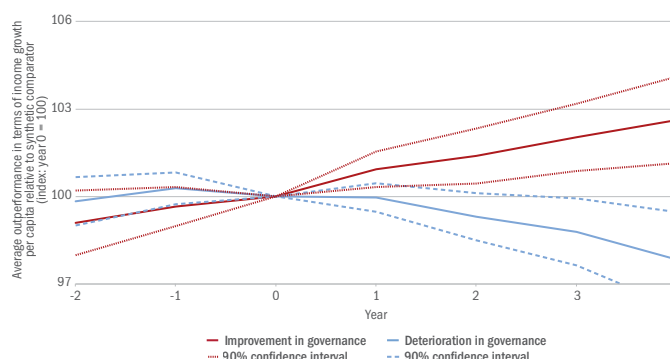
Another way of evaluating the impact that changes in governance have at country level involves looking at the events that follow closely fought elections (defined here as elections where the margin of victory does not exceed 5 percentage points). Close elections may bring to power a government with a 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 2017.³⁸ 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.³⁹

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.⁴⁰ 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*,⁴¹ 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

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

³⁸ See Scartascini et al. (2018).

³⁹ The vote shares of other candidates are not recorded in the database.

⁴⁰ 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.

⁴¹ 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

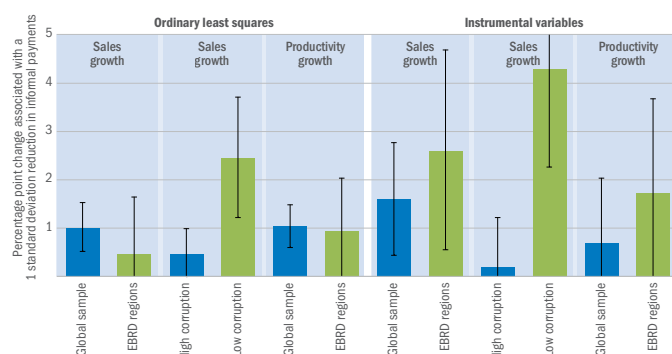
| Estimator Dependent variable | Ordinary least squares | | | | Instrumental variables | | | |
|--|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|-----------------------|-----------------------|
| | 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 ² | 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".⁴² 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.⁴³ 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.⁴⁴ 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).⁴⁵ 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.

⁴² See, for instance, Lui (1985).

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

⁴⁴ 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.

⁴⁵ 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.⁴⁶ 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).

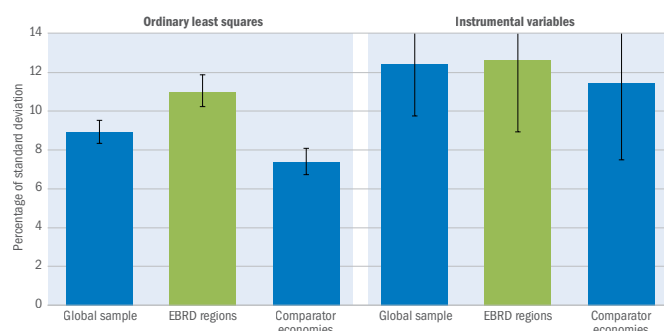
In order to estimate the relationship between governance and satisfaction with life, the measure of life satisfaction is regressed on the index of perceptions of governance that was introduced earlier, as well as the logarithm of the individual's income, gender, level of education, age, age squared and 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.⁴⁷ 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).

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

⁴⁷ 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*,⁴⁸ 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.⁴⁹ 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.

⁴⁸ See EBRD (2017).

⁴⁹ 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).

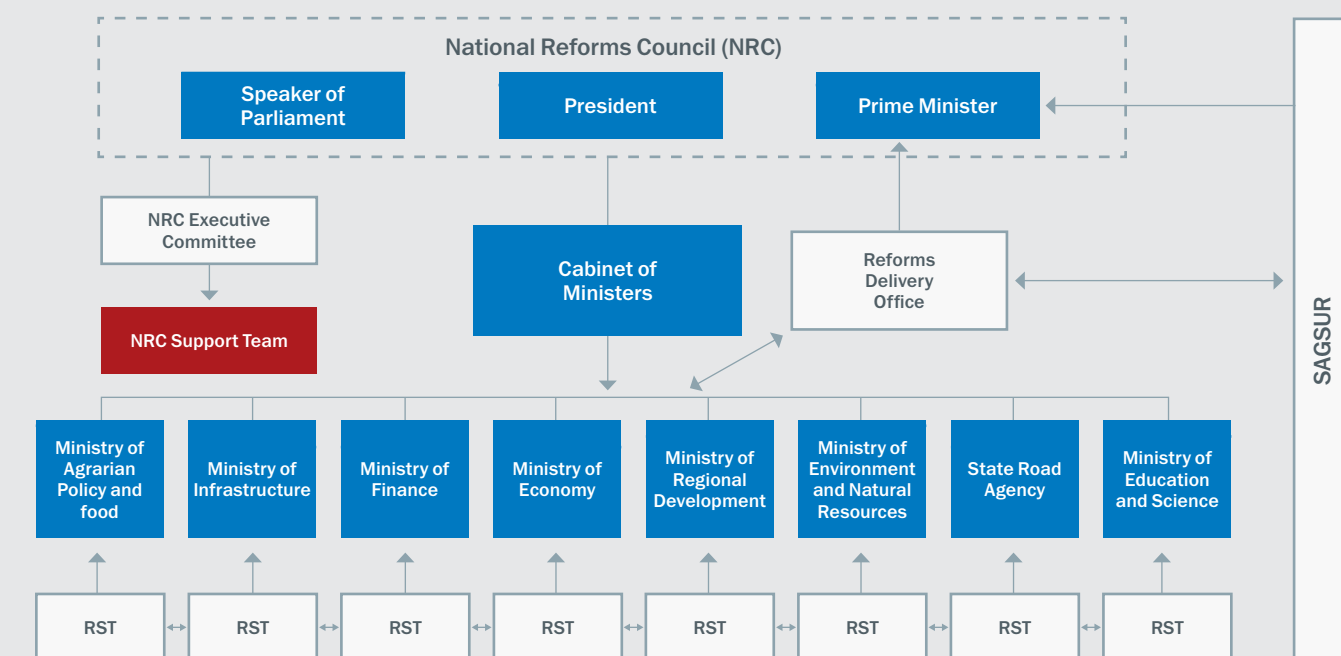
Experience with the URA programme to date highlights a number of important lessons as regards support for the implementation of reforms in public institutions.

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.⁵⁰ 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.

⁵⁰ 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,⁵¹ 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**

⁵¹ 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.

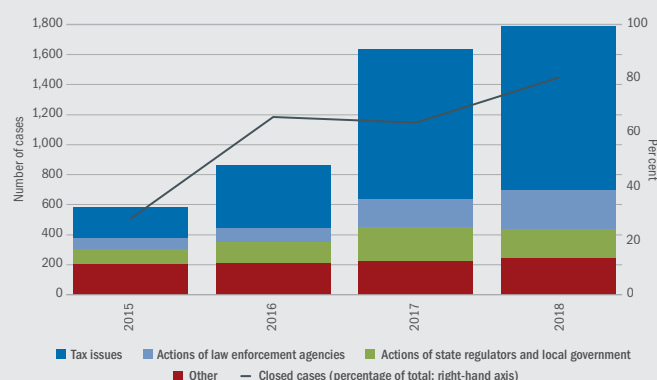
Despite this significant progress, making sustainable and tangible changes to Ukraine's governance system in order to eliminate corruption opportunities and ensure proper prosecution and punishment for corruption-related crimes remains one of the country's key challenges. Indeed, the conviction rate 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.⁵² 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.

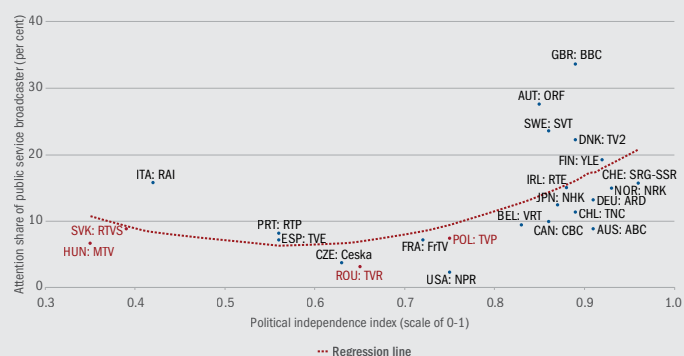
As a result, countries with less equal income distributions also tend to have higher levels of information inequality, as measured by the Gini coefficient of the number of news sources used by individuals. Levels of information poverty, defined as the percentage of individuals who report using one or 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.⁵³

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.⁵⁴

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)).

⁵² See Puglisi and Snyder (2015).

⁵³ See Hanretty (2010).

⁵⁴ See Benson et al. (2017).

BOX 1.5.**SPREAD OF MOBILE INTERNET AND CONFIDENCE IN GOVERNMENTS**

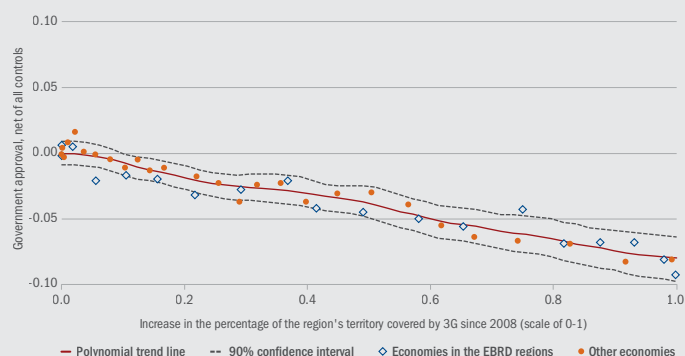
Over the past decade or so, third-generation (3G) mobile networks have expanded significantly, with the percentage of the world's population that have access to 3G rising from just 4 per cent in 2007 to 69 per cent in 2018. Unlike the preceding second-generation (2G) technology, 3G changes the ways in 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.⁵⁵ 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**

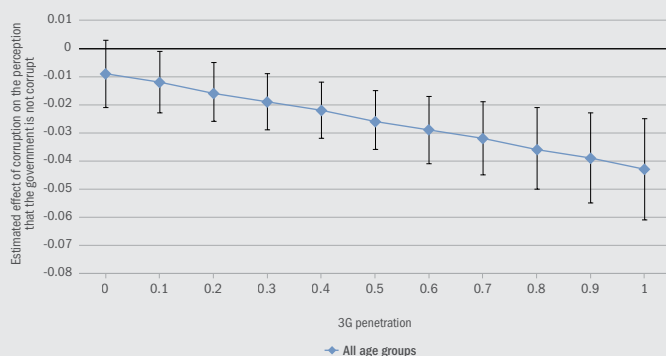
Source: Guriev et al. (2019).

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.

⁵⁵ 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^2 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.⁵⁶ 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).

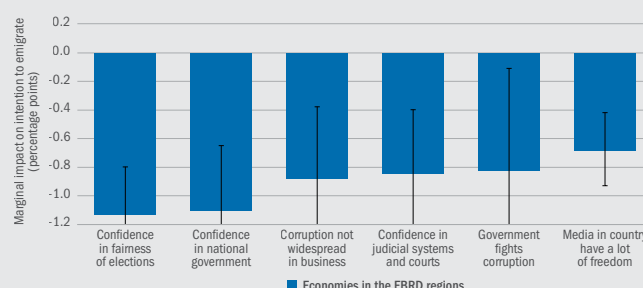
After accounting for individual characteristics (such as age or gender) and country of residence, people who complain about corruption or report low levels of trust in government are also significantly more likely to indicate an intention to emigrate in the next 12 months (see Chart 1.6.1). For example, 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, CEPIL 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.

⁵⁶ 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.⁵⁷

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,⁵⁸ 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.⁵⁹ 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**

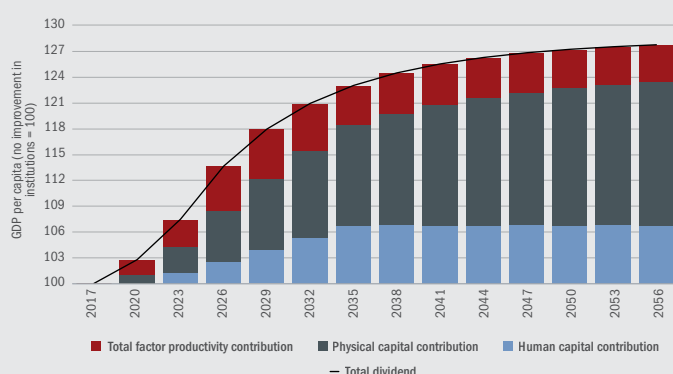
⁵⁷ See Bircan and De Haas (2019).

⁵⁸ 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.

⁵⁹ 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.⁶⁰ 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.

⁶⁰ See, for instance, Levine and Renelt (1992).



References

D. Acemoğlu, P. Aghion and F. Zilibotti (2006)

"Distance to Frontier, Selection, and Economic Growth", *Journal of the European Economic Association*, Vol. 4, pp. 37-74.

D. Acemoğlu, S. Johnson and J. Robinson (2005)

"Institutions as a Fundamental Cause of Long-Run Growth", *Handbook of Economic Growth*, Vol. 1A, pp. 386-472.

D. Acemoğlu, S. Naidu, P. Restrepo and J. Robinson (2019)

"Democracy Does Cause Growth", *Journal of Political Economy*, Vol. 127, pp. 47-100.

P. Aghion and C. Bircan (2017)

"The Middle-Income Trap from a Schumpeterian Perspective", EBRD Working Paper No. 204.

M. Andrews (2013)

"Who Really Leads Development?", UNU-WIDER Working Paper No. 92/2013.

M. Andrews, L. Pritchett and M. Woolcock (2015)

"The challenge of building (real) state capability", Center for International Development Working Paper No. 306, Harvard University.

J. Angrist and A. Krueger (1995)

"Split-sample instrumental variables estimates of the return to schooling", *Journal of Business and Economic Statistics*, Vol. 13, pp. 225-235.

R. Atoyan, L. Christiansen, A. Dizioli, C. Ebeke, N. Ilahi, A. Ilyina, G. Mehrez, H. Qu, F. Raei, A. Rhee and D. Zakharova (2016)

"Emigration and its economic impact on eastern Europe", IMF Staff Discussion Note No. 16/07.

R. Benson, M. Powers and T. Neff (2017)

"Public Media Autonomy and Accountability: Best and Worst Policy Practices in 12 Leading Democracies", *International Journal of Communication*, Vol. 11, pp. 1-22.

T. Besley and H. Mueller (2018)

"Institutions, Volatility, and Investment", *Journal of the European Economic Association*, Vol. 16, pp. 604-649.

C. Bircan and R. De Haas (2019)

"The limits of lending? Banks and technology adoption across Russia", *The Review of Financial Studies*, forthcoming.

R. Blundell and S. Bond (1998)

"Initial conditions and moment restrictions in dynamic panel data models", *Journal of Econometrics*, Vol. 87, pp. 115-143.

L. Bruszt and N. Campos (2018)

"Deep economic integration and state capacity: A mechanism for avoiding the middle-income trap", ADB Economics Working Paper No. 547.

EBRD (2009)

Transition Report 2009 – Transition in Crisis?, London.

EBRD (2013)

Transition Report 2013 – Stuck in Transition?, London.

EBRD (2016)

Transition Report 2016-17 – Transition for all: Equal opportunities in an unequal world, London.

EBRD (2017)

Transition Report 2017-18 – Sustaining Growth, London.

EBRD (2018)

Transition Report 2018-19 – Work in Transition, London.

EBRD (2019)

Eight things you should know about middle-income transitions, London.

N. Elbahnasawy (2014)

"E-Government, Internet Adoption, and Corruption: An Empirical Investigation", *World Development*, Vol. 57, pp. 114-126.

A. Finkel (2015)

"Captured News Media: The Case of Turkey", Center for International Media Assistance report.

R. Fisman and M. Golden (2017)

Corruption: What Everyone Needs to Know, Oxford University Press.

R. Fisman and J. Svensson (2007)

"Are corruption and taxation really harmful to growth? Firm level evidence", *Journal of Development Economics*, Vol. 83, pp. 63-75.

D. Furceri, C. Papageorgiou and H. Ahir (2019)

"Global Incidence of Corruption Index", International Monetary Fund, mimeo.

S. Guriev (2004)

"Red Tape and Corruption", *Journal of Development Economics*, Vol. 73, pp. 489-504.

S. Guriev, N. Melnikov

and E. Zhuravskaya (2019)

"3G internet and confidence in government", CEPR working paper, forthcoming.

R. Hall and C. Jones (1999)

"Why do some countries produce so much more output per worker than others?", *The Quarterly Journal of Economics*, Vol. 114, pp. 83-116.

M. Hallward-Driemeier

and L. Pritchett (2015)

"How Business Is Done in the Developing World: Deals versus Rules", *Journal of Economic Perspectives*, Vol. 29, No. 3, pp. 121-140.

C. Hanretty (2010)

"Explaining the de facto independence of public broadcasters", *British Journal of Political Science*, Vol. 40, pp. 75-89.

J. Helliwell, R. Layard and J. Sachs (2019)

World Happiness Report 2019, United Nations Sustainable Development Solutions Network.

IMF (2017)

Regional Economic Outlook: Europe, November, Washington, DC.

IMF (2019)

Fiscal Monitor, April, Washington, DC.

T. Kahn, A. Baron and J. Vieyra (2018)

"Digital Technologies for Transparency in Public Investment", Inter-American Development Bank Discussion Paper No. 634.

D. Kaufmann, A. Kraay and M. Mastruzzi (2009)

"Governance Matters VIII: Aggregate and Individual Governance Indicators 1996-2008", World Bank Policy Research Working Paper No. 4978.

D. Kaufmann and P. Siegelbaum (1997)

"Privatization and Corruption in Transition Economies", *Journal of International Affairs*, Vol. 50, pp. 419-458.

D. Kaufmann and S.-J. Wei (2000)

"Does 'Grease Money' Speed Up the Wheels of Commerce?", IMF Working Paper No. 00/64.

P. Kennedy and A. Prat (2019)

"Where Do People Get Their News?", *Economic Policy*, Vol. 34, pp. 5-47.

E. Kopp, L. Kaffenberger and C. Wilson (2017)

"Cyber Risk, Market Failures, and Financial Stability", IMF Working Paper No. 17/185.

A. Levchenko (2007)

"Institutional Quality and International Trade", *The Review of Economic Studies*, Vol. 74, pp. 791-819.

R. Levine and D. Renelt (1992)

"A Sensitivity Analysis of Cross-Country Growth Regressions", *American Economic Review*, Vol. 82, No. 4, pp. 942-963.

F. Lui (1985)

"An Equilibrium Queuing Model of Bribery", *Journal of Political Economy*, Vol. 93, pp. 760-781.

P. Mauro (1995)

"Corruption and Growth", *The Quarterly Journal of Economics*, Vol. 110, pp. 681-712.

McKinsey Global Institute (2018)

"Outperformers: High-growth emerging economies and the companies that propel them", MGI report.

W. Naudé, A. Surdej and M. Cameron (2019)

"The Past and Future of Manufacturing in Central and Eastern Europe: Ready for Industry 4.0?", IZA Discussion Paper No. 12141.

S. Nickell (1981)

"Biases in Dynamic Models with Fixed Effects", *Econometrica*, Vol. 49, pp. 1417-1426.

D. North (1990)

Institutions, Institutional Change and Economic Performance, Cambridge University Press.

N. Nunn (2007)

"Relationship-Specificity, Incomplete Contracts, and the Pattern of Trade", *The Quarterly Journal of Economics*, Vol. 122, pp. 569-600.

A. Plekhanov and M. Stostad (2018)

"Modern growth in perspective: Relative performance since the global financial crisis", EBRD Working Paper No. 214.

R. Puglisi and J. Snyder (2015)

"Media Bias in the Marketplace: Empirics", *Handbook of Media Economics*, Vol. 1B, pp. 647-667.

M. Razafindrakoto and F. Roubaud (2010)

"Are International Databases on Corruption Reliable? A Comparison of Expert Opinion Surveys and Household Surveys in Sub-Saharan Africa", *World Development*, Vol. 38, pp. 1057-1069.

C. Scartascini, C. Cruz and P. Keefer (2018)

"Database of Political Institutions 2017", Inter-American Development Bank.

F. Silve and A. Plekhanov (2018)

"Institutions, innovation and growth: Evidence from industry data", *Economics of Transition*, Vol. 26, pp. 335-362.

A. Smith (1776)

An Inquiry into the Nature and Causes of the Wealth of Nations.

C. Starke, T. Naab and H. Scherer (2016)

"Free to Expose Corruption: The Impact of Media Freedom, Internet Access and Governmental Online Service Delivery on Corruption", *International Journal of Communication*, Vol. 10, pp. 4702-4722.

A. Szeidl and F. Szucs (2017)

"Media capture through favor exchange", Central European University working paper.

G. Tabellini (2008)

"Institutions and Culture", *Journal of the European Economic Association*, Vol. 6, pp. 255-294.

G. Tabellini (2010)

"Culture and institutions: Economic development in the regions of Europe", *Journal of the European Economic Association*, Vol. 8, pp. 677-716.

World Bank (2017)

World Development Report 2017 – Governance and the Law, Washington, DC.

World Bank (2018)

World Development Report 2018 – Learning to Realize Education's Promise, Washington, DC.

A. Young (1995)

"The Tyranny of Numbers: Confronting the Statistical Realities of the East Asian Growth Experience", *The Quarterly Journal of Economics*, Vol. 110, pp. 641-680.